



G20 Report on Actions Against Marine Plastic Litter

Fifth Information Sharing based on the
G20 Implementation Framework

2023

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Disclaimer: The report does not necessarily provide exhaustive documentation of all activities by G20 members, other countries and regions sharing the Osaka Blue Ocean Vision and key international organisations; rather it documents their on-going efforts and best practices at the time when compilation work was conducted between April 2023 and July 2023.

The information included in this report is based on voluntary submissions from the G20 members, other countries and regions sharing the Osaka Blue Ocean Vision, and international organisations / NGOs. For more details on actions, please refer to the direct links in the annexure.

1st edition (As of 28 July 2023)



Acknowledgement

This report is the fifth compilation of policies and measures undertaken to tackle marine plastic litter by countries and international organisations across the world. Previous editions have been successfully published over the last four years, with the first report published in October 2019, the second in November 2020, the third in November 2021, and the fourth in November 2022. The 2023 report aims to identify the current policy status on tackling marine plastic litter as a global issue, among the G20 countries and regions sharing the Osaka Blue Ocean Vision, and international organisations.

We are grateful to the Honourable Minister for Environment, Forest and Climate Change, Government of India, Shri Bhupender Yadav, for his constant support, guidance, valuable inputs, and encouragement in the development of this report. We also thank Ms Leena Nandan, Secretary, Ministry of Environment, Forest and Climate Change (MoEF&CC) for leading the G20 Environment and Climate Sustainability Working Group team under the India Presidency, as Chair. We sincerely thank Ms. Richa Sharma, Additional Secretary, Ministry of Environment, Forest and Climate Change for all the critical inputs, encouragement and untiring guidance in the preparation of this report.

We extend our sincere thanks and regards to The Ministry of the Environment, Japan, and the Institute for Global Environmental Strategies (IGES), Japan for their continued support to the India G20 Presidency during the development of the 5th G20 Report on Actions against Marine Plastic Litter 2023.

With India holding the G20 Presidency in 2023, we would like to thank all the countries, regions and organisations for their prompt submission of inputs, support and cooperation. We thank the following G20 members, Invited/ Other Countries and International Organizations for their inputs to the 5th Report (**as on 30 June 2023**)

G20 Members:

- | | |
|------------------------|------------------------------------|
| 1. Australia (AUS) | 9. Italy (ITA) |
| 2. Brazil (BRA) | 10. Japan (JPN) |
| 3. Canada (CAN) | 11. Mexico (MEX) |
| 4. China (CHN) | 12. Saudi Arabia (KSA) |
| 5. European Union (EU) | 13. South Africa (ZAF) |
| 6. France (FRA) | 14. South Korea (KOR) |
| 7. Germany (DEU) | 15. Türkiye (TUR) |
| 8. India (IND) | 16. United Kingdom (UK) |
| | 17. United States of America (USA) |

Invited/Other Countries:

- | | |
|-----------------------------|--------------------------------|
| 1. Antigua and Barbuda (AB) | 8. Peru (PER) |
| 2. Costa Rica (CR) | 9. Singapore (SG) |
| 3. Kiribati (KI) | 10. Solomon Islands (SI) |
| 4. Mauritius (MAU) | 11. Spain (ESP) |
| 5. Myanmar (MNR) | 12. Sri Lanka (SL) |
| 6. The Netherlands (NED) | 13. United Arab Emirates (UAE) |
| 7. Norway (NOR) | |

International Organisations:

1. ADB - Asian Development Bank
2. EMF – Ellen MacArthur Foundation
3. ERIA - Economic Research Institute for ASEAN and East Asia
4. FAO - Food and Agriculture Organisation
5. IAEA - International Atomic Energy Agency
6. OECD - Organisation for Economic Co-operation and Development
7. UNEP - United Nations Environment Programme
8. UN-Habitat - United Nations Human Settlements Programme
9. UNIDO - United Nations Industrial Development Organisation
10. WEF/GPAP - World Economic Forum (GPAP-Global Plastic Action Partnership)

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With India holding the G20 Presidency in 2023, we would like to thank the countries, regions and organisations for their prompt submission and cooperation. We hope that this report will be helpful to promote policies and measures among the contributing countries and organisations through peer learning from best practices, as well as for the wider international community.

Acronyms and Abbreviations

3Rs	Reduce, Reuse, Recycle
ADB	Asian Development Bank
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CE	Circular Economy
COBSEA	Coordinating Body on the Seas of East Asia
COVID-19	CoronaVirus Disease of 2019
CSR	Corporate Social Responsibility
DMC (of ADB)	Developing Member Country of Asian Development Bank
EC	European Commission
EPR	Extended Producer Responsibility
EPS	Expanded Polystyrene
ERIA	Economic Research Institute for ASEAN and East Asia
FAO	Food and Agriculture Organisation of the United Nations
G20	Group of Twenty
G7	Group of Seven
GEF	Global Environment Facility
GPAP	Global Plastic Action Partnership
HELCOM	Baltic Marine Environment Protection Commission - Helsinki Commission
IAEA	International Atomic Energy Agency
IMO	International Maritime Organisation
MARPOL	International Convention for the Prevention of Pollution from Ships
MPL	Marine Plastic Litter
MSFD	Marine Strategy Framework Directive
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
OSPAR	Convention for the Protection of the Marine Environment of the North-

	East Atlantic
PE	Polyethylene
PET	Polyethylene terephthalate
PO	Polyolefin
PS	Polystyrene
PVC	Polyvinyl chloride
R&D	Research and Development
REACH	European Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
SDGs	Sustainable Development Goals
SME	Small and Medium-sized Enterprises
SUP	Single-Use Plastics
UN	United Nations
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation

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Executive Summary

The 5th edition of the Report on Actions Against Marine Plastic Litter is based on the “G20 Implementation Framework for Actions on Marine Plastic Litter” established at the G20 Ministerial Meeting in June 2019 in Karuizawa, Japan. This report is a compilation of information, voluntarily shared by the G20 members, invited/other countries and international organisations on policies and measures undertaken to address the global issue of marine litter.

A comprehensive assessment of practices adopted by countries and entities is presented in chapters 2 to 5 of this report. Information on the legal and policy framework (chapter 2), measures and achievements (chapter 3), challenges (chapter 4), and best practices (chapter 5) are collated, based on the inputs received. Detailed submissions of the contributing member/ country, and international organisations are presented in chapter 6 as further information, along with the data collection questionnaire, which was updated in 2023 to capture recent mechanisms and instruments for encouraging community participation.

The G20 India Presidency thanks countries and international organisations for their participation in sharing of information. This has enabled the development of a broad overview of the initiatives being undertaken around the world that identifies areas for future collaborations to combat marine plastic litter on a global scale. Responses to the questionnaire were received from thirty countries and ten international organisations. Of these, nine responses each from Asia and Europe (excluding the European Union), seven from Americas, two from Oceania, and two from Africa, were received.

In 2022, countries adopted a resolution at the fifth session of the United Nations Environment Assembly (UNEA-5) which initiated a process to develop an international legally binding instrument on plastic pollution, including the marine environment. We hope that information contained in this report will support further development of policies, implementation and acceleration of actions on plastic pollution.

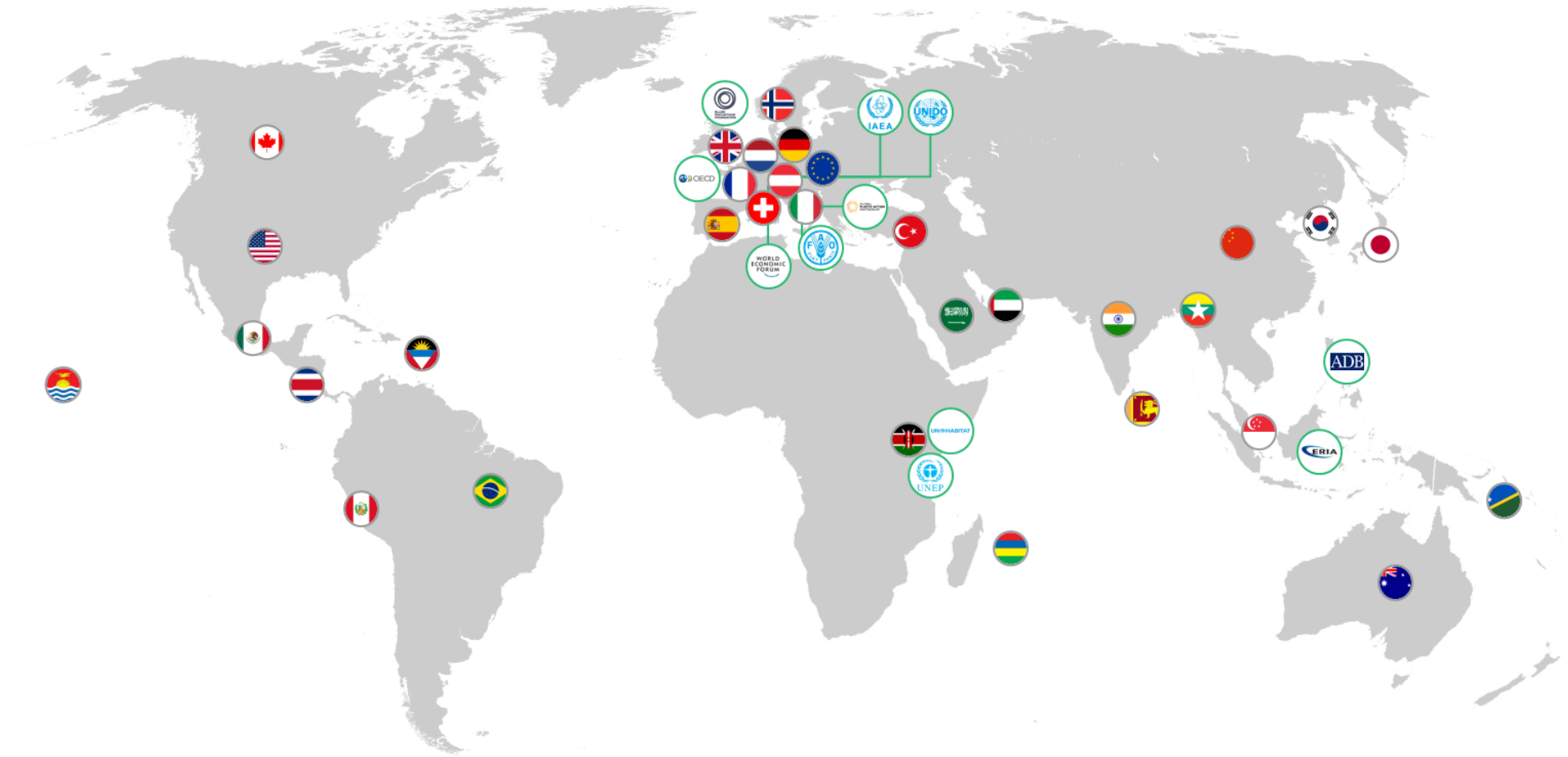


Figure 1: Voluntary participation of 30 countries and 10 International Organizations (as on 30 June 2023)

Table 1: Overview of measures undertaken by participating G20 members and other countries

Actions taken by countries to	G20 Countries															Invited/Other Countries															
	KSA	FRA	ITA	CHN	KI	KOR	MUS	TUR	SB	SL	UAE	ESP	SG	USA	AG	NED	JPN	IND	PER	MMR	CRI	EU	AUS	NOR	MEX	CAN	BRA	UK	DEU	ZAF	
Introduce Extended Producer Responsibility	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•		•	•	•	•		•	•	•	•	•	
Reduce single-use plastic	•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•			•	•	•
Restrict microplastics in personal care products		•	•	•		•						•		•		•	•	•				•	•	•		•		•	•	•	
Improve waste management recycling	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	
Sustainably manage MPL through human-centric/collective effort	•	•		•		•	•	•				•	•			•	•	•	•	•	•		•	•		•	•	•	•	•	
Involve local communities to conduct clean-up activities across water bodies	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Clean the seas at national/community level		•	•	•	•	•	•	•			•	•	•	•	•	•	•	•		•	•		•	•		•	•	•	•	•	
Create value chain opportunity for lost fishing gear (ALDFG)		•	•	•		•	•	•				•				•	•	•			•		•	•		•		•		•	

Actions taken by countries to	G20 Countries															Invited/Other Countries														
	KSA	FRA	ITA	CHN	KI	KOR	MUS	TUR	SB	SL	UAE	ESP	SG	USA	AG	NED	JPN	IND	PER	MMR	CRI	EU	AUS	NOR	MEX	CAN	BRA	UK	DEU	ZAF
Incentivize the collection of end-of-life fishing gears		•	•	•		•		•					•				•						•	•		•			•	•
Encourage private sector action to reduce plastic waste through policy	•	•	•	•		•	•	•				•	•			•	•	•	•		•		•	•		•	•	•	•	•
Promote technology based plastic waste re-use, recycling and recovery	•	•	•	•		•	•					•	•	•	•	•	•	•	•		•		•	•		•	•	•	•	•
Install capturing trap/filter on drainage/river		•	•	•		•	•	•		•		•	•	•		•	•	•			•	•	•	•		•	•	•	•	•
Promote innovative solutions through circular economy	•	•	•	•		•	•	•		•		•	•	•		•	•	•	•		•	•	•	•	•	•	•	•		•
Boost multi-stakeholder involvement and awareness	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Share knowledge (R&D and monitoring)	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
Participate in international cooperation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•

Actions taken by countries to	G20 Countries															Invited/Other Countries														
	KSA	FRA	ITA	CHN	KI	KOR	MU S	TUR	SB	SL	UAE	ESP	SG	USA	AG	NED	JPN	IND	PER	MM R	CRI	EU	AUS	NO R	MEX	CAN	BRA	UK	DEU	ZAF
Support target region: South, Central and Southeast Asia		•		•	•	•	•			•		•	•				•	•		•	•	•	•	•		•		•	•	
Support target region: Africa		•					•					•	•				•					•	•	•		•		•	•	•
Support target region: Latin America	•	•					•					•	•	•		•					•	•	•	•	•	•		•	•	

• **Action Taken**

Table 2: Overview of measures taken by participating International Organisations

Actions taken by International Organisations	ADB	ERIA	EMF	FAO	IAEA	OECD	UNEP	UN-Habitat	UNIDO	WEF
Technology development for plastic alternatives	•	•			•				•	
Sustainable and circular product design	•	•			•	•	•		•	•
Sustainable and circular business model creation	•	•					•		•	•
Proper waste management	•	•				•	•	•	•	
Prevention of littering and illegal dumping into the ocean		•		•		•	•	•		•
Collection of scattered waste on beaches		•								
Removal of plastic litter from the ocean		•		•						
Community participation in removal of plastic litter from the ocean		•							•	
Education system creation		•					•	•	•	
Awareness-raising	•	•			•		•	•	•	
Initiatives for behavioral change		•					•		•	•
Monitoring of plastic flows		•			•	•	•	•		•
Monitoring of country policy status related to MPL		•				•	•			•
Scientific research		•		•	•		•	•		
Technology development	•				•					
Others							•		•	

• **Action Taken**

It is observed that numerous initiatives have been implemented to address the problem of marine plastic litter by the G20 members, invited/ other countries, and international organisations. Enhanced awareness and active participation of communities is apparent from the assessment. A few key findings are presented below:

Science

- Challenges in data collection related to marine plastic litter have been reported by 77% of the countries and IOs.
- 87% of countries are engaged in research on plastic flows and ocean surface microplastics to address the data gaps.

Policy

- The linkages between marine litter and blue economy and considering policy or legal measures is addressed by 23% of the countries.
- 47% of the countries have regulations on microplastics, however, the effectiveness of these regulations/ policies is not well documented.
- About 50% of the participating countries have indicated initiatives to restrict microplastics in personal care products and in promoting the collection of end-of-life fishing gears
- The efforts for prevention and reduction in plastic waste generation is gaining huge impetus as 73% of the countries levy charges/ taxes on single use plastics while 63% have completely banned SUPs. Further, 77% of the countries have established frameworks to encourage sustainable and circular product designs and 83% reported having policies to promote plastic alternatives
- Efforts towards developing Extended Producer Responsibility policies, specifically are highlighted, particularly in-
 - creating a value chain opportunity for abandoned, lost, and discarded fishing gear (ALDFG) and
 - encouraging actions by private sector companies to reduce/ sustainably manage their plastic waste

Practice

- Concerted and systematic efforts towards collection of scattered wastes, littered on the beaches are practiced by 97% of the participating countries. Significantly, 83% of countries have taken action to remove plastic litter from the oceans.

Collaboration

- The importance of public-private partnership at addressing MPL issues was emphasized by 73% of the participating countries.

Capacity

- Designing/ reframing education systems and/ or curriculum to create public awareness on problems related to MPL are developed in 87% of the countries
- Periodic awareness campaigns are conducted, indicating the importance of community participation in marine litter mitigation efforts.

Opportunities

- There are numerous examples of measures undertaken through international cooperation across the world towards addressing the global issue of marine plastic litter.



1. Introduction

Over the last decade, the global production of plastics has seen a steep rise, amounting to about 400 million tonnes per year. The world today produces twice as much plastic waste as it did 20 years ago. Yet only an estimated 9% of the plastic is recycled, while 12% is incinerated¹. Most of this plastic waste enters the ocean through rivers and stormwater, creating a persistent and ubiquitous problem that affects every ocean and coastal region.

International fora, such as the UNEA (United Nations Environment Assembly), G20, and G7, have discussed measures to curb marine plastic litter, creating momentum for global actions. In 2022, the 5th session of the United Nations Environment Assembly (UNEA-5) declared the goal of developing an international legally binding instrument on plastic pollution, including in the marine environment.

The G20 members, together with non-member countries and international organisations, have a key responsibility in accelerating actions against marine plastic litter, and have been facilitating implementation at national, regional, and global level. Building upon the “G20 Action Plan on Marine Litter” agreed at the G20 Hamburg summit in July 2017, the “G20 Implementation Framework for Actions on Marine Plastic Litter” was established at the G20 Ministerial Meeting in June 2019 in Karuizawa, Japan. Subsequently, “Osaka Blue Ocean Vision (OBOV)”, which aims to reduce additional pollution by marine plastic litter to zero by 2050 through a comprehensive life-cycle approach, was shared by G20 leaders at the G20 Osaka Summit as a common global vision. To achieve this vision, the G20 Implementation Framework was endorsed by the G20 Osaka Leaders’ Declaration. As of August 2022, 87 countries and regions share the Osaka Blue Ocean Vision.

With this background, the G20 reports on Actions against Marine Plastic Litter have been published annually since 2019. The 5th G20 report on Actions against Marine Plastic Litter has compiled information from G20 members, other countries and international organisations. The questionnaire for the report was amended to capture best practices of community involvement in positive actions against marine plastic litter. Blue/Ocean-based economy is one of the focus areas of the Environment and Climate Sustainability Working Group (ECSWG) under India’s G20 presidency. This report will provide inputs to the technical report on ‘Accelerating the transition to a Sustainable and Resilient Blue Economy’ that will be published by India’s G20 Presidency.

The 5th edition was prepared and published in 2023, under the leadership of the India G20 Presidency, and with the support of the Ministry of Environment, Government of Japan (MoEJ) and IGES. We hope this informative report will continue to support the improvement and acceleration of actions, particularly by encouraging institutions and communities to work in an internationally harmonized, coordinated, and collaborative manner.

¹ [United Nations Environment Program \(UNEP\) report](#)

2. Policy Framework for Marine Plastic Litter (MPL)

Countries

Countries and organisations all around the globe have recognized the importance of developing comprehensive action plans and strategies at the national, regional and global levels to address the issue of disposal of plastic litter and reduce marine plastic litter. Responses from 30 countries were received, of which 70% have implemented national action plans/strategies specifically targeting marine plastic litter, while 90% have enacted legislation related to MPL. Additionally, 53% have established MPL-specific indicators (Figure 2.1).

From the 10 responses received from international organisations, 90% have developed organisational Action Plans/Strategies, and among them 70% have implemented MPL-specific indicators (Figure 2.2).

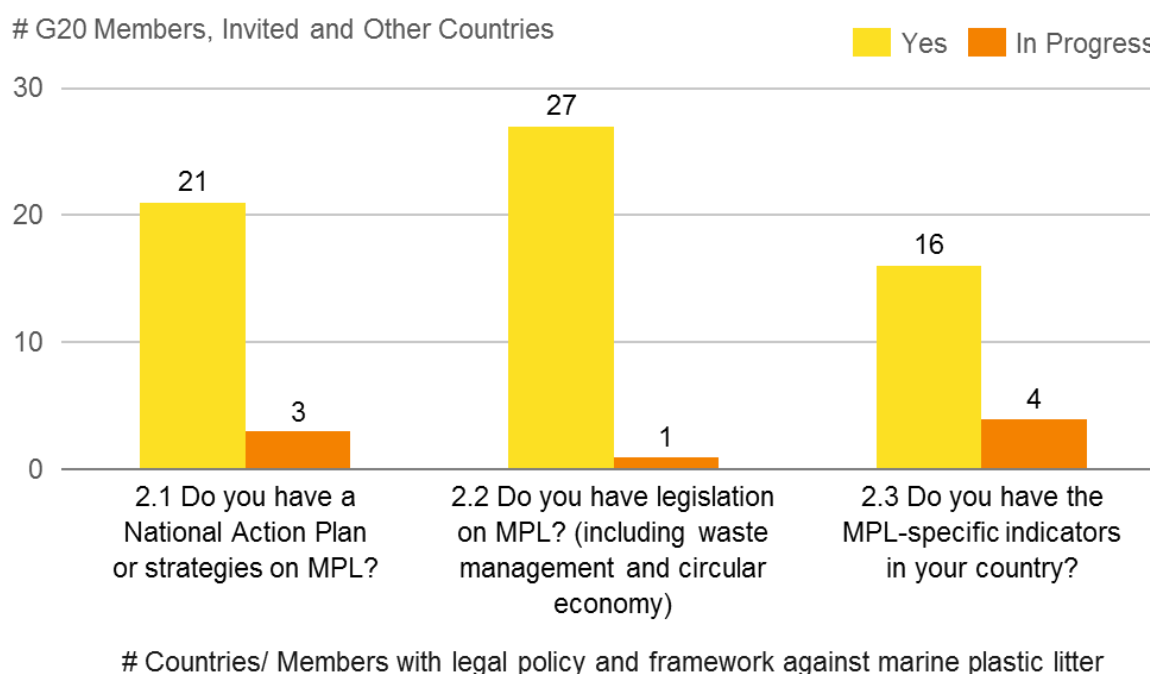


Figure 2.1: Status of prevalence of policy framework for MPL in countries

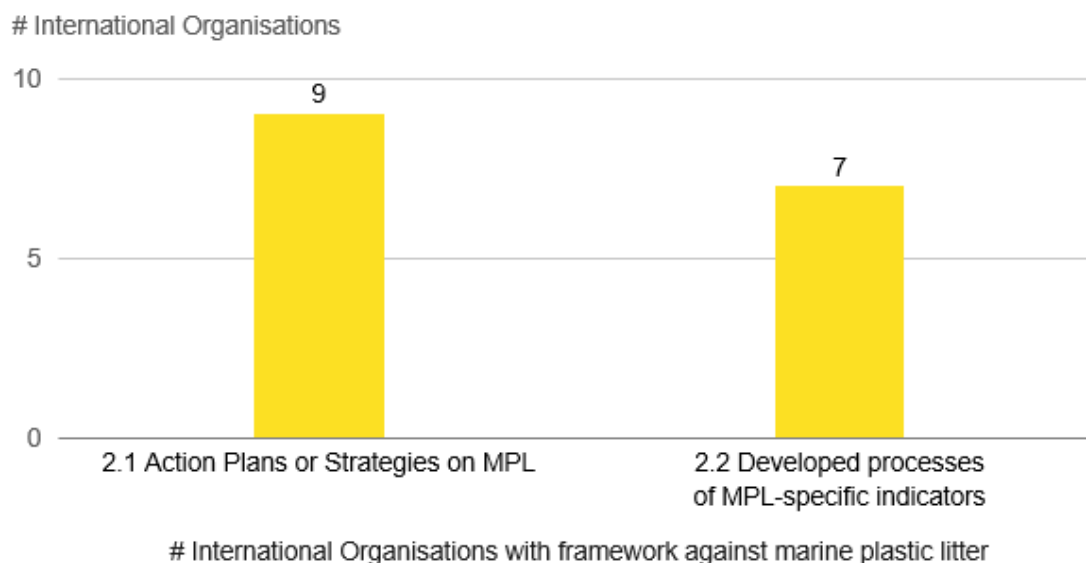


Figure 2.2: Status on MPL related action plans and indicators of IOs

2.1. National Action Plan (Countries) and Action Plan (International Organisations)

There is a consensus that the issue of marine litter should be addressed at the national level and through global cooperation. Having appropriate legislation and/or an action plan is critical to solving the global issue of MPL and is being dealt with in two ways:

1. Specific marine litter management measures
2. General plastic waste management / plastic pollution control policies

Most countries use a combination of the above methods to tackle the problem of marine plastic pollution and hence coordinated action to combine general and marine litter specific policies could be of value.

This section lists the country-wise national action plans that are being implemented in Table 2.1 and an overview of the action plans set by international organisations in Table 2.2.

Table 2.1: Summary of National Action Plans by Countries

Country	National Action Plans shared by countries
G20 Members	
Australia	<ul style="list-style-type: none"> ● National Waste Policy (2018) ● National Waste Policy Action Plan (2019) ● National Plastics Plan (2021)
Brazil	<ul style="list-style-type: none"> ● National Plan to Combat Marine Litter (Under Development)

Country	National Action Plans shared by countries
Canada	<ul style="list-style-type: none"> ● Canada-wide Action Plan on Zero Plastic Waste (Phase 1 and Phase 2)
China	<ul style="list-style-type: none"> ● Opinions on Further Strengthening Plastic Pollution Control (2020); Plastic Pollution Control Action Plan (2021-2025)
European Union	<ul style="list-style-type: none"> ● EU Strategy for Plastics in a Circular Economy (2018)
France	<ul style="list-style-type: none"> ● Action Plan for the Marine Environment (Marine Strategy Framework Directive – MSFD) ● Biodiversity plan ● National Roadmap against Marine Litter ● National Roadmap for a circular economy (CE) ● National “3R” strategy on single use plastic packaging
Germany	<ul style="list-style-type: none"> ● German Resource Efficiency Program III (ProgResS) ● Programme of Measures (PoM) ● Action Plan “Nein zur Wegwerfgesellschaft”
India	<ul style="list-style-type: none"> ● Plastic Waste Management (Amendment) Rules (2022) ● National Marine Litter Policy of India through task force (in preparation)
Italy	<ul style="list-style-type: none"> ● Implementation of the Directive 2008/56/EC on Marine Litter ● The Regional Plan on the Marine Litter Management in the Mediterranean in the Framework of Article 15 on the Land Based Sources Protocol
Japan	<ul style="list-style-type: none"> ● National Action Plan for Marine Plastic Litter (2019)
Mexico	<ul style="list-style-type: none"> ● National Action Plan for Marine Debris and Plastic Pollution (Under Development)
Saudi Arabia	<ul style="list-style-type: none"> ● National Action Plan for Sustainable Management of Marine Litter in the Red Sea Coast of Saudi Arabia
South Africa	<ul style="list-style-type: none"> ● National Waste Management Strategy (2020)
South Korea	<ul style="list-style-type: none"> ● The 1st National Action Plan on Marine Litter and marine contaminated sediment (2021-2030)
Türkiye	<ul style="list-style-type: none"> ● Circular on the Preparation and Implementation of Marine Litter Provincial Action Plans
United Kingdom	<ul style="list-style-type: none"> ● UK Marine Strategy ● UK Plastics Pact (UKPP) (Voluntary) ● Environmental Improvement Plan 2023 (EIP23) ● Single Use Plastic (SUP) Directive (EU Directive 2019/904 on the reduction of the impact of certain plastic products on the environment) ● Reduction of Single-Use Plastic Beverage Cups and Containers-Department for Agriculture, Environment and Rural Affairs (DAERA) Consultation ● Circular Economy Strategy (Consultation opened 9th January 2023, closed 29th March 2023)

Country	National Action Plans shared by countries
United States of America	<ul style="list-style-type: none"> ● Save Our Seas 2.0 Act, Title 3, Section 301 ● EPA National Strategy for Reducing Plastic and Other Waste in Waterways and Oceans
Invited / Other Countries	
Antigua and Barbuda	<ul style="list-style-type: none"> ● National Bottle Deposit Scheme and a Waste-to-product;
Costa Rica	<ul style="list-style-type: none"> ● National Marine Waste Plan 2021-2030
Kiribati	<ul style="list-style-type: none"> ● Kiribati Waste Management and Resource Recovery Strategy
Mauritius	<ul style="list-style-type: none"> ● The Environment Protection (Control of Single Use Plastic Products) Regulations 2020 ● The Environment Protection (Banning of Plastic Bags) Regulations 2020 ● The Waste Management and Resource Recovery Act 2023
Myanmar	<ul style="list-style-type: none"> ● National Plastic Action Plan in Myanmar (Under Development)
The Netherlands	<ul style="list-style-type: none"> ● European Marine Strategy Framework Directive ● OSPAR Marine Litter Regional Action Plan ● Various European policies focused on reducing Marine Litter e.g. implementation of the Single Use Plastics and fishing gear ● Directive and EU Port Reception Facilities Directive ● National policies focused on prevention of litter (macro- and micro plastics) ● National policy on developing a circular economy
Peru	<ul style="list-style-type: none"> ● No National Action Plan
Singapore	<ul style="list-style-type: none"> ● National Action Strategy for Marine Litter (NASML)
Solomon Islands	<ul style="list-style-type: none"> ● National Waste Management & Pollution Control Strategy 2017-2026 ● Draft National Marine Litter Action Plan developed under CLIP (Commonwealth Litter Program) in 2019 ● National Ocean Policy ● National Implementation Plan on Persistent Organic Pollutants (SINIPs) ● National Biodiversity Strategic Action Plan (NBSAP) ● National Tourism Policy ● Solomon Islands Recycling & Waste Management Association Strategic Plan 2021-2031
Spain	<ul style="list-style-type: none"> ● Marine Strategies Program of Measures on Marine Litter (2022-2027)
Sri Lanka	<ul style="list-style-type: none"> ● National Action Plan on Plastic Waste Management 2021-2030
United Arab Emirates	<ul style="list-style-type: none"> ● The national agenda for the integrated waste management

Table 2.2: Summary of Action Plans by International Organisations

Name of International Organisation	Action Plans shared by International Organisations
Economic Research Institute for ASEAN and East Asia (ERIA)	<ul style="list-style-type: none"> • Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD)
Food and Agriculture Organisation (FAO)	<ul style="list-style-type: none"> • Actions to prevent and reduce abandoned, lost and otherwise discarded fishing gear (ALDFG) • The <u>IMO/FAO implemented GloLitter Partnerships project</u> and the development and implementation of ALDFG surveys, co-sponsoring the <u>GESAMP Working Group 43</u> on sea-based sources of marine plastic litter • Together with IMO and UNEP , facilitating a topic group on ALDFG under the <u>ICES/FAO Working Group on Fishing Technology and Fish Behavior (WGFTFB)</u>.
International Atomic Energy Agency (IAEA)	<ul style="list-style-type: none"> • NUTEC Plastics Initiative to assist its Member States in integrating nuclear techniques in their efforts to address challenges of plastic pollution
United Nations Environment Program (UNEP)	<ul style="list-style-type: none"> • UNEP Medium Term Strategy 2022-2025 • UNEP Programme of Work 2022-2025 • One-UNEP Plastics Initiative • Follow-up to UNEA resolutions, including UNEA 5/14
United Nations Industrial Development (UNIDO)	<ul style="list-style-type: none"> • Addressing the challenge of Marine Plastic Litter using Circular Economy methods
World Economic Forum (WEF)	<ul style="list-style-type: none"> • Global Plastic Action Partnership (GPAP)

2.2. Legal Framework (Countries and International Organisations)

Several countries have incorporated the issue of marine litter in their environmental legislations including solid waste management, plastic waste management and other waste management laws. This section describes the legal frameworks that are in place at country level (Table 2.3) and international organisation level (Table 2.4).

Table 2.3: Summary of Legal Frameworks by Countries

Country	List of legal frameworks
G20 Members	
Australia	<ul style="list-style-type: none"> ● Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) ● Recycling and Waste Reduction Act 2020 (RAWR Act) ● Recycling and Waste Reduction (Export—Waste Plastic) Rules 2021 (Waste Plastic Rules) ● Hazardous Waste (Regulation of Exports and Imports) Act 1989 (Hazardous Waste Act) ● National Environment Protection (Used Packaging Materials) Measure 2011 ● Protection of the Sea (Prevention of Pollution from Ships) Act 1983 ● Marine Order 95 (Marine pollution prevention – garbage) 2018
Brazil	<ul style="list-style-type: none"> ● Environment National Policy Law – Federal Law No. 6,938/1981 ● National Solid Waste Management Policy – Federal Law No. 12,305/2010 ● Federal Law No. 14,026/2020 ● Environmental Crimes Law ● Decree No. 10,936/2022, regulates the National Solid Waste Management Policy – (Law No. 12,305/2010).
Canada	<ul style="list-style-type: none"> ● Canadian Environmental Protection Act <ul style="list-style-type: none"> – Microbeads in Toiletries Regulations – Single-use Plastics Prohibition Regulations – Fisheries Act and Species at Risk Act.
China	<ul style="list-style-type: none"> ● Law of the China on Prevention and Control of Environmental Pollution by Solid Waste (2020 Amendment) ● Marine Environment Protection Law of the People's Republic of China (2017 Amendment) ● Circular Economy Promotion Law of the People's Republic of China (2018 Amendment) ● Draft Amendment to the Marine Environmental Protection Law of the People's Republic of China (upcoming)
European Union	<ul style="list-style-type: none"> ● Legislation on Waste ● Marine Strategy Framework Directive
France	<ul style="list-style-type: none"> ● The Legislation for Energy Transition for Green Growth (2015) ● The Legislation for Reclaiming Biodiversity, Nature, and Landscapes Law (2016) ● The Legislation for Trade Relations Balance in the Agricultural

Country	List of legal frameworks
	<ul style="list-style-type: none"> • Sector and Healthy and Sustainable Diet (EGAlim, 2018) • The Legislation against Waste and for a Circular Economy (2020); “3R” Decree for Reduction, Reuse and Recycling of single use plastic packaging for 2021-2025 period
Germany	<ul style="list-style-type: none"> • Kreislaufwirtschaftsgesetz (KrWG) • Wasserhaushaltsgesetz (WHG) • Hohe-See-Einbringungsgesetz (HSEG)
India	<ul style="list-style-type: none"> • The Environment (Protection) Act (1986) • Solid Waste Management Rules (2016) • Plastic Waste Management Rules (2016) • Plastic Waste Management (Amendment) Rules (2021) • National Taskforce on Management of Marine Litter • Plastic Waste Management (Amendment) Rules (2022) <ul style="list-style-type: none"> – Extended Producer Responsibility (EPR) on plastic packaging – Ban on identified single-use plastic items • BIS notification on “Classification for Cosmetic Raw Materials and Adjuncts” and ban on the use of non-biodegradable polymeric materials in personal care products from 2020.
Italy	<ul style="list-style-type: none"> • National legislative measure to reduce the improper discarding of small and micro waste (receipts, chewing gum, tissues, cigarette butts, etc.) in the environment (2015) • National legislative measure: ban light and ultralight shopping plastic bags that are not biodegradable and compostable, 2018; National legislative measure: ban of microplastics in soaps, creams, toothpastes (2018) • National legislative measure: ban of plastic cotton buds’ sticks, 2019; Italy joined the European Plastic Pact (EPP) (2020) Transposition of DIRECTIVE 2019/904/EC on the reduction of the impact of certain plastic products on the environment. D.Lgs 196/2021 • Transposition of DIRECTIVE 2019/883/EC on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC. D.Lgs 197/2021 • Updated Program of measures according to Article 13 of the MSFD, 2021 • Update of D.Lgs 197/2021 on port reception facilities for the delivery of waste from ships (upcoming)
Japan	<ul style="list-style-type: none"> • Waste Management and Public Cleansing Act • Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging • Act on Promotion of Resource Circulation for Plastics • Law Concerning Special Measures for Conservation of the Environment of the Seto Inland Sea
Mexico	<ul style="list-style-type: none"> • General Law for the Prevention and Integral Management of Waste (LGPGIR) • Prevention and sound waste management Law and Regulation

Country	List of legal frameworks
Saudi Arabia	<ul style="list-style-type: none"> ● National Environmental Management Waste Act ● Extended Producer Responsibility Regulations ● Plastic Bag Regulations ● South African National Standard (SANS) 695 (Compulsory Specification for Plastic Carrier Bags to improve recyclability of plastic bags) ● Plastics Master Plan, which is intended to serve as South Africa’s national action plan to tackle plastic pollution and achieve sustainable production and consumption of plastics.
South Africa	<ul style="list-style-type: none"> ● New “Waste Management Law”
South Korea	<ul style="list-style-type: none"> ● Marine Litter and contaminated sediment Management Act ● Act on Conservation and Utilization of the Marine Environment
Türkiye	<ul style="list-style-type: none"> ● Circular on the Preparation and Implementation of Marine Litter Provincial Action Plans by Law on Zero Waste
United Kingdom	<ul style="list-style-type: none"> ● The Marine Strategy Regulations 2010 ● The Merchant Shipping (Prevention of Pollution by Garbage from Ships) Regulations 2020 ● The Merchant Shipping and Fishing Vessels (Port Waste Reception Facilities) 2003 (as amended) ● IMO Action Plan for Marine Litter from Ships 2018 ● Plastic Packaging Tax ● London Convention 197
United States of America	<ul style="list-style-type: none"> ● U.S. Marine Debris Act ● Clean Water Act (EPA) ● Infrastructure Investment and Jobs Act (multiple federal agencies) ● Resource Conservation and Recovery Act (EPA) ● Save Our Seas 2.0 Act (EPA/NOAA/others) ● Microbead-Free Waters Act (FDA); Toxic Substances Control Act (EPA) ● Rivers and Harbours Appropriations Act (Army Corps of Engineers)
Invited / Other Countries	
Antigua and Barbuda	<ul style="list-style-type: none"> ● Environmental Protection Levy (Amendment) Bill, 2023
Kiribati	<ul style="list-style-type: none"> ● Environment Act 2021 (In preparation)
Mauritius	<ul style="list-style-type: none"> ● The Environment Protection (Control of single use plastic products) Regulations 2020 ● The Environment Protection (Banning of Plastic Bags) Regulations 2020 ● Environment Protection (Polyethylene Terephthalate (PET) Bottle Permit) Regulations 2001 ● Littering, illegal dumping into the ocean and on land is an offence under the Environment Protection Act 2002 ● The Waste Management and Resource Recovery Act 2023
The Netherlands	<ul style="list-style-type: none"> ● The EU Marine Strategy Framework Directive ● EU Waste Framework Directive ● EU packaging and packaging waste directive,

Country	List of legal frameworks
	<ul style="list-style-type: none"> ● National EPR schemes ● EU plastic bag directive ● Implementation of the Single Use Plastics and fishing gear directive
Norway	<ul style="list-style-type: none"> ● The Pollution Control Act ● The Marine Resources Act ● The Product Control Act ● The Harbour and Fairways Act ● The regulations relating to pollution control, chapter 32A
Peru	<ul style="list-style-type: none"> ● Legislative Decree N°1278 “Solid Waste Management Law” This legislative Decree was approved in 2017 by the Peruvian president. ● Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers”, approved in 2018 by the Peruvian President. ● Supreme Decree N°003-2020-PRODUCE “Roadmap towards a circular economy in the industrial sector”. This Legal instrument was approved in 2020
Singapore	<ul style="list-style-type: none"> ● Environmental Protection and Management Act (EPMA) ● Environmental Public Health Act (EPHA) and subsidiary legislation; Sewerage and Drainage Act ● Sewerage and Drainage (Trade Effluent) Regulations; Prevention of Pollution of the Sea Act (PPSA) ● Resource Sustainability Act (RSA)
Solomon Islands	<ul style="list-style-type: none"> ● Environment Act 1998 ● Environment Act 1998 & Environment Regulation 2008 ● Current Review of Environment Bill 2022 ● Fisheries Management Act 2017 ● Shipping (Marine Pollution) Regulation 2011 ● Solomon Islands Ports Act ● Solomon Islands Maritime Authority Act No.9 of 2018. ● Environmental Health Act 1980(version as at 1996) ● Forest Resources and Timber Utilization Act 1990 (version as at 1996) ● Mines and Minerals (Amendment) Act 2014 ● Provincial Government Act 1997 (as at 1997) ● Customs & Excise (Import Duties) (Amendment No.2/Order 2021) RT
Spain	<ul style="list-style-type: none"> ● Law 41/2010, 29th December, on protection of the marine environment
Sri Lanka	<ul style="list-style-type: none"> ● Marine Pollution Prevention Act no 35 of 2008 is being amended; Regulations are available on plastic waste management ● Regulations of 2021 on Single Use Plastic: Gazette No 2211/50 and dated 21 January 2021 – Plastic Material Identification standards (Codes)
United Arab Emirates	<ul style="list-style-type: none"> ● Federal Law (No. 24 /1999) ● Federal Law (No. 12/2018) for the Integrated Waste Management ● Cabinet Resolution No. 18 of 2012

Table 2.4 Summary of Legal frameworks by International Organisations

International Organisation	List of legal frameworks
Economic Research Institute for ASEAN and East Asia (ERIA)	<ul style="list-style-type: none"> • Technical Guidelines for Prevention of Plastics and Resin Pellets Leakage from Factories and Informal Recycling Sector in ASEAN in collaboration with the Regional Resource Centre for Asia and the Pacific (RRC.AP) of the Asian Institute of Technology (AIT)
United Nations Environment Program (UNEP)	<ul style="list-style-type: none"> • UNEP, in collaboration with UNITAR, is developing a statistical technical guideline on measuring flows of plastic along the lifecycle
United Nations Human Settlements Program (UN-Habitat)	<ul style="list-style-type: none"> • SDG Indicator 11.6.1: Proportion of municipal solid waste collected and managed in controlled facilities with regards to total municipal solid waste generated by cities.
United Nations Industrial Development (UNIDO)	<ul style="list-style-type: none"> • Supporting Member States to promote circular economy practices through policy recommendations
World Economic Forum (WEF)	<ul style="list-style-type: none"> • Global Plastic Action Partnership

2.3. Indicators (Countries and International Organisations)

Specific indicators to measure the flow and volume of MPL are being developed and several countries are currently in the process of formulating dedicated metrics for assessing the extent and quantity of MPL. However, obtaining such data can be challenging. Integrating plastic pollution and marine plastic pollution indicators can provide comprehensive insights into the stocks and flow of marine litter. In addition, it would be beneficial to establish standardized indicators and measurement methodologies to streamline monitoring of transboundary MPL. This section presents the MPL-specific indicators that are prevalent in various countries (Table 2.5).

Table 2.5: Summary of MPL indicators by Countries

Country	List of indicators
G20 Members	
Australia	<ul style="list-style-type: none"> ● Packing Targets
Brazil	<ul style="list-style-type: none"> ● Number of coastal municipalities with environmentally sound destination of solid wastes ● Quantity of devices installed ● Quantity of actions carried out ● Quantity of waste collected ● Number of municipalities with actions undertaken ● Platform updated available on the Ministry of the Environment website
Canada	<ul style="list-style-type: none"> ● Physical flow account for plastic material ● Canada has established the plastic particles in the Northern Fulmar indicator
China	<ul style="list-style-type: none"> ● Has a national Marine Litter monitoring system and carries out annual monitoring of Marine Litter in more than 50 coastal areas covering the types and amounts of floating litter on the sea surface, beach litter, and seabed litter
European Union	<ul style="list-style-type: none"> ● Descriptor 10 of the <u>Marine Strategy Framework Directive</u> ● Litter on the coastline, in the water surface layer and on the seafloor ● Micro-litter in all matrices
France	<ul style="list-style-type: none"> ● Targets for the legislation against waste and for circular economy ● Targets for Marine Litter reduction
Germany	<ul style="list-style-type: none"> ● As per EU MSFD and regional provisions (OSPAR, HELCOM) ● Beach litter, litter on the seafloor ● Plastic particles in the stomachs of seabirds (Northern fulmars)
India	<ul style="list-style-type: none"> ● Solid waste including plastic waste segregation and processing infrastructure ● Plastic packaging covered under EPR for a particular year ● Plastic Packaging waste recycled/processed in a particular year ● Reuse of rigid plastic packaging ● Use of recycled plastic content ● Enforcement of ban on identified single use plastic items

Country	List of indicators
	<ul style="list-style-type: none"> Quantification of beach litter through structured protocols Marine plastic litter auditing after the natural calamity
Italy	<ul style="list-style-type: none"> Definitions of ENVIRONMENTAL TARGETS (Target) pursuant to Ministerial Decree of February 15, 2019, according to the implementation of the Directive 2008/56/EC.
Japan	<ul style="list-style-type: none"> Amount of plastic waste generated, recycled, heat recovered, incinerated without energy recovery, and landfilled Amount of land-based litter collected, illegal dumping, and scattered waste Amount of marine litter collected by clean-up activities Production capacity and amount of consumption of alternative materials such as marine degradable plastics and paper Increment of plastic waste generated, recycled, heat recovered, incinerated without energy recovery, and landfilled, as a result of international cooperation
Mexico	<ul style="list-style-type: none"> No Indicators
Saudi Arabia	<ul style="list-style-type: none"> Under Development
South Africa	<ul style="list-style-type: none"> In South Africa, the majority of plastic waste still ends up in landfills. Recycling is a key element of circulating plastic material in the economy. However, while all plastics are technically recyclable, not all plastics are currently recycled in practice in South Africa. The end-use market demand for recycled material is still one of the limiting factors for growth of the plastic recycling sector in South Africa. This is largely linked to the competitive price of virgin plastic.
South Korea	<ul style="list-style-type: none"> Working towards the goal of zero Marine plastic waste by 2050. Middle target is reducing generation of MPL by 60% by 2030 compared to 2018
Türkiye	<ul style="list-style-type: none"> The Marine Litter monitoring component as a part of National Marine Monitoring Program covers all the seas around Türkiye, and the indicators of Marine Litter were designed according to IMAP (Integrated Marine Monitoring Program of Barcelona Convention) and EU-MSFD (Marine Strategy Framework Directive).
United Kingdom	<ul style="list-style-type: none"> Marine litter is used as an indicator of clean seas, and indicators that feed into that include litter on beaches, on the seafloor and floating litter. OSPAR is currently working to develop new indicators to measure microplastics in sediments
United States of America	<ul style="list-style-type: none"> No indicators
Invited / Other Countries	
Antigua and Barbuda	<ul style="list-style-type: none"> Prohibition Orders for single-use plastic and polystyrene (shopping bags, straws, etc.) Promotion of innovative solutions Boosting multi-stakeholder involvement and awareness-raising Beach clean-ups

Country	List of indicators
Mauritius	<ul style="list-style-type: none"> ● Projects and research are currently being undertaken to eventually to monitor microplastics in our marine environment which is also transboundary in addition to local inland generation
The Netherlands	<ul style="list-style-type: none"> ● North-East Atlantic, OSPAR has developed several common indicators to monitor Marine Litter: <ul style="list-style-type: none"> – Beach litter – Plastic particles in fulmars ● Study of supply chain of plastics
Spain	<ul style="list-style-type: none"> ● Beach litter; Seafloor litter ● Floating litter; Microplastics on beaches ● Microplastics on the water surface ● Microplastics on sediments ● Citizen Science ● Marine Litter in biota (ingestion and entanglement on marine turtles)
Sri Lanka	<p>The main indicator as per the National Action Plan is:</p> <ul style="list-style-type: none"> ● Percentage reduction of plastics entering oceans from land ● Other indicators <ul style="list-style-type: none"> The amount plastic waste in selected shoreline stretches <ul style="list-style-type: none"> – Plastic waste distance ratio kg/ km – Introducing indicator for floating plastic litter/sq km and microgram/sq m is under development – No. of beach Clean-up Programmes – No. of plastic traps established – No. of beach caretakers recruited – Quantity Plastic raw material imported – Percentage of violators of the regulations and its rectification – Percentage of increase in recycling facility
United Arab Emirates	<ul style="list-style-type: none"> ● Amount and types of MPL in the seawater and sediment ● Amount of marine litter collected by cleanup activities



3. Measures and Achievements

This section provides the measures and achievements of countries in their fight against marine plastic litter. From the implementation of policies and frameworks to promote sustainable practices and waste management systems, to the introduction of regulations and initiatives to reduce single-use plastics and promote recycling, countries have been actively working to mitigate the impacts of plastic pollution on marine ecosystems. Responses from twenty-nine countries were compiled to assess the measures and achievements in managing, mitigating, and curbing marine plastic litter, aiming to identify trends. Popular actions include improving waste management and recycling systems, conducting clean-up activities along rivers and coasts, fostering multi-stakeholder partnerships for knowledge sharing and awareness, and participating in international conventions to promote conservation frameworks. These actions received affirmative responses from 26 countries.

In terms of specific measures, 76% countries have introduced Extended Producer Responsibility (EPR), while 83% countries have implemented measures to reduce single-use plastics. Among regions targeted by numerous international cooperation projects, 59% countries have initiatives/projects implemented in Southeast Asia, 45% countries have initiatives in Latin America, and 35% countries have initiatives in Africa. Additionally, 48% countries have taken steps to restrict microplastics in personal care products. It has also been observed that 55% countries have initiated value chain financial incentive plans to encourage fishermen to collect end-of-life fishing gear. Figure 3.1. illustrates the various measures undertaken by countries to address marine plastic pollution.

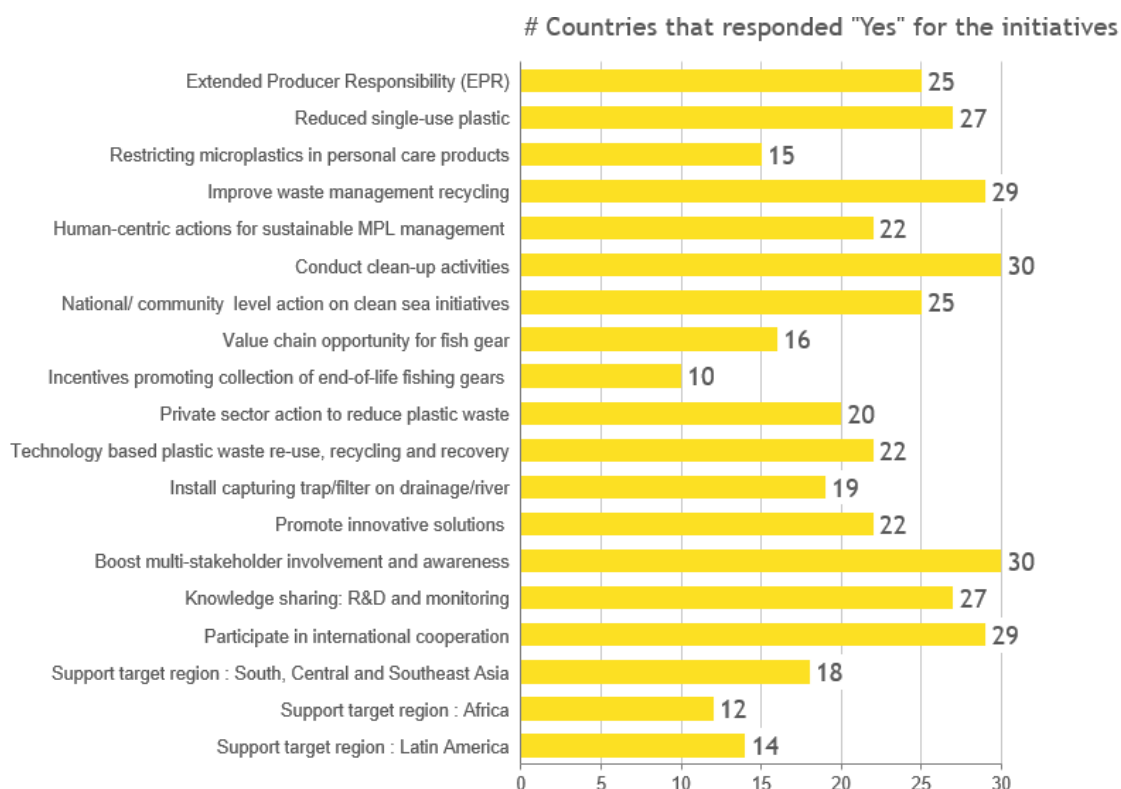


Figure 3.1: Measures undertaken by countries to address marine plastic litter.

3.1. Prevention and reduction of plastic waste generation

Concerted global efforts towards reduction of global plastic waste generation ranging from levying taxes and regulatory actions on single-use plastic products to community-based awareness and actions have been major contributors to the reduction of marine plastic litter. These actions can be classified into three broad categories:

1. Punitive Action:

Many countries are taking affirmative action to tackle the problem of single-use plastic products, more targeted efforts may be needed to address the problem of microplastics pollution

2. Supportive Action:

Numerous countries are currently undertaking substantial initiatives to encourage circular product design. Such endeavors aim to prevent pollution without negatively impacting the economy, while also creating new opportunities.

3. Community Action:

Several case studies exist that highlight the significance of community-led actions in addressing plastic pollution, including beach clearing campaign.

Various methodologies implemented by countries to minimise the generation of plastic waste are highlighted in this section. The summary of the responses is shown in the figure 3.2. 73% of the participating countries have implemented charges or taxes on single-use plastic products, such as shopping bags and straws, while 63% countries have enforced complete bans on the use of such products. In a trend towards technological development, 76.6% countries have established frameworks to encourage sustainable and circular product designs. With regard to microplastics, 47% countries have implemented policies for their regulation, and 37% countries have policies in place for government actions on microplastics. Additionally, four countries are currently in the process of developing similar frameworks and 30% have highlighted the importance of community participation in addressing marine plastic litter reduction (please see Tables 3.1, 3.2, 3.3, and Figure 3.2).

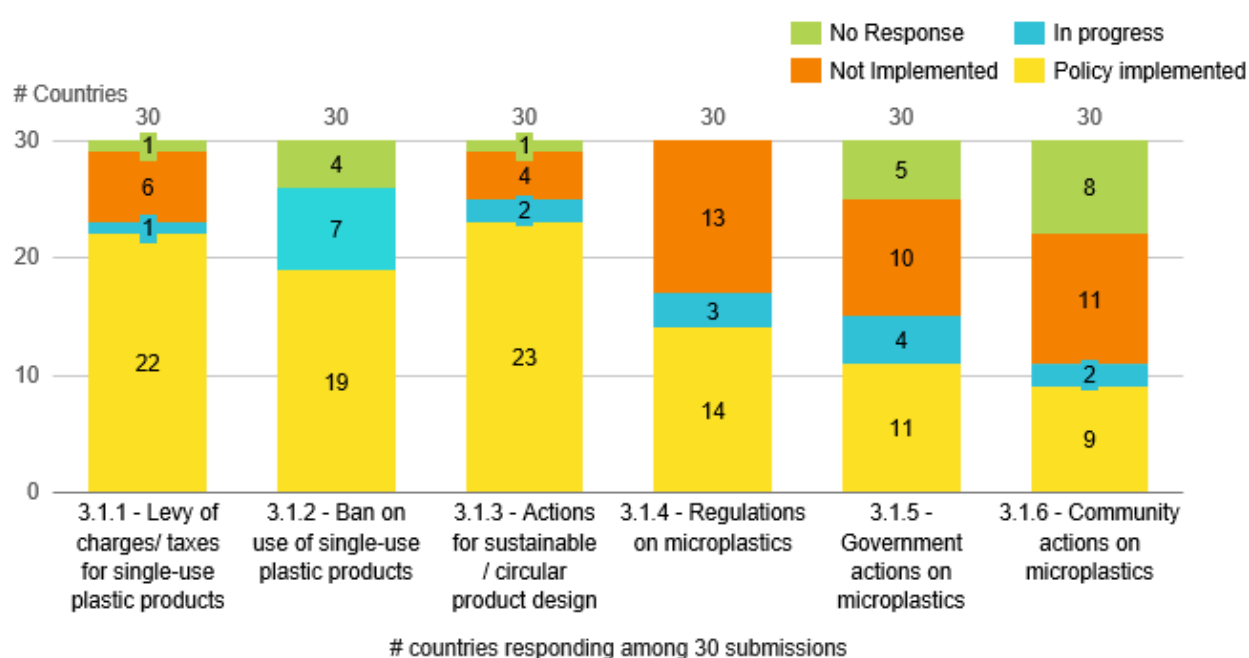


Figure 3.2: Country responses to actions or initiatives.

Country responses to the questions related to charges, taxes/ban on single-use plastics are given in Table 3.1.

Table 3.1: Country responses to charges/taxes/ban on single-use plastics

Country	3.1.1 - Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)	3.1.2 - Ban on use of single-use plastic products (e.g. shopping bags, straws)
G20 Members		
Australia	No	Yes
		<ul style="list-style-type: none"> 2021 National Plastics Plan – Phase outs
Brazil	Yes	No
	<ul style="list-style-type: none"> Sector Agreement for Reverse Logistics System for Packaging 	
Canada	Yes	Yes
	<ul style="list-style-type: none"> Canada-wide Action Plan on Zero Plastic Waste 	<ul style="list-style-type: none"> Single-use Plastics Prohibition Regulations
China	Yes	Yes
	<ul style="list-style-type: none"> Notice on restricting the production and sale of plastic shopping bags 	<ul style="list-style-type: none"> Opinions on Further Strengthening Plastic Pollution Control Work Plan for Plastic Pollution Control in the Civil Aviation Industry (2021-2025)

Country	3.1.1 - Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)	3.1.2 - Ban on use of single-use plastic products (e.g. shopping bags, straws)
European Union	Yes <ul style="list-style-type: none"> The Plastic Bags Directive (2015) and the Directive on the reduction of the impact of certain plastic products on the environment (Single-Use Plastic Directive) (2019) 	Not Available
France	Yes <ul style="list-style-type: none"> Reinforcement of extended producer responsibility schemes 	Yes <ul style="list-style-type: none"> Progressive ban of some single use plastic products
Germany	No	Yes <ul style="list-style-type: none"> Amendment of the Packaging Act
India	No	Yes <ul style="list-style-type: none"> Plastic Waste Management (Amendment) Rules, 2021
Italy	Yes <ul style="list-style-type: none"> Transposition of DIRECTIVE 2019/904/EC in Italian D.Lgs 196/2021 	Yes <ul style="list-style-type: none"> 2018. National legislative measure 2019. National legislative measure
Japan	Yes <ul style="list-style-type: none"> Charge for plastic shopping bags Reducing the use of “specified plastic-containing products” Targeted products: <ul style="list-style-type: none"> Plastic shopping bags Specified plastic products 	No
Mexico	No	Yes <ul style="list-style-type: none"> Single use plastic products prohibition
South Africa	Yes <ul style="list-style-type: none"> Plastic Bag Regulations Targeted products: Single-use shopping bags 	Yes <ul style="list-style-type: none"> Banning of plastic bags that has a thickness of less than 24 microns Targeted products: Plastic Carrier and Flat Bags
Saudi Arabia	Yes <ul style="list-style-type: none"> Baseline Study and Business model for implementing EPR or 	No

Country	3.1.1 - Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)	3.1.2 - Ban on use of single-use plastic products (e.g. shopping bags, straws)
	user fee on single use plastic bags	
South Korea	Yes	Yes
	<ul style="list-style-type: none"> • Deposit system for disposable cups 	<ul style="list-style-type: none"> • Regulation of Single-Use Items
Türkiye	Yes	No
	<ul style="list-style-type: none"> • Charging of plastic bags 	
United Kingdom	Yes	Yes
	<ul style="list-style-type: none"> • Single Use Carrier Bags Charge legislation • Plastic Packaging Tax 	<ul style="list-style-type: none"> • The Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations 2020 • The Environmental Protection (Cotton Buds) (Scotland) 2019 • The Environmental Protection (Single-use Plastic Products) (Scotland) Regulations 2021 (legislation.gov.uk)
Unites States of America	No	No
Invited / Other Countries		
Antigua and Barbuda	No	Not Available
Costa Rica	Yes	Yes
	<ul style="list-style-type: none"> • Approval of the creation of incentives (2%) for trade to replace single-use plastics. 	<ul style="list-style-type: none"> • Prohibition of single-use plastics in the public sector • Prohibition of the entry of single-use plastic into protected areas • Law to combat plastic pollution and protect the environment No.9786-2019
Kiribati	Yes	Yes
	<ul style="list-style-type: none"> • Container Deposit Scheme, Special Fund (Waste Recovery Act & Regulation) 2004 	<ul style="list-style-type: none"> • Customs Act 2019
Mauritius	Yes	Yes
	<ul style="list-style-type: none"> • Excise Duty introduced since 2006 on Beverage PET bottles 	<ul style="list-style-type: none"> • Banning through promulgation of: • The Environment Protection (Control of Single Use Plastic Products) Regulations 2020;

Country	3.1.1 - Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)	3.1.2 - Ban on use of single-use plastic products (e.g. shopping bags, straws)
		<ul style="list-style-type: none"> The Environment Protection (Banning of Plastic Bags) Regulations 2020
Myanmar	No	No
The Netherlands	Yes <ul style="list-style-type: none"> Implementation of the EU SUP Directive Single-use plastics (europa.eu) Implementation of extension of deposit system with plastic bottles (July 2021) and metal drinking cans (April 2023) 	Not available
Norway	Yes <ul style="list-style-type: none"> Implementation of relevant EU-directives Establishment of the Norwegian Retailers' Environment Fund (HMF). The fund's stated goals are threefold: <ul style="list-style-type: none"> Reduce plastic pollution Increase plastic recycling Reduce consumption of plastic bags 	Yes <ul style="list-style-type: none"> In line with EU's (SUP-directive), banned single-use products: Cotton bud sticks, cutlery, plates, straws and stirrers, balloon sticks and attachment mechanisms for such sticks. Food containers made of expanded polystyrene (EPS), with or without a lid, for food products that are intended to be eaten from the container without further preparation either at the point of sale or as take away Beverage packaging made of expanded polystyrene (EPS) and corks and lids
Peru	Yes <ul style="list-style-type: none"> Implement a customer-paid tax on the use of plastic bags 	Yes <ul style="list-style-type: none"> Ban of some single-use plastics (bags, straws, disposable utensils)
Solomon Islands	Yes <ul style="list-style-type: none"> Introduction of a plastic levy on imports in January 2022 	Yes <ul style="list-style-type: none"> Development of a Plastic Regulation on single-use plastic ban to be enforced by 1st September 2023
Spain	Yes <ul style="list-style-type: none"> Law 7/2022 on waste and contaminated soils for a circular economy Royal Decree 293/2018 on reducing the consumption of 	Yes <ul style="list-style-type: none"> The placing on the market of the following products is prohibited: Plastic products mentioned in section B of Annex IV. Any plastic product made of oxo-

Country	3.1.1 - Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)	3.1.2 - Ban on use of single-use plastic products (e.g. shopping bags, straws)
	plastic bags. • Future Royal Decree on packaging and packaging waste	degradable plastic. • Plastic microspheres of less than 5 millimeters added intentionally.
Sri Lanka	Yes • Charge for shopping bags	Not available
Singapore	Under Development • A charge for disposable carrier bags at supermarkets will come into effect from 3 July 2023	No
United Arab Emirates	Yes • Executive Council Resolution No. (52) of 2022 Concerning Reduction of the Use of Single-use Bags in the Emirate of Dubai	Yes • Ministerial Resolution No.380 of 2022 regarding regulation of the use of single-use products in the country's markets

The actions for promoting circular product design and regulations on microplastics undertaken by countries are given in Table 3.2.

Table 3.2: Country responses related to circular product design and microplastics

Country	3.1.3 - Actions for encouraging sustainable / circular product design	3.1.4 - Regulations on microplastics
G20 Members		
Australia	Yes • National Packaging Targets	Yes • Industry-led phase-out of microbeads in rinse-off personal care, cosmetic and cleaning products sold in Australia
Brazil	Yes • Decree that establishes reverse logistics for plastic packaging	No
Canada	Yes • Canada-wide Action Plan on Zero Plastic Waste	Yes • Microbeads in toiletries regulations

Country	3.1.3 - Actions for encouraging sustainable / circular product design	3.1.4 - Regulations on microplastics
	<ul style="list-style-type: none"> Canada's comprehensive zero plastic waste agenda 	
China	<p>Yes</p> <ul style="list-style-type: none"> Opinions on Further Strengthening Plastic Pollution Control Development of Circular Economy Plan (2021-2025) Plastic Pollution Control Action Plan (2021-2025) Notice of the General Office of the State Council on Further Strengthening the Control of Excessive Packaging of Commodities 	<p>Yes</p> <ul style="list-style-type: none"> Opinions on Further Strengthening Plastic Pollution Control Plastic Pollution Control Action Plan (2021-2025) Marine Ecological Environment Protection Plan (2021-2025)
European Union	<p>Yes</p> <ul style="list-style-type: none"> Follow up to the Single-use Plastic Directive Proposal for a Regulation on Eco-design for Sustainable Products (ESPR) 	<p>Yes</p> <ul style="list-style-type: none"> Legislation on microplastics intentionally added to products
France	<p>Yes</p> <ul style="list-style-type: none"> Roadmap for circular economy 	<p>Yes</p> <ul style="list-style-type: none"> Anti-waste Law of 2020
Germany	<p>Yes</p> <ul style="list-style-type: none"> Amendment of the Packaging Act An extension of the compulsory deposit to almost all single-use plastic beverage bottles and all beverage cans since 2022 	<p>No</p>
India	<p>Yes</p> <ul style="list-style-type: none"> Plastic Waste Management (Amendment) Rules, 2022 – Guidelines for Extended Producer Responsibility on Plastic Packaging 	<p>Under Development</p> <ul style="list-style-type: none"> BIS notification on: "Classification for cosmetic raw materials and adjuncts, Part 2: List of raw materials generally not recognized as safe for use in cosmetics" by incorporating non-biodegradable polymeric microbeads in the banned list
Italy	<p>Yes</p> <ul style="list-style-type: none"> Programme of measures according to Article 13 of the MSFD (2021) 	<p>Yes</p> <ul style="list-style-type: none"> National legislative measure: ban of microplastics in soaps, creams, toothpastes (2018)

Country	3.1.3 - Actions for encouraging sustainable / circular product design	3.1.4 - Regulations on microplastics
	<ul style="list-style-type: none"> National Strategy for Circular Economy MEC (Minimum Environmental Criteria) Introduction of measures that incentivize the eco-design of textile products in the EPR Italian system 	<ul style="list-style-type: none"> Programme of measures according to Article 13 of the MSFD (2021)
Japan	<p>Yes</p> <ul style="list-style-type: none"> Enforcement of environmentally friendly design under the Act on Promotion of Resource Circulation for Plastics 	<p>Yes</p> <ul style="list-style-type: none"> Act on Promoting the Treatment of Debris that Drift Ashore
Mexico	<p>Yes</p> <ul style="list-style-type: none"> General Law of Circular Economy Initiative 	<p>No</p>
South Africa	<p>Under Development</p> <ul style="list-style-type: none"> UNIDO project on Support for transitioning from conventional plastics to more environmentally sustainable alternatives. 	<p>No</p>
Saudi Arabia	<p>Yes</p> <ul style="list-style-type: none"> Mostadam Program: Green building rating system developed by the Ministry of Housing of the Kingdom of Saudi Arabia 	<p>No</p>
South Korea	<p>Yes</p> <ul style="list-style-type: none"> Evaluation System for Recyclability 	<p>Yes</p> <ul style="list-style-type: none"> Regulations on the safety standards etc. of cosmetics (2017), Designation of, and safety and labeling standards for, consumer chemical products subject to safety verification (2020)
Türkiye	<p>No</p>	<p>No</p>
United Kingdom	<p>Yes</p> <ul style="list-style-type: none"> The Resources and Waste Strategy for England Sustainable Production Goals CEN Standard UK Plastics Pact 	<p>Yes</p> <ul style="list-style-type: none"> Environmental protection (Microbeads) (England) Regulations 2017 The Environmental Protection (Microbeads) (Scotland) 2018 Environmental Protection

Country	3.1.3 - Actions for encouraging sustainable / circular product design	3.1.4 - Regulations on microplastics
		(Microbeads) Regulations (Northern Ireland) 2018 • The Environmental Protection (Microbeads) (Wales) 2018
Unites States of America	Yes • Environmentally Preferable Purchasing Program • Safer Choice and Design for the Environment voluntary certification programs • National Recycling Strategy: Part One of a Series on Building a Circular Economy for All • Save Our Seas 2.0, Title 3, Section 301 "National Strategy for Reducing Plastic and Other Waste in Waterways and Oceans"	Yes • Microbead-Free Waters Act
Invited/Other Countries		
Antigua and Barbuda	Not available	No
Costa Rica	Under Development	Under Development
Kiribati	Under Development	No
Mauritius	Yes • Reduction in the weight of beverage PET bottles through reduction of the plastic content in the design of the bottles and caps.	No
Myanmar	No	No
The Netherlands	Yes • Dutch economy to be completely circular by 2050	Yes • REACH Restriction on intentionally added microplastics at EU level and a national policy programme on micro plastics
Norway	Yes • Actively involved in EU-processes on product design • Establishing a Plastic Pact	Yes • National regulation on granular infill for artificial turfs

Country	3.1.3 - Actions for encouraging sustainable / circular product design	3.1.4 - Regulations on microplastics design
Peru	Yes	Yes
	<ul style="list-style-type: none"> • Clean Production Agreement • Supreme Decree N°003-2020-PRODUCE Roadmap towards a Circular Economy in the Industry Sector” 	<ul style="list-style-type: none"> • Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers”
Solomon Islands	No	No
Spain	Yes	Yes
	<ul style="list-style-type: none"> • From 3 July 2024, single-use plastic, whose caps and closures remain attached to the container may be placed on the market. • From 1 January 2025, polyethylene terephthalate bottles (hereinafter "PET bottles") containing at least 25% recycled plastic, calculated as an average of all, may be placed on the market • From 1 January 2030, only bottles, with 30% recycled plastic, may be placed on the market 	<ul style="list-style-type: none"> • Law 7/2022 of April 8, on waste and contaminated soils for a circular economy.
Sri Lanka	Yes	No
	<ul style="list-style-type: none"> • Alternative products are promoted 	
Singapore	Yes	No
	<ul style="list-style-type: none"> • Mandatory Packaging Reporting (MPR) Scheme/ Resource Sustainability Act • Packaging Partnership Program (PPP) • Singapore Green Labelling Scheme (SGLS) 	
United Arab Emirates	Yes	Under Development
	<ul style="list-style-type: none"> • Several actions to encourage sustainable and circular product design 	

The initiatives taken by the countries for wider stakeholder involvement in combating the MPL issue are illustrated in Table 3.3

Table 3.3: Country responses related to key stakeholder involvement

Country	3.1.5 - Government actions on microplastics	3.1.6 - Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)
G20 Members		
Australia	Under development	Not available
Brazil	No	No
Canada	Yes <ul style="list-style-type: none"> ● Addition of microbeads to Schedule 1 of Canada Environment Protection Act ● Canada Environment Protection Act (CEPA) ● Microbeads in Toiletries Regulations ● Canada-wide Strategy and Action Plan on Zero Plastic Waste ● Canada’s comprehensive zero plastic waste agenda 	Yes <ul style="list-style-type: none"> ● Canada’s comprehensive zero plastic waste agenda
China	Yes <ul style="list-style-type: none"> ● Plastic Pollution Control Action Plan (2021-2025) 	Not Available
European Union	-	-
France	Yes <ul style="list-style-type: none"> ● Microfiber filter on washing machines 	No
Germany	No	No
India	Yes <ul style="list-style-type: none"> ● Ban on the use of non-biodegradable polymer in personal care products from 2020 	Yes
Italy	Yes <ul style="list-style-type: none"> ● Design and testing of experimental prototypes for the removal of microplastics by wastewater treatment plants 	Yes <ul style="list-style-type: none"> ● “Life Blue Lakes” project under LIFE Programme (coordinated by Legambiente)

Country	3.1.5 - Government actions on microplastics	3.1.6 - Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)
Japan	Yes <ul style="list-style-type: none"> Harmonization of ocean surface microplastics monitoring methodologies 	Yes <ul style="list-style-type: none"> Reduction of micro-beads contained in body scrubs
Mexico	No	No
South Africa	Yes <ul style="list-style-type: none"> Microplastics research 	Yes <ul style="list-style-type: none"> Studies of Microplastics in Vaal River
Saudi Arabia	No	No
South Korea	Yes <ul style="list-style-type: none"> Cross-ministerial meeting on microplastics 	Yes <ul style="list-style-type: none"> Legislative actions on microplastics
Türkiye	No	No
United Kingdom	Yes <ul style="list-style-type: none"> Operation Clean Sweep 	Yes <ul style="list-style-type: none"> Operation Clean Sweep The Great Nurdle Hunt The Big Microplastic Survey International Pellet Watch
Unites States of America	Yes <ul style="list-style-type: none"> Report on Microfiber Pollution (in preparation) Micro-bead-Free Water Act 	Not Available
Invited/Other Countries		
Antigua and Barbuda	No	No
Costa Rica	Under development	Under development
Kiribati	No	No
Mauritius	Under development	Yes <ul style="list-style-type: none"> The Environment Protection Act 2002 promotes Environmental Stewardship and calls for collective cleanup actions.
Myanmar	No	No
The Netherlands	Not Available	Not Available

Country	3.1.5 - Government actions on microplastics	3.1.6 - Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)
Norway	Yes <ul style="list-style-type: none"> A national microplastics monitoring program is established to provide information on levels and types of microplastics in the environment 	Not Available
Peru	Yes <ul style="list-style-type: none"> Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers” 	Yes <ul style="list-style-type: none"> Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers”
Solomon Islands	No	No
Spain	Yes <ul style="list-style-type: none"> Promotion of a certification scheme on preventing pellet loss in the plastic supply chan. 	Not Available
Sri Lanka	Not Available	Not Available
Singapore	No	No
United Arab Emirates	Under development	Under development

3.2. Environmentally sound waste management

Several countries have policies to manage waste effectively and prevent it from entering the oceans and studies on interlinking marine plastics and the blue economy is gaining momentum.

In the face of escalating marine plastic pollution, adopting environmentally sound waste management practices has become imperative to combat the pressing issue of ocean pollution. This section explores the various environmentally friendly waste management strategies adopted by countries across the globe to combat ocean pollution. 93% countries have implemented proper waste management system interventions to prevent littering, illegal dumping, and unintentional leakage of waste into the oceans (Figure 3.3). 90% countries have also implemented measures to address these issues. Furthermore, 23% countries are currently studying the linkages between marine litter and the blue economy and considering policy or legal measures to address them, while 10% countries are still Under Development in their efforts. An overview of all the responses has been presented in Figure 3.3 and Table 3.4.

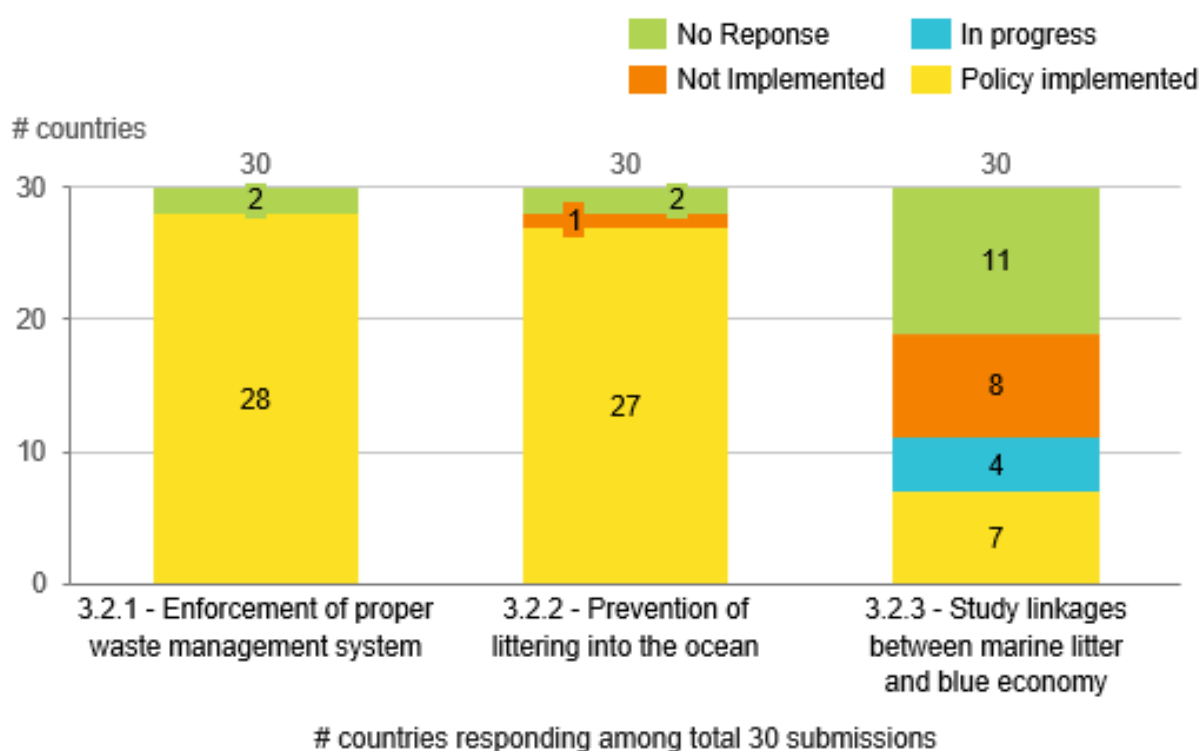


Figure 3.3: Responses from countries to initiatives taken to ensure environmentally sound waste management

Table 3.4: Country-wise actions towards better waste management

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
G20 Members			
Australia	Yes <ul style="list-style-type: none"> ● Ban on exports of waste plastic, paper, glass and tires 	Yes <ul style="list-style-type: none"> ● 2019 National Waste Policy Action Plan to implement the 2018 National Waste Policy ● Australian Recycling Investment Plan ● Threat Abatement Plan for the impacts of marine debris on the vertebrate wildlife of Australia's coasts and oceans ● National Plastics Plan ● CSIRO Plastics Innovation Hubs ● Indo-Pacific Oceans Initiative ● Partnership with National Centre for Coastal Research 	Not Available
Brazil	Yes <ul style="list-style-type: none"> ● National Reverse Logistics Program ● National Information System on Solid Waste Management ● National Plan to Solid Waste Management ● Recycling Credit Certificate Program ● Management of Material to be Dredged in Waters Under National 	Yes <ul style="list-style-type: none"> ● Port State Control and Naval Inspections, carried out by the Brazilian Navy ● Environmental Permitting Process and Inspections, carried out by Federal, State and Municipal Environmental Agencies ● GloLitter Partnerships Programme, carried out by the Ministry of the Environment (coordinator), the 	No

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
	Jurisdiction and its Final Disposition into Fresh and Marine Waters	Brazilian Navy, the Aquaculture and Fisheries National Secretariat and the National Waterways Transportation Agency.	
Canada	<p>Yes</p> <ul style="list-style-type: none"> ● Ghost Gear Fund ● Canada's comprehensive zero plastic waste agenda 	<p>Yes</p> <ul style="list-style-type: none"> ● Condition of license in all commercial fisheries prohibiting the depositing of garbage into the ocean from fishing vessels ● Canada-wide Action Plan on Zero Plastic Waste ● Canada's zero plastic waste agenda ● Commission on Environmental Cooperation (Marine Litter Project) 	<p>Yes</p> <ul style="list-style-type: none"> ● Ghost Gear Fund
China	<p>Yes</p> <ul style="list-style-type: none"> ● Opinions on Further Strengthening Plastic Pollution Control ● Plastic Pollution Control Action Plan (2021-2025) ● Several Opinions on Further Promoting the Work of Separating Domestic Waste ● Notice on Further Strengthening the Construction and 	<p>Yes</p> <ul style="list-style-type: none"> ● Opinions on Further Strengthening Plastic Pollution Control ● Plastic Pollution Control Action Plan (2021-2025) ● Marine Ecological Environment Protection Plan (2021-2025) ● Action Plan for the Uphill Battles for Integrated Bohai Sea Management ● Action Plan for Deepening the Battle for the Protection and 	<p>Yes</p> <ul style="list-style-type: none"> ● Several opinions on accelerating the green development of aquaculture ● Opinions on strengthening the ecological supervision of mariculture

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
	Management of Rural Domestic Waste Collection and Disposal System	Restoration of the Yangtze River	
European Union	Yes <ul style="list-style-type: none"> ● EU Waste Framework Directive 	Yes <ul style="list-style-type: none"> ● Directive on Port Reception Facilities (EU) 2019/883 	Not Available
France	Yes <ul style="list-style-type: none"> ● Simplify the sorting process for citizens and extend it to all types of household plastics ● Communication through medias ● Experiment deposit schemes ● create a new EPR organization 	Yes <ul style="list-style-type: none"> ● On-land actions ● Actions on rivers and waste and rainwater ● Actions on the seashore and at sea 	Not Available
Germany	No	No	No
India	Yes <ul style="list-style-type: none"> ● Plastic Waste Management Rules, 2016, 2022 ● Solid Waste Management Rules, 2016 	Yes <ul style="list-style-type: none"> ● Plastic Waste Management Rules, 2016, 2022 ● Solid Waste Management Rules, 2016 ● Coastal Regulation Zone Notification 2011, 2019 ● Mission LiFE (Lifestyle for the Environment) ● ● 	Yes <ul style="list-style-type: none"> ● National Marine Litter Policy (under preparation) ● Pradhan Mantri Matsya Sampada Yojana (PMMSY) ● National Action Plan on Marine Plastic Litter from Sea based sources ● National Policy on Marine Fisheries, 2017
Italy	Yes	Yes	Not Available

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
	<ul style="list-style-type: none"> National Programme for Waste Management 	<ul style="list-style-type: none"> D.Lgs 197/2021. 	
Japan	<p>Yes</p> <ul style="list-style-type: none"> Enforcement of proper waste management systems 	<p>Yes</p> <ul style="list-style-type: none"> Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean 	<p>Yes</p> <ul style="list-style-type: none"> Implementation of the Basic Act on Ocean Policy and the National Action Plan for Marine Plastic Litter
Mexico	<p>Yes</p> <ul style="list-style-type: none"> Sound waste prevention and management programs are developed in the municipal and regional level 	<p>No</p> <ul style="list-style-type: none"> Not at the federal level. In 2018, the German Agency for International Cooperation (GIZ), the company LafargeHolcim and its subsidiary company GEOCYCLE, together with the government of the state of Quintana Roo, collaborated on the OLAS (Clean Oceans) project, whose main objective was to prevent plastic waste generated on land from reaching aquatic ecosystems. (https://coprocesamiento.org/olas-cierra-2019-con-buenos-resultados/) 	<p>No</p>
South Africa	<p>Yes</p> <ul style="list-style-type: none"> Environmental Management Inspectors 	<p>Yes</p> <ul style="list-style-type: none"> Municipal Cleaning and Greening 	<p>No</p>
Saudi Arabia	<p>Yes</p>	<p>Not Available</p>	<p>Not Available</p>

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
	<ul style="list-style-type: none"> New Waste Management Law and Implementing regulations 		
South Korea	Yes <ul style="list-style-type: none"> Installation of Citizen-friendly Waste Treatment Facilities 	Yes <ul style="list-style-type: none"> The 3rd national action plan on rivers and estuaries (2021-2025) Fishing Gear management system 	No
Türkiye	Yes <ul style="list-style-type: none"> Environmental Law amendment 	Yes <ul style="list-style-type: none"> Environmental Law 	Under development
United Kingdom	Yes <ul style="list-style-type: none"> Port Waste Trapping or screening of drainage / rivers Pollution Prevention and Control Act 1999 Environmental Protection Act 1990 Environment Act 1995 	Yes <ul style="list-style-type: none"> International Convention for the Prevention of Pollution from Ships (MARPOL) UK Regulations on the Prevention of Pollution by Garbage from Ships 2020 (S.I. 2020/621) The UK's Port Waste Reception Facilities Regulations (S.I 2003/1809) 	No
Unites States of America	Yes <ul style="list-style-type: none"> Resource Conservation and Recovery Act (EPA) 	Yes <ul style="list-style-type: none"> EPA Trash Free Waters NOAA Marine Debris Program Prevention Grants 	Yes <ul style="list-style-type: none"> Produced study "The Economic Impacts of Marine Debris on Beach Recreation" Solid Waste Infrastructure for Recycling (SWIFR) Grant Program Consumer Recycling Education and

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
			Outreach Grant Program
Invited / Other Countries			
Antigua and Barbuda	Yes <ul style="list-style-type: none"> ● Litter Control and Prevention Act, 2019 	Yes <ul style="list-style-type: none"> ● Litter Control and Prevention Act, 2019 	Under development
Costa Rica	Yes <ul style="list-style-type: none"> ● Innovative Law and National Waste Plan ● National Strategy for Single-use Plastic ● National Strategy for the Recovery, Separation and Recovery of Waste (Recycling Strategy) 	Yes <ul style="list-style-type: none"> ● National Marine Waste Plan ● PROMAR project (Dominican Republic, Colombia and Costa Rica) 	Under development
Kiribati	Yes <ul style="list-style-type: none"> ● Environment Act 2021, Kiribati Waste Management and Resource Recovery Strategy 	Yes <ul style="list-style-type: none"> ● Environment Act 2021 	No
Mauritius	Yes <ul style="list-style-type: none"> ● Designated specific locations (civic amenity centres) to segregate waste into various components including plastic waste. 	Yes <ul style="list-style-type: none"> ● Littering, illegal dumping into the ocean is an offence under the Environment Protection Act 2002. ● Unintentional waste into the ocean may entail enforcement notices under the 	Yes <ul style="list-style-type: none"> ● Plastic Expedition in the Indian Ocean- ExPIoI, involving the Seychelles, Mauritius, Comoros, Madagascar, Reunion Island

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
		above Act. <ul style="list-style-type: none"> Government conducts regular sensitization and awareness campaigns against littering and illegal dumping. 	
Myanmar	Not Available	Not Available	Not Available
The Netherlands	Yes <ul style="list-style-type: none"> National waste management plan (Landelijk Afvalbeheerplan, LAP3), in compliance with the European Waste Framework Directive 	Yes <ul style="list-style-type: none"> National agreement on additional measures to tackle persistent floaters by asking for additional and stricter prewash procedures in the harbor of Rotterdam 	Not Available
Norway	Yes <ul style="list-style-type: none"> Chapter 10A establishes mandatory sorting of biological waste and plastic waste Regulations entered into force 1 January 2023. requires municipalities to sort at least 70 % of plastic waste from households by 2035 	Yes <ul style="list-style-type: none"> Norwegian Pollution Control Act 	Not Available
Peru	Yes <ul style="list-style-type: none"> Legislative Decree N°1278 “Solid Waste Management 	Yes <ul style="list-style-type: none"> Legislative Decree N°1278 “Solid Waste Management Law” Law N°30884 “Law 	No

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
	Law”	that Regulates Single-Use Plastic and Disposable Containers or Containers”	
Solomon Islands	<p>Yes</p> <ul style="list-style-type: none"> ● Tipping fees introduced ● Licensing of prescribed business ● Waste Discharged license from prescribed premises 	<p>Yes</p> <ul style="list-style-type: none"> ● Waste discharge license from prescribed premises under the Environment Act 1998 ● Awareness & Education (including billboard installations in various locations, community and school programmes, radio programmes, social media platforms) ● Installation of Litter Boom in Mataniko Sea front by SIPA ● Provision of waste bins for domestic shipping industry 	<p>Yes</p> <ul style="list-style-type: none"> ● Ocean Policy
Spain	<p>Yes</p> <ul style="list-style-type: none"> ● Law 7/2022 on waste and contaminated soils for a circular economy. ● Several Royal Decrees for EPR: ● Royal Decree 646/2020 on landfill disposal of waste. ● Royal Decree 553/2020 on waste shipment within Spain. 	<p>Yes</p> <ul style="list-style-type: none"> ● Marine strategies. ● Law 7/2022 on waste and contaminated soils for a circular economy. ● Royal Decree 293/2018 on reducing the consumption of plastic bags ● Circular Economy Plan & Strategy ● Future RD on packaging and packaging waste 	<p>Not Available</p>

Country	3.2.1 - Enforcement of proper waste management system	3.2.2 - Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean	3.2.3 - Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?
	<ul style="list-style-type: none"> • Law 5/2013 on integrated pollution prevention and control (incineration) 		
Sri Lanka	Yes <ul style="list-style-type: none"> • National Policy on Waste Management 	Yes <ul style="list-style-type: none"> • Surakimu Ganga Programme, etc. 	Not Available
Singapore	Yes <ul style="list-style-type: none"> • Control of waste disposal. • Anti-littering and waterways clean-up measures, • Integrated and comprehensive solid waste management and collection system 	Yes <ul style="list-style-type: none"> • Damming up tidal rivers to form reservoirs • Collect and treat all used water • Party to all six Annexes of the International Maritime Organisations's (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL) 	No
United Arab Emirates	Yes <ul style="list-style-type: none"> • National Agenda for waste management 	Yes <ul style="list-style-type: none"> • The UAE Federal Law No. 24 of 1999 on the Protection and Development of the Environment 	Under Development

3.3. Clean-up of marine plastic litter

Many countries have taken affirmative action to clean up litter from beaches and oceans, and significant efforts have been put in by countries towards the targeted clean-up of marine ecosystems. These initiatives can broadly be categorized as:

1. Removal of plastic waste from the beaches (land-based)
2. Removal of waste from the oceans.

According to the shared responses, 97% countries have taken systematic efforts towards the collection of scattered waste littering the beaches. Further, 66% of them have noted a positive development since this initiative. 80% countries have taken action to remove plastic litter from the oceans and 50% countries have mentioned that this has improved the prevailing conditions. Figure 3.5 and Table 3.5 shows the responses from the countries.

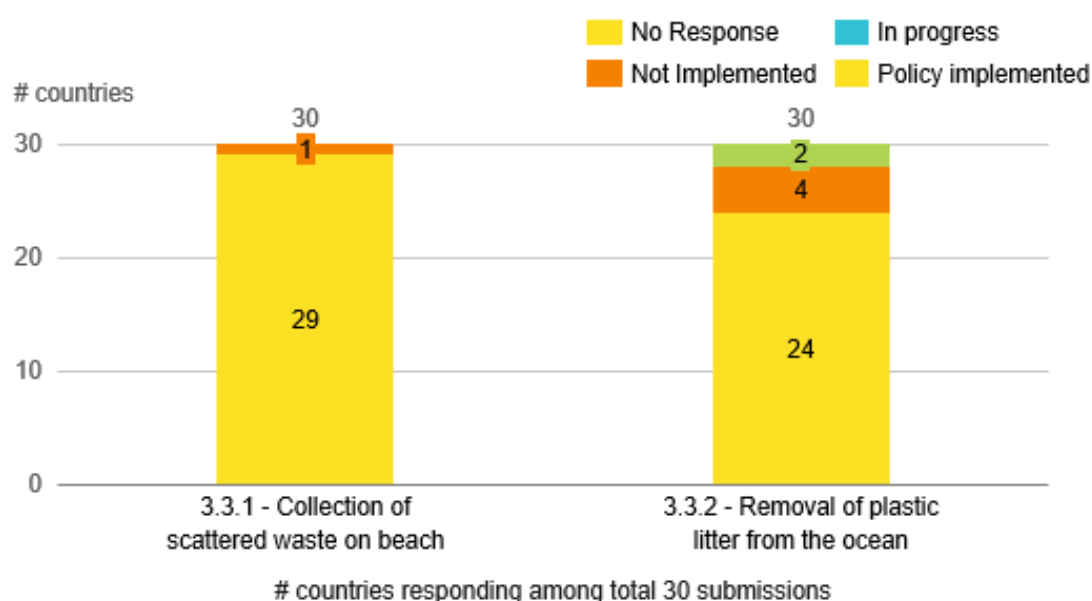


Figure 3.4: Land and ocean based plastic waste removal by various countries

Table 3.5: Country-wise actions towards removal of Marine Litter

Country	3.3.1 - Collection of scattered waste on beach	3.3.2 - Removal of plastic litter from the ocean
G20 Members		
Australia	Yes <ul style="list-style-type: none"> ● Australian Government Ghost Nets Initiative: Indigenous Rangers Coastal Clean-ups Project. ● Environment Restoration Fund ● Communities Environment Program ● CSIRO Ghost Nets Research 	Yes <ul style="list-style-type: none"> ● Australian Government Ghost Nets Initiative

Country	3.3.1 - Collection of scattered waste on beach	3.3.2 - Removal of plastic litter from the ocean
Brazil	No	No
Canada	Yes <ul style="list-style-type: none"> • Ghost Gear Fund • Canada-wide Action Plan on Zero Plastic Waste • Canada’s zero plastic waste agenda 	Yes <ul style="list-style-type: none"> • Ghost Gear Fund retrieval projects • Canada-wide Action Plan on Zero Plastic Waste • Canada’s zero plastic waste agenda
China	Yes <ul style="list-style-type: none"> • Opinions on Further Strengthening Plastic Pollution Control • Plastic Pollution Control Action Plan (2021-2025) • Marine Ecological Environment Protection Plan (2021-2025) • Action Plan for the Comprehensive Management of Key Marine Areas • Notice on Special Action Plan for Waste Cleaning Up in Rivers, Lakes and Seas (2022) 	Yes <ul style="list-style-type: none"> • Opinions on Further Strengthening Plastic Pollution Control • Plastic Pollution Control Action Plan (2021-2025) • Marine Ecological Environment Protection Plan (2021-2025) • Notice on Special Action Plan for Waste Cleaning Up in Rivers, Lakes and Seas (2022)
European Union	Yes <ul style="list-style-type: none"> • World Clean-up Day 2018 	Yes <ul style="list-style-type: none"> • Port Reception Facilities Directive • European Maritime, Fisheries and Aquaculture Fund
France	Yes <ul style="list-style-type: none"> • Support clean-up campaign organized by NGOs on beaches and along the coastlines. • Launch of the citizen science platform on marine litter to identify the clean-up actions taking place. • 	Yes <ul style="list-style-type: none"> • France is leading “Fishing for Litter” program by EU
Germany	Yes <ul style="list-style-type: none"> • The “Reduction of litter already present in the marine environment” is part of the German Programme of Measures under the MSFD (Measure UZ5-07) 	Yes <ul style="list-style-type: none"> • The “Reduction of litter already present in the marine environment” is part of the German Programme of Measures under the MSFD (Measure UZ5-07)
India	Yes	Yes

Country	3.3.1 - Collection of scattered waste on beach	3.3.2 - Removal of plastic litter from the ocean
	<ul style="list-style-type: none"> ● Swachh Sagar, Surakshit Sagar (Clean Coast, Safe Seas) ● Swachh-Nirmal Tat Abhiyan (Beach Cleaning Campaign) ● Blue Flag certification 	<ul style="list-style-type: none"> ● Swachh Sagar, Surakshit Sagar (Clean Coast, Safe Seas) ● Swachhata Action Plan ● Coastal Clean Seas ● Suchitwa Sagaram
Italy	<p>Yes</p> <ul style="list-style-type: none"> ● Clean up initiatives by national NGOs: Legambiente, Marevivo, WWF and others. 	<p>Yes</p> <ul style="list-style-type: none"> ● Initiative of the Ministry of the Environment and Energy Security to clean up the sea of Marine Litter ● National programme Mo.Ri.net (Monitoring, Census, Collection and Recycling of Ghost Nets: Fishermen as protagonists of sea conservation). The programme was conducted by ISPRA, PolieCo, Siena University, Capo Carbonara MPA and Asinara National Park ● Transposition of DIRECTIVE 2019/883/EC in Italian D.Lgs 197/2021.on port reception facilities for the delivery of waste from ships
Japan	<p>Yes</p> <ul style="list-style-type: none"> ● Collection of scattered waste on land 	<p>Yes</p> <ul style="list-style-type: none"> ● Removal of plastic litter from the ocean
Mexico	<p>Yes</p> <ul style="list-style-type: none"> ● Beach cleanups focused on reduce marine plastic litter 	<p>Not Available</p>
South Africa	<p>Yes</p> <ul style="list-style-type: none"> ● National Working for the Coast Programme ● Good Green Deeds programme ● The Source to Sea Litter Combatting Project ● Annual International Coastal Clean-up Day 	<p>Yes</p> <ul style="list-style-type: none"> ● Beach Clean ups ● NGO's which are created specifically to do beach clean ups ●
Saudi Arabia	<p>Yes</p> <ul style="list-style-type: none"> ● “National Action Plan” for sustainable management of Marine Litter in the Red Sea coast of Saudi Arabia 	<p>Yes</p> <ul style="list-style-type: none"> ● National Program for Reducing Marine Litter, ● Aims to address the sources of Marine Litter, improve waste management practices, and enhance the conservation of marine ecosystems
South Korea	<p>Yes</p>	<p>Yes</p>

Country	3.3.1 - Collection of scattered waste on beach	3.3.2 - Removal of plastic litter from the ocean
	<ul style="list-style-type: none"> Marine environment keepers 	<ul style="list-style-type: none"> National Marine Litter removal project
Türkiye	Yes	Yes
	<ul style="list-style-type: none"> Provincial Action Plan on Marine Litter 	<ul style="list-style-type: none"> Provincial Action Plan on Marine Litter
United Kingdom	Yes	Yes
	<ul style="list-style-type: none"> The Great British Beach Clean (Marine Conservation Society) 	<ul style="list-style-type: none"> KIMO Fishing for Litter
Unites States of America	Yes	Yes
	<ul style="list-style-type: none"> NOAA Marine Debris Program Removal Grants 	<ul style="list-style-type: none"> NOAA Marine Debris Program Removal Grants
Invited / Other Countries		
Antigua and Barbuda	Yes	No
	<ul style="list-style-type: none"> National clean-up days and NGO'S beach clean- ups 	
Costa Rica	Yes	Yes
	<ul style="list-style-type: none"> Guide for the Collection of Waste on the Beach 	<ul style="list-style-type: none"> Conditioning of a Coast Guard service boat Recovery of fishing gear abandoned at sea
Kiribati	Yes	No
	<ul style="list-style-type: none"> Pickathon Cleanup 	
Mauritius	Yes	Yes
	<ul style="list-style-type: none"> The Beach Authority is responsible for maintaining and cleaning of public beaches in Mauritius 	<ul style="list-style-type: none"> Government in collaboration with relevant stakeholders carries out cleaning of the lagoons
Myanmar	Yes	Not Available
	<ul style="list-style-type: none"> Beach Clean-up activities by local government and NGOs 	
The Netherlands	Yes	Yes
	<ul style="list-style-type: none"> Beach cleanup initiatives 	<ul style="list-style-type: none"> Support of the The Ocean Cleanup with agreement
Norway	Yes	Yes
	<ul style="list-style-type: none"> A National Centre against Marine Litter (Marfo) Support of the NGO Keep Norway Beautiful The Norwegian Retailers' 	<ul style="list-style-type: none"> Fishing for Litter Norwegian Directorate of Fisheries has organized annual clean-up surveys for lost or abandoned fishing gear

Country	3.3.1 - Collection of scattered waste on beach	3.3.2 - Removal of plastic litter from the ocean
	Environment Fund (HMF)	
Peru	Yes <ul style="list-style-type: none"> • Campaign "Save Beaches" 	No
Solomon Islands	Yes <ul style="list-style-type: none"> • International Coastal Cleanup Day events • Marine Litter Training & cleanups under SWAP Project • Coastal beach-up during WED and by small, organized youth groups & organizations in Honiara and Provinces 	Yes <ul style="list-style-type: none"> • Installation of litter boom in front of Honiara Sea front by SIPA
Spain	Yes <ul style="list-style-type: none"> • Financing of clean-up activities 	Yes <ul style="list-style-type: none"> • Fishing for litter • ALDFG
Sri Lanka	Yes <ul style="list-style-type: none"> • Carry out International coastal cleanup day programme • Carry out beach cleaning in more than 100 sites • Establish beach caretakers programme to clean selected beach areas in daily basis more than 120 km were cleaned • Carry out fishing harbour cleaning program 	Yes <ul style="list-style-type: none"> • Underwater cleaning programme at selected sensitive ecosystem area such coral reef
Singapore	Yes <ul style="list-style-type: none"> • Beach clean-ups 	Yes <ul style="list-style-type: none"> • Dive clean-ups
United Arab Emirates	Yes <ul style="list-style-type: none"> • Clean-up Campaigns organized by the Ministry of Climate Change and Environment with federal, local entities, NGOs, private sectors, and public volunteers • Clean up UAE (by Emirates Environmental Group) • Clean-Up Arabia campaign (by Emirates Diving Association) • Clean-Up the Gulf (by Borouj) 	Yes <ul style="list-style-type: none"> • Clean-up Campaigns organized by the Ministry of Climate Change and Environment with federal, local entities, NGOs, private sectors, and public • Clean-Up Arabia campaign (by the EDA) • Advanced and Innovative Clean-up Campaign (drone, marine scraper, etc.)

3.4. Promotion of innovative solutions

Innovative solutions play a pivotal role in combating marine plastic pollution. The development of biodegradable plastics, circular product designs, the implementation of advanced waste management technologies, the promotion of public-private partnerships, and innovative solutions offer promising avenues for tackling this global challenge. This section covers the efforts taken by countries in this direction.

In terms of promoting innovative solutions, 83% of countries have reported policies to encourage plastic alternatives, such as biodegradable plastics and circular product design, which includes the use of recycled materials or closed-loop recycling. Since the implementation of these policies, 64% of the countries have witnessed a positive impact, indicating the effectiveness of these measures.

Moreover, 73% of the countries have emphasized the importance of public-private partnerships as an innovative solution to addressing the issue of marine plastic litter. Over time, 50% of the countries have observed a positive impact as a result of these partnerships. However, 27% countries have mentioned that they have not yet seen a positive impact (Figure 3.5 and Table 3.6).

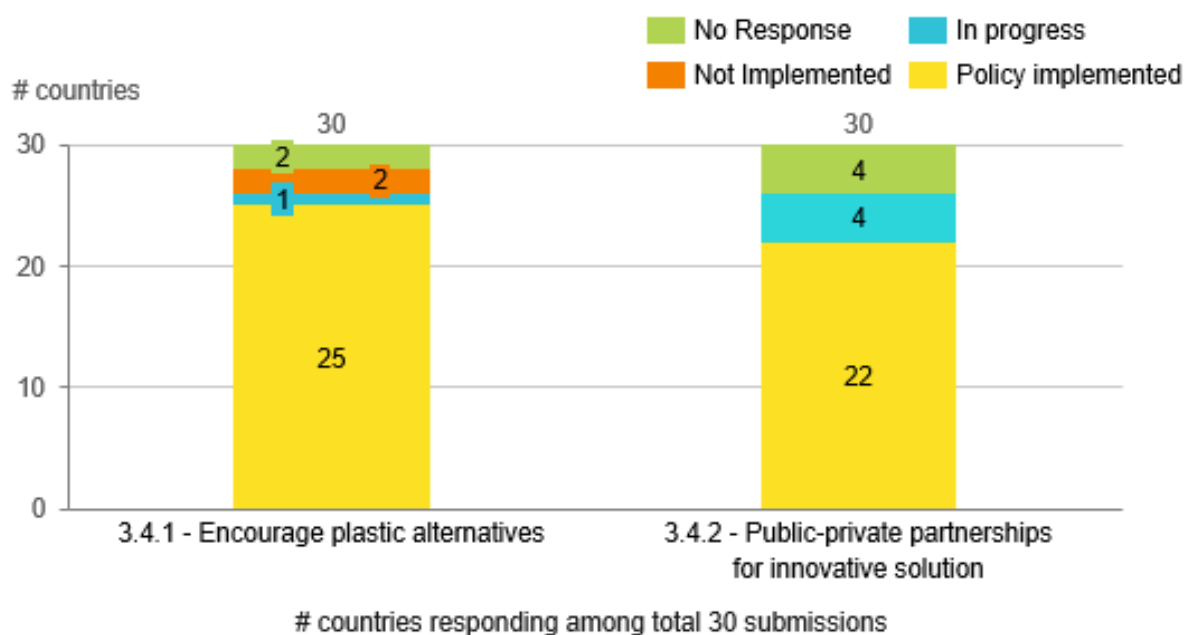


Figure 3.5: Innovative solutions by countries to tackle MPL

Table 3.6 Country-wise inputs received towards innovative solution

Country	3.4.1 - Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)	3.4.2 - Public-private partnerships for creating and implementing innovative solution
G20 Members		
Australia	Yes	No

Country	3.4.1 - Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)	3.4.2 - Public-private partnerships for creating and implementing innovative solution
	<ul style="list-style-type: none"> • Australian Circular Economy Hub • Australian Circular Economy Ministerial Advisory Group 	
Brazil	Under Development	No
Canada	Yes <ul style="list-style-type: none"> • Ghost Gear Fund • Canada’s comprehensive zero plastic waste agenda • Single-use Plastics Prohibition Regulations 	Yes <ul style="list-style-type: none"> • Canada’s comprehensive zero plastic waste agenda
China	Yes <ul style="list-style-type: none"> • Opinions on Further Strengthening Plastic Pollution Control • Plastic Pollution Control Action Plan (2021-2025) 	Yes <ul style="list-style-type: none"> • Opinions on Further Strengthening Plastic Pollution Control • Plastic Pollution Control Action Plan (2021-2025)
European Union	Yes <ul style="list-style-type: none"> • Commission Implementing Decision of 10.2.2021 on a standardization request to the European Committee for Standardisation as regards circular design of fishing gear in support of Directive (EU) 2019/904 • Policy Framework for Biobased, biodegradable and compostable plastics 	Yes <ul style="list-style-type: none"> • Plastics Circularity Multiplier group
France	Yes <ul style="list-style-type: none"> • Definition of standard ranges of reusable packaging for the catering sector, as well as for fresh produce and drinks • Decree no. 2022-507 of April 8, 2022 relating to the minimum proportion of reused packaging to be placed on the market each year 	Yes <ul style="list-style-type: none"> • Identifying new fishing gears that intend to prevent impacts in the marine environment • In 2020, the Ministry of ecological transition launched the basis for an Accelerating Strategy “Recyclability, recycling and reincorporation of materials” in order to support innovation in the private sector • ADEME has planned to launch a study in 2021 to characterise the sources of recoverable waste in

Country	3.4.1 - Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)	3.4.2 - Public-private partnerships for creating and implementing innovative solution
		France
Germany	<p>Yes</p> <ul style="list-style-type: none"> Criteria for “Reusable systems to-go for food and beverages (DE-UZ 210)” of the German national ecolabel “Blue Angel”. Amendment of the Packaging Act 	No
India	<p>Yes</p> <ul style="list-style-type: none"> Ministry of Micro, Small and Medium Enterprises (MSMEs), Steps are also being taken to promote the manufacturing of alternatives to banned single-use plastic items by bringing in technology and innovations, facilitating credit availability. 	<p>Yes</p> <ul style="list-style-type: none"> Ghost Gear Upcycling
Italy	<p>Yes</p> <ul style="list-style-type: none"> Programme of measures according to Article 13 of the MSFD (2021). MEC (Minimum Environmental Criteria) Tax credit for the purchase of recycled materials from separate waste collection 	<p>Yes</p> <ul style="list-style-type: none"> Rivers anti-pollution barriers
Japan	<p>Yes</p> <ul style="list-style-type: none"> Policy actions for encouraging plastic alternatives 	<p>Yes</p> <ul style="list-style-type: none"> Clean Ocean Material Alliance (CLOMA)
Mexico	<p>No</p> <ul style="list-style-type: none"> Some local governments have promoted the use of biodegradable materials, particularly compostable ones, but they have faced other problems such as the lack of laboratories to certify the material, as well as the lack of monitoring activities. 	No
South Africa	<p>Yes</p> <ul style="list-style-type: none"> National Waste Management Strategy 	<p>Yes</p> <ul style="list-style-type: none"> Extended Producer Responsibility

Country	3.4.1 - Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)	3.4.2 - Public-private partnerships for creating and implementing innovative solution
Saudi Arabia	Yes <ul style="list-style-type: none"> ● New law and regulations 	Yes <ul style="list-style-type: none"> ● Some initiatives are currently under consideration
South Korea	Yes <ul style="list-style-type: none"> ● Biodegradable fishing gears dissemination ● Target Utilization Rate of Recycled Raw Materials 	Yes <ul style="list-style-type: none"> ● Adopt-a-beach project
Türkiye	Not Available	Not Available
United Kingdom	Yes <ul style="list-style-type: none"> ● A call for evidence was undertaken on the need for standards for bio-based, biodegradable, and compostable plastics, noting numerous concerns. ● Minded to consult on ban of oxo-degradable plastics. ● We will do further work on measures to increase reuse and refill. 	Yes <ul style="list-style-type: none"> ● Research and Innovation Fund ● Plastics and Waste Innovation Fund ● Smart Sustainable Plastic Packaging ● Sustainable Manufacturing and Environmental Pollution (SMEP)
Unites States of America	No	No
Invited/Other Countries		
Antigua and Barbuda	Yes <ul style="list-style-type: none"> ● Prohibition Order for Shopping Plastic Bags and Polystyrene 	Yes <ul style="list-style-type: none"> ● Closing the Plastic Tap
Costa Rica	Yes <ul style="list-style-type: none"> ● Circular Economy Strategy ● Diagnosis of the existence of natural fibers that replace single-use plastic. ● Incorporation of at least 50% recycled material in the design of packaging, packaging and bottles 	Yes <ul style="list-style-type: none"> ● Circular Economy Strategy ● Rethinking plastic consumption: from ideas to action
Kiribati	Yes <ul style="list-style-type: none"> ● Waste repurposing trainings with local communities using plastics 	Yes <ul style="list-style-type: none"> ● Promoting reusable shopping bags instead of plastic shopping

Country	3.4.1 - Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)	3.4.2 - Public-private partnerships for creating and implementing innovative solution
	as materials	bags
Mauritius	Yes <ul style="list-style-type: none"> ● Promotion of alternatives to plastics 	Yes <ul style="list-style-type: none"> ● Government provides support to Small and Medium Enterprises (Tax rebate, loan scheme, etc)
Myanmar	Not Available	Not Available
The Netherlands	Yes	Yes <ul style="list-style-type: none"> ● Programme Fisheries for a Clean Sea ● Programme Clean Beaches
Norway	Yes <ul style="list-style-type: none"> ● Through the EU (Norway as part of the EEA agreement) a new target is set on incorporating 25% of recycled plastic in PET beverage bottles from 2025, and 30% in all plastic beverage bottles from 2030 ● Initiatives for better product design supported by Innovation Norway 	Yes <ul style="list-style-type: none"> ● Norwegian Retailers' Environment Fund and the Research Council of Norway (RCN) have a joint project on supporting research on circular solutions for plastics including reuse and recycling
Peru	Yes <ul style="list-style-type: none"> ● Technical Regulation on Biodegradable Plastic Bags (Supreme Decree No. 025-2021-PRODUCE) ● Clean Production Programs between the government of Peru and private companies ● National Competitiveness and Productivity Policy (Decree Supremo N° 345-2018-EF) ● National Competitiveness and Productivity Plan, Supreme Decree N° 237-2019-EF) 	Yes <ul style="list-style-type: none"> ● Clean production Programs between the government and private companies
Solomon Islands	Yes <ul style="list-style-type: none"> ● Pyrolysis system by Design Technology 	Yes <ul style="list-style-type: none"> ● Establishment of SIRWMA ● Plastic Wise Gizo women's group ● Strongim Bisnis Gizo ● Positive change for marine life ● Clean Op

Country	3.4.1 - Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)	3.4.2 - Public-private partnerships for creating and implementing innovative solution
		<ul style="list-style-type: none"> Extended Producer Responsibility by Solbrew Positive Change for Marine Life doing separate household of recyclables (plastics, aluminum cans, PET)
Spain	Yes <ul style="list-style-type: none"> Guide of Circular Economy Best Practices Circular Strategy and Plan Law 7/2022 on waste and contaminated soils for a circular economy Royal Decree 293/2018 on reducing the consumption of plastic bags 	Yes <ul style="list-style-type: none"> Guide of Circular Economy Best Practices
Sri Lanka	Yes	Yes
Singapore	Yes <ul style="list-style-type: none"> Zero Waste Masterplan Chemical Recycling of Plastic Waste 	Yes <ul style="list-style-type: none"> Engage domestic stakeholders to reduce the amount of solid waste, generated and disposed of, including plastics.
United Arab Emirates	Yes <ul style="list-style-type: none"> Abu Dhabi Emirate Single Use Plastic Policy Ministry of Climate Change and Environment, Coalition Circle Pledge to Transform Plastic Recycling Model in Abu Dhabi 	Not Available

3.5. Education and awareness

Enhancing the understanding and knowledge on the impacts of marine pollution, its sources, and potential solutions is highly essential. Education empowers governments to make informed decisions, and individuals, communities, and other stakeholders aware of the impacts of marine plastic litter. Targeted awareness campaigns, educational programs, and community engagement initiatives bring a behavioural change and a sense of stewardship towards our marine ecosystems. This section examines the steps taken by countries towards encouraging community awareness to prevent Marine Litter.

While compiling efforts to raise education and awareness, it was noted that 87% of the countries have reinforced their education system and/or curriculum to create public awareness on issues related to marine plastic litter. In terms of awareness-raising campaigns, 97% of the countries conduct campaigns at the national level, 60% at the local level, and 70% at the international/regional level, specifically targeting marine plastic litter. Additionally, it was observed that 50% of the countries have experienced the benefits of reinforcing their education system and/or curriculum to encourage public awareness of marine plastic litter issues. Furthermore, 60% of the countries have observed long-term benefits from running awareness-raising campaigns, 30% at the national level and 27% at the local level (Figure 3.6, Table 3.8).

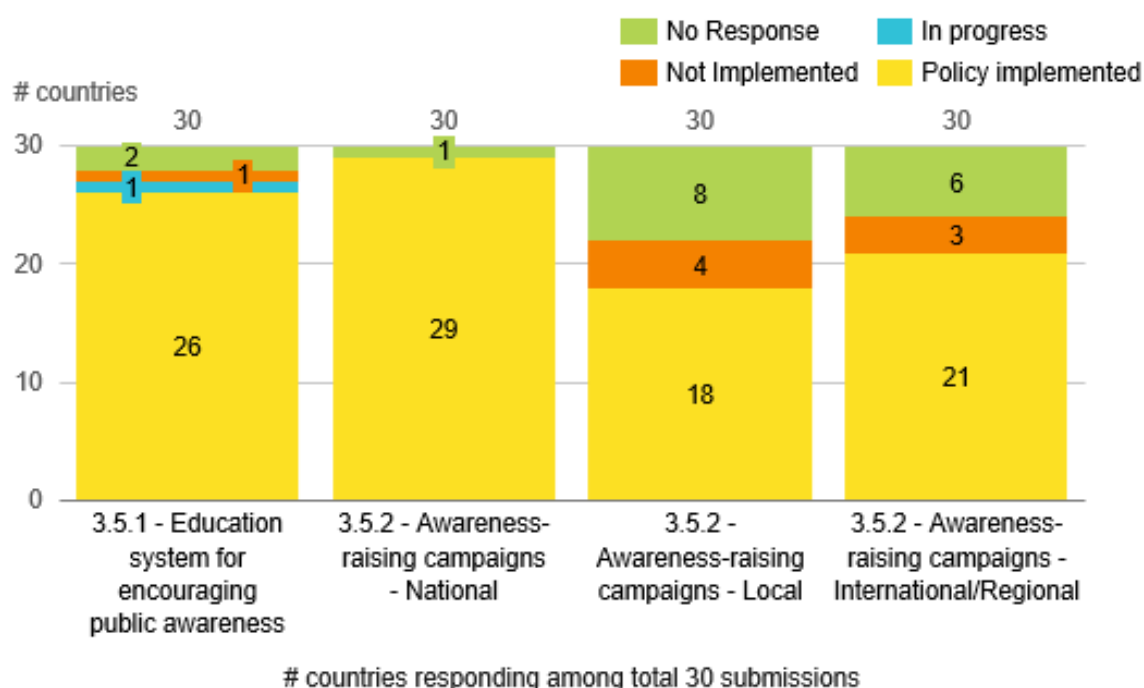


Figure 3.6: Actions taken by countries in for creating public awareness on the issue of MPL

Table 3.8: Country-wise actions for encouraging public awareness on MPL

Country	3.5.1 - Education system and/or curriculum for encouraging public awareness on MPL issues	3.5.2 - Awareness-raising campaigns related to MPL - National issues
G20 Countries		
Australia	Yes	Yes <ul style="list-style-type: none"> • Australia is implementing the Threat Abatement Plan for the impacts of marine debris on vertebrate wildlife of Australia's coasts and oceans (TAP). • Plastic Free Beaches • National Consumer Education Campaign on the ARL • MOU with Tangaroa Blue/Australian Marine Debris Initiative
Brazil	Yes <ul style="list-style-type: none"> • Online course: Conscious behavior in the coastal and marine zone: combating Marine Litter 	Yes <ul style="list-style-type: none"> • Awareness-raising and informative material
Canada	Yes <ul style="list-style-type: none"> • The Ghost Gear Program • The Zero Plastic Waste Initiative 	Yes <ul style="list-style-type: none"> • Canada's comprehensive zero plastic waste agenda
China	Yes <ul style="list-style-type: none"> • "Marine Ecology Protection Publicity Campaign in Schools" 	Yes <ul style="list-style-type: none"> • Opinions on Further Strengthening Plastic Pollution Control • Plastic Pollution Control Action Plan (2021-2025) • 3. Marine Ecological Environment Protection Plan (2021-2025)
European Union	Yes <ul style="list-style-type: none"> • Network of European Blue Schools 	Yes <ul style="list-style-type: none"> • Awareness raising campaign
France	Yes <ul style="list-style-type: none"> • In 2020, the Ministry has launched the "Beaches without plastic litter" 	Yes <ul style="list-style-type: none"> • Actions on the seashore and at sea • Awareness raising actions • Multi-stakeholder involvement
Germany	Yes <ul style="list-style-type: none"> • The "Inclusion of the topic of Marine Litter in learning goals" 	Yes <ul style="list-style-type: none"> • Runder Tisch Meeressmüll (RTM, www.muell-im-meer.de)

Country	3.5.1 - Education system and/or curriculum for encouraging public awareness on MPL issues	3.5.2 - Awareness-raising campaigns related to MPL - National
	is part of the German Programme of Measures under the MSFD (Measure UZ5-01)	
India	<p>Yes</p> <ul style="list-style-type: none"> ● National Education Policy, 2020 ● Climate Literacy and Marine Litter Management (CLMLM) 	<p>Yes</p> <ul style="list-style-type: none"> ● Beach Environment & Aesthetic Management Service (BEAMS) ● Swachh Sagar, Surakshit Sagar (Clean Coast, Safe Sea) ● Swachh-Nirmal Tat Abhiyan ● 'Green Good Deeds' initiative to promote environmental awareness and to mobilize people's participation for conservation of environment
Italy	<p>Yes</p> <ul style="list-style-type: none"> ● ISPRA, organizes environmental education initiatives for sustainability ● The Researchers' Night promoted by the European Commission (EC) since 2005 ● ScienzaInsieme to promote scientific dissemination ● Ministry of Education: "Rigenerazione scuola" programme 	<p>Yes</p> <ul style="list-style-type: none"> ● "Plastic free" campaign promoted by Ministry of Ecological Transition that involves different actors (municipalities, universities etc.) ● Awareness-raising campaigns related to MPL promoted by NGOs (Marevivo, WWF etc.) ● " Strategia nazionale per la lotta contro l'inquinamento da plastica" (National strategy to combat plastic pollution) – Under Development
Japan	<p>Yes</p> <ul style="list-style-type: none"> ● Marine Litter Learning Materials (for elementary and junior high school students and high school students) 	<p>Yes</p> <ul style="list-style-type: none"> ● Plastics Smart ● UMIGOMI Zero Week ● Good Practices for Reducing Microplastics ● Marine Plastic Litter Academic Symposium
Mexico	<p>No</p>	<p>Yes</p> <p>SEMARNAT has carried out some information campaigns such as the following:</p> <ul style="list-style-type: none"> ● "No straw is fine" ● "Protection of Mexico's oceans, seas and coasts" ● "For our health and the planet's health, no disposable plastics, use reusable"
South Africa	<p>Yes</p>	<p>Yes</p>

Country	3.5.1 - Education system and/or curriculum for encouraging public awareness on MPL issues	3.5.2 - Awareness-raising campaigns related to MPL - National
	<ul style="list-style-type: none"> • Municipal Cleaning and Greening Programme 	<ul style="list-style-type: none"> • Good Green Deeds programme
Saudi Arabia	<p>Yes</p> <ul style="list-style-type: none"> • Key component of the National Action Plan 	<p>Yes</p> <ul style="list-style-type: none"> • The National Action Plan for sustainable management of Marine Litter in the Red Sea coast of Saudi Arabia
South Korea	<p>Yes</p> <ul style="list-style-type: none"> • Online platform for ocean environment education • Moving class for ocean environment 	<p>Yes</p> <ul style="list-style-type: none"> • Marine debris 'picking up + jogging' campaign in 2022 • 'Tell me! + Pick up!' campaign in 2023
Türkiye	<p>Yes</p> <ul style="list-style-type: none"> • Zero Waste Blue Movement 	<p>Yes</p> <ul style="list-style-type: none"> • Zero Waste Blue Movement
United Kingdom	<p>Yes</p> <ul style="list-style-type: none"> • British-Irish Council commitment the UK is working to facilitate marine litter education materials for professional fishers • The UK funds the Tide Turners Plastic Challenge, which is an environmental education and youth (18-35) engagement programme delivered by the United Nations Environment Programme (UNEP) 	<p>Yes</p> <ul style="list-style-type: none"> • Defra launched the “Keep it, Bin it” anti-litter campaign in 2018 with Keep Britain Tidy.
Unites States of America	<p>Yes</p> <ul style="list-style-type: none"> • Trash Free Waters Program and the NOAA Marine Debris Program Prevention Grants • Stormwater Runoff and Marine Litter Prevention – Commission for Environmental Cooperation (CEC) 	<p>Yes</p> <ul style="list-style-type: none"> • EPA National Recycling Strategy
Invited/Other Countries		
Antigua and Barbuda	<p>Yes</p>	<p>Yes</p> <ul style="list-style-type: none"> • Plastic Waste Free Island
Costa Rica	<p>Yes</p> <ul style="list-style-type: none"> • Comprehensive Waste Management Law No.8839 	<p>Yes</p> <ul style="list-style-type: none"> • National Strategy for Recovery, Separation and Recovery of Waste

Country	3.5.1 - Education system and/or curriculum for encouraging public awareness on MPL issues	3.5.2 - Awareness-raising campaigns related to MPL - National
		<ul style="list-style-type: none"> ● Single Use Plastic Strategy
Kiribati	Yes <ul style="list-style-type: none"> ● Book written for year 4 primary school. ● Ongoing school visits and radio awareness programs 	Yes <ul style="list-style-type: none"> ● National cleanups ● Radio programs ● Press releases ● Poster competition
Mauritius	Yes <ul style="list-style-type: none"> ● Information and Education Division of the Ministry conducts regular awareness and sensitization campaigns 	Yes <ul style="list-style-type: none"> ● Master Plan for the Environment
Myanmar	Not Available	Not Available
The Netherlands	Yes <ul style="list-style-type: none"> ● VANG Buitenshuis ● “Fishing with a Future” ● “Marine Awareness” 	Yes <ul style="list-style-type: none"> ● Communication initiatives to promote good waste disposal habits in consumers. E.g. national campaign “Natuurlijk raap je ook iets op”.
Norway	Yes <ul style="list-style-type: none"> ● Blue Responsibility (Blått ansvar) educational videos and material ● The Norwegian Directorate for Fisheries adopted in 2021 	Yes <ul style="list-style-type: none"> ● The Directorate of Fisheries has launched an Action Plan on Marine Litter which includes measures on awareness raising ● Keep Norway Beautiful has extensive awareness raising campaigns ● Friends of the Earth Norway (Naturvernforbundet) and World Wildlife Fund (WWF) Norway ● Centre against Marine Litter (Marfo) and The Norwegian Retailers’ Environment Fund (HMF)
Peru	Yes <ul style="list-style-type: none"> ● Program "The Environmental Hour" ● Programa Educca 	Yes <ul style="list-style-type: none"> ● Campaign "Less plastic, more life" ● “Peru Limpio” Strategy
Solomon Islands	Yes	Yes <ul style="list-style-type: none"> ● Community Waste Management Workshop ● Radio Awareness ● Social Media posts ● Training of staff from different

Country	3.5.1 - Education system and/or curriculum for encouraging public awareness on MPL issues	3.5.2 - Awareness-raising campaigns related to MPL - National
		departments <ul style="list-style-type: none"> • WED/WOD/CTD
Spain	Not Available	Yes <ul style="list-style-type: none"> • Establishment of a technical group on Marine Litter • Creation of "Guardians of the Beach" program
Sri Lanka	Yes <ul style="list-style-type: none"> • Carry out sector-based awareness programme • Waste management is included in the school curriculum • Environment Brigade, Clubs, and Societies in schools conduct waste management programmes 	Yes <ul style="list-style-type: none"> • Coastal and marine environment conservation week programme • Comprehensive Communication strategy and visuals developed • Awareness is created through mass media, government channels, private sector and NGOs
Singapore	Yes <ul style="list-style-type: none"> • Nationwide "Say YES to Waste Less" campaign 	Yes <ul style="list-style-type: none"> • Refer to section 3.4.2 and 3.5.1
United Arab Emirates	Yes <ul style="list-style-type: none"> • Incorporating environmental education into the curriculum • Organizing awareness campaign • Promoting public engagement, through workshops, seminars, and exhibitions. 	Yes <ul style="list-style-type: none"> • Awareness campaigns to educate the public about the harmful effects of plastic pollution

Table 3.9: Country-wise actions for encouraging public awareness on MPL at local and regional scale

Country	3.5.3 - Awareness-raising campaigns related to MPL - Local	3.5.4 - Awareness-raising campaigns related to MPL - International/Regional
G20 Countries		
Australia	Yes <ul style="list-style-type: none"> • Plastic Free Beaches initiative • National Consumer Education Campaign • Reef Clean Project 	Yes <ul style="list-style-type: none"> • CSIRO Global Plastics Leakage project

Country	3.5.3 - Awareness-raising campaigns related to MPL - Local	3.5.4 - Awareness-raising campaigns related to MPL - International/Regional
Brazil	No	Yes <ul style="list-style-type: none"> ● GloLitter Partnerships Programme
Canada	Yes <ul style="list-style-type: none"> ● Canada's comprehensive zero plastic waste agenda ● Atlantic Healthy Oceans Initiative ● Clean Harbours Initiative 	Yes <ul style="list-style-type: none"> ● Member of the Global Partnership on Marine Litter ● Pledged to the Clean Seas campaign ● Canada's comprehensive zero plastic waste agenda
China	Yes <ul style="list-style-type: none"> ● Coastal Cleanup and Public Education in Coastal Cities of China ● International Coastal Cleanup 	Yes <ul style="list-style-type: none"> ● International Coastal Cleanup
European Union	Not Available	Not Available
France	Yes <ul style="list-style-type: none"> ● Support the associations that launch awareness raising actions and clean-ups ● Development of marine educational area ● "Beaches without plastic litter" chart in link with local authorities 	Yes <ul style="list-style-type: none"> ● Actions under OSPAR convention
Germany	Yes <ul style="list-style-type: none"> ● MSFD regards "Local provisions" (UZ5-08) ● Interreg-project "CAPonLITTER" 	Yes <ul style="list-style-type: none"> ● Grant Programme "Marine:DeFraG" ● OSPAR/HELCOM Regional Action Plans on Marine Litter
India	Yes <ul style="list-style-type: none"> ● Several Coastal and Beach Clean Up activities are undertaken regularly 	Yes <ul style="list-style-type: none"> ● UNEP Tide Turners' Plastic Challenge
Italy	Not Available	Not Available
Japan	Yes <ul style="list-style-type: none"> ● Local Blue Ocean Vision Project ● "UMIGOMI Zero" declaration by local governments ("umigomi" means Marine Litter in Japanese) 	Yes <ul style="list-style-type: none"> ● Regional Knowledge Centre for Marine Plastic Debris ● Contributions to the G20 Report on Actions against Marine Plastic Litter and relevant website updates ● ASEAN-Japan Eco-school Project

Country	3.5.3 - Awareness-raising campaigns related to MPL - Local	3.5.4 - Awareness-raising campaigns related to MPL - International/Regional
Mexico	Not Available	Yes <ul style="list-style-type: none"> • Campaign “Last stop: The ocean”
South Africa	Yes <ul style="list-style-type: none"> • Operation Clean Sweep 	Yes <ul style="list-style-type: none"> • Annual International Coastal Clean-up Day: celebrated in the 3rd week of September each year
Saudi Arabia	Not Available	Yes <ul style="list-style-type: none"> • National Action Plan for sustainable management of Marine Litter in the Red Sea coast of Saudi Arabia
South Korea	Yes <ul style="list-style-type: none"> • Adopt-a-beach project • Coastal cleanup day 	Yes <ul style="list-style-type: none"> • International Coastal cleanup day
Türkiye	Yes <ul style="list-style-type: none"> • Zero Waste Blue Movement 	Yes <ul style="list-style-type: none"> • International Coastal Cleanup Day • World Coastal Cleanup Day
United Kingdom	No	Yes <ul style="list-style-type: none"> • Tearfund (£3m) Tearfund runs plastics projects in Haiti (£1m) and Pakistan (£2m), working with communities on waste collection. • WasteAid (£80k) Preventing plastics from reaching the ocean in Cameroon
Unites States of America	Not Available	Yes <ul style="list-style-type: none"> • NOAA International Marine Debris Conference (IMDC) Series • Commission for Environmental Cooperation (CEC) – Last Stop the Ocean
Invited/Other Countries		
Antigua and Barbuda	Not Available	Yes <ul style="list-style-type: none"> • Replit OECS project
Costa Rica	Yes <ul style="list-style-type: none"> • Design and dissemination of educational materials for the population 	Yes <ul style="list-style-type: none"> • Committee for the Management of Marine Residues of Latin America and the Caribbean

Country	3.5.3 - Awareness-raising campaigns related to MPL - Local	3.5.4 - Awareness-raising campaigns related to MPL - International/Regional
Kiribati	No	No
Mauritius	Yes <ul style="list-style-type: none"> Talks/Exhibitions/debates competition/Workshops are organized by the Ministry 	Yes <ul style="list-style-type: none"> Mauritius is a member state of the Indian Ocean Rim Association and participated in the Development of the IORA Declaration Plastic Expedition in the Indian Ocean- ExPlol
Myanmar	Yes <ul style="list-style-type: none"> “Sunday Stop” campaign “No Thank You” campaign Awareness raising activities 	Not Available
The Netherlands	Not Available	Not Available
Norway	Yes <ul style="list-style-type: none"> The campaign “Rusken” in Oslo 	Yes <ul style="list-style-type: none"> The Regional Action Plans on Marine Litter in the Arctic under PAME and for the North-East Atlantic under OSPAR Norway has since 2016 been part of and a contributor to the UNEP Clean Seas Campaign Nordic Council of Climate and Environment Ministers
Peru	No	No
Solomon Islands	Yes <ul style="list-style-type: none"> Commemoration of the annual WED/WOD/CTD celebration in have been adopted in provinces 	Yes <ul style="list-style-type: none"> Side event at UN Ocean Conference in Lisbon, Portugal
Spain	Not Available	Not Available
Sri Lanka	Yes <ul style="list-style-type: none"> School Marine Group Porgramme 	Yes <ul style="list-style-type: none"> Development regional Marine Litter action plan
Singapore	Not Available	No
United Arab Emirates	Yes	Yes

3.6. Monitoring and scientific research on marine plastic litter

Monitoring the flow of marine litter from source to sea and conducting scientific research will help address the issue of marine plastic litter (MPL). Key actions include developing waste flow diagrams, harmonizing monitoring methodologies, and fostering global collaboration to build comprehensive data repositories on marine plastic litter.

According to the responses received, 87% of the countries actively encourage monitoring and scientific research on plastic flows and ocean surface microplastics. Among these, 46% have reported a positive impact and 73% are engaged in scientific research activities related to the ocean-bound plastics at an international and/or regional level. Out of these, 37% of the countries have observed a positive impact while 18% have not observed any significant change yet (Figure 3.7, Table 3.10).

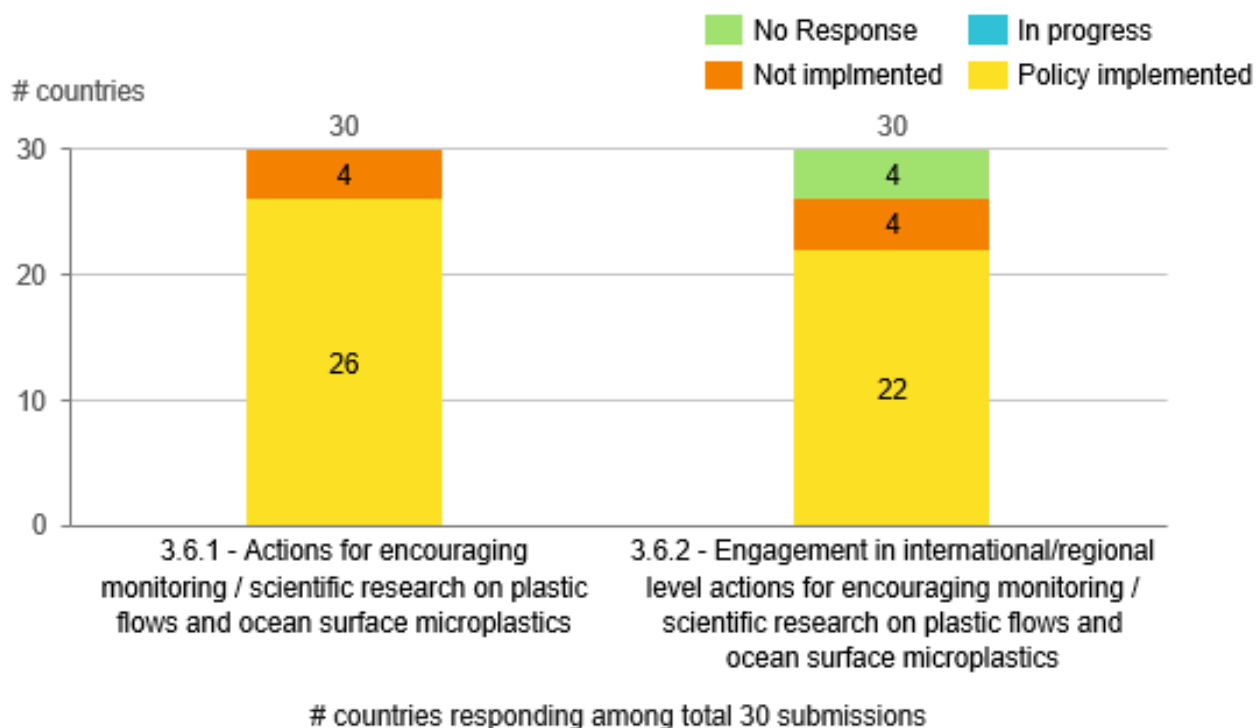


Figure 3.7: Status on the actions taken by countries towards monitoring and scientific research

Table 3.10: Country-wise actions taken towards monitoring and scientific research

Country	3.6.1 - Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics	3.6.2 - Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics
G20 Members		
Australia	Yes <ul style="list-style-type: none"> ● National Waste Reports ● National Environment Science Program ● National plastics pollution monitoring protocol and database ● CSIRO Marine Debris Research 	Yes <ul style="list-style-type: none"> ● Regional engagement international engagement and commitments
Brazil	Yes <ul style="list-style-type: none"> ● Waste Flow Diagram 	No
Canada	Yes <ul style="list-style-type: none"> ● Lost fishing gear reporting ● Canada’s Plastics Science Agenda ● Canada-wide Action Plan on Zero Plastic Waste 	Yes <ul style="list-style-type: none"> ● Supporting lost gear reporting internationally ● Canada’s comprehensive zero plastic waste agenda
China	Yes <ul style="list-style-type: none"> ● National Marine Litter and Microplastics Monitoring System ● The National Key Research and Development Program of China "Monitoring and Ecological Effect Assessment of Marine Microplastics" ● Plastic Pollution Control Action Plan (2021-2025) 	Yes <ul style="list-style-type: none"> ● UNESCO-IOC/WESTPAC Research Project: Distribution, Source, Fate and Impacts of Marine Microplastics in the Asia Pacific Region ● UNESCO-IOC “United Nations Decade of Ocean Science for Sustainable Development (2021-2030)” Research Project: UN22. Stem the tide of Asia’s riverine plastic emission into the ocean
European Union	Yes <ul style="list-style-type: none"> ● EU Research and Innovation 	Yes <ul style="list-style-type: none"> ● Four Regional Sea Conventions (in Mediterranean, Northeast Atlantic, Baltic and the Black Sea) developed and implemented ● Part of G7 (in 2015) and G20 (in 2017) which adopted Action Plans against marine litter.
France	Yes <ul style="list-style-type: none"> ● The Ministry of Ecology partners up with national agencies and research centers (such as 	Yes <ul style="list-style-type: none"> ● Participation in international fora, negotiations and guidelines: JRC, UNEP, IMO, UN World Ocean

Country	3.6.1 - Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics	3.6.2 - Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics
	ADEME, IFREMER and CEDRE) to lead scientific research on Marine Litter	Assessment II, GESAMP, European Technical Group on Marine Litter, Basel convention, OSPAR convention, Barcelona Convention, etc.
Germany	Yes <ul style="list-style-type: none"> ● R&D projects to test monitoring methods for litter in the different marine compartments and biota 	Not Available
India	Yes <ul style="list-style-type: none"> ● R&D projects undertaken by various ministries – MoEF&CC and MoES through their research organisations on the following: <ul style="list-style-type: none"> - assessment of marine litter and microplastics along the Indian Coast and the oceanic islands - marine litter in beaches and oceans - research on microplastics in personal care products, organic pollutants such as PAHs and POPs - Fishery Survey of India (FSI), Govt. of India is conducting regular field assessment of plastic litter including ghost nets at fishing grounds in the Indian Exclusive Economic Zone (EEZ). - FSI is lead agency in International Maritime Organisation (IMO)-Food and Agricultural Organisation (FAO) Glolitter partnership project. - Indian Council of Agricultural Research (ICAR)- Central Marine Fisheries Research Institute (CMFRI), studies on abundance of marine litter in fishing grounds and beaches, developing litter maps, 	Yes <ul style="list-style-type: none"> ● Promotion of Countermeasures against Marine Plastic Litter in Southeast Asia and India ● Circular Economy Solutions Preventing Marine Litter in Ecosystems project (CES-ML) ● India-UK 2030 Roadmap for finding innovative solutions to tackle plastic and marine pollution ● Commonwealth Litter Programme (CLiP), evidence based scientific input to bring out India’s National Marine Litter Strategy ● INOPOL, capacity building for reducing plastic and chemical pollution ● Indo-Pacific Ocean Initiative (IPOI) for mitigation of marine litter pollution

Country	3.6.1 - Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics	3.6.2 - Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics
	<p>assessing presence of microplastics in oceanic environment and in biological systems</p>	
Italy	<p>Yes</p> <ul style="list-style-type: none"> ● Marine Strategy Framework Directive Article 11 Monitoring Programmes 	<p>Yes</p> <ul style="list-style-type: none"> ● Marine Strategy Framework Directive ● UNEP-MAP Barcelona Convention ● GESAMP Working Group on seabased sources of Marine Litter.
Japan	<p>Yes</p> <ul style="list-style-type: none"> ● Harmonization of Microplastics Monitoring Methodologies in the Ocean ● Sharing and Compilation of Ocean Microplastics Monitoring Data ● Development of the harmonized guidelines for monitoring using remote sensing technologies ● Investigation and estimation of domestically generated amounts and routes, as well as an investigation into floating plastic ● Research on methods for evaluating the impact of marine plastic litter, including microplastics, on living organisms and ecosystems. ● Development of survey guidelines and case studies for marine plastics ● Survey on ecological impact on fish and shellfish that have ingested microplastics (implemented by the Fisheries Technology Research Institute) 	<p>Yes</p> <ul style="list-style-type: none"> ● Sharing and Compilation of Ocean Microplastics Monitoring Data ● Training program on Marine Litter monitoring methods
Mexico	<p>No</p> <ul style="list-style-type: none"> ● 	<p>Yes</p> <ul style="list-style-type: none"> ● Marine Litter and Microplastics Working Group in LAC. ● Academia efforts oriented to work with international groups to generating technical information and developing capabilities in marine plastic litter topics

Country	3.6.1 - Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics	3.6.2 - Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics
South Africa	<p>Yes</p> <ul style="list-style-type: none"> • Science review of marine plastic pollution research in South Africa: 	<p>Under Development</p> <ul style="list-style-type: none"> • Participation in the development of the UNEA 5.2 resolution on plastic pollution and the subsequent Intergovernmental Negotiating Committee meetings.
Saudi Arabia	<p>No</p>	<p>Yes</p> <ul style="list-style-type: none"> • The PERSGA initiative calls for encouraging and supporting local marine institutes and universities to conduct research on protective and regulatory measures for protecting the coastal and marine environments from litter arising from urban or rural areas.
South Korea	<p>Yes</p> <ul style="list-style-type: none"> • Coastal Garbage monitoring • Use of ICT 	<p>Yes</p> <ul style="list-style-type: none"> • “Strengthening and Improvement for Marine Litter response in Indonesia” project aims to enhance the marine litter monitoring capacity of Indonesia through a joint pilot marine litter monitoring conducted in Labuan Bajo, Indonesia. Through this project, MOF is also working with the Indonesian government to establish a guideline to properly conduct marine litter monitoring in Indonesia. •
Türkiye	<p>Yes</p> <ul style="list-style-type: none"> • Turkish National Integrated Marine Pollution Monitoring Program 	<p>Yes</p> <ul style="list-style-type: none"> • Participation in international technical group activities on litter monitoring guidelines and determination of baseline/treshhold values: Barcelona Convention
United Kingdom	<p>Yes</p> <ul style="list-style-type: none"> • Seafloor litter bycatch, Macro and mesoplastics data recorded periodically • Floating industrial and user litter fragments are monitored Through the British-Irish Council 	<p>Yes</p> <ul style="list-style-type: none"> • OSPAR • Ocean Country Partnership Programme (OCP).

Country	3.6.1 - Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics	3.6.2 - Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics
	currently funded relevant UK government research includes: <ul style="list-style-type: none"> ● Bio-Plastic-Risk – Investigation of Biodegradable plastics as an environmental pollutant in terrestrial and marine environments. ● Tyre-Loss – Investigation into the prevalence and impact of tyre-wear particles in the marine environment. ● MINIMISE - Current and future effects of microplastics on marine ecosystems. 	
Unites States of America	Yes <ul style="list-style-type: none"> ● NOAA Marine Debris Monitoring and Assessment Program ● EPA Research 	Yes <ul style="list-style-type: none"> ● APEC Marine Debris Shoreline Monitoring Decision Framework ● EPA Research Collaborations
Invited / Other Countries		
Antigua and Barbuda	No	No
Costa Rica	Yes <ul style="list-style-type: none"> ● Investigation and Monitoring of waste on Pacific beaches ● Investigation and Monitoring of waste carried by marine currents and presence in sectors of Caribbean beaches 	No
Kiribati	No	No
Mauritius	Yes <ul style="list-style-type: none"> ● Research Collaborative Agreement (RCA) with the University of Mauritius on “Analytical monitoring of microplastics” 	Yes <ul style="list-style-type: none"> ● Mauritius is a member state of the Indian Ocean Rim Association and participated in the Development of the IORA Declaration ● Plastic Expedition in the Indian Ocean- ExPlol
Myanmar	Yes <ul style="list-style-type: none"> ● A study conducted by the Fridtjof Nansen research vessel ● “Litter on the seafloor along the African coast and in the Bay of Bengal based on trawl bycatches 	Yes <ul style="list-style-type: none"> ● 3rd Myanmar-Japan Policy Dialogue on Environmental issues

Country	3.6.1 - Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics	3.6.2 - Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics
	from 2011 to 2020” (L. Buhl-Mortensen et al., 2022)	
The Netherlands	Yes <ul style="list-style-type: none"> ● Development an effective monitoring program for macro/microplastics and meso-pellets ● Active role in the improvement of the monitoring methods for seafloor litter. 	Yes <ul style="list-style-type: none"> ● The Netherlands is actively involved in OSPAR’s ICG Marine Litter (one of the co-convenors) and in the EU MSFD
Norway	Yes <ul style="list-style-type: none"> ● The National Monitoring Program for Microplastics was established in 2021 ● GESAMP (The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection) ● AMAP (Arctic Monitoring and Assessment Programme) 	Yes <ul style="list-style-type: none"> ● European level on research and innovation – ERA and Horizon Europe, under UNEP, International Maritime Organization (IMO), the Basel Convention, the Global Partnership on Marine Litter (GPML), OSPAR, Nordic Council of Climate and Environment Ministers, and the working groups PAME and AMAP under the Arctic Council
Peru	Yes <ul style="list-style-type: none"> ● Scientific research on plastic flows and ocean surface microplastics 	Yes <ul style="list-style-type: none"> ● We have the Peruvian Sea Institute (IMARPE)
Solomon Islands	Yes <ul style="list-style-type: none"> ● Under the R2R Project & CEFAS program, a report on microplastics was published. 	Yes <ul style="list-style-type: none"> ● Under the R2R project & CEFAS
Spain	Yes <ul style="list-style-type: none"> ● Marine Strategies monitoring programs and Monitoring programs on Marine Litter 	Not Available
Sri Lanka	Yes <ul style="list-style-type: none"> ● Establish marine microplastic laboratory with support of CEFAS UK ● Coastal litter monitoring programme initiated in selected locations covering all coastal district 	Yes <ul style="list-style-type: none"> ● Planning initiated for programme with support of CEFAs to monitor plastic litter using OSPAR protocol ● Planning initiated for programme with support of CEFAs to monitor plastic litter using OSPAR protocol

Country	3.6.1 - Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics	3.6.2 - Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics
	<ul style="list-style-type: none"> • Marine Floating plastic monitoring programme was formulated and will be implemented shortly 	
Singapore	<p>Yes</p> <ul style="list-style-type: none"> • Extension of additional membrane bioreactor technology systems • Marine debris research • Marine Litter and microplastics consultancy study 	<p>Yes</p> <ul style="list-style-type: none"> • Regional Training Programmes • Capacity Building Assistance • Adoption of regional instruments addressing marine debris • Active participation at regional Marine Litter initiatives.
United Arab Emirates	<p>Yes</p> <ul style="list-style-type: none"> • A study program to qualitatively & quantitatively assess plastic in marine environment 	<p>Yes</p> <ul style="list-style-type: none"> • UAE's engagement in international/regional level actions on Marine Plastic Litter

3.7. International Organisations (IOs)

Various international organisations have also taken measures to combat marine pollution. From the responses received from ten international organisations, it was gathered that sustainable and circular product design, awareness-raising activities, and monitoring of plastic flows were some of the initiatives (Figure 3.8, Table 3.11 - 3.15).

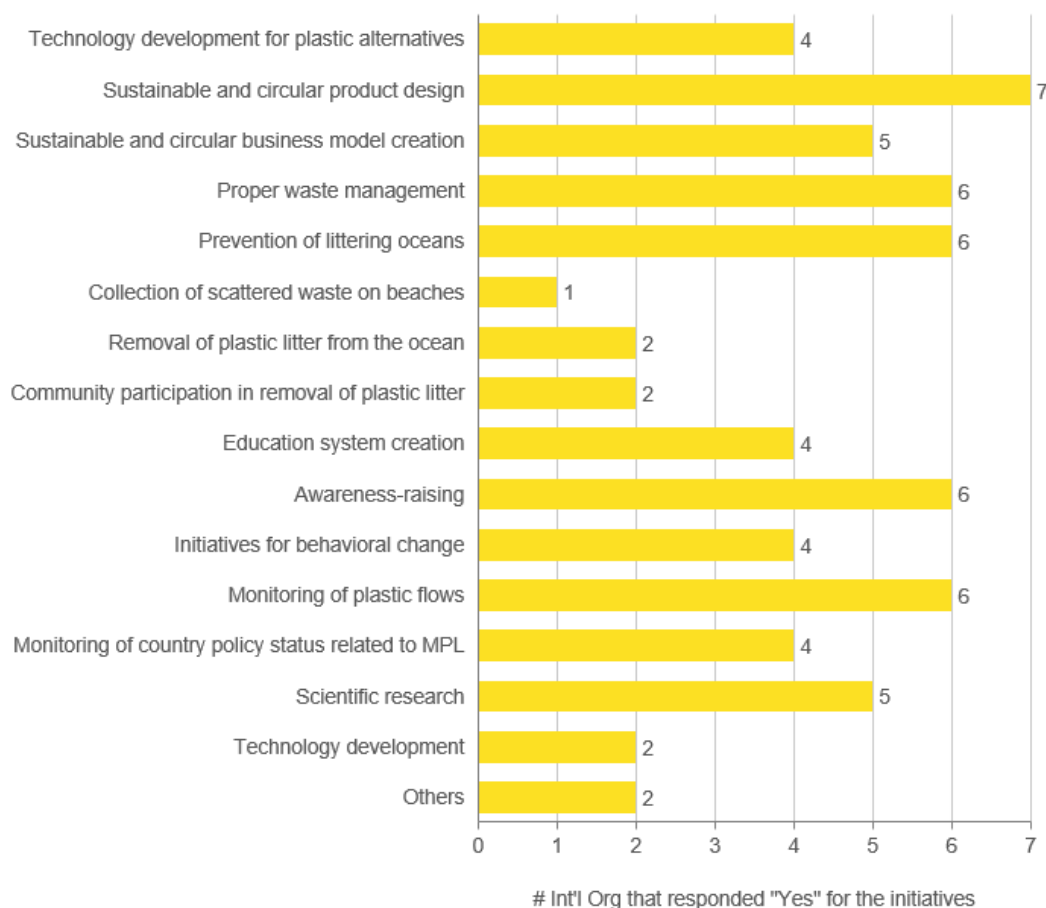


Figure 3.8: Responses from International Organisations regarding initiatives taken

Table 3.11: Measures taken by international organisations to tackle MPL (Part-I)

International Organisations	Technology development for plastic alternatives (e.g. biodegradable plastics)	Sustainable and circular product design (e.g. use of recycled materials)	Sustainable and circular business model creation (e.g. servitization of products)
ADB	Yes <ul style="list-style-type: none"> Supporting the preparation of a cost-benefit and market analysis study of Thailand’s bioplastics value chain 	Yes <ul style="list-style-type: none"> Supporting the development of a design guide for circular plastic packaging and recommendations for national policy and 	Yes <ul style="list-style-type: none"> In 2021, ADB awarded a \$450,000 grant to Alner (formerly Koinpack), a Jakarta, Indonesia based startup, to develop a deposit-based reuse

International Organisations	Technology development for plastic alternatives (e.g. biodegradable plastics)	Sustainable and circular product design (e.g. use of recycled materials)	Sustainable and circular business model creation (e.g. servitization of products)
		regulatory reform to improve plastic waste management in Viet Nam	system for reusable packages for fast moving consumer goods
ERIA	Yes <ul style="list-style-type: none"> Information sharing on “Biodegradable and Compostable Plastics” in the ASEAN+3 context 	Yes <ul style="list-style-type: none"> Information sharing on “Design for Recycling” and “Industrial Standards for Recycled Products” in the ASEAN+3 context 	Yes <ul style="list-style-type: none"> Private Sector Initiatives to Reduce Plastic Waste and Marine Plastic Debris
EMF	Not Available	Not Available	Not Available
FAO	Not Available	Not Available	Not Available
IAEA	Yes <ul style="list-style-type: none"> NUTEC Plastics activity area “Single use Eco-alternatives and Advanced Packaging Materials” 	Yes <ul style="list-style-type: none"> NUTEC Plastics activity area “Radiation-supported recycling” 	Not Available
OECD	Not Available	Yes <ul style="list-style-type: none"> 2021 OECD publication “A Chemicals Perspective on Designing with Sustainable Plastics: Goals, Considerations and Trade-offs” 	Not Available
UNEP	Not Available	Yes <ul style="list-style-type: none"> Study “Single-Use Plastic Products (SUPP) and their alternatives: Recommendations from Life Cycle Assessments” 	Yes <ul style="list-style-type: none"> Global Environment Facility 8 – Integrated Program on: Circular Solutions to Single Use Plastic Packaging Pollution from the Food and Beverage Sector UNEP- Norwegian Retailers’ Environment Fund partnership on Reducing Plastic Pollution through the Extended Producer Responsibility EPR One-Stop-Shop

International Organisations	Technology development for plastic alternatives (e.g. biodegradable plastics)	Sustainable and circular product design (e.g. use of recycled materials)	Sustainable and circular business model creation (e.g. servitization of products)
			<ul style="list-style-type: none"> • Reuse Portal • UNEP SEA circular project
UN Habitat	Not Available	Not Available	Not Available
UNIDO	Yes	Yes	Yes
	<ul style="list-style-type: none"> • Single-use food containers with alternative material 	<ul style="list-style-type: none"> • “Supporting the promotion of circular economy practices on single-use plastic value chain” 	<ul style="list-style-type: none"> • Project “SWITCH to circular economy value chains”
WEF (GPAP)	Not Available	Yes	Yes
		<ul style="list-style-type: none"> • Reuse Portal • GPAP’s Global Plastic Innovation Network 	<ul style="list-style-type: none"> • Launch a “Plastic Waste to Value” Innovation Challenge

Table 3.12: Measures taken by international Organisations to tackle MPL (Part-II)

International Organisations	Proper waste management	Prevention of littering, illegal dumping and unintentional waste into the ocean	Collection of scattered waste on beaches
ADB	Yes	Not Available	Not Available
	<ul style="list-style-type: none"> • ADB (UCCRTF) tested the community-based SWM system and presented at the CLP Peer-to-Peer Learning Event in October 2022 • Analytical study summarized ADB’s MSW commitment • On-line SWM training with IGES in November 2022 for staff 		
ERIA	Yes	Yes	Yes
	<ul style="list-style-type: none"> • Preventing Mangroves from Plastic Pollution: Some Good Practices • Technical Guidelines for Prevention of 	<ul style="list-style-type: none"> • Surveying and Piloting the Application of Behavioral Insights Approach for Plastic Production 	<ul style="list-style-type: none"> • Clean Up Day with Youth

International Organisations	Proper waste management	Prevention of littering, illegal dumping and unintentional waste into the ocean	Collection of scattered waste on beaches
	Plastics and Resin Pellets Leakage from Factories and Informal Recycling Sector in ASEAN	<ul style="list-style-type: none"> • Technical Guidelines for Prevention of Plastics and Resin Pellets Leakage from Factories and Informal Recycling Sector in ASEAN 	
EMF	Not Available	Not Available	Not Available
FAO	Not Available	Yes	Not Available
		<ul style="list-style-type: none"> • FAO component GloLitter Partnerships project 	
IAEA	Not Available	Not Available	Not Available
OECD	Yes	Yes	Not Available
	<ul style="list-style-type: none"> • Global Plastics Outlook publications 	<ul style="list-style-type: none"> • Global Plastics Outlook Publications 	
UNEP	Yes	Yes	Not Available
	<ul style="list-style-type: none"> • UNEP-IETC (International Environmental Technology Centre) 	<ul style="list-style-type: none"> • UNEP-IETC (International Environmental Technology Centre) 	
UN Habitat	Yes	Yes	Not Available
	<ul style="list-style-type: none"> • Waste Wise Cities programme (WWC) 	<ul style="list-style-type: none"> • African Clean Cities Platform (ACCP) 	
UNIDO	Yes	Not Available	Not Available
	<ul style="list-style-type: none"> • Project “Support for transitioning from conventional plastics to more environmentally sustainable alternatives” • Project “Promoting sustainable plastic value chains through circular economy practices” • Project “Integrated approach towards sustainable plastics use and (marine) litter 		

International Organisations	Proper waste management	Prevention of littering, illegal dumping and unintentional waste into the ocean	Collection of scattered waste on beaches
	prevention in Bangladesh”		
WEF (GPAP)	Not Available	Yes <ul style="list-style-type: none"> Country analyses on trade and plastics circularity 	Not Available

Table 3.13: Measures taken by international Organisations to tackle MPL (Part-III)

International Organisations	Removal of plastic litter from the ocean	Encouraging community participation in removal of plastic litter from the ocean	Education system creation
ADB	Not Available	Not Available	Not Available
EMF	Not Available	Not Available	Not Available
ERIA	Yes <ul style="list-style-type: none"> Information sharing on “Waste Collection from Rivers, Beaches, and Oceans” in the ASEAN+3 context 	Yes <ul style="list-style-type: none"> Pilot project of floating and drifted marine plastics in mangrove 	Yes <ul style="list-style-type: none"> ASEAN-Japan Eco School for Marine Plastic Waste Education (“Eco-School Project”) Capacity development through workshops and webinars
FAO	Yes <ul style="list-style-type: none"> GloLitter Partnerships project includes Reporting and retrieval of lost fishing gear: recommendations for developing effective programmes 	Not Available	Not Available
IAEA	Not Available	Not Available	Not Available
OECD	Not Available	Not Available	Not Available
UNEP	Not Available	Not Available	Yes <ul style="list-style-type: none"> Sustainable Living Learning Module

International Organisations	Removal of plastic litter from the ocean	Encouraging community participation in removal of plastic litter from the ocean	Education system creation
			<ul style="list-style-type: none"> • My Sustainable Living Challenge (GAME) • Massive open online course (MOOC) on Marine Litter
UN Habitat	Not Available	Not Available	Yes <ul style="list-style-type: none"> • Waste Wise Academy • Waste Wise Partnership
UNIDO	Not Available	Yes	Yes <ul style="list-style-type: none"> • “Ghana Circular Economy Centre”
WEF (GPAP)	Not Available	Not Available	Not Available

Table 3.14: Measures taken by international organisations to tackle MPL (Part-IV)

International Organisations	Awareness-raising	Initiatives for behavioral change	Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies)
ADB	Yes <ul style="list-style-type: none"> • Cluster TA on Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific supports regional and country-level knowledge-sharing and capacity-building on reducing marine plastic litter and promoting a circular plastics economy 	Not Available	Not Available
ERIA	Yes <ul style="list-style-type: none"> • Podcast series named “Living Chic with 	Yes <ul style="list-style-type: none"> • Surveying and Piloting the Application of 	Yes <ul style="list-style-type: none"> • “Zero in on Plastics” interview series

International Organisations	Awareness-raising	Initiatives for behavioral change	Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies)
	Plastic' (2023 onward)	Behavioral Insights Approach for Plastic Production	
EMF	Not Available	Not Available	Not Available
FAO	Not Available	Not Available	Not Available
IAEA	Yes	Not Available	Yes
	<ul style="list-style-type: none"> • NUTEC Plastics Roundtables; • National Stakeholder Meetings, NUTEC Portal, Partnership with GPAP, ASEAN, UNEP, ESCAP, ADB etc. 		<ul style="list-style-type: none"> • NUTEC Plastics Monitoring Network applying Isotopic tracers and nuclear imaging techniques
OECD			<ul style="list-style-type: none"> • The OECD “Monitoring trade in plastic waste and scrap” reports
UNEP	Yes	Yes	Yes
	<ul style="list-style-type: none"> • New Plastics Economy Global Commitment • Global Tourism Plastics Initiative • Anatomy of Action • The Clean Seas Campaign 	<ul style="list-style-type: none"> • The One Planet network Sustainable Lifestyles and Education programme 	<ul style="list-style-type: none"> • The Global Partnership on Plastic Pollution and Marine Litter (GPML)
UN Habitat	Yes	Not Available	Yes
	<ul style="list-style-type: none"> • International Day of Zero Waste • World Cleanup Day 		<ul style="list-style-type: none"> • Waste Wise Cities Tool (WaCT) • Waste Flow Diagram (WFD)
UNIDO	Yes	Yes	Not Available
	<ul style="list-style-type: none"> • Promoting plastic circular economy 	<ul style="list-style-type: none"> • UNIDO projects have communication campaigns targeting consumers 	
WEF (GPAP)	Not Available	Yes	Yes

Table 3.15: Measures taken by international organisations to tackle MPL (Part-V)

International Organisations	Monitoring of country policy status related to MPL (e.g. regional knowledge platform)	Scientific research	Technology development
ADB	Not Available	Not Available	Yes <ul style="list-style-type: none"> ● Supporting activities focusing on how to enhance the plastic waste value chain with digital solutions, including pilots of digital applications
ERIA	Yes <ul style="list-style-type: none"> ● Information sharing on the updated national framework to tackle marine plastic debris from each ASEAN+3 country 	Yes <ul style="list-style-type: none"> ● Technical Guidelines for Plastics and Resin Pellets Leakage Prevention from Factories and Informal Recycling Sector in ASEAN ● Data-driven Policy Research ● Programme on Marine Plastic Debris ● Surveying and Piloting the Application of Behavioral Insights Approach for Plastic ● Pilot Project of Floating and Drifted Marine Plastics in Mangrove ● Protecting Mangroves from Plastic Pollution: Some Good Practices 	Not Available
EMF	Not Available	Not Available	Not Available
FAO	Not Available	Yes <ul style="list-style-type: none"> ● GESAMP WG 43 report on Sea Based Sources of Marine Plastic Litter 	Not Available
IAEA	Not Available	Yes	Yes

International Organisations	Monitoring of country policy status related to MPL (e.g. regional knowledge platform)	Scientific research	Technology development
		<ul style="list-style-type: none"> • Launching Coordinated Research Projects on NUTEC Plastics 	<ul style="list-style-type: none"> • Development of a thermos-radiolysis reactor for chemical recycling
OECD	Yes	Not Available	Not Available
	<ul style="list-style-type: none"> • Project “Driving a sustainable ocean economy in Southeast Asia” 		
UNEP	Yes	Yes	Not Available
	<ul style="list-style-type: none"> • GPML Digital Platform 	<ul style="list-style-type: none"> • “From Pollution to Solution: a global assessment of Marine Litter and plastic pollution” • “Drowning in Plastics: Marine Litter and plastic waste vital graphics” 	
UN Habitat	Not Available	Yes	Not Available
		<ul style="list-style-type: none"> • Study on SDG indicator 11.6.1 	
UNIDO	Not Available	Not Available	Not Available
WEF (GPAP)	Not Available	Not Available	Not Available



4. Challenges

The following section discusses the various challenges that the participating countries and international organisations have faced in their fight against marine plastic litter.

4.1. Countries

The initiatives put in place by the various countries to combat marine pollution and the innovations around resource efficiency, circular economy, and ocean monitoring have several challenges during its execution at a global scale.

The three broad challenges identified are:

1. Data collection
2. Waste management system improvement
3. Lack of awareness

77% of the countries reported data collection related to MPL as a significant challenge. 55% of the countries mentioned that collecting data on waste was also a challenge they faced. To overcome these challenges, 63% of the countries highlighted the importance of improving the recycling system, while 53% emphasized the need for proper waste management. 51% of the countries considered lack of awareness among stakeholders a major hindrance in addressing marine plastic litter. Additionally, 40% of the countries identified the lack of financial incentives for waste treatment as a challenge, and 43% stated the lack of technology development as a challenge. Furthermore, 40% of the countries mentioned that project delays due to COVID-19 are now considered a minor issue (Figure 4.1., Tables 4.1 - 4.2.). The highlighted cell indicates the challenge faced by the respective country.

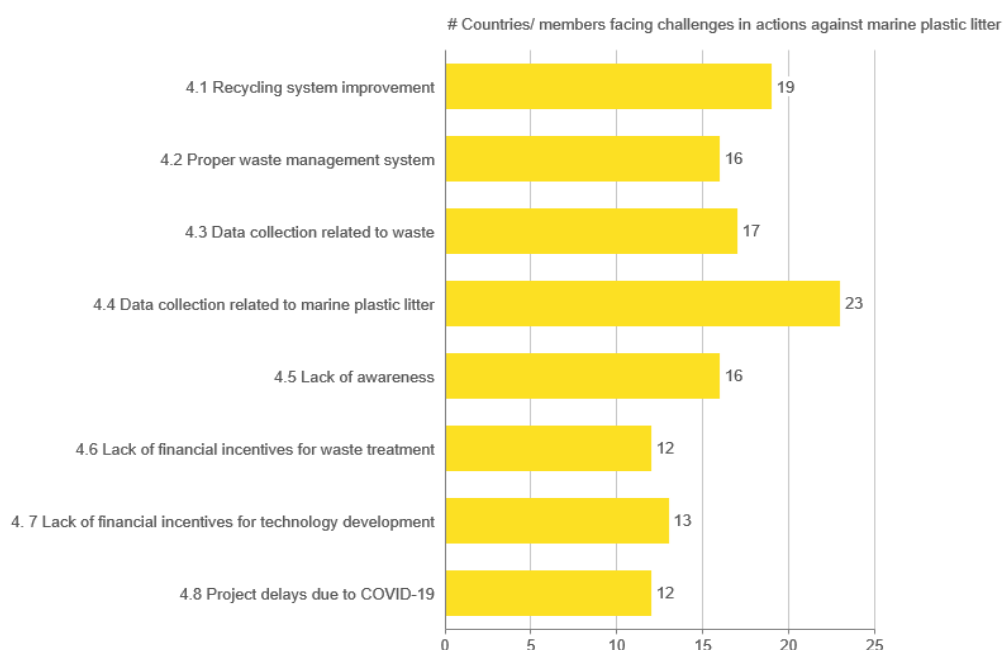


Figure 4.1: Challenges faced by countries in actions against MPL

Table 4.1: Challenges faced by countries while taking actions against MPL (Part-I)

Country	Recycling system improvement	Proper waste management system (including lack of local capacity)	Data collection related to waste in general	Data collection related to marine plastic litter
G20 Members				
Australia	●	●		●
Brazil	●	●	●	●
Canada	●	●	●	●
China	●	●		●
European Union				
France	●	●	●	●
Germany	●		●	●
India	●	●		
Italy			●	●
Japan				●
Mexico				
Saudi Arabia	●			
South Africa	●	●	●	●
South Korea		●		
Türkiye				●
United Kingdom	●	●	●	●
United States of America	●			●
Invited / Other Countries				
Antigua and	●		●	●

Country	Recycling system improvement	Proper waste management system (including lack of local capacity)	Data collection related to waste in general	Data collection related to marine plastic litter
Barbuda				
Costa Rica	●	●	●	●
Kiribati	●	●	●	●
Mauritius	●	●	●	●
Myanmar	●	●	●	●
The Netherlands		●		
Norway	●		●	●
Peru	●	●	●	●
Solomon Island	●	●	●	●
Spain				●
Sri Lanka	●	●	●	●
Singapore				●
UAE	●		●	●

● Yes, Problem faced

Table 4.2: Challenges faced by countries while taking actions against MPL (Part-II)

Country	Lack of awareness among citizens, business, local governments	Lack of financial incentives for waste treatment in general	Lack of financial incentives for technology development	Project delays due to COVID-19
G20 Members				

Country	Lack of awareness among citizens, business, local governments	Lack of financial incentives for waste treatment in general	Lack of financial incentives for technology development	Project delays due to COVID-19
Australia				●
Brazil	●	●	●	
Canada	●	●	●	
China				
European Union				
France	●			
Germany				●
India		●	●	●
Italy				●
Japan				●
Mexico				
Saudi Arabia	●	●	●	●
South Africa	●		●	
South Korea	●			
Türkiye	●			
United Kingdom	●	●	●	●
United States of America	●			
Invited / Other Countries				
Antigua and Barbuda	●	●	●	
Costa Rica	●	●	●	

Country	Lack of awareness among citizens, business, local governments	Lack of financial incentives for waste treatment in general	Lack of financial incentives for technology development	Project delays due to COVID-19
Kiribati		●	●	●
Mauritius		●	●	●
Myanmar	●	●	●	
The Netherlands				
Norway	●			●
Peru	●	●	●	●
Solomon Island	●	●	●	●
Spain				
Sri Lanka	●	●	●	●
Singapore				
UAE	●			

● Yes, Problem faced

4.2. International Organisations

The responses received from international organisations have been documented in this section. As shown in Figure 4.2, six international organisations reported the need for proper waste management and recycling system improvement as a challenge. Five International Organisations mentioned lack of awareness among stakeholders is a challenge. Four organisations mentioned the financial investment for waste treatment, and data collection as a challenge. The lack of incentives for technology development, lack of viable circular models, and government support was stated by three organisations. The inputs received from 9 international organisations (IOs) are presented in Tables 4.3, 4.4, and 4.5. The highlighted cell indicates the problem faced by the respective IO.

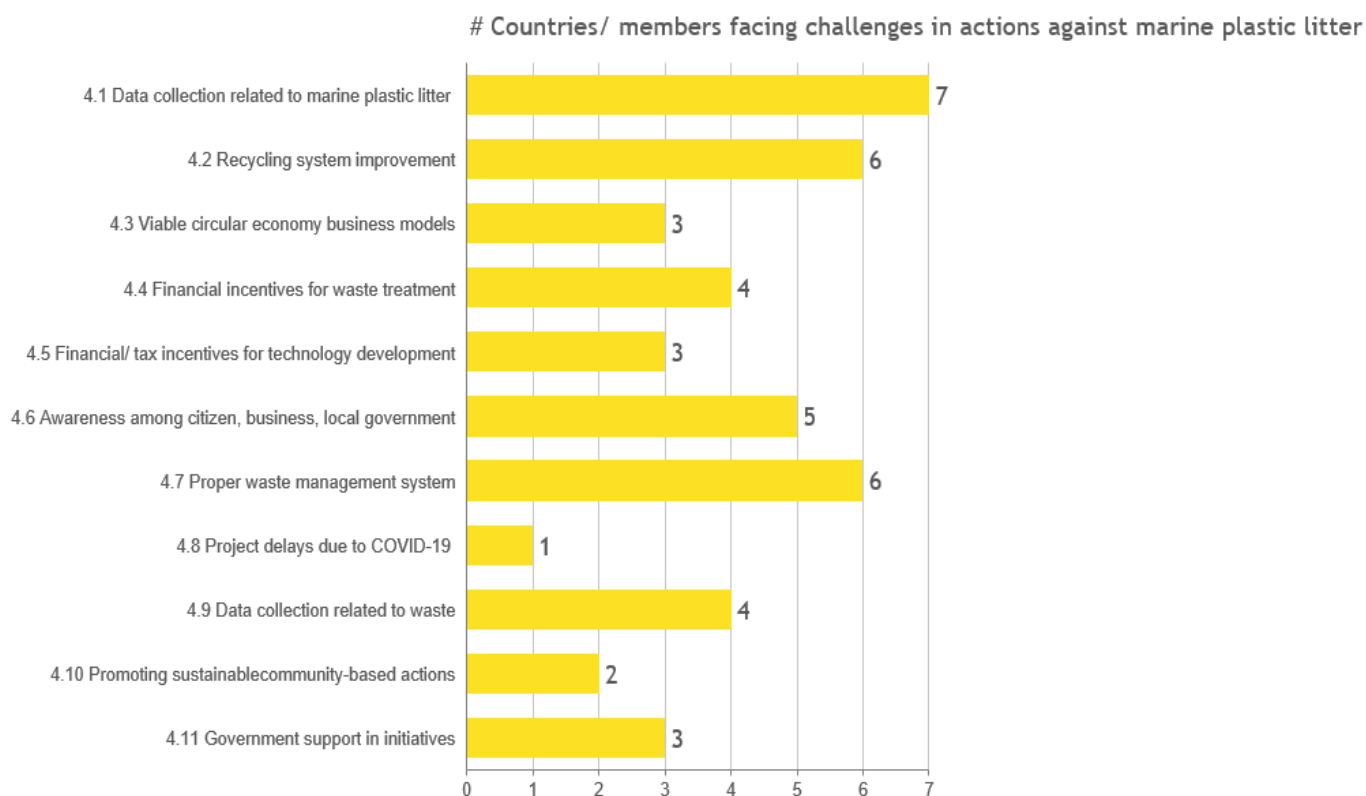


Figure 4.2: Challenges shared by international organisations while taking actions against MPL

Table 4.3: Challenges faced by international organisations while taking actions against MPL (Part-I)

International Organisation	Data collection related to marine plastic litter	Recycling system improvement	Lack of viable circular economy business models	Lack of financial incentives for waste treatment in general
Asian Development Bank (ADB)	●	●	●	●
Economic Research Institute for ASEAN and East Asia (ERIA)	●			
Ellen MacArthur Foundation (EMF)				
Food and Agriculture Organisation (FAO)				
International Atomic Energy Agency (IAEA)	●	●		
Organisation for Economic Cooperation and Development (OECD)	●	●	●	●
United Nations Environment Program (UNEP)	●			
United Nations Human Settlement Program (UN-Habitat)				
United Nations Industrial Development (UNIDO)				●
World Economic Forum (WEF)	●	●	●	●

● Yes, Problem faced

Table 4.4: Challenges faced by international Organisations while taking actions against MPL (Part-II)

International Organisation	Lack of financial/ tax incentives for technology development	Lack of awareness among citizen, business, local government	Proper waste management system (including lack of local capacity)	Project delays due to COVID-19
Asian Development Bank (ADB)			●	
Economic Research Institute for ASEAN and East Asia (ERIA)		●	●	
Ellen MacArthur Foundation (EMF)		●	●	
Food and Agriculture Organisation (FAO)			●	
International Atomic Energy Agency (IAEA)	●	●		
Organisation for Economic Cooperation and Development (OECD)	●		●	
United Nations Environment Program (UNEP)	●	●		
United Nations Human Settlement Program (UN-Habitat)	●	●		
United Nations Industrial Development (UNIDO)		●	●	
World Economic Forum (WEF)				

● Yes, Problem faced

Table 4.5: Challenges faced by international Organisations while taking actions against MPL (Part-III)

International Organisation	Data collection related to waste in general	Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle Marine Litter	Government support in initiatives of your Organisation
Asian Development Bank (ADB)			
Economic Research Institute for ASEAN and East Asia (ERIA)	●	●	
Ellen MacArthur Foundation (EMF)	●	●	
Food and Agriculture Organisation (FAO)			●
International Atomic Energy Agency (IAEA)			
Organisation for Economic Cooperation and Development (OECD)		●	●
United Nations Environment Program (UNEP)	●		●
United Nations Human Settlement Program (UN-Habitat)	●		
United Nations Industrial Development (UNIDO)			●
World Economic Forum (WEF)			●

● Yes, Problem faced

STOP OCEAN PLASTIC POLLUTION



**REDUCE
REUSE
RECYCLE**



5. Best Practices

This section explores the various successful initiatives and innovations implemented by different countries to combat the problem of Marine Litter implemented at the international, national, and local levels. 73% of the countries participated in international co-operations enacting and propagating best practices, 77% at the national level, 63% at the local level, and 66% cooperated with the private sector.

Figure 5.1 indicates the number of countries that have taken initiatives at different regional scales. The country-wise responses at national and local levels have been summarized in the Table 5.1 while the best practice implemented by the private sector and through international cooperation is given in Table 5.2.

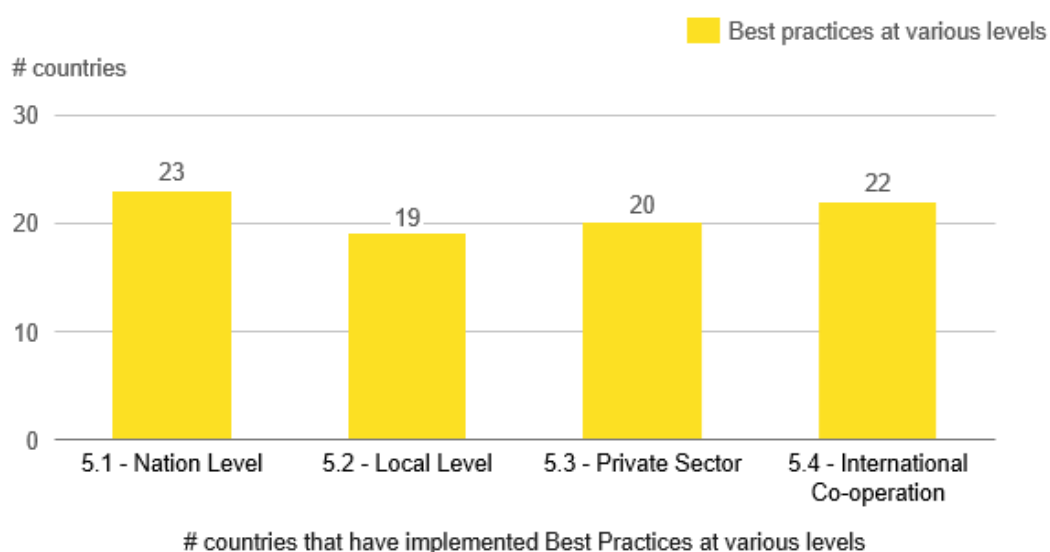


Figure 5.1: Best practices executed at different scales

Table 5.1 Best Practices at National & Local Level

Country	5.1 - Nation Level	5.2 - Local Level
G20 Members		
Australia	Yes <ul style="list-style-type: none"> • RAWR Act provides a national framework to manage waste and recycling across Australia 	Yes <ul style="list-style-type: none"> • CSIRO research has shown container deposit schemes (CDS) can reduce drink containers in the ocean by 40%. CDS are in operation in South Australia, Northern Territory, New South Wales, Queensland, the Australian Capital Territory and Western Australia. Tasmania and Victoria will have their schemes operational in 2023. • States and territories are acting

Country	5.1 - Nation Level	5.2 - Local Level
		on the use of single use plastics with policies having been implemented already or planned in the near future.
Brazil	No	No
Canada	Yes <ul style="list-style-type: none"> ● A Roadmap to Strengthen the Management of Single-use and Disposable Plastics (2022) ● Guidance to Facilitate Consistent Extended Producer Responsibility Policies and Programs for Plastics (2022) ● Best Management Practices for Disposal Bans, Levies, and Incentives for End-of-Life Plastics (2021) ● Canada-wide Action Plan for Extended Producer Responsibility (2009) ● (Pilot) physical flow account for plastic material – Statistics Canada ● Solid waste management for northern and remote communities ● Canadian Code of Conduct for Responsible Fishing Operations ● 10,000 Changes (public awareness campaign) ● Ocean Wise Plastic Reduction Program (public awareness campaign) ● The Anthropocene Education Project ● Waste Literacy Education Program 	Yes <ul style="list-style-type: none"> ● Ontario Materials Marketplace – Council of the Great Lakes Region ● Great Lakes Plastic Cleanup – Council of the Great Lakes Region ● Diversion 2.0 – Georgian Bay Forever ● Marine Plastic: Local Solutions for a Global Issue – Clean Harbours Initiative ● Plastic Audit Guide – Alberta Plastics Recycling ● Zero Plastic Waste Gros Morne – Atlantic Healthy Oceans Initiative ● Ocean Friendly Nova Scotia – Coastal Action
China	Yes <ul style="list-style-type: none"> ● Outstanding cases of Beautiful Bays 	Yes <ul style="list-style-type: none"> ● "Marine sanitation" mechanism in Xiamen, Fujian ● The "Blue Cycle" Project in Taizhou, Zhejiang
European Union	Yes <ul style="list-style-type: none"> ● EU's Plastic Strategy as part of the EU's Circular Economy Action Plan ● Binding legislation for monitoring and assessing Marine Litter 	Not Available

Country	5.1 - Nation Level	5.2 - Local Level
France	<ul style="list-style-type: none"> ● Yes ● Prohibition of single-use plastic items ● Citizen science platform ● The Ministry is developing the national charter “Beaches without plastic waste” ● Extended producer responsibility schemes ● 2020 legislation against waste and for a circular economy 	<p>Yes</p> <ul style="list-style-type: none"> ● Awareness-raising campaigns through the installation of "Here begins the sea" signs
Germany	Not Available	Not Available
India	<p>Yes</p> <ul style="list-style-type: none"> ● Blue Flag Beaches: Eco-lebelling of beaches for conservation, management, responsible tourism, and environmental education ● Quantification of beach litter through standard protocol ● The Central Pollution Control Board (CPCB) has certified over 150 compostable plastic manufacturers who are producing films, bags, cutlery items, straws, etc. ● Plastic Waste Management Rule 2022 ● Ban of selected single use plastic ● Community participation in waste management ● Extended Producer Responsibility ● The Defense Research and Development Organisation (DRDO) Lab has developed a technology for biodegradable cutlery starch-based compostable bags/films, and compostable plastics. ● National Institute of Ocean Technology (NIOT), Ministry of Earth Sciences, Government of India, has developed plastic films using marine seaweed. ● Swachh Sagar, Surakshit Sagar: The campaign by Ministry of Earth Sciences includes 75 volunteers, who have been 	<p>Yes</p> <ul style="list-style-type: none"> ● Vengurla model - where a landfill was converted into a waste management park called “Swachh Bharat Waste Park”. The local communities have practiced waste segregation at the source. ● Versova Beach – largest beach cleaning program ● Waste Management Agency of Goa ● Meendum Manjappai scheme in the state of Tamil Nadu intends to end the use of single use plastic. Vending machines are installed at key locations to dispense cloth bags for public.

Country	5.1 - Nation Level	5.2 - Local Level
	<p>allocated to clean the beaches at every km of the 7500 km long Indian coastline. This is a step towards India's commitment to protect 30% of its oceans, waters, and lands by 2030 in a phased manner.</p> <ul style="list-style-type: none"> • Mission LiFE (Lifestyle for Environment) • The mission plans to create and nurture a global network of individuals, namely 'Pro-Planet People,' to promote environmentally friendly lifestyles. 	
Italy	Not Available	<p>Yes</p> <ul style="list-style-type: none"> • Plastic free islands • "Tremiti Plastic Free Islands"
Japan	<p>Yes</p> <ul style="list-style-type: none"> • Act on Promotion of Resource Circulation for Plastics, April 2022 	<p>Yes</p> <ul style="list-style-type: none"> • "Project for promoting local measures against coastal marine debris" based on the "Marine Litter Act"
Mexico	<p>Yes</p> <ul style="list-style-type: none"> • The National Inventory of Plastic Pollution Sources 	Not Available
South Africa	<p>Yes</p> <ul style="list-style-type: none"> • National Recycling Enterprise Support Programme (RESP) 	Not Available
Saudi Arabia	Not Available	Not Available
South Korea	Not Available	<p>Yes</p> <ul style="list-style-type: none"> • Local government of Chungcheongnam
Türkiye	<p>Yes</p> <ul style="list-style-type: none"> • Zero Waste Movement • Zero Waste Blue Movement • Charging of plastic bags • Integrated Marine Pollution Monitoring Program (IMPM) • National coastal clean up campaigns with NGO's • National public awareness campaigns 	<p>Yes</p> <ul style="list-style-type: none"> • Provincial Action Plans on Marine Litter
United	Yes	Yes

Country	5.1 - Nation Level	5.2 - Local Level
Kingdom	<ul style="list-style-type: none"> Environmental Improvement Plan 2023 Resources and Waste Strategy for England 	<ul style="list-style-type: none"> Fishing for Litter
United States of America	<p>Yes</p> <ul style="list-style-type: none"> NOAA Reports and Technical Memos on Marine Debris Microplastics Expert Workshop report Model Recycling Program Toolkit DOI Secretary's Order to Reduce Plastic Pollution 	<p>Yes</p> <ul style="list-style-type: none"> NOAA's Marine Debris Program EPA Trash Free Waters Best Practices Compendium
Invited/Other Countries		
Antigua and Barbuda	<p>Yes</p> <ul style="list-style-type: none"> IUCN The Organisation of Eastern Caribbean States (OECS) Plastic Treaty 	Not Available
Costa Rica	<p>Yes</p> <ul style="list-style-type: none"> RCM classification (renewable, compostable in the marine environment) 	Yes
Kiribati	<p>Yes</p> <ul style="list-style-type: none"> National cleanup with Government ministries, Private sectors, local communities, NGOs, church groups and youth groups. Waste repurposing trainings Waste management trainings to youth Ongoing awareness programs 	Not Available
Mauritius	<p>Yes</p> <ul style="list-style-type: none"> Banning of single use plastic items 	<p>Yes</p> <ul style="list-style-type: none"> Promotion and support eco-friendly alternatives to plastic
Myanmar	Not Available	Not Available
The Netherlands	<p>Yes</p> <ul style="list-style-type: none"> Yearly National Beach Cleanup organized by the North Sea Foundation (initiated in 2013) Fishing For Litter Project (initiated in 2001 and involve from than 140 vessels that collect litter during fishing operations at sea) 	<p>Yes</p> <ul style="list-style-type: none"> Plastic Free Wadden Islands Rotterdam Waste Free Amsterdam - Plastic Smart Cities In the Dutch Caribbean: Clean Coast Bonaire

Country	5.1 - Nation Level	5.2 - Local Level
	<ul style="list-style-type: none"> • Clean Beach Elections • Clean River Networks • Plastic Soup Surfer • Nederland Schoon • Ocean Cleanup • The Great Bubble Barrier. 	
Norway	Yes	Yes
		<ul style="list-style-type: none"> • The Polluter Control Act
Peru	Yes	Yes
	<ul style="list-style-type: none"> • Clean Production Agreements on solid waste 	<ul style="list-style-type: none"> • Source segregation Program • Municipal Solid Waste Characterization Study
Solomon Islands	Yes	Yes
	<ul style="list-style-type: none"> • Coordination between government and other organizations 	<ul style="list-style-type: none"> • Western Province Environment Network
Spain	Yes	Not Available
	<ul style="list-style-type: none"> • ALDFG. technical guidelines • Fishing for litter initiatives • Monitoring (macrolitter and microplastics) on beaches, floating litter, seabed litter, and also biota • Implementation of a non-special fee cost recovery system for waste collection 	
Sri Lanka	Yes	Yes
	<ul style="list-style-type: none"> • National Action Plan 	<ul style="list-style-type: none"> • Material Recovery Facilities (MRF)
Singapore	Yes	Yes
	<ul style="list-style-type: none"> • National Recycling Programme • Zero Waste Master Plan and the Singapore Green Plan 2030 • Extended Producer Responsibility (EPR) scheme for e-waste • Mandatory Packaging Reporting (MPR) scheme 	<ul style="list-style-type: none"> • Prevention of littering, illegal dumping, release of waste into the ocean:
United Arab Emirates	Yes	Yes
	<ul style="list-style-type: none"> • Federal Law (No. 24 /1999) on the Protection and Development of the Environment • Federal Law (No. 12/2018) aims to regulate the process of Waste 	<ul style="list-style-type: none"> • Abu Dhabi Emirate Single Use Plastic Policy

Country	5.1 - Nation Level	5.2 - Local Level
	Management	

Table 5.2: Best Practices by private sector and through international cooperation

Country	5.3 - Private Sector	5.4 - International Co-operation
G20 Members		
Australia	Yes <ul style="list-style-type: none"> • Australasian Recycling Label (ARL) 	Yes <ul style="list-style-type: none"> • Australia joined the High Ambition Coalition to End Plastic Pollution • New Plastics Economy Global Commitment • Regional Fisheries Management Organisations (RFMOs) • Pacific Ocean Litter Project
Brazil	Yes <ul style="list-style-type: none"> • Sector Agreement for Reverse Logistics System for Packaging • Technical cooperation agreement to carry out awareness campaigns on the proper disposal of packaging. Signed in 2022 between the MMA and the Brazilian Association of Soft Drinks and Non-Alcoholic Beverages (Abir). 	Yes <ul style="list-style-type: none"> • National Plan to Combat Marine Litter • TerraMar (Protection and Integrated Management of Marine and Coastal Biodiversity Project) • TerraMar Project
Canada	Yes <ul style="list-style-type: none"> • The Golden Design Rules for Plastics Packaging – Canada Plastics Pact • Circular Economy Business Toolkit – National Zero Waste Council • Preferred Plastics Guide – Canadian Produce Marketing Association • Operation Clean Sweep – Chemistry Industry Association of Canada • Medical PVC Recycling Program – Vinyl Institute of Canada • Roadmap to Support the Circularity and Recycling of Plastics in Canada – CSA 	Yes <ul style="list-style-type: none"> • Ocean Plastics Charter • Addressing Single-use Plastic Products Pollution Using a Lifecycle Approach • Last Stop: The Ocean Campaign Toolkit and Website • Reducing Marine Litter Through Local Action: A Toolkit for Community Engagement

Country	5.3 - Private Sector	5.4 - International Co-operation
	Group <ul style="list-style-type: none"> Reuse Refill Canada – Scout Environmental 	
China	Not Available	Yes <ul style="list-style-type: none"> "Sister city" cooperation in Marine Litter prevention and control Dialogue Platform for Marine Litter experts and a Symposium on Marine Litter
European Union	Not Available	Not Available
France	Yes <ul style="list-style-type: none"> Development of links with the industrial sector: the "National Pact on plastic packaging" The Clean Sweep Operation 	Yes <ul style="list-style-type: none"> Participation to meetings and working groups (UN, G7, G20, RSC, EU, etc) France organized in 2017 and 2019 a workshop to share results and methodologies of existing projects analyzing riverine plastic pollution
Germany	Not Available	Not Available
India	Yes <ul style="list-style-type: none"> India & UK collaboration Commonwealth Litter Programme (CLiP) India, Australia, and Singapore come together to address marine pollution with a focus on plastic debris. India and Norway to work jointly towards mitigating marine plastic litter and microplastics; India and Germany sign an agreement on 'Cities combating plastic entering the marine environment' India and Japan have joined hands to fight plastic pollution through data collection, advanced scientific research, and development The Government of India through the Department of Fisheries (DoF), MoFAH&D is participating in the IMO-FAO GloLitter Partnership (GLP) Project as a Lead Partnering Country (LPC) with the aim of 	Yes <ul style="list-style-type: none"> IMO-FAO GloLitter Partnership (GLP) Project as a Lead Partnering Country (LPC) Commonwealth Litter Programme (CLiP)

Country	5.3 - Private Sector	5.4 - International Co-operation
	prevention and reduction of Marine Plastic Litter (MPL)	
Italy	Not Available	Yes
		<ul style="list-style-type: none"> ● PLASTIC BUSTER project
Japan	Yes	Yes
	<ul style="list-style-type: none"> ● Released “Good Practices for Reducing Microplastics”, revised in November 2022 	
Mexico	Not Available	Yes
		<ul style="list-style-type: none"> ● Marine Litter Action Plan for the Northeast Pacific 2022-2026
South Africa	Yes	Yes
	<ul style="list-style-type: none"> ● Plastics SA ● Sustainable Seas Trust – Development of an African Marine Litter Monitoring Manual and Guide (2020) ● Sustainable Seas Trust – Development of a Sample Preparation Manual for the Analysis of Plastic-related Pollutants (2022) ● 	<ul style="list-style-type: none"> ● Swedish Agency for Marine and Water Management (SwAM) in collaboration with DFFE Source to Sea screening study of pollution and flows the Umgeni River catchment in KwaZulu-Natal ● Nairobi Convention ● Abidjan Convention ● MARPLASTICS Initiative ● Commonwealth Marine Litter Project (CLiP)
Saudi Arabia	Not Available	Not Available
South Korea	Yes	Yes
	<ul style="list-style-type: none"> ● Adopt-A Beach project 	<ul style="list-style-type: none"> ● NOAA International Marine Debris Conference (IMDC) Series
Türkiye	Not Available	Not Available
United Kingdom	Yes	Yes
	<ul style="list-style-type: none"> ● Marine Conservation Society ● Odyssey Innovation ● Global Ghost Gear Initiative + Food and Agriculture Organisation 	<ul style="list-style-type: none"> ● Plastic Pollution Treaty ● International Maritime Organisation (IMO) ● The Convention on Biological Diversity ● United Nations (UN) ● SDGs ● OSPAR ● INdIGO project ● The Blue Planet Fund (BPF) ● The Commonwealth Clean Ocean Alliance (CCOA)

Country	5.3 - Private Sector	5.4 - International Co-operation
United States of America	Yes	Yes
	<ul style="list-style-type: none"> ● Operation Clean Sweep ● Sustainable Packaging Coalition 	<ul style="list-style-type: none"> ● The Trash Free Waters International Implementation Guide ● Best Practices for Solid Waste Management: A Guide for Decision-Makers in Developing Countries ● Virtual Landfill Construction & Operations Workshop ● USAID Clean Cities Blue Ocean (CCBO) Virtual Event and Training Hub ● The Building Blocks of a Circular Economy: USAID's Local Systems Approach to Reducing Ocean Plastic Pollution ● USAID Tools ● USAID Reports ● USAID Case Studies
Invited/Other Countries		
Antigua and Barbuda	Yes	Yes
	<ul style="list-style-type: none"> ● IUCN ● The Organisation of Eastern Caribbean States (OECS) ● Plastic Treaty 	<ul style="list-style-type: none"> ● IUCN ● The Organisation of Eastern Caribbean States (OECS) ● Plastic Treaty
Costa Rica	Yes	Yes
	<ul style="list-style-type: none"> ● Supermarkets: Pay to have a plastic bag/ Prohibited the sale and promote reusable bags. ● Market is boosted with renewable and compostable products, most of them imported. ● 	<ul style="list-style-type: none"> ● United States Environmental Protection Agency (EPA) supports ● National Marine debris Plan ● Training and information strategy for two fishing sectors in the central and northern Pacific of Costa Rica
Kiribati	Yes	Not Available
	<ul style="list-style-type: none"> ● Adopting the reusable bag initiative ● Maintaining proper waste receptacles at their business compounds 	
Mauritius	Yes	Yes
	<ul style="list-style-type: none"> ● Incentive to use alternative to plastic packaging 	<ul style="list-style-type: none"> ● WTO taxation on plastic packaging ● Introduce EPR concept for goods having transboundary

Country	5.3 - Private Sector	5.4 - International Co-operation
		movement
Myanmar	Not Available	Not Available
The Netherlands	Yes <ul style="list-style-type: none"> • Operation Clean Sweep • Rotterdam Taskforce Clean Sweep • The Meuse Cleanup 	Yes <ul style="list-style-type: none"> • Action 53: Fishing for Litter OSPAR Commission • Sustainability education programmes for fishermen • European Plastics Pact • Global Plastics Pact Network
Norway	Yes <ul style="list-style-type: none"> • The Producer Responsibility Organization Green Dot Norway (Grønt Punkt Norge) • Pollution Control Act 	Yes <ul style="list-style-type: none"> • G7 Plastics Charter • The Norwegian Development Program to Combat Marine Litter and Microplastics
Peru	Yes <ul style="list-style-type: none"> • 9 agreements signed between the Ministry of the Environment, the Ministry of Production, and different companies 	Yes
Solomon Islands	Yes <ul style="list-style-type: none"> • Pyrolysis System 	Yes
Spain	Not Available	Not Available
Sri Lanka	Yes <ul style="list-style-type: none"> • Plastic waste collection centers and recycling centres 	Yes <ul style="list-style-type: none"> • NORAD and BRSM China is supporting with two projects on plastic waste management
Singapore	Yes <ul style="list-style-type: none"> • Cooperation with stakeholders 	Yes <ul style="list-style-type: none"> • Actively participates in regional and global Marine Litter platforms under ASEAN, UN, UNEA, COBSEA, PEMSEA
United Arab Emirates	Yes <ul style="list-style-type: none"> • Circular Packaging Association 	Yes <ul style="list-style-type: none"> • UAE has signed and ratified many international and regional environmental conventions



Further Information

6. Further Information

The following section collates and summarises unfiltered responses from all Countries/ International Organisation as received. This is compiled with the intent of ready reference and further readings on following chapters covered in the G20 Report on Actions against Marine Plastic Litter (5th Edition):

- Chapter 2: Policy and Frameworks
- Chapter 3: Measures and Achievements
- Chapter 4: Challenges
- Chapter 5: Best practices

6.1. Australia

Key Highlights

- National Waste Policy (2018)
- National Waste Policy Action Plan (2019)
- National Plastics Plan (2021)
- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- Recycling and Waste Reduction Act 2020 (RAWR Act)
- Recycling and Waste Reduction (Export—Waste Plastic) Rules 2021 (Waste Plastic Rules)
- Australian Government Ghost Nets Initiative
- Indigenous Rangers Coastal Clean-ups Project.
- Marine Order 95 (Marine pollution prevention – garbage) 2018

6.1.1. Policy and Frameworks

National Action Plan

Do you have a National Action Plan or strategy on MPL? Please choose one.

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name:

- a) National Waste Policy (2018)
- b) National Waste Policy Action Plan (2019)
- c) National Plastics Plan (2021)

Brief description:

- a) The National Waste Policy: Less waste, more resources (Policy) was agreed by all Australian governments in 2018 and sets the agenda for a sustainable path for Australia's waste and resource recovery to 2030. The Policy draws on the waste hierarchy and embodies circular economy principles in seeking to retain materials in the economy for as long as possible. A copy of the Policy is available at <https://www.dcceew.gov.au/environment/protection/waste/how-we-manage-waste/national-waste-policy>

- b) The 2019 National Waste Policy Action Plan (the Action Plan) drives implementation of the Policy. The Action Plan sets seven national waste targets that help guide investment and supports policy reform to better manage Australia's waste and resource recovery. A copy of the Action Plan is available at <https://www.dcceew.gov.au/environment/protection/waste/publications/national-waste-policy-action-plan>
- c) The National Plastics Plan takes a whole-of-lifecycle approach to the plastic challenge, including product design, increasing Australia's recycling capacity, stimulating demand for recycled content, and preventing plastics from leaking into the environment. A copy of the National Plastics Plan is available at <https://www.dcceew.gov.au/environment/protection/waste/plastics-and-packaging/national-plastics-plan>

Legal Framework

Do you have legislation on MPL? (including waste management and circular economy)

Yes

Please list your country's legislation including name and brief description here:

Name:

- a) Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- b) Recycling and Waste Reduction Act 2020 (RAWR Act)
- c) Recycling and Waste Reduction (Export—Waste Plastic) Rules 2021 (Waste Plastic Rules)
- d) Hazardous Waste (Regulation of Exports and Imports) Act 1989 (Hazardous Waste Act)
- e) National Environment Protection (Used Packaging Materials) Measure 2011
- f) Protection of the Sea (Prevention of Pollution from Ships) Act 1983
- g) Marine Order 95 (Marine pollution prevention – garbage) 2018

Brief description:

- (a) The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) lists injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris as a key threatening process.
- (b) Australia's Threat Abatement Plan for the impacts of marine debris on the vertebrate wildlife of Australia's coasts and oceans incorporates actions needed to abate the listed key threatening process. The threat abatement plan includes a range of management approaches for research and monitoring, public outreach and education, preventing and reducing debris from land-based sources as well as addressing marine-based sources and removing accumulated marine debris from the coastal marine environment.
- (c) A copy of the Threat Abatement Plan is available at: www.dcceew.gov.au/environment/biodiversity/threatened/publications/tap/marine-debris-2018
- (d) In 2020, the Australian federal parliament enacted landmark legislation to ensure Australia takes responsibility for its waste. The RAWR Act provides a national framework to regulate the export of waste materials, and to manage the environmental, health and safety impacts of such waste. Through subordinate legislation, the Act implements the export ban on unprocessed waste plastic, paper,

glass, and tyres that was agreed by the Commonwealth, state, and territory governments in March 2020.

(e) The Act and its supporting Rules provides for voluntary, co-regulatory and mandatory product stewardship schemes, to encourage companies to take greater responsibility for the waste they generate, including through better product design and the increased recovery and reuse of waste materials. It also requires the Minister to publish a Product Stewardship Priority List each year which lists products most in need of product stewardship action, and that may be regulated if other approaches are not suitably adopted.

(f) The Waste Plastic Rules under the RAWR Act implement the ban on export of unprocessed waste plastic in two phases, through a licensing and declaration scheme.

Phase 1 of the export ban was in place from 1 July 2021 until 30 June 2022. This required licence holders to sort plastic into a single polymer or resin prior to export for further processing, recycling, and re-manufacture.

On 1 July 2022, phase 2 of the export ban commenced. This requires licence holders to further process sorted waste in Australia prior to export, for example into flakes or pellets.

The Waste Plastic Rules help ensure that Australia takes responsibility for its plastic waste and promotes the development of our domestic recycling sector and circular economy. By ensuring we only export properly processed waste, we are preventing these materials from being dumped overseas, reducing harm to the environment and human health.

(g) Australia is a signatory to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention) and implements its obligations through the Hazardous Waste Act.

(h) The Basel Convention was amended from 1 January 2021 to enhance controls on exports, imports and transboundary movement of waste plastics, so that impacts on human health and the environment are minimised. The amendments introduced a broad category of waste plastics that are to be subject to prior informed consent procedures, with certain exceptions.

(i) The Hazardous Waste Act was amended in 2021 to incorporate the Basel Convention plastic amendments into Australian law. The Hazardous Waste Act operates in tandem with the RAWR Act to ensure the optimal environmental outcome in relation to waste plastics.

(j) The Australian Government partners with state and territories governments and industry to reduce the environmental impacts of packaging, including plastic packaging, through the Australian Packaging Covenant (Covenant). The Covenant is underpinned by the National Environment Protection (Used Packaging Materials) Measure 2011.

(k) The Australian Government is working with the states and territories and industry to review and reform the co-regulatory packaging system by 2025 to increase sustainable packaging design and recyclability and integrate with Australia's packaging product stewardship and circular economy initiatives.

(l) The review presents an opportunity to strengthen the domestic regulatory framework and ensure that all packaging available in Australia is designed to be recovered, reused, recycled and reprocessed safely in line with circular economy principles.

Increasing the effectiveness of the packaging framework will have consequences for marine plastic litter by increasing product sustainability and plastic collection and recycling.

- (m) Australia is a Party to the International Convention for the Prevention of Pollution from Ships (MARPOL), which among other things, prohibits the discharge of plastic into the sea. Australia implements its obligations through the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* (POTS Act) and *Marine Order 95 (Marine pollution prevention – garbage) 2018* (MO95).
- (n) Under the MARPOL vessels are also required to maintain records of all garbage that is generated and disposed by the vessel, including plastics, through a Garbage Management Plan and a Garbage Record Book.
- (o) Additionally, MARPOL obliges Member States ensure that adequate reception facilities are available in ports and terminals to receive all types of waste, including plastic, generated by a ship during normal operations.

Indicators

Do you have the MPL-specific indicators or data collection framework in your country?

Yes

Please list your indicators here:

(a) Packaging targets

The National Packaging Targets have driven systemic change to how packaging is designed, collected, recovered, and reprocessed, and are increasing recovery rates.

The Australian Government is taking a range of actions on waste and recycling that will support industry to deliver the Targets, including:

funding under the Recycling Modernisation Fund to increase Australia's onshore material processing infrastructure capacity

the fast-tracked phase-out of problematic and unnecessary single-use plastics under the National Plastics Plan

supporting the Australasian Recycling Label (ARL) as a world-leading educational tool to help households recycle correctly, including by investing \$5 million to assist 20,000 small to medium enterprises improve packaging sustainability and labelling by adopting the ARL

product stewardship schemes to increase plastic recycling rates.

In 2023 APCO completed a review of the Targets that shows they will not be met by 2025 and that voluntary actions are not sufficient to achieve a circular economy for packaging. The Review identifies short and medium-term actions to support industry and address systemic barriers. The Australian Government is working with APCO and the states and territories to address these gaps in the immediate term and as part of reform to packaging regulation.

The current data does not reflect the significant impact of government policies and industry investment in infrastructure capacity since the reporting period.

All Environment Ministers have agreed on the need to reform packaging regulation by 2025 to ensure that packaging is designed to be recovered, reused, recycled and reprocessed safely in line with circular economy principles.

Reform provides an opportunity to address particularly challenging packaging types, such as soft plastics, through improved collection and recycling and product stewardship approaches.

This reform will provide a framework to support and monitor industry to ensure continuous progress against packaging design and recovery objectives.

- (b) The Australian Government supports APCO's ongoing work to deliver a suite of resources for industry to assess and improve the design and manufacturing of their packaging. These include the Sustainable Packaging Guidelines, Food Services Packaging Sustainability Guidelines, Quick Start guidelines for design for recovery and PET.
- (c) The Australian Government strongly supports the use of the Australasian Recycling Label (ARL) as the only verified recycling label on the Australian market. The ARL is a world-leading consumer education tool which helps households recycle and assists brand owners to design recyclable packaging. The Australian Government has also invested \$5 million to support small-to-medium enterprises to implement the ARL on their packaging, in turn giving households greater guidance on how to recycle and keeping more plastics out of landfill.
- (d) A national plastics pollution monitoring protocol and web portal – Australia's 2021 National Plastics Plan includes a commitment for the Australian Government to establish a national monitoring protocol and web portal for plastics pollution. This is currently in the early stages of development and is due for completion in 2025.

6.1.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

fishing gears	
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

No

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

a) 2021 National Plastics Plan – Phase outs

Targeted products:

a) To provide greater clarity to industry, on 15 April 2021 Environment Ministers identified eight problematic and unnecessary single-use plastic product types for industry to phase out nationally by 2025 (or sooner in some cases) under the National Waste Policy Action Plan. The list includes:

- Lightweight shopping bags
- “Degradable” plastics (fragmentable/oxo-degradable)
- Plastic straws
- Plastic utensils and stirrers
- Plastic bowls and plates
- Expanded polystyrene (EPS) consumer food containers (e.g. cups and clamshells)

- EPS consumer goods packaging (loose fill and moulded)
- PVC labels

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

The National Packaging Targets have driven systemic change to how packaging is designed, collected, recovered, and reprocessed, and are increasing recovery rates.

The Australian Government is taking a range of actions on waste and recycling that will support industry to deliver the Targets, including:

- funding under the Recycling Modernisation Fund to increase Australia's onshore material processing infrastructure capacity
- the fast-tracked phase-out of problematic and unnecessary single-use plastics under the National Plastics Plan
- supporting the Australasian Recycling Label (ARL) as a world-leading educational tool to help households recycle correctly, including by investing \$5 million to assist 20,000 small to medium enterprises improve packaging sustainability and labelling by adopting the ARL
- product stewardship schemes to increase plastic recycling rates.

Regulations on microplastics

Yes

Names of regulations:

Industry-led phase-out of microbeads in rinse-off personal care, cosmetic and cleaning products sold in Australia

Brief description:

A 2020 independent assessment of the voluntary industry-led phase-out of microbeads in rinse-off personal care, cosmetic and cleaning products sold in Australia revealed that 99.3% of the targeted products were microbead free.

Government actions on microplastics

In preparation

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Others (please specify)

Australia supports and is engaged in the work of the International Maritime Organisation to implement the Strategy to reduce marine plastic litter from ships and the associated Action

Plan, which includes actions to better understand the contribution of ships to marine microplastics.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

(a) Ban on exports of waste plastic, paper, glass and tyres

Brief description:

In March 2020, the Australian Government, along with all states and territories and local governments, agreed to a phased ban on the export of waste plastic, paper, glass and tyres, starting with glass on 1 January 2021.

The *Recycling and Waste Reduction Act 2020* (the Act) commenced on 16 December 2020.

The *Recycling and Waste Reduction Rules (Export–Waste Plastic) Rules 2021* (the Waste Plastic Rules) were made on 24 May 2021. The Act and Rules regulate export of waste plastic.

From 1 July 2021, an export licencing scheme for waste plastics was implemented and exports of unsorted mixed waste plastics were banned.

Phase 1 of the export ban was in place from 1 July 2021 until 30 June 2022. This required licence holders to sort their plastic into a single polymer or resin prior to export for further processing, recycling, and re-manufacture.

On 1 July 2022, phase 2 of the export ban commenced. This requires licence holders to further process sorted waste in Australia prior to export, for example into flakes or pellets.

Australia monitors how ships process and dispose of garbage, including plastic waste through AMSAs risk-based Port State Control (PSC) inspection program, conducting over 3000 PSC inspections each year. PSC verifies that ships are meeting their MARPOL requirements for waste management, recording and disposal.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

2019 National Waste Policy Action Plan to implement the 2018 National Waste Policy

Australian Recycling Investment Plan

Threat Abatement Plan for the impacts of marine debris on the vertebrate wildlife of Australia's coasts and oceans

National Plastics Plan

CSIRO Plastics Innovation Hubs

Indo-Pacific Oceans Initiative

Partnership with National Centre for Coastal Research

Brief description:

On 8 November 2019, Australian environment ministers agreed to a National Waste Policy Action Plan (the Action Plan) that drives the implementation of the 2018 National Waste Policy. The Action Plan includes targets that help guide investment and national efforts in waste management and resource recovery to 2030 and beyond.

An 80% 'recovery' rate of material across all waste streams

Significant increases to government procurement of recycled materials

Phase out problematic and unnecessary plastics by 2025

The Australian Government has committed to a AU\$167 million Australian Recycling Investment Plan to increase Australia's recycling rates and tackle plastic waste and litter, and accelerate work on new recycling schemes. The focus of this Plan is on creating the right investment environment so that new technologies are commercialised, preventing pollution from entering our oceans and creating valuable new products. The Plan includes AU\$100 million through the Clean Energy Finance Corporation to support the manufacture of products using recycled materials (including plastics), AU\$20 million through Cooperative Research Centre grants to find new and innovative solutions to plastic recycling and waste, an AU\$20 million Product Stewardship Investment Fund to help to fast track new recycling/product stewardship schemes, and more than AU\$11 million for community campaigns to reduce litter and clean up beaches and waterways.

Australia is implementing the Threat Abatement Plan for the impacts of marine debris on the vertebrate wildlife of Australia's coasts and oceans. The plan is available at <https://www.environment.gov.au/biodiversity/threatened/publications/tap/marine-debris-2018>.

Specific actions in the 2021 National Plastics Plan relating to the prevention of littering, illegal dumping and unintentional leakage into the ocean include:

Work with industry to fast-track the phase out of particular problematic and unnecessary plastics, and consider regulatory action should the industry phase out not be achieved

Deliver a Plastic Free Beaches initiative in partnership with Boomerang Alliance to eliminate single-use plastics from Australia's favourite beaches and support local businesses to switch to alternative products

Pursue coordinated global action on marine litter and microplastic pollution through a new global agreement

Work with the textile and whitegoods sectors on an industry-led phase-in of microfibre filters on new residential and commercial washing machines by 1 July 2030.

Pursue opportunities across Government for coordinated policy response to reduce e-vape litter in Australia

Partner with states and territories and the CSIRO on solutions to prevent plastic debris entering the marine environment via stormwater

Partner with organisations to establish a national monitoring protocol and database for plastic pollution.

Continue to implement the *Threat Abatement Plan for the impacts of marine debris on the vertebrate wildlife of Australia's coasts and oceans*.

Establish an Indonesia-Australia Systemic Innovation Lab on Marine Plastic Waste under the leadership of the CSIRO and the Indonesian Ministry of Marine Affairs and Fisheries.

Implement measures to reduce ship-sourced waste in accordance with the International Maritime Organisation's Action Plan to address marine plastic litter from ships

CSIRO Plastics Innovation Hubs

Indonesia-Australia Systemic Innovation Lab on Marine Plastic Waste:

Australia and Indonesia have agreed to establish and have launched a new \$1.3 million Indonesia-Australia Systemic Innovation Lab on Marine Plastic Waste partnership under the joint leadership of the CSIRO and the Indonesian Ministry of Education, Culture, Research and Technology. This new initiative will strengthen research collaboration to help identify new approaches in tackling marine plastic waste across the region.

Mekong-Australia Systemic Innovation Lab on Marine Plastic Waste:

The Vietnam Plastics Innovation Hub is an initiative of Aus4Innovation, an official development assistance program, sponsored by DFAT, managed and co-funded by CSIRO and the Hanoi Embassy and delivered in strategic partnership with Vietnam's Ministry of Science and Technology (MOST) and with collaboration from the National Plastic Action Partnership and the Vietnam Administration of Seas and Islands (VASI). A Mekong-Australia Systemic Innovation Lab on Marine Plastic Waste (covering Thailand, Cambodia and Laos) is the 3rd hub in the network, currently in the design phase. Further [information at this link](#).

DFAT has appointed CSIRO as Australia's Knowledge Partner under the Indo-Pacific Oceans Initiative.

CSIRO is partnering with India's National Centre for Coastal Research, together with DFAT to support development of a formal partnership arrangement. Together with National Centre for Coastal Research (NCCR), CSIRO, and Singapore's National Environment Agency hosted the East Asia Summit (EAS) Marine Plastic Debris Workshop with most EAS member countries in attendance.

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

- (a) Australian Government Ghost Nets Initiative: Indigenous Rangers Coastal Clean-ups Project.
- (b) Environment Restoration Fund
- (c) Communities Environment Program
- (d) CSIRO Ghost Nets Research

Brief description:

- (a) As part of the the \$14.8 million Australian Government Ghost Nets Initiative Indigenous ranger groups are being supported to coordinate retrievals and marine

debris beach clean ups and to collect data on the source of ghost nets in the Gulf of Carpentaria, one of the nation's hot spots for ghost nets drifting from foreign waters. On-ground activities under the Ghost Nets Initiative are being expanded from 2022 to additional Indigenous ranger groups in the gulf and other northern Australian hotspots.

- (b) The Australian Government is investing \$100 million, over four years from 2019-20 to 2022-23 through the Environment Restoration Fund. Projects delivered under the ERF focus on protecting threatened and migratory species and their habitat across Australia's coasts, oceans and waterways. ERF grants have been provided for beach and coastline clean-up activities, including AU\$300,000 to Clean Up Australia Day and AU\$5,000,000 to Conservation Volunteers Australia.
- (c) The Communities Environment Program is a grant program that supports community-led projects to address local environmental priorities, including litter clean up events.
- (d) Recent analysis by CSIRO demonstrated there is an increase in ghost nets across northern Australia, not a decrease (or positive improvement), across most of the country.

Removal of plastic litter from the ocean

Yes

Names of actions:

- a) Australian Circular Economy Hub
- b) Australian Circular Economy Ministerial Advisory Group

Brief description:

- a) The Australian Government has invested AU\$1.6 million through the Environment Restoration Fund to help establish an Australian Circular Economy Hub and Marketplace by end of 2021, designed to be a one-stop-shop for circular economy inspiration, education and implementation in Australia.

The Australian Government through the Minister for the Environment and Water has established an Advisory Group to guide Australia's transition to a more circular economy by 2030. Members are appointed by the Minister for Environment and Water based on individual expertise.

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Public-private partnerships for creating and implementing innovative solution

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

- Australia is implementing the Threat Abatement Plan for the impacts of marine debris on vertebrate wildlife of Australia's coasts and oceans (TAP).
- Plastic Free Beaches
- National Consumer Education Campaign on the ARL
- MOU with Tangaroa Blue/Australian Marine Debris Initiative

Brief description:

- a) The TAP includes a range of management approaches for research and monitoring, public outreach and education, preventing and reducing debris from land-based sources as well as addressing marine-based sources and removing accumulated marine debris from the coastal marine environment.
- b) The Plastic Free Beaches initiative will work with businesses in eight identified geographic areas to phase out problematic single use plastics. The selected areas disproportionately contribute to marine plastic litter (e.g. high visitor numbers, density of retail and food outlets offering single use plastic items, proximity to the coast or waterways through which plastic pollution is transported).
- c) The Australasian Recycling Label (ARL) is a world-leading consumer education tool which helps households recycle and assists brand owners to design recyclable packaging.
- d) The Australian Maritime Safety Authority (AMSA) holds an MOU with Tangaroa Blue, a non-government Organisation that coordinates the Australian Marine Debris Initiative. AMSA works in partnership with Tangaroa Blue to enhance Australia's capability to meet MARPOL garbage management obligations and help identify and address any gaps in our regulatory framework, including the proper disposal of plastic waste from ships to prevent marine debris.

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

- (a) Plastic Free Beaches initiative
- (b) National Consumer Education Campaign
- (c) ReefClean Project

Brief description:

- a) Plastic Free Beaches is being delivered in partnership with Boomerang Alliance to eliminate single-use plastics from Australia's favorite beaches and support local businesses to switch to alternative products, simultaneously raising consumer awareness of the issue.
- b) The National Consumer Education Campaign delivered targeted sessions and toolkits to local councils, waste educators and their waste contractors, and primary and secondary school students.
- c) The ReefClean Project is being delivered by Tangaroa Blue from 2018-19 to 2022-23 and seeks to manage and mitigate marine debris across the Great Barrier Reef's

coastlines, islands and waterways through targeted removal, community awareness and source reduction programs.

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

- a) CSIRO Global Plastics Leakage project

Brief description:

- a) CSIRO's global plastics leakage project worked in over a dozen countries (many within the region) to build capacity, collect and collate data and develop national baselines. Work has also been undertaken with United Nations Coordinating Body on the Seas of East Asia (COBSEA) to enable regional partners to foster collaboration, harmonisation and professional development between COBSEA participating countries, as well as to conduct training of trainers on monitoring and assessment of marine plastic litter and microplastics across the region.

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

- (a) National Waste Reports
- Other research
 - National Environment Science Program
 - National plastics pollution monitoring protocol and database
 - CSIRO Marine Debris Research

Brief description:

- (b) Australia's National Waste Reports describe Australia's national performance on waste and recycling. The Reports present data and commentary on waste generation, recovery and fate for all waste streams and various material categories. It also analyses this information by jurisdiction and on a per capita basis. More information is available at:

<https://www.dcceew.gov.au/environment/protection/waste/national-waste-reports/2020>

- (c) Australia is conducting a range of research to better understand marine debris, including marine plastic pollution. Recent CSIRO research indicates that 75% of Australian beach pollution is plastic. This research will assist in setting baselines for marine debris and plastic pollution, allowing this to be tracked over time. For details on CSIRO marine debris research, see <https://www.csiro.au/en/Research/OandA/Areas/Marine-resources-and-industries/Marine-debris>
- (d) The Australian Government has invested AU\$149 million in the second phase of the National Environment Science Program to establish four new multidisciplinary and

applied research hubs, including a Marine and Coastal Hub and a Sustainable Communities and Waste Hub. The program provides evidence for the design, delivery and on-ground outcomes for environmental programs, helps decision-makers build resilience and supports positive environmental, social and economic outcomes, including in relation to plastic flows and ocean surface microplastics.

- (e) Australia's 2021 National Plastics Plan includes a commitment for the Australian Government to partner with organisations to establish a national monitoring protocol and database for plastics pollution (currently in the early stages of development).

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

- (a) Regional engagement
- International engagement and commitments

Brief description:

Regional engagement

The Australian Government has committed AU\$16 million to the Pacific Ocean Litter Project (POLP), to help the Secretariat of the Pacific Regional Environment Program (SPREP) implement the Pacific Regional Action Plan: Marine Litter 2018-2025. The POLP is working to assist Pacific island countries to refuse, reduce and find alternatives to single-use plastics, such as plastic bags, cutlery, food containers and drink bottles, which make up much of the plastic waste in inshore waters and beaches in the Pacific region.

The Australian Government is a supporting member of the Australia New Zealand Pacific Plastic Pact (ANZPAC). ANZPAC is the first Plastics Pact in the Oceania region, second regional Pact and the 11th Plastics Pact under the Ellen MacArthur Foundation's global Plastics Pact Network. Members aim to achieve four targets: eliminating unnecessary and problematic plastic packaging, ensuring 100% of plastic packaging is reusable, recyclable or compostable by 2025, increasing plastic packaging collected and effectively recycled by 25%, and having an average of 25% recycled content in packaging.

In 2023, ANZPAC members are collaborating on the creation of plastics end markets, trialling reuse systems in the tourism industry, and harmonising restrictions for problematic single-use plastics. ANZPAC is also developing a shared evidence and knowledge base for plastics reduction in the Pacific, including through Circular Design Guidelines and Pacific Island value chain information sessions. Projects receive engagement from ANZPAC Members from across the region and value chain to foster collaboration and ensure success and impact.

See above input on Australia-Indonesia Plastics Innovation Hub.

International engagement and commitments

Australia worked with other countries to launch negotiations for a new treaty to end plastic pollution, including in the marine environment, at the March 2022 United Nations Environment Assembly (UNEA 5.2). Australia will actively engage in negotiations to finalise the draft treaty by the end of 2024.

The final resolution adopted at UNEA 5.2 directs the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution including in the marine environment, that includes provisions to:

- facilitate access to technology, capacity building and scientific and technical cooperation.
- promote research and development of sustainable, affordable, innovative and cost-efficient approaches

Australia is a member of the Commonwealth Clean Ocean Alliance, the United Nations Environment Programme Clean Seas Campaign, the G20 Marine Litter Action Plan and G20 Implementation Framework for Actions on Marine Plastic Litter, and the High-Level Panel for a Sustainable Ocean Economy. Under the UN Clean Seas Campaign, Australia has made several public commitments, including packaging targets.

Others

In progress

Australia is actively engaged in the work of the International Maritime Organisation (IMO) to reduce vessel-sourced marine plastic pollution, including through the development of new requirements on the mandatory marking of fishing gear and reporting of Abandoned, Lost and Discarded Fishing Gear (ALDFG). The fishing gear requirements aim to disincentivise the discharge of gear into the sea, improve data collection on the loss and discharge of fishing gear and improve understanding of the contribution of fishing gear to the global marine plastic litter issue so that appropriate measures can be identified to prevent future losses and discharges. Australia is also involved in the work of the IMO to introduce measures to reduce the risk of plastic pellet loss and aid the clean-up of any plastic pellet spill resulting from their transport by ships.

6.1.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.1.4. Best Practices

National level

In 2020, the Australian Government introduced landmark legislation to ensure Australia takes responsibility for its waste. The RAWR Act provides a national framework to manage waste and recycling across Australia, now and into the future. It implements the export ban on waste plastic, paper, glass, and tyres that was agreed by the Commonwealth, state, and territory governments in March 2020.

The legislation and its supporting Rules also allows for voluntary, co-regulatory and mandatory product stewardship, to encourage companies to take greater responsibility for the waste they generate, including through better product design and the increased recovery and reuse of waste materials. It also requires the Minister to publish a Product Stewardship Priority List each year of products that might warrant regulation if other approaches are not suitably adopted.

Outreach/education activities, alongside local government policies and national led action have demonstrated a 29% average decrease of coastal litter in Australia over 6 years

Local level

CSIRO research has shown container deposit schemes (CDS) can [reduce drink containers in the ocean by 40%](#). CDS are in operation in South Australia, Northern Territory, New South Wales, Queensland, the Australian Capital Territory and Western Australia. Tasmania and Victoria will have their schemes operational in 2023.

States and territories are acting on the use of single use plastics with policies having been implemented already or planned in the near future.

Private sector

The Australasian Recycling Label (ARL) is a world-leading consumer education tool which helps households recycle and assists brand owners to design recyclable packaging. The Australian Government has also invested \$5 million to support small-to-medium enterprises to implement the ARL on their packaging in turn giving households greater guidance on how to recycle and keeping more plastics out of landfill.

International cooperation

Australia was pleased to worked with other countries to launch negotiations for a new treaty to end plastic pollution, including in the marine environment, at the March 2022 United Nations Environment Assembly (UNEA 5.2).

Australia supports an ambitious legally binding instrument on plastic pollution and is playing an active leadership role in the negotiations. Our priority is that the instrument addresses the full life cycle of plastics and supports the transition towards a safe circular economy.

In November 2022, Australia joined the High Ambition Coalition to End Plastic Pollution which aims to end plastic pollution by 2040 through an ambitious legally binding instrument. Australia will work closely with other Coalition members to advocate for an ambitious instrument.

In November 2022 the Australian Government also joined the New Plastics Economy Global Commitment, an initiative of the Ellen MacArthur Foundation that is administered by the UN Environment Programme.

Australia is a party to several Regional Fisheries Management Organisations (RFMOs), all of which are either actively considering or have already adopted specific gear marking provisions as a step towards encouraging the retention and recovery of fishing gear.

The Australian Government has committed AU\$16 million to the Pacific Ocean Litter Project to help the Secretariat of the Pacific Regional Environment Program (SPREP) implement of the Pacific Regional Action Plan: Marine Litter 2018-2025. The POLP is working to assist Pacific island countries refuse, reduce and find alternatives to single-use plastics, such as plastic bags, cutlery, food containers and drink bottles, which make up much of the plastic waste in inshore waters and beaches in the Pacific region.

6.1.5. References and Reading Links

<https://www.dcceew.gov.au/environment>

6.1.6. Contact Details: *(Please specify name and email address)*

Cameron Colebatch (cameron.colebatch@environment.gov.au) cc. International Plastic Policy inbox (international.plastics@environment.gov.au)

6.2. Brazil

Key Highlights

- National Solid Waste Management Policy – Federal Law No. 12,305/2010
- Environment National Policy Law – Federal Law No. 6,938/1981.
- Federal Law No. 14,026/2020, updates the legal framework for basic sanitation
- Part of London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (LC-72) – Decree No. 87,566/1982;

6.2.1. Policy and Frameworks

National Action Plan

Yes

Please list your country's legislation including name and brief description here:

Legal Framework

1. The main legal national instruments are:

Environment National Policy Law – Federal Law No. 6,938/1981.

National Solid Waste Management Policy – Federal Law No. 12,305/2010. According to this law, it is forbidden to discharge any kind of debris in beaches, sea or any other water bodies.

Federal Law No. 14,026/2020, updates the legal framework for basic sanitation. This law establishes as one of its principles that the provision of water supply, sewage disposal, urban cleaning and solid waste management services must consider public health, conservation of natural resources and protection of the environment.

Environmental Crimes Law – Federal Law No. 9,605/2008 - This law considers it an environmental crime to either dispose of any kind of oil substances at odds with such law or to dispose of any kind of debris at beaches, at sea or in any other water resources.

Decree No. 10,936/2022, regulates the National Solid Waste Management Policy – (Law No. 12,305/2010).

Decree No. 11,043/2022, approves the National Plan to Solid Waste Management

Decree No. 11,413/2023, Establishes the Reverse Logistics Recycling Credit Certificate, the General Packaging Structuring and Recycling Certificate and the Future Mass Credit Certificate, under the scope of the reverse logistics systems referred to in art. 33 of Law No. 12,305, of August 2, 2010.

Decree No. 11,414/2023, Establishes the Pro-Scavengers Program for Popular Recycling and the Interministerial Committee for the Socioeconomic Inclusion of Scavengers of Reusable and Recyclable Materials.

National Environmental Council (Conama) Resolution No. 454/2012, establishes general guidelines and referential procedures for the management of the material to be dredged in waters under national jurisdiction and its final disposition.

Normative Instruction MPA-MMA No. 12/2012, requires the identification of marine gillnet and trammel net fisheries.

Brazil is also Party to the following international conventions:

London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (LC-72) – Decree No. 87,566/1982;

United Nations Convention on the Law of the Sea (UNCLOS) - Decree No. 99,165/1990;

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal – Decree No. 875/1993.

MARPOL (International Convention for the Prevention of Pollution from Ships) - Decree no. 2,508/1998

Indicators

In preparation

Please list your country's legislation including name and brief description here: Name:

Decree establishing reverse logistics for plastic packaging discarded by consumers

Brief description:

The Decree, which is in the final stage of preparation, is one of the instruments that regulates the principle of shared responsibility for the life cycle of products. Through this instrument, plastic recycling targets will be established based on the shipment of these products placed on the domestic market. In addition, the decree establishes percentages of recycled content in new plastic packaging

Indicators

Yes

Please list your country's legislation including name and brief description here:

Actions	Indicators
To implement measures for environmentally sound management of solid wastes	Number of coastal municipalities with environmentally sound destination of solid wastes
To deploy devices for solid waste retention in rain galleries and water courses	Quantity of devices installed
To perform actions of cleaning and litter collection in mangroves and on sea and fluvial shores	Quantity of actions carried out; Quantity of waste collected
To perform litter combating actions in rivers	Number of municipalities with actions undertaken

To provide data and information for continuous improvement of actions for pollution prevention and environmental recovery	Platform updated available on the Ministry of the Environment website
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Please list your indicators here:

- Prohibition Orders for single-use plastic and polystyrene (shopping bags, straws, etc.)
- Promotion of innovative solutions
- Boosting multi-stakeholder involvement and awareness-raising
- Beach clean-ups

 Yes

Please list your country's legislation including name and brief description here:

1. The main legal national instruments are:

Environment National Policy Law – Federal Law No. 6,938/1981.

National Solid Waste Management Policy – Federal Law No. 12,305/2010. According to this law, it is forbidden to discharge any kind of debris in beaches, sea or any other water bodies.

Federal Law No. 14,026/2020, updates the legal framework for basic sanitation. This law establishes as one of its principles that the provision of water supply, sewage disposal, urban cleaning and solid waste management services must consider public health, conservation of natural resources and protection of the environment.

Environmental Crimes Law – Federal Law No. 9,605/2008 - This law considers it an environmental crime to either dispose of any kind of oil substances at odds with such law or to dispose of any kind of debris at beaches, at sea or in any other water resources.

Decree No. 10,936/2022, regulates the National Solid Waste Management Policy – (Law No. 12,305/2010).

Decree No. 11,043/2022, approves the National Plan to Solid Waste Management

6.2.2. Measures and Achievements

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions: Sector Agreement for Reverse Logistics System for Packaging

Targeted products:

Brief description: This Sector Agreement has been implemented since 2015. It aims to ensure the environmentally appropriate final destination of packaging in general. Through this agreement with Ministry of the Environment, manufacturers, importers, traders and distributors of packaging and products sold in packaging commit to working together to ensure the environmentally friendly final destination of the packaging they place on the market. The packaging can be composed of paper and cardboard, plastic, aluminum, steel, glass, or even a combination of these materials, such as long-life carton packaging, for example.

The arrangement made through the sectoral agreement is being redone through the publication of decrees for each type of packaging, as is the case of the decree that establishes the reverse logistics of plastic packaging. It includes support for cooperatives of recyclable material collectors and partnerships with commerce for the installation of voluntary delivery points.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

No

Actions for encouraging sustainable / circular product design

Yes

Names of actions: Decree that establishes reverse logistics for plastic packaging

Brief description: The government is in the final stages of preparing the decree that establishes reverse logistics for plastic packaging. There are initiatives already created within the scope of the federal and state government to remunerate collectors of recyclable materials for the collection and processing of waste in sorting centers

Regulation on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Environmentally sound waste management

Environmentally sound waste management system

Yes

Names of actions: National Reverse Logistics Program; National Information System on Solid Waste Management

Brief Description:

Law No. 12,305/2010 established the Brazilian National Solid Waste Policy providing principles, objectives, instruments, and guidelines for the integrated management of solid waste, including hazardous waste. An important aim of the policy is to decrease the total volume of waste produced nationally and increase the sustainability of solid waste management from the local level to national level.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Cleanup of marine plastic litter

Collection of scattered waste on beach

Removal of plastic litter from the ocean

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Public-private partnerships for creating and implementing innovative solution

Education and Awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Awareness-raising campaigns related to MPL

National Level

Local Level

International Level / Regional Level

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Engagement in international/regional level actions for encouraging monitoring /scientific research on plastic flows and ocean surface microplastics

6.2.3. Challenges

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19

6.2.4. Best Practices

National Level

Local Level

Private Sector

6.2.5. References and Reading Links

Zero Waste Dumpsite Program <https://www.gov.br/mma/pt-br/assuntos/agendaambientalurbana/lixao-zero>

6.2.6. Contact Details: *(Please specify name and email address)*

- Adalberto Felício Maluf Filho, Secretary for Urban Environment and Environmental Quality / Ministry of the Environment and Climate Change (adalberto.maluf@mma.gov.br)
- Thaianne Resende Henriques Fábio, Director for Environment Quality Substitute / Ministry of the Environment and Climate Change (thianne.fabio@mma.gov.br)
- Ana Paula Leite Prates, Director for Ocean and Coastal Management/ Ministry of the Environment and Climate Change (ana.prates@mma.gov.br)
- Larissa Cruz Godoy, Deputy General-Coordinator for Coastal Management / Ministry of the Environment and Climate Change (larissa.godoy@mma.gov.br)
- Robson José Calixto, Environmental Analyst for Ocean and Coastal Management/ Ministry of the Environment and Climate Change (robson-jose.calixto@mma.gov.br)

6.3. Canada

Key Highlights

- [Canada-wide Strategy on Zero Plastic Waste](#)
- Canada-wide Action Plan on Zero Plastic Waste ([Phase 1](#) and [Phase 2](#))
- Canadian Environmental Protection Act
- Microbeads in Toiletries Regulations
- Single-use Plastics Prohibition Regulations
- Fisheries Act and Species at Risk Act.
- The Ghost Gear Program
- [A Roadmap to Strengthen the Management of Single-use and Disposable Plastics \(2022\)](#)
- Canada has adopted a goal of zero plastic waste by 2030.
- The Single-use Plastics Prohibition Regulations (SUPPR) are part of the Government of Canada's comprehensive plan to address pollution
- Addition of microbeads to Schedule 1 of CEPA Microbeads in Toiletries Regulations
- Canada-wide Strategy and Action Plan on Zero Plastic Waste

6.3.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name:

Canada-wide Strategy on Zero Plastic Waste

Canada-wide Action Plan on Zero Plastic Waste ([Phase 1](#) and [Phase 2](#))

Brief description:

The Canada-wide Strategy on Zero Plastic Waste and its comprehensive Action Plan are moving Canada toward a circular economy for plastics and addressing plastic pollution, and positioning the country as a world leader in innovative waste prevention, reduction and management solutions.

In 2018, federal, provincial and territorial governments, through the Canadian Council of Ministers of the Environment, approved the Canada-wide Strategy on Zero Plastic Waste, which outlines a vision to keep all plastics in the economy and out of the environment. As such, the Strategy identifies areas where improvements are needed across the plastic lifecycle as well as the opportunities for economic growth at every stage of a circular plastics economy. The Strategy aligns with the [Ocean Plastics Charter](#), which was a key outcome of Canada's G7 presidency in 2018.

In 2019, the Council adopted Phase 1 of the Canada-wide Action Plan on Zero Plastic Waste, which focuses government efforts across a broad range of activities, including: support for recycling infrastructure and innovation in plastics manufacturing, tools for green procurement practices, and guidance on best practices. The following year, the Council adopted Phase 2 of the Action Plan, which outlines further action to reduce plastic pollution, raise awareness, strengthen science and take global action.

The Council's *Roadmap to Strengthen the Management of Single-use and Disposable Plastics* and *Guidance to Facilitate Consistent Extended Producer Responsibility Policies and Programs for Plastics* were recently published in 2022.

In preparation

Please provide the name of your action plan or strategy with a brief description here:

Name: Canadian Ghost Gear Action Plan.

Brief description: The Canadian Ghost Gear Action Plan will provide direction on modernizing Canada's fisheries management practices, to ensure that Canadian fisheries are better able to prevent the loss of fishing gear and that lost gear is more easily recovered. The plan will look at fishing gear through its life cycle (composition of gear, end-of-life responsible disposal options, measures to prevent gear loss, improved retrieval techniques, etc).

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

Canadian Environmental Protection Act

- Microbeads in Toiletries Regulations
- Single-use Plastics Prohibition Regulations
- Fisheries Act and Species at Risk Act.

Brief description:

Among several Canadian federal acts, regulations and agreements that contribute to the prevention of marine plastic litter, including microplastics, the Canadian Environmental Protection Act (the Act) is particularly significant in providing the authority for the Government of Canada to enact regulations and other risk-management tools to address the harmful impacts of certain plastics. Following the addition of plastic microbeads to the Act's list of toxic substances, Canada introduced the Microbeads in Toiletries Regulations in 2017 to ban toiletries that contain microbeads, such as bath and body products, skin cleansers, and toothpaste. In 2022, Canada introduced the Single-use Plastics Prohibition Regulations, following the addition of plastic manufactured items to the Act's list of toxic substances, to prohibit the manufacture, import and sale of single-use plastic checkout bags, cutlery, foodservice ware made from our containing problematic plastics, ring carriers, stir sticks, and straws.

As well, the Canadian Environmental Protection Act, the Canada Shipping Act and other enabling legislation, provide authority for the federal government to enforce the Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations, which were introduced in 2021 to replace the Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations. The implementation of these regulations

contribute to Canada's ability to meet its obligations under the Basel Convention (see below) as well as other international and regional agreements.

Canada's Fisheries Act, which prohibits serious harm to fish and fish habitat from the deposit of deleterious substances into domestic waters, and the Species at Risk Act, which seeks to protect critical habitats of at-risk species, including in the marine environment, provide further authorities for the federal government to prevent and reduce marine plastic litter in Canada. The Fisheries Act and Species at Risk Act play a specific role in the prevention of the depositing of deleterious substances into Canadian waters and the protection of species at risk. As part of the Ghost Gear Program's regulatory review process, it could be determined that a stand-alone Ghost Gear Act may be required.

Canada also implements its obligations under several legally binding international agreements that contribute to preventing waste and litter, namely: the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; the International Convention for the Prevention of Pollution from Ships (MARPOL); and the London Convention and Protocol to prevent marine pollution by dumping at sea.

Canada's implementation of other international frameworks for action – such as, the Ocean Plastics Charter, G7 Action Plan to Combat Marine Litter, G20 Action Plan on Marine Litter and Implementation Framework, International maritime Organisation Action Plan to Address Marine Litter from Ships, and the plastics-related United Nations Environment Assembly resolutions – help to inform and support the legal framework to address marine plastic litter

In preparation

Please list your country's legislation including name and brief description here:

Name:

Recycled Content and Labelling for Plastic Products Regulations

Federal plastics registry

Brief description:

As part of Canada's comprehensive plan to reduce plastic pollution and achieve zero plastic waste, the Government of Canada proposes to (i) develop rules for recyclability and compostability labelling, as well as minimum recycled content requirements for certain products, and (ii) establish a federal plastics registry requiring producers of plastic products to report on the plastics they place on the Canadian market.

New labelling rules would enable Canadians to make informed decisions about the plastics they buy and how to properly dispose of the products at their end-of-life, and new minimum recycled content requirements would strengthen market demand for recycled plastics. Together, these labelling rules and recycled content requirements can drive improvements to recycling systems and product design. Draft regulations are targeted for publication by the end of 2023.

A federal public registry would require producers to report annually on plastics in the Canadian economy. In doing so, the registry would support the harmonization and improved accessibility of data pertaining to plastics in the Canadian market. A public registry would also complement the science and research activities of the broader federal agenda toward zero plastic waste.

Indicators

Yes

Please list your indicators here:

Canada has adopted a goal of zero plastic waste by 2030.

The Ocean Plastics Charter, championed by Canada during its 2018 G7 presidency, includes actions across the plastics lifecycle to reduce plastic waste and pollution. Specific targets identified in the Ocean Plastics Charter include:

- Working with industry toward 100% reusable, recyclable, or where viable alternatives do not exist, recoverable plastics by 2030;
- Working with industry toward increasing recycled content by at least 50% in plastic products where applicable by 2030;
- Working with industry and other levels of government to recycle and reuse at least 55% of plastic packaging by 2030 and recover 100% of all plastics by 2040; and
- Working with industry toward reducing the use of plastic microbeads in rinse-off cosmetic and personal-care consumer products, to the extent possible by 2020, and addressing other sources of microplastics.

In alignment with the Ocean Plastics Charter and to support the Canada-wide Strategy on Zero Plastic Waste, Phases 1 and 2 of the Canada-wide Action Plan on Zero Plastic Waste identify a comprehensive suite of commitments and milestones, providing a framework for accountable and collaborative action to address plastic waste and pollution. Key commitments identified in the Action Plan include facilitating consistent Extended Producer Responsibility programs for plastics across the country; supporting the establishment of national performance requirements for plastics; developing guidance for Canada-wide monitoring to achieve consistent data gathering on plastics in the environment; and maintaining Canada-wide data on plastic use, management and fate in the economy.

To support data collection and analysis needed to achieve our goals of zero plastic waste and a circular economy, Statistics Canada created the (pilot) physical flow account for plastic material. This project estimates the lifecycle of plastic in Canada and accounts for the plastic content of internationally imported and exported products as well as international imports and exports of sorted and baled plastic waste.

In an effort to lead by example, the Government of Canada's Greening Government Strategy also commits to divert at least 75% of plastic waste from federal operations by 2030, and eliminate the unnecessary use of single-use plastics in government operations, events and meetings.

Through the Canadian Environmental Sustainability Indicators program, Canada has established the plastic particles in the Northern Fulmar indicator. This provides information on the mass of plastic found in the Northern Fulmars' stomach in birds collected in Canada. The Northern Fulmar is a seabird that feeds exclusively on the surface (top 1 metre) in the open ocean. The indicator reports the proportion of birds with 0.1 g or more of plastic in their stomachs and gives an overview of the situation at the national and the regional levels.

Beyond plastic waste, federal, provincial and territorial governments have endorsed a Canada-wide waste reduction goal (for all waste, including plastics): reduce per capita waste (measured in 2014 at 706 kg) by 30% by 2030, and by 50% by 2040.

Canada has also endorsed relevant international commitments, including the United Nations Sustainable Development Goals target 14.1 to prevent and significantly reduce marine litter by 2025 and the Osaka Blue Ocean Vision that aims to reduce additional marine plastic pollution to zero by 2050.

6.3.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Canada-wide Action Plan on Zero Plastic Waste

Various

Targeted products: Various

Brief description:

In 2019, federal, provincial and territorial governments, via the Canadian Council of Ministers of the Environment, published Best Management Practices for Disposal Bans, Levies and Incentives for End-of-Life Plastics, which includes guidance on implementing point-of-sale levies that can be applied to specific plastics.

Currently, sub-national governments and communities across Canada are implementing a range of tools to reduce plastic waste, including fees and levies on single-use plastics, extended producer responsibility programs for packaging, deposit-return programs, and measures to avoid waste such as re-use, refill and repair programs

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Single-use Plastics Prohibition Regulations

Targeted products:

- Checkout bags
- Cutlery
- Foodservice ware
- Ring carriers
- Stir sticks
- Straws

Brief description: The Single-use Plastics Prohibition Regulations (SUPPR) are part of the Government of Canada's comprehensive plan to address pollution, meet its target of zero plastic waste by 2030, and help reduce greenhouse gas emissions.

The Regulations prohibit the manufacture, import and sale of six (6) categories of single-use plastics:

- Checkout bags designed to carry purchased goods from a business and typically given to a customer at the retail point of sale.
- Cutlery, including knives, forks, spoons, sporks, and chopsticks
- Foodservice ware designed for serving or transporting food or beverage that is ready to be consumed, and that:
 - o Contains expanded polystyrene foam, extruded polystyrene foam, polyvinyl chloride, carbon black, or an oxo-degradable plastic, and
 - o Is limited to: clamshell containers, boxes, cups, plates, and bowls.

- Flexible ring carriers designed to surround beverage containers in order to carry them together
- Stir sticks designed to stir or mix beverages, or to prevent a beverage from spilling from the lid of its container.
- Straws, including straight drinking straws, and flexible straws, which have a corrugated section that allows the straw to bend, packaged with beverage containers (juice boxes and pouches).

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Canada-wide Action Plan on Zero Plastic Waste

Canada's comprehensive zero plastic waste agenda

Brief description:

The Canada-wide Action Plan on Zero Plastic Waste prioritizes incentives to enable a circular economy, such as the development and implementation of best management practices as well as agreements and tools with industry partners to reduce plastic waste. The Action Plan also supports research to promote innovative plastics design, alternatives and technologies that reduce plastic pollution and waste, and enable greater circularity in plastics markets.

Canada's comprehensive agenda to achieve zero plastic waste supports a number of efforts to encourage sustainable and circular design, including:

- the Canadian Plastics Innovation Challenges, which offer funding to small and medium-sized enterprises to further develop innovative solutions that address plastic waste
- the Zero Plastic Waste Initiative supported innovative solutions that support circularity, inform sustainable behaviour, and prevent, capture and remove plastic pollution, including microplastics
- Promoting value-retention processes, such as reuse, remanufacturing, repair, and refurbishment, to facilitate the transition to a circular economy.

Regulations on microplastics

Yes

Names of regulations:

Microbeads in Toiletries Regulations

Brief description: The Government of Canada introduced the Microbeads in Toiletries Regulations in 2017, under the authority of the Canadian Environmental Protection Act. The regulations prohibit the manufacture, import and sale of toiletries that contain plastic microbeads, including non-prescription drugs and natural health products.

Government actions on microplastics

Yes

Names of actions:

Addition of microbeads to Schedule 1 of CEPA; Microbeads in Toiletries Regulations

Canada-wide Strategy and Action Plan on Zero Plastic Waste

Canada's comprehensive zero plastic waste agenda

Brief description:

Following the addition of plastic microbeads to the Act's list of toxic substances, Canada introduced the Microbeads in Toiletries Regulations in 2017 to ban toiletries that contain microbeads, such as bath and body products, skin cleansers, and toothpaste.

Canadian governments, through the Canada-wide Action Plan on Zero Plastic Waste, have also prioritized research to better understand the effects of plastic pollution, particularly microplastics, on wildlife, the environment, and human health.

As part of Canada's comprehensive zero plastic waste agenda, the Zero Plastic Waste Initiative supported innovative solutions that promoted circularity, informed sustainable behaviour, and prevented, captured and removed plastic pollution, including microplastics. Notable projects that focused on microplastics included the development of freshwater plastics detection and removal technology; methods to remove microplastics from biosolids; and community science activities to deploy technology aimed at quantifying and characterizing marine microplastics.

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of actions:

Canada's comprehensive zero plastic waste agenda

Brief description:

As part of Canada's comprehensive zero plastic waste agenda, the Zero Plastic Waste Initiative supported innovative solutions that promoted circularity, informed sustainable behaviour, and prevented, captured and removed plastic pollution, including microplastics. Notable projects that focused on microplastics included the development of freshwater plastics detection and removal technology; methods to remove microplastics from biosolids; and community science activities to deploy technology aimed at quantifying and characterizing marine microplastics.

Others (please specify)

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

1. Ghost Gear Fund
2. Canada's comprehensive zero plastic waste agenda

Brief description:

1. The Ghost Gear Fund has supported projects focused on the responsible disposal of end-of-life and recovered fishing gear.
2. Internationally, Canada participates in key international fora, such as the G7, G20, Basel Convention Partnership on Plastic Waste, the International Resource Panel, and the Organisation for Economic Co-operation and Development (OECD), to strengthen resource

efficiency and waste management practices globally. Canada invested CA \$100 million to support solutions for environmentally sound waste management and plastic pollution mitigation and remediation in developing countries.

Environmentally sound waste management is a shared responsibility in Canada. A range of policies, programs and regulatory initiatives at all levels of government drive improvements in the production, use, disposal and recovery of materials. The federal government has responsibilities for the transboundary movement of hazardous waste and hazardous recyclable materials, identifying best practices to reduce possible toxic pollution from waste, and developing guidance or other supporting measures. The Government of Canada also invests in waste and wastewater infrastructure.

Provincial, territorial and municipal governments have implemented regulatory (e.g. product or landfill bans, incentives, extended producer responsibility programs, litter by-laws) and non-regulatory measures (e.g. educational campaigns, recycling and deposit programs) that target some plastic products and other wastes. These efforts play an important role in collecting plastics from households and other sources that help to reduce marine debris.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

1. Condition of licence in all commercial fisheries prohibiting the depositing of garbage into the ocean from fishing vessels.
2. Canada-wide Action Plan on Zero Plastic Waste

Canada's zero plastic waste agenda

Commission on Environmental Cooperation (Marine Litter Project)

Brief description:

Through the Canada-wide Action Plan on Zero Plastic Waste, federal, provincial and territorial governments have committed to develop guidance or identify best practices to reduce plastic waste entering the environment from: natural disasters and spills; stormwater, wastewater and industrial discharges; and food and organic waste processing and sewage biosolids.

As part of Canada's comprehensive zero plastic waste agenda, the Zero Plastic Waste Initiative supported innovative solutions that support circularity, inform sustainable behaviour, and prevent, capture and remove plastic pollution, including microplastics.

Through the Commission on Environmental Cooperation, Canada supports efforts to reduce marine litter and continues to work with continental neighbours to prevent litter and waste from entering our waterways.

Internationally, Canada has invested CA \$100 million to support developing countries in preventing the leakage of plastic waste into the environment. This includes advancing gender equity elements in plastic pollution through the World Bank ProBlue Fund and supporting the development of national action plans in Indonesia, Ghana, Vietnam and Nigeria via

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Yes

Names of actions: Ghost Gear Fund

Brief description: The Fund encourages the reuse and upcycling of end-of-life and recovered ghost gear for use in secondary products.

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

1. Ghost Gear Fund
2. Canada-wide Action Plan on Zero Plastic Waste

Canada's zero plastic waste agenda

Brief description:

1. The Fund has supported several projects that had beach clean up components as part of their retrieval efforts.
2. Through the Canada-wide Strategy on Zero Plastic Waste and Action Plan, federal, provincial and territorial governments have committed to support prevention, capture and clean-ups efforts, as well as research and development for effective technologies to reduce plastic pollution.

As part of Canada's comprehensive zero plastic waste agenda, the Zero Plastic Waste Initiative supported innovative solutions that promoted circularity, informed sustainable behaviour, and prevented, captured and removed plastic pollution, including microplastics. Notable projects that focused on collecting waste from shorelines included the Great Lakes Plastics Cleanup and the Ocean Wise (formerly Great Canadian) Shoreline Cleanup.

Removal of plastic litter from the ocean

Yes

Names of actions:

1. Ghost Gear Fund retrieval projects
2. Canada-wide Action Plan on Zero Plastic Waste

Canada's zero plastic waste agenda

Brief description:

1. The Ghost Gear Fund supported projects across Canada focused on the retrieval of ghost gear.
2. Through the Canada-wide Action Plan on Zero Plastic Waste, Canadian governments are working with the fishing and aquaculture industry to address priority areas to prevent, mitigate and retrieve lost gear. Canada's Sustainable Fisheries Solutions and Retrieval Support Contribution Program investment of \$8.3 million (2020-2022) also supports the prevention and retrieval of abandoned, lost or otherwise discarded fishing and aquaculture gear.

As part of Canada's comprehensive zero plastic waste agenda, the Zero Plastic Waste Initiative supported innovative solutions that promoted circularity, informed sustainable behaviour, and prevented, captured and removed plastic pollution, including microplastics.

Notable projects that focused on removing plastic pollution from Canada's waterways included Diversion 2.0, a campaign based in the Georgian Bay area of Ontario; the Clean Harbours Initiative in Newfoundland; and the installation of zero waste nets in Quebec.

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

1. Ghost Gear Fund
2. Canada's comprehensive zero plastic waste agenda
Single-use Plastics Prohibition Regulations

Brief description:

1. Trialing of innovative gear technology through the Ghost Gear Fund funded projects
2. Through the Canadian Plastic Innovation Challenge, the government is investing nearly \$19 million to support Canadian innovators and small and medium-sized businesses to develop solutions for plastics challenges. The Challenges include, among other categories, supporting innovation in reducing plastic waste and microfibers from textiles, finding sustainable alternatives to plastic packaging, developing sustainable fishing and aquaculture gear, and developing innovative solutions to address plastic waste and toxic substances from electronics.

In partnership with the Reducing Plastic Waste in Canada Project, Canada co-hosted a Symposium and Policy Dialogue on Reuse to share knowledge and discuss opportunities and barriers to advance reuse in Canada.

Canada is also investing in innovation internationally, including \$20 million to support the G7 Innovation Challenge to Address Marine Plastic Litter.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Canada's comprehensive zero plastic waste agenda

Brief description:

Canada works with all levels of government, industry, Indigenous communities, and civil society to reduce plastic waste and pollution and transition to a circular economy. Through the Zero Plastic Waste Initiative, Canada supported leading businesses and Organisations to move towards a circular plastics economy, including assessing options to reduce agricultural plastic waste, creating an online market place for secondary plastics from the industrial, commercial and institutional sector, and evaluating the recycling value chain and identifying pilot projects for hard to recycle items such as medical PVC.

The industry-led Canada Plastics Pact includes over 40 partners, including Environment and Climate Change Canada. The Pact is part of the Ellen MacArthur Foundation's Plastics Pact

Network and brings together Organisations from the national plastics value chain to collaborate and rethink the way plastic packaging is designed, used and reused to realize a circular economy for plastic in Canada.

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

1. The Ghost Gear Program engages in advisory committee meetings with the fishing industry to raise awareness on the importance of preventing and recovering ghost gear. We also share videos and information on social media.
2. As part of Canada's comprehensive zero plastic waste agenda, the Zero Plastic Waste Initiative supported innovative solutions that promoted circularity, informed sustainable behaviour, and prevented, captured and removed plastic pollution, including microplastics. Notable examples of curriculum development and educational programs include: the Anthropocene Educational Program, the Ocean Plastic Education Kit, the Waste Literacy Education Program, and Climate Kids online game about plastics and oceans.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Canada's comprehensive zero plastic waste agenda

Brief description:

Canada's comprehensive zero plastic waste agenda maintains regular channels (including social media) for public communication to educate, inform and raise awareness about plastic waste and pollution.

The Zero Plastic Waste Initiative supported innovative solutions that promoted circularity, informed sustainable behaviour, and prevented, captured and removed plastic pollution, including microplastics. Notable national projects that focused on raising awareness about marine plastic pollution included the 10,000 Changes campaign to encourage Canadians to commit to reduce plastic waste; and the Plastic Wise pledge to reduce one's plastic footprint.

To inform Canada's voice in international negotiations to develop a global treaty on plastics, consultation activities to engage the public as well as key stakeholders provide opportunities for the federal government to raise awareness about plastic waste and litter.

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Canada's comprehensive zero plastic waste agenda

Brief description:

As part of Canada's comprehensive zero plastic waste agenda, the Zero Plastic Waste Initiative supported innovative solutions that promoted circularity, informed sustainable behaviour, and prevented, captured and removed plastic pollution, including microplastics. Notable local projects that focused on raising awareness about marine plastic pollution included Diversion 2.0, a campaign based in the Georgian Bay area of Ontario; the Atlantic Healthy Oceans Initiative in Gros Morne, Newfoundland; and the Clean Harbours Initiative in Newfoundland.

Municipal governments and local Organisations also promote campaigns to raise awareness about, and address, local and regional issues related to plastic waste and pollution.

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Canada's comprehensive zero plastic waste agenda

Brief description:

Through the Commission on Environmental Cooperation, Canada supports efforts to reduce marine litter and to educate and empower local communities to prevent, minimize and manage waste before it finds its way to waterways and oceans.

As a member of the Global Partnership on Marine Litter and having pledged to the Clean Seas campaign, Canada supports broader efforts to educate the public and raise awareness.

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

1. Lost fishing gear reporting
2. Canada's Plastics Science Agenda

Canada-wide Action Plan on Zero Plastic Waste

Brief description:

1. This is mandatory in all commercial fishing licences in Canada. We have the Fishing Gear Reporting System which is used to collect lost gear reports.
2. Canada's Plastics Science Agenda, published in 2019, provides a framework across the plastics lifecycle to inform and provide direction to Canada's science and research activities, such as detecting plastics in the environment, and understanding and mitigating their potential impacts on wildlife, human health and the environment.

The Canada-wide Action Plan on Zero Plastic Waste also identifies specific research priorities, including to better understand the effects of plastic pollution, particularly microplastics, on wildlife, the environment and human health, and to achieve consistent data gathering on plastics in the environment.

Through a range of programs, including Plastics Science for a Cleaner Future, the Increasing Knowledge on Plastic Pollution Initiative, the Zero Plastic Waste Initiative, and the Northern Contaminants Program, Canada has invested over \$10 million in foundational science that addresses priority research gaps and helps us better understand the impacts of plastic pollution and support solutions across the plastics value chain

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

1. Supporting lost gear reporting internationally
2. Canada's comprehensive zero plastic waste agenda

Brief description:

1. Canada has supported discussion on the mandatory reporting of lost fishing gear at the IMO as a method of collecting data on lost fishing gear and as a preventative measure for ghost gear
2. As part of its comprehensive agenda to achieve zero plastic waste, Canada participates in international and regional initiatives to advance effective science to address plastic waste and pollution.

As a member of the Arctic Council, Canada works with international partners to coordinate research and monitoring on litter and microplastics through the Arctic Monitoring and Assessment Programme. Canada also works on the Conservation of Arctic Flora and Fauna international team to identify Arctic bird species that can be used to track and assess plastic pollution. In addition, through the Protection of the Arctic Marine Environment working group, Canada participated in the desktop study on marine litter, including microplastics.

Through the North Pacific Marine Science Organisation (PICES), Canada is working with partners in the North Pacific on assessing potential indicators for the North Pacific region through a rubric exercise. This work will review the need for bioindicators to track plastic in marine food webs over time, identify baselines and targets, and determine if mitigation targets will be met in the future.

Others

6.3.3. Challenges

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general

Lack of financial incentives for technology development

6.3.4. Best Practices

National level

[A Roadmap to Strengthen the Management of Single-use and Disposable Plastics \(2022\)](#)

[Guidance to Facilitate Consistent Extended Producer Responsibility Policies and Programs for Plastics \(2022\)](#)

[Best Management Practices for Disposal Bans, Levies, and Incentives for End-of-Life Plastics \(2021\)](#)

[Canada-wide Action Plan for Extended Producer Responsibility \(2009\)](#)

[\(Pilot\) physical flow account for plastic material – Statistics Canada](#)

[Solid waste management for northern and remote communities](#)

[Canadian Code of Conduct for Responsible Fishing Operations](#)

[10,000 Changes \(public awareness campaign\)](#)

[Ocean Wise Plastic Reduction Program \(public awareness campaign\)](#)

[The Anthropocene Education Project](#)

[Waste Literacy Education Program](#)

Local level

[Ontario Materials Marketplace – Council of the Great Lakes Region](#)

[Great Lakes Plastic Cleanup – Council of the Great Lakes Region](#)

[Diversion 2.0 – Georgian Bay Forever](#)

[Marine Plastic: Local Solutions for a Global Issue – Clean Harbours Initiative](#)

[Plastic Audit Guide – Alberta Plastics Recycling](#)

[Zero Plastic Waste Gros Morne – Atlantic Healthy Oceans Initiative](#)

[Ocean Friendly Nova Scotia – Coastal Action](#)

Private sector

[The Golden Design Rules for Plastics Packaging – Canada Plastics Pact](#)

[Circular Economy Business Toolkit – National Zero Waste Council](#)

[Preferred Plastics Guide – Canadian Produce Marketing Association](#)

[Operation Clean Sweep – Chemistry Industry Association of Canada](#)

[Medical PVC Recycling Program – Vinyl Institute of Canada](#)

[Roadmap to Support the Circularity and Recycling of Plastics in Canada – CSA Group](#)

[Reuse Refill Canada – Scout Environmental](#)

International cooperation

[The Golden Design Rules for Plastics Packaging – Canada Plastics Pact](#)

[Circular Economy Business Toolkit – National Zero Waste Council](#)

[Preferred Plastics Guide – Canadian Produce Marketing Association](#)

[Operation Clean Sweep – Chemistry Industry Association of Canada](#)

[Medical PVC Recycling Program – Vinyl Institute of Canada](#)

[Roadmap to Support the Circularity and Recycling of Plastics in Canada – CSA Group](#)

[Reuse Refill Canada – Scout Environmental](#)

6.3.5. References and Reading Links

[Canada's zero plastic waste agenda](#)

[Ocean Plastics Charter](#)

[Canada-wide Strategy on Zero Plastic Waste](#)

[Canada-wide Action Plan on Zero Plastic Waste Phase 1](#)

[Canada-wide Action Plan on Zero Plastic Waste Phase 2](#)

[Canada's Plastics Science Agenda](#)

[Science Assessment of Plastic Pollution](#)

[A proposed integrated management approach to plastic products: discussion paper – Canada.ca](#)

[Canadian Environmental Protection Act, 1999](#)

[Microbeads in Toiletries Regulations](#)

[Single-use Plastics Prohibition Regulations](#)

[Canadian Plastics Innovation Challenges](#)

[Zero Plastic Waste Initiative](#)

[Combatting marine litter: Ghost gear](#)

[Reducing plastic waste in federal operations](#)

[Economic study of the Canadian plastic industry, markets and waste: summary report](#)

[Socio-economic and Environmental Study on Remanufacturing and Other Value-Retention Processes in Canada](#)

6.3.6. Contact Details: *(Please specify name and email address)*

Marina Petrovic/ Assistant Director, National Programs (marina.petrovic@dfo-mpo.gc.ca)

2. Sarah Da Silva sarah.dasilva@ec.gc.ca

6.4. China

Key Highlights

- Opinions on Further Strengthening Plastic Pollution Control (2020)
- Plastic Pollution Control Action Plan (2021-2025)
- Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste (2020 Amendment)
- Marine Environment Protection Law of the People's Republic of China (2017 Amendment)
- Circular Economy Promotion Law of the People's Republic of China (2018 Amendment)
- Work Plan for Plastic Pollution Control in the Civil Aviation Industry (2021-2025)
- Marine Ecological Environment Protection Plan (2021-2025)
- Action Plan for Deepening the Battle for the Protection and Restoration of the Yangtze River
- Opinions on Further Strengthening Plastic Pollution Control
- Coastal Cleanup and Public Education in Coastal Cities of China
- "Marine sanitation" mechanism in Xiamen, Fujian
- The "Blue Cycle" Project in Taizhou, Zhejiang
- UNESCO-IOC/WESTPAC Research Project: Distribution, Source, Fate and Impacts of Marine Microplastics in the Asia Pacific Region
- UNESCO-IOC "United Nations Decade of Ocean Science for Sustainable Development (2021-2030)" Research Project: UN22. Stem the tide of Asia's riverine plastic emission into the ocean
- Action Plan for the Comprehensive Management of Key Marine Areas
- Notice on Special Action Plan for Waste Cleaning Up in Rivers, Lakes and Seas (2022)

6.4.1. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.4.2. Policy and Frameworks

National Action Plan

Name:

Opinions on Further Strengthening Plastic Pollution Control (2020)

Plastic Pollution Control Action Plan (2021-2025)

Brief description:

China issued the *Opinions on Further Strengthening Plastic Pollution Control*, which put forward positive response to plastic pollution, orderly prohibited or restricted from part of the plastic products production, sale and use, actively promoted substitutes for plastic products, increased the supply of green products, developed robust plastic waste recycling system, established and perfected the system of management of each link. We will take strong, orderly and effective measures to control plastic pollution. The main objectives are to take the lead in banning and restricting the production, sales, and use of some plastic products in specific regions and areas. By 2022, the consumption of single-use plastic products tend to be significantly reduced, substitute products will be promoted, and the proportion of plastic waste resources and energy utilization will be significantly increased; in the areas with prominent problems of plastic pollution such as e-commerce, express delivery, and takeaway, a number of reproducible and scalable plastic reduction and green logistics models are developed. By 2025, the management system for the production, distribution, consumption, recycling, and disposal of plastic products will be basically established, and a multiple governance system will be basically built. The capability of development and practices for substitute products will be further improved. The amount of plastic waste in key cities will be significantly reduced, and plastic pollution will be effectively controlled.

China issued the *Plastic Pollution Control Action Plan (2021-2025)* to further strengthen the whole chain control of plastic pollution and promote the white pollution control to achieve greater results during the 14th Five-Year Plan period. By 2025, the plastic pollution control mechanism will operate more effectively, the responsibilities of local governments, departments and enterprises will be effectively implemented, governance of plastic whole-chain covering production, circulation, consumption, recycling and end disposal will be more effective, and white pollution will be effectively curbed. In terms of source reduction, the irrational use of disposable plastic products in key areas such as commodity retail, e-commerce, takeout, express delivery, accommodation will be greatly reduced, the e-commerce express will be basically realized no secondary packaging, and the application scale of recyclable express packaging has reached 10 million. In terms of recycling and disposal, cities at prefecture level and above have basically established domestic waste classification, delivery, transportation and treatment systems according to local conditions, and the collection and transfer efficiency of plastic waste has been greatly improved; the incineration capacity of municipal solid waste in China will reach about 800000 tons/day, and the direct landfill volume of plastic waste will be greatly reduced; the recovery rate of agricultural film will reach 85%, and the residue of plastic film in China will achieve zero growth. In terms of garbage removal, the historical plastic waste left over open in key water areas, key tourist attractions and rural areas will be basically eliminated. The leakage of plastic waste to the natural environment will be effectively controlled.

Legal Framework

Name:

Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste (2020 Amendment)

Marine Environment Protection Law of the People's Republic of China (2017 Amendment)

Circular Economy Promotion Law of the People's Republic of China (2018 Amendment)

Brief description:

The *Law on Prevention and Control of Environmental Pollution by Solid Waste* was amended to identify the responsibilities of competent departments and local governments, improve the system for the prevention and control of solid waste pollution, and strengthen supervision and implementation of responsibilities.

The *Marine Environment Protection Law of the People's Republic of China* is formulated for the purposes of protecting and improving the marine environment, conserving marine resources, preventing damage caused by pollution, maintaining ecological balance, safeguarding human health and promoting sustainable economic and social development.

The *Circular Economy Promotion Law of the People's Republic of China* is formulated for the purpose of facilitating circular economy, raising resources utilization rate, protecting and improving environment and realizing sustained development. The Law aims to achieve sustainable development by raising resource utilization rate and increasing resource recovery in production, circulation, and consumption.

In preparation

Name:

Draft Amendment to the Marine Environmental Protection Law of the People's Republic of China²

Brief description:

Strengthen the prevention and control of marine litter pollution, strictly prevent and control solid waste on shore beaches, clarify that local people's governments at or above the coastal county level are responsible for the prevention and control of marine litter pollution in the waters under their management, and establish a marine litter clean-up system.

Indicators

China has set up a national marine litter monitoring system and carries out annual monitoring of marine litter in more than 50 coastal areas, covering the types and amounts of floating litter on the sea surface, beach litter and seabed litter, with the results released to society through the China Marine Ecological Environment Status Bulletin.

² <http://www.npc.gov.cn/npc/c30834/202212/9888634b67af4e4295a4e67534308ef3.shtml>

6.4.3. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Notice on restricting the production and sale of plastic shopping bags³

Targeted products:

Plastic bags

Brief description:

Since June 1, 2008, in all supermarkets, shopping malls, marketplaces and other commodity retail establishments have implemented the system of paying for the use of plastic shopping bags and no free plastic shopping bags are allowed. Commodity retail establishments must clearly mark the price of plastic shopping bags, charge for plastic shopping bags in addition to the price of goods and should not provide plastic shopping bags free of charge or include them in the total price of commodities.

We have seen a positive improvement over the last two years

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Work Plan for Plastic Pollution Control in the Civil Aviation Industry (2021-2025)⁴

Targeted products:

Non-degradable plastic bags, disposable plastic cutlery, plastic cotton swabs

Civil aviation industry disposable non-degradable plastic bags, straws, stir sticks, meal/cup holders, packaging bags, etc.

Brief description:

By the end of 2020, the production and sale of disposable foam plastic tableware and disposable plastic swabs would be banned. The nationwide catering industry would prohibit the use of non-degradable disposable plastic straws; the use of non-degradable disposable plastic tableware would be prohibited for catering and dining services in urban built-up areas and scenic spots at or above the prefecture level; non-degradable plastic bags would be prohibited from being used in shopping malls, supermarkets, pharmacies, bookstores, and food and beverage packaging and delivery services in some urban built-up areas. By the end of 2022, star-rated hotels and guesthouses nationwide will no longer actively provide

³ http://www.gov.cn/zhuanti/2015-06/13/content_2879030.htm

⁴ http://www.gov.cn/xinwen/2021-05/26/content_5612499.htm

single-use plastic products; by the end of 2025, the implementation will be extended to all hotels, guesthouses and B&Bs.

From 2022, the provision of single-use non-degradable plastic straws, cutlery and bags will be banned in airports and domestic passenger flights with an annual passenger throughput of 2 million passengers or more, and the implementation will be further extended to national airports and international passenger flights from 2023.

We have seen a positive improvement over the last two years

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Development of Circular Economy Plan (2021-2025)

Plastic Pollution Control Action Plan (2021-2025)

Notice of the General Office of the State Council on Further Strengthening the Control of Excessive Packaging of Commodities⁵

Brief description:

Plastic manufacturers must strictly implement national laws and regulations. All plastic products must meet national standards, and chemical additives that are harmful to the human body and environment are banned to add. Green designs are encouraged to improve the safety and recycling performance of plastic products. Moreover, new green and environmentally friendly functional materials are also attractive, and the use of recycled plastics that meet quality control standards and use control requirements will increase, and the research and development of recyclable, easily recyclable, and degradable alternative materials and products will be strengthened.

At the same time, the standardization, centralization, and industrialization of the resource utilization of plastic waste will be promoted, and related projects would be concentrated in resource recycling bases and other parks to improve the level of plastic waste resource utilization. Plastic waste with high sorting costs which is unsuitable for resource utilization, would be promoted for energy utilization. The operation and management of enterprises would be strengthened to ensure the stable and up-to-standard discharge of various pollutants and minimize the amount of plastic waste directly landfilled.

In July 2021, the National Development and Reform Commission issued the *Development of Circular Economy Plan (2021-2025)*. According to the plan, during the 14th Five-Year Plan period, great efforts will be made to develop a circular economy, promote the economical and intensive use of resources, build a resource-recycling industrial system and a recycling system of waste materials. By 2025, a resource recycling industry system will be basically established and a resource recycling system covering the entire society will be basically completed. By then, resource utilization efficiency will be substantially improved, and the replacement ratio of renewable resources to primary resources will be further increased. According to the plan, China is expected to roll out up to 11 key projects or actions, including

⁵ http://www.gov.cn/zhengce/content/2022-09/08/content_5708858.htm

the *Action on Whole Chain Treatment of Plastic Pollution*, which aims to implementing prevention and reduction of plastic waste generation.

Actively promote green design of plastic products. Focusing on disposable plastic products, formulate relevant standards for green design, optimize product structure design, reduce the complexity of product material design, and enhance the ease of recycling of plastic products. Prohibit the production of ultra-thin plastic shopping bags with a thickness of less than 0.025 mm, polyethylene agricultural mulch films with a thickness of less than 0.01 mm, and daily chemical products containing plastic microbeads and other products that endanger the environment and human health.

Strengthen technological innovation in the field of packaging. Promote packaging enterprises to provide reasonable designed, material saving, convenient recycling, economical and applicable packaging overall solutions. Independently research and develop low-gram weight, high-strength and functional packaging materials and their production equipment and innovate and develop integrated packaging products for commodities and express delivery. Give full play to the role of packaging enterprises as a bridge in promoting simple packaging and rational consumption, and promote the practice of simplicity and moderation in packaging design, commodity production and other upstream and downstream links.

We have seen a positive improvement over the last two years

Regulations on microplastics

Yes

Names of regulations:

Opinions on Further Strengthening Plastic Pollution Control

Plastic Pollution Control Action Plan(2021-2025)

Marine Ecological Environment Protection Plan (2021-2025)

Brief description:

By the end of 2020, the production of daily chemical products containing plastic microbeads had been prohibited; by the end of 2022, the sale of daily chemical products containing plastic microbeads will be prohibited.

Research on the pollution mechanism, monitoring, prevention, and control technologies and policies of plastic waste and microplastics in rivers, lakes, and seas will be strengthened, and the assessment on ecological environmental impact and human health risk caused by microplastics will be performed in the coming years.

It is forbidden to produce ultra-thin plastic shopping bags with thickness less than 0.025mm, polyethylene agricultural film with thickness less than 0.01mm, daily chemical products containing plastic beads and other products that endanger the environment and human health.

Carry out monitoring and investigation of marine plastic waste and microplastics. Organize and carry out research on the pollution mechanism, and control technology of marine plastic waste and microplastic.

Numerical data, if any:

In 2021, microplastics in the surface were monitored in 6 sections of the Bohai Sea, the Yellow Sea, the East China Sea and the northern South China Sea, with the average density of 0.44 items/m³.

We have seen a positive improvement over the last two years

Government actions on microplastics

Yes

Names of actions:

Plastic Pollution Control Action Plan (2021-2025)

Brief description:

Carry out monitoring and investigation of marine plastic litter and microplastics. Implement special clean-up of plastic litter in bays, estuaries and beaches, promote the establishment of a long-term mechanism for marine plastic litter clean-up in coastal cities and counties and keep key coastal areas free of visible plastic litter. Organize research on plastic litter and microplastic pollution mechanisms, monitoring and prevention technologies in rivers, lakes and seas.

We have seen a positive improvement over the last two years

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Plastic Pollution Control Action Plan (2021-2025)

Several Opinions on Further Promoting the Work of Separating Domestic Waste ⁶

Notice on Further Strengthening the Construction and Management of Rural Domestic Waste Collection and Disposal System

Brief description:

To combine with the implementation of garbage classification, the classified collection, and treatment of plastic waste and other recyclables will be increased. At the same time, random stacking and dumping causing plastic garbage pollution will be prohibited strictly. In places where large amounts of plastic waste are generated, such as office buildings, airports, stations, and ports, it is necessary to increase the delivery facilities and the frequency of removal. Multi-party cooperation among e-commerce takeaway platforms, environmental sanitation departments, recycling companies are promoted, and place delivery packages, takeaway lunch boxes, and other recycling facilities in key areas. The recycling system of the waste agricultural film will be established and improved; the recycling and disposal of waste fishing nets and fishing gear are also performed.

Strengthen the standardised recycling and removal of plastic waste. In conjunction with the classification of household waste, promote the integration of urban recycling outlets with household waste classification outlets and enhance the standardization of plastic waste

⁶ https://www.mohurd.gov.cn/gongkai/fdzdgknr/tzgg/202012/20201204_248315.html

recycling. Further strengthen the standardised collection of plastic waste in passenger transport such as roads, railways, water transport and civil aviation.

Establish and improve the collection, transportation and disposal system for plastic waste in rural areas. Improve the system of collecting, transferring and disposing of classified rural domestic waste, build a long-term mechanism for stable operation, strengthen daily supervision and implement in-depth agricultural film recycling actions. Carry out action to recycle pesticide packaging. Support and guide relevant responsible entities to actively carry out recycling of waste agricultural and fishery materials such as irrigation implements, fishing nets and fishing gear, and rice seedling trays.

Increase the recycling of plastic waste. Promote the scale, standardization and clean development of the plastic waste recycling industry. Strengthen the environmental supervision of plastic waste recycling enterprises.

Upgrade the level of harmless disposal of plastic waste. Comprehensively promote the construction of domestic waste incineration facilities to significantly reduce the amount of plastic waste directly landfilled. Strengthen the comprehensive improvement of existing landfills, enhance the level of operation and management, standardise daily operations, prohibit the arbitrary dumping and storage of domestic waste, and prevent the leakage of historical landfilled plastic waste into the environment.

Upgrade the sorting and treatment capacity. Accelerate the construction of domestic waste classification and treatment facilities. Scientifically estimate the level of local domestic waste output, accelerate the construction of domestic waste incineration and treatment facilities in accordance with the principle of moderate advancement, make up for the shortcomings of food waste and hazardous waste treatment facilities, and carry out pilot market-based models of harmless waste treatment. Promote the transformation and upgrading of the recycling industry and the recovery and recycling of low-value recyclables from urban household waste.

To plan the construction and operation and management of the rural domestic waste collection and disposal system in an integrated manner. Scientifically and reasonably determine the mode of construction of rural domestic waste collection, transportation and disposal systems. Define the layout of rural domestic waste classification, collection, transportation, treatment or resource utilization facilities.

Promote source separation and resource utilization of rural domestic waste. Strengthen the local treatment and resourceful use of perishable waste, do a good job of recycling recyclables, strengthen the collection, transportation and disposal of hazardous waste, and explore and summarise the rural domestic waste treatment model of sorting, collecting, transporting and disposing of waste in a sorted manner.

We have seen a positive improvement over the last two years

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Plastic Pollution Control Action Plan (2021-2025)

Marine Ecological Environment Protection Plan (2021-2025)

Action Plan for the Uphill Battles for Integrated Bohai Sea Management

Action Plan for Deepening the Battle for the Protection and Restoration of the Yangtze River⁷

Brief description:

The inspection and rectification of informal storage and dumping points of domestic waste will be inspired, and the problem of plastic pollution caused by random dumping of domestic waste in urban and rural areas, environmentally sensitive areas, roads and rivers, and pits and ditches are the vital regions to be solved. Operations to clean up plastic garbage in rivers, lakes, and harbours and clean beaches will be carried out. The cleaning and remediation of residual mulch film on farmland, plastic packaging of pesticides, and fertilizers will be promoted to gradually reduce the amount of residual mulch film on farmland.

Strengthen the cleaning and treatment of plastic waste in rivers, lakes and seas. Give full play to the role of the river and lake chief system at all levels, implement special cleaning projects of plastic waste within the management scope of rivers, lakes and reservoirs, establish a regular cleaning mechanism, and strive to basically eliminate open plastic waste in key water areas. Formulate the implementation plan of plastic pollution control in the Yangtze River Economic Belt.

Supervise and urge ships to collect, transfer and dispose ship garbage, including plastic garbage, in strict accordance with relevant laws and regulations, urge shipping enterprises to implement the main responsibility and crack down on illegal discharge of ship garbage according to law. Ensure the normal operation of port receiving facilities of ship domestic waste, promote the effective connection between port receiving facilities and urban public transfer and disposal facilities, implement the main responsibility of receiving, transferring and disposing ship domestic waste, improve the whole process connection and cooperation of ship port city, and strictly implement the policy of free receiving ship domestic waste in inland ports of Yangtze River Economic Belt.

Implement ship pollution prevention and control. Further improve the operation and management level of ship pollutant receiving facilities, promote the effective connection with urban public transport and disposal facilities, and implement the joint supervision mechanism of port ship pollutant reception, transfer and disposal. Deepen the management of atmospheric emission control areas for marine vessels. Promote the construction and utilization of shore power facilities in coastal ports and ships.

Carry out comprehensive control of pollution in fishing ports and fishing vessels. Encourage the allocation and improvement of garbage collection and transfer facilities in fishing ports, timely collect, clean up, transfer and dispose of garbage generated by fishing ports and fishing vessels arriving at ports, explore the fishing gear identification and real name system, and strengthen the research on the recycling of waste fishing nets, fishing gears and breeding cages. By the end of 2025, all the central coastal fishing ports will implement the pollution prevention and control measures of "one port, one policy".

Carry out special cleaning and control of floating plastic litter on the water surface of the Yangtze River basin and strengthen the management of floating litter gathering areas such as the Three Gorges Dam. Strengthen the clean-up of plastic litter along the river shoreline. Crack down on the illegal dumping of plastic litter along the shoreline.

⁷ http://www.gov.cn/zhengce/zhengceku/2022-09/19/content_5710666.htm

We have seen a positive improvement over the last two years

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Yes

Names of actions:

Several opinions on accelerating the green development of aquaculture ⁸

Opinions on strengthening the ecological supervision of mariculture ⁹

Brief description:

Strengthen the treatment of aquaculture waste. Promote the centralized collection and resourceful utilization of shells, net clothes, floats and other by-products and waste of aquaculture production. Regulate the foam floats used in offshore raft and cage aquaculture, promote new materials for environmental protection floats, and strive to control white pollution. Strengthen the comprehensive remediation of waste after the removal of nets, and restore the natural ecological environment of the waters as soon as possible.

Strengthen enforcement and inspection. Comprehensive use of satellite remote sensing, unmanned aerial vehicles, shore patrols and other means to increase surveillance and supervision of plastic litter in aquaculture areas. Guide aquaculture entities to collect plastic litter and other solid waste generated from aquaculture activities. Focus on outstanding problems such as discarded aquaculture solid waste found during inspections and prompt efforts to solve the problem.

We have seen a positive improvement over the last two years

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Plastic Pollution Control Action Plan (2021-2025)

Marine Ecological Environment Protection Plan (2021-2025)

Action Plan for the Comprehensive Management of Key Marine Areas

Notice on Special Action Plan for Waste Cleaning Up in Rivers, Lakes and Seas (2022)

Brief description:

The special action on cleaning up of plastic waste is carried out. The inspection and rectification of informal storage and dumping points of domestic waste are inspected. The problem of plastic pollution caused by random dumping of domestic waste in urban and rural areas, environmentally sensitive areas, roads and rivers, and pits and ditches are the

⁸ http://www.gov.cn/zhengce/zhengceku/2019-10/22/content_5443445.htm

⁹ http://www.gov.cn/zhengce/zhengceku/2022-01/12/content_5667762.htm

important regions to be solved. Operations to clean up plastic garbage in rivers, lakes and harbours and clean beaches will be carried out. The cleaning and remediation of residual mulch film on farmland and plastic packaging of pesticides and fertilizers will be promoted, and the amount of residual mulch film on farmland are gradually reduced.

Strengthen plastic waste management in both river and sea, implement special cleaning of plastic waste in bays, estuaries, beaches and other areas, promote coastal cities and counties to establish a long-term mechanism for marine plastic waste cleaning, and maintain no obvious plastic waste in key coastal areas. Increase the waste collection facilities in the beach and other venues, and improve the frequency of garbage removal and transportation. Implement regular supervision of littoral and floating wastes, and improve the environmental quality of bay water bodies and beaches.

Organize relevant coastal localities to carry out a one-year special operation to clean up plastic litter in 11 key bays (bay areas), including Jiaozhou Bay, in a dragnet manner. Regular salvage and cleaning will be carried out in key areas where solid waste tends to accumulate, such as intertidal zones, seawall embankments and aquaculture concentration areas, and regular cleaning will be carried out on shore beaches, and plastic waste caused by typhoons and astronomical high tides should be cleaned up in time.

Numerical data, if any:

According to incomplete statistics, as of February 2023, more than 400,000 inspection and cleaning personnel had been dispatched to the 11 key bays in the special clean-up campaign, and 87,000 tons of various beach and floating marine litter had been cleared. Monitoring and supervision efforts had been intensified through regular aerial surveillance by UAVs, video surveillance, digital supervision and other means. The action also received extensive participation from the local public, volunteers, fishing companies and public welfare Organisations.

We have seen a positive improvement over the last two years

Removal of plastic litter from the ocean

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Plastic Pollution Control Action Plan (2021-2025)

Marine Ecological Environment Protection Plan (2021-2025)

Notice on Special Action Plan for Waste Cleaning Up in Rivers, Lakes and Seas (2022)

Brief description:

Carry out special clean-up of plastic waste. Accelerate the investigation and rectification of informal storage and dumping points of domestic waste, and carry out clean-up of plastic waste in rivers, lakes and harbours and clean-up operations for beaches.

To strengthen both river and sea treatment of plastic litter, implement special clean-up of plastic litter in bays, estuaries, beaches and other areas, promote coastal cities and counties to establish a long-term mechanism for marine plastic litter clean-up work, and keep key coastal areas free of obvious plastic litter.

Organize relevant coastal localities to carry out a one-year special operation to clean up plastic litter in 11 key bays (bay areas), including Jiaozhou Bay, in a dragnet manner.

Continuously strengthen the management of plastic litter on the sea surface. Regular salvage and cleaning of the waters adjacent to shore beaches should be carried out, and plastic litter caused by typhoons and astronomical high tides should be salvaged and cleaned up in time.

Numerical data, if any:

According to incomplete statistics, as of February 2023, more than 400,000 inspection and cleaning personnel had been dispatched to the 11 key bays in the special clean-up campaign, and 87,000 tons of various beach and floating marine litter had been cleared. Monitoring and supervision efforts had been intensified through regular aerial surveillance by UAVs, video surveillance, digital supervision and other means. The action also received extensive participation from the local public, volunteers, fishing companies and public welfare Organisations.

We have seen a positive improvement over the last two years

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control
Plastic Pollution Control Action Plan (2021-2025)

Brief description:

Recyclable and foldable packaging products and logistics and distribution equipment will be promoted actively. Encourage enterprises to build a cross-platform operation system for recyclable packaging. Enterprises using integrated packaging of goods and logistics, and establishing a recycling system for recyclable logistics distribution equipment are also encouraged.

Scientifically and steadily promote plastic substitute products. Fully consider the environmental impact of the whole life-cycle resources such as bamboo and wood products, paper products, and degradable plastic products, and improve the quality and food safety standards of relevant products. Carry out research on the degradation mechanism and impact of different types of degradable plastics, and scientifically evaluate their environmental safety and controllability. Improve the standard system, issue biodegradable plastics standards, standardize the application fields, and clarify the degradation conditions and disposal methods. Increase transformation of key core technology research and achievement of degradable plastics, continuously improve product quality and performance, and reduce application costs. Promote the orderly development of biodegradable plastics industry, guide the rational layout of the industry. Accelerate the scientific research and application of biodegradable agricultural film. Strengthen the construction of detection capacity of degradable plastics and standardize the order of the industry.

We have seen a positive improvement over the last two years

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Plastic Pollution Control Action Plan (2021-2025)

Brief description:

Plastic products manufacturers should promote green design to improve the safety and recycling performance of plastic products. Adopt new green and environment-friendly functional materials. Strengthen the research and development of recyclable and degradable alternative materials and products. Formulate a replacement implementation plan for the reduction of disposable plastic products. Strengthen the management of registered merchants in e-commerce, food delivery, and other platform enterprises, promote green supply chains.

Formulate the *management measures for the use and report of disposable plastic products*, establish and improve the reporting system for the use and recycling of disposable plastic products, and supervise and guide the operators of commodity retail, e-commerce, catering and accommodation to implement main responsibility. Supervise and guide e-commerce, takeout and other platform enterprises and express delivery enterprises to formulate platform rules for disposable plastic products reduction. Release recommended catalogue of green packaging products, promote the integration of products and express packaging, and promote the original direct delivery of e-commerce express. Give play to the role of public institutions and take the lead in reducing the use of single-use plastic products. In the reception and training venues affiliated to the agency, explore the pilot program of direct drinking water purifiers to replace plastic bottled water.

We have seen a positive improvement over the last two years

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Under the guidance of the Department of Marine Ecology and Environment of the Ministry of Ecology and Environment, Centre for Environmental Education and Communications of Ministry of Ecology and Environment organized the "Marine Ecology Protection Publicity Campaign in Schools", which consisted of a series of thematic courses, on-site interactive quizzes and the distribution of publicity brochures to deepen students' knowledge and understanding of marine plastic waste pollution and raise their awareness of participating in marine ecology protection.¹⁰

We have seen a positive improvement over the last two years

¹⁰ http://www.chinaeol.net/ceecst/202212/t20221221_1008342.shtml

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Opinions on Further Strengthening Plastic Pollution Control

Plastic Pollution Control Action Plan (2021-2025)

Marine Ecological Environment Protection Plan (2021-2025)

Brief description:

Increasing the publicity of plastic pollution control, guiding the public to reduce the use of disposable plastic products, participate in garbage classification, and resisting excessive packaging. Making use of newspapers, radio and television, new media, and other channels to in-depth publicize the effectiveness and typical practices of plastic pollution control. Guiding industry associations, business groups, and charity Organisations to conduct professional seminars and voluntary activities in an orderly manner, building consensus, and creating a good atmosphere for the participation of the whole society.

In terms of publicity and education, marine plastic survey and cleaning activities have become normalized relying on non-governmental environmental protection Organisations and environmental protection volunteers, who have played active roles in preventing land-based garbage from entering the sea. Through newspapers, television, the Internet and other media, promote the prevention of marine plastic pollution by strengthening public education and other methods, and raise the public awareness on prevention and control of marine plastic pollution.

Strengthen publicity, education and scientific popularization, guide the public to develop green consumption habits, reduce the consumption of disposable plastic products, and consciously fulfill the obligation of sorting and throwing household waste.

Give full play to the guiding role of the media in public opinion, make full use of the important nodes such as the June 5th Environmental Day, the June 8th Ocean Day and the International Beach Day, carry out publicity and education activities of marine ecological environment protection, popularize scientific knowledge of marine ecological environment, spread the concept of marine ecological civilization.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Coastal Cleanup and Public Education in Coastal Cities of China

Brief description:

Dalian Municipal Environmental Protection Volunteers Association was founded in 2003. This association has been engaged in the publicity, education, and public participation of marine litter for a long time. At present, the association has 125 member units and 12,500 registered volunteers. The association has organized 32 large propaganda activities and nearly 1,000 activities throughout the year. Nearly 200,000 brochures of the public marine conservation publicity had been issued to more than millions of people. On average, over 200 events are held each year, with over 50,000 participants.

From 2009 to 2019, the Blue Ribbon Ocean Conservation Association has been carrying out publicity, education, and public participation on Marine litter. This association has a total of 128 member units and nearly 100,000 registered volunteers. In 2019, the association organized 798 publicity activities on marine litter, distributed 68,000 copies of publicity materials, publicized marine protection to more than 7.114 million people. A total of 317,300 volunteers have participated in marine litter clean-up activities, 38.49 tons of litter on the beach and 0.25 tons of litter on the seabed were cleaned up.

With the support of coastal natural resources departments at all levels, the China Ocean Development Foundation has been organizing the "National Beach Clean-up Public Welfare Campaign" since 2017 in coastal provinces and cities across the country. Through organising beach cleaning activities by well-known domestic marine public welfare organisations and marine volunteers, the campaign spreads knowledge of marine resources and ecological restoration, promotes the active participation of all sectors of society in building beautiful shorelines, a good situation of the whole society to jointly promote the construction of marine ecological civilisation is formed.¹¹

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

International Coastal Cleanup

Brief description:

During the Northwest Pacific Action Plan (NOWPAP) - The Tripartite Environment Ministers Meeting among Japan, China and Korea China-Japan-South (TEMM) Joint Symposium on Marine Litter and International Beach Litter Cleanup (ICC) in 2019, the participants and more than 50 volunteers from Dalian Environmental Protection Volunteers Association held the 2019 International Beach Litter Clean-up at the Dalian Bangchui Island Bathing Beach, picking up and cleaning up litter floating and discarded on the surface of the beach as well as litter buried shallowly in the sand and gravel and conducting a sorting survey.¹²

We have seen a positive improvement over the last two years

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

National Marine Litter and Microplastics Monitoring System

The National Key Research and Development Program of China "Monitoring and Ecological Effect Assessment of Marine Microplastics"

¹¹ <http://www.cfocean.org.cn/index.php/index/program/fid/3/pid/6.html>

¹² https://www.sohu.com/a/346060458_806274

Plastic Pollution Control Action Plan (2021-2025)

Brief description:

The routine monitoring of China's national marine litter has been launched since 2007, covering beach, seawater, and seafloor litter. The routine monitoring of floating microplastics in coastal waters has been conducted since 2016. The monitoring results have been published in *Bulletin of Marine Ecological and Environmental Status of China* every year.

In 2016, the Ministry of Science and Technology (MOST) launched the National Key Research and Development Programme on "Research on Marine Microplastic Monitoring and Ecological Effects Assessment Technology" which focused on marine microplastic pollution monitoring, source analysis, ecological effects and source control.

Carry out monitoring and investigation of marine plastic waste and microplastics. Organize and carry out research on pollution mechanism, monitoring and control technology of plastic wastes and microplastics in rivers, lakes and seas.

We have seen a positive improvement over the last two years

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

UNESCO-IOC/WESTPAC Research Project: Distribution, Source, Fate and Impacts of Marine Microplastics in the Asia Pacific Region ¹³

UNESCO-IOC "United Nations Decade of Ocean Science for Sustainable Development (2021-2030)" Research Project: UN22. Stem the tide of Asia's riverine plastic emission into the ocean ¹⁴

Brief description:

"The Western Pacific Regional Marine Microplastics Research Project" is a UNESCO Intergovernmental Oceanographic Commission Western Pacific Sub-Commission (IOC/WESTPAC) project that builds on the establishment of a network of institutions and experts to play a regional role in the development of a standardized monitoring methodology for marine microplastics in the Asia-Pacific region, from the perspective of developing and harmonizing sampling and analytical methodologies. Establish a baseline database of marine microplastics in the region, analyse the distribution, sources and fate of marine microplastics, and assess their impacts on marine ecosystems.

The UNESCO-IOC project on "UN22. Stem the tide of Asia's riverine plastic emission into the ocean" has been included in the United Nations Implementation Project for the United Nations Decade of Ocean Science for Sustainable Development (2021-2030)". Ten research, government and corporate institutions from seven countries, including Thailand, Indonesia, Vietnam and Malaysia, will participate in the project. The project will conduct field surveys, joint research, public awareness campaigns, and exchange of experiences and results on plastic waste control and treatment. By promoting the participation of local stakeholders, the project will enhance the transparency and credibility of scientific

¹³ <http://www.sklec.ecnu.edu.cn/node/5286>

¹⁴ <http://www.sklec.ecnu.edu.cn/node/7082>

information and strengthen science-based action to reduce emissions, and jointly address the serious environmental problem of global marine plastic pollution.

We have seen a positive improvement over the last two years

6.4.4. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.4.5. Best Practices

National level

Outstanding cases of Beautiful Bays¹⁵: In 2021, the Ministry of Ecology and Environment launched the first collection of outstanding cases of Beautiful Bays and organized the selecting of eight cases, among which the outstanding cases were Qingdao Lingshan Bay, Beidaihe Section of Qinhuangdao Bay, mud bank Section of Dongtaitiaozi, Yancheng and Shantou Qing'ao Bay, and the nominated cases were Fuzhou Binhai New City Shore Section, Shenzhen Dapeng Bay, Wenzhou Dongtou Zhu Bay and Dalian Jinshi Beach Bay. Qingdao Lingshan Bay continued to carry out the "Coastal Cleanup" campaign to clean up marine litter to keep the beach clean. Qinhuangdao Bay improved mechanisms for cleaning floating litter and riverbank cleaning. Shantou Qing'ao Bay cleaned up illegal aquaculture, promoted the use of environmentally friendly floats, and guided offshore ecological aquaculture. A "Marine sanitation" team was established in Fuzhou Binhai New City

¹⁵ https://www.mee.gov.cn/xxgk/xxgk06/202201/t20220130_968669.html

6.5. European Union

Key Highlights

- [EU Strategy for Plastics in a Circular Economy](#) (2018)
- [Legislation on waste](#) and [Marine Strategy Framework Directive](#)
- Descriptor 10 of the [Marine Strategy Framework Directive](#)
- The Plastic Bags Directive (2015)
- Single-Use Plastic Directive (2019)
- Proposal for a Regulation on Eco-design for Sustainable Products (ESPR)
- [Marine Strategy Framework Directive](#) (MSFD, 2008/56/EC) first EU legal instrument to explicitly address marine litter
- March 2020 new **Circular Economy Action Plan**
- Directive on Port Reception Facilities (EU) 2019/883 for minimizing ocean litter
- European Circular Economy Stakeholder Platform

6.5.1. Policy and Frameworks

National Action Plan

Do you have a National Action Plan or strategy on MPL?

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name: [EU Strategy for Plastics in a Circular Economy](#) (2018)

Brief description:

Emphasis on prevention of litter from both land- and sea-based sources is the cornerstone of EU policies against plastic pollution of oceans and the seas. Clean-up actions can be meaningful when litter accumulations create serious risks for marine or coastal biodiversity and habitats or negative socioeconomic effects. The EU is furthermore committed to close collaboration with its neighbours within the four Regional Seas Conventions around Europe and with other non-EU countries in global fora such as UN, G20 and G7.

The [EU Strategy for Plastics in a Circular Economy](#) (2018) is the first EU-wide policy framework adopting a material-specific life-cycle approach integrating design, use, reuse and recycling. It also aims at an increasing the uptake of alternative materials where evidence clearly shows that they are more sustainable compared to the ones based on fossil resources. This supports efforts on decarbonisation and creating additional opportunities for growth. As part of the Strategy, the EU adopted the [Single-Use Plastic Directive](#) (2019), targeting the top 10 single-use plastic products most often found on Europe's beaches and seas as well as fishing gear containing plastics and the [Port Reception Facilities Directive](#) (2019), aiming to properly collect waste generated by ships, including passively fished waste from fishing vessels.

The European Commission has voted on a legislation to restrict microplastics intentionally added to products, e.g. in cosmetics or detergents. Its adoption is expected for autumn 2023. In addition, the Commission is working on an initiative that would encompass a legislative proposal on losses of plastic pellets as an important source of microplastic pollution, and a Commission's Communication on all major sources of unintentional

microplastic releases, likely for adoption Q3 2023. The legislative proposal on pellet losses builds on the industry-led Operation Clean Sweep certification scheme and the OSPAR Convention's Recommendation on pellet losses. Industry has also started the production of bio-based and biodegradable alternative materials and fibres in tyres and textiles thus supporting the substitution of materials based on fossil resources.

Legal Framework

Do you have legislation on MPL? (including waste management and circular economy)

Yes

If yes, list your country's legislation including name and brief description here:

Name: Legislation on waste and Marine Strategy Framework Directive

Brief description:

The EU's long tradition of legislation on waste (starting in the 1970s and over the years developed into a comprehensive body of legislation) plays an important role in preventing marine litter. As part of the shift towards a circular economy, an important review of the waste legislation took place and the ensuing legislative proposals adopted in 2018 introduced the world's most ambitious waste-management targets and strengthened provisions on waste prevention. Today EU's waste policy includes:

Horizontal legislation setting the main definitions and principles

Laws on how waste should be treated

Legislation on specific products or so-called waste streams (many of which will be further modernised in the years to come)

The Marine Strategy Framework Directive (MSFD, 2008/56/EC) was the first EU legal instrument to explicitly address marine litter; it requires "Good Environmental Status" for marine litter to be achieved by 2020, i.e. that "properties and quantities of marine litter do not cause harm to the coastal and marine environment". Assessment of the status, target setting, monitoring, reporting and implementation of measures related to marine litter and microlitter are carried out in accordance with relevant MSFD provisions and have been further specified within a Decision by the European Commission (2017/848/EU). The Commission assessment of the measures submitted by the EU Member States was published in July 2018¹⁶; in 2020 the Commission published a report on MSFD implementation¹⁷ and in 2023 its assessment of monitoring programmes, including for marine litter¹⁸. MSFD activities against marine litter are supported by the MSFD Technical Group on Marine Litter¹⁹, chaired by the European Commission's Joint Research Centre, bringing together experts from Member States, Regional Sea Conventions, NGOs, umbrella organisations and scientific project leads. It acts as an advisory group to the policy process and links science with policy, providing guidance and recommendations on relevant issues

¹⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0562&from=EN>

¹⁷ https://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

¹⁸ https://environment.ec.europa.eu/system/files/2023-04/C_2023_2203_F1_COMMUNICATION_FROM_COMMISSION_EN_V5_P1_2532109.PDF

¹⁹ http://mcc.jrc.ec.europa.eu/dev.py?N=41&O=434&titre_chap=TG%20Marine%20Litter

such as monitoring methodologies, harm caused by marine litter and sources of marine litter. Importantly, it has been tasked to develop baseline quantities and threshold values for marine litter and microlitter pursuant to the abovementioned Commission Decision. The EU Marine Beach Litter Baselines report²⁰ was published early 2020. In September 2020, EU Member States agreed on a beach litter threshold value of 20 items per 100 m of beach. More threshold values in relation to marine litter and microlitter (including microplastics) are being developed, notably for seafloor litter and for floating litter and microlitter. A [Joint list of litter categories](#) has been developed, so that collected data are recorded in a harmonised way. The updating of the monitoring guidelines is almost completed (publication planned in May 2023).

The MSFD is being reviewed, and it might be amended, resulting in more concrete and quantified targets and thresholds related to marine litter, including plastic marine litter and microplastics. Other EU instruments that help tackle marine litter include the [Directive on Port Reception Facilities](#) for the delivery of waste from ships (2019), the [Single-Use Plastic Directive](#) focusing on most frequently found marine litter (including fishing gear containing plastic) (2019), the EU's [International Ocean Governance Agenda](#) (2022) and the Urban Waste Water Treatment Directive, under review, also aiming to better capture microplastics in wastewater treatment.

As a follow-up of the Single-Use Plastic Directive, the Commission also adopted a decision on a [standardization request to the European Committee for Standardisation as regards circular design of fishing gear](#) (2021) and a decision laying down the [format for reporting data and information on fishing gear placed on the market and waste fishing gear collected in Member States](#) (2021).

The European Commission also adopted its [Zero Pollution Action Plan](#) in May 2021 where, among other things, includes a target of reducing by 50% plastic litter at sea and of 30% micro plastics released into the environment by 2030.

Indicators

Do you have the MPL-specific indicators in your country?

Yes

If yes, list your indicators here:

Indicators for marine litter occurrence and impact in the marine environment are provided through Descriptor 10 of the [Marine Strategy Framework Directive](#). It specifies criteria for litter on the coastline, in the water surface layer and on the seafloor, as well as microlitter in all matrices and impacts of litter through ingestion, entanglement and other adverse effects. Baselines are derived from reliable, sufficient and comparable monitoring data and are used to assess status, evaluate trends, measure the success of mitigation measures and prioritise actions.

Data on marine litter concentration are available through the [EMODnet platform](#). This includes a complete set of data on litter on beaches of EU Member States and some neighbourhood countries, normalised to common standards.

Work on normalising data on floating, seabed and microlitter concentrations is underway. A target threshold value for beach litter (i.e. 20 litter items/100 m of coastline), has been

²⁰ https://mcc.jrc.ec.europa.eu/main/dev.py?N=41&O=434&titre_chap=TG%2520Marine%2520Litter

established in 2020 (see the [JRC Technical Report on A European Threshold Value and Assessment Method for Macro Litter on Coastlines](#)), which is estimated to reduce harm from beach litter to a sufficiently precautionary level.

6.5.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Restrict microplastics for cosmetics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities for rivers and coasts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Take action on fishing gear	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

The Plastic Bags Directive (2015) and the Directive on the reduction of the impact of certain plastic products on the environment (Single-Use Plastic Directive) (2019)

Targeted products:

Food containers, EPS food and beverage containers, cups for beverages, cotton bud sticks, cutlery, plates, stirrers, straws, balloon sticks, balloons, packets, wrappers, beverage containers and bottles, tobacco product filters, sanitary towels, wet wipes, plastic carrier bags and fishing gear containing plastic.

Brief description:

The Plastic Bags Directive requires Member States to take measures to achieve a 'sustained reduction in the consumption' of lightweight plastic carrier bags, such as national reduction targets and/or economic instruments (e.g. fees, taxes) and marketing restrictions (bans), provided that the latter are proportionate and non-discriminatory. The Directive sets targets that annual consumption would not exceed 90 bags per person by 2019, 40 by 2025, and/or that by end of 2018 such bags would not be free of charge at the point of sale. Compared to the baseline scenario (2010) this is a 50% reduction in consumption by 2019 and a 80% reduction by 2025.

The Single-Use Plastic Directive includes the following measures:

- i. Extended Producer Responsibility (EPR) schemes under the principle 'the polluter pays' to ensure that producers will cover the costs of waste management and clean-up, data gathering and awareness raising for the following single-use plastic products and fishing gear containing plastic: tobacco products with filters, drink bottles, packets and wrappers, wet wipes, drinks cups (including their cover and lids), food and beverage containers, balloons, and lightweight carrier bags;
- ii. Product design measures for drink bottles related to tethered caps and lids, and a binding target of at least 25% of recycled plastic for PET beverage bottles from 2025 onwards and 30% recycled content for all plastic bottles by 2030;
- iii. Consumption reduction measures for single-use plastic versions of drinks cups (including covers and lids), and food containers;
- iv. A ban of single-use plastic versions of cotton bud sticks, balloon sticks, cutlery, plates, straws and stirrers; and beverage containers and cups made of expanded polystyrene (including their caps/covers and lids);
- v. A general ban on oxo-degradable products;
- vi. A 90% separate collection target for waste from single-use plastic bottles either by Deposit Refund Schemes or improved EPR schemes by 2029 (interim target of 77% by 2025);
- vii. Marking requirements for sanitary towels, wet wipes, tampons and tampon applicators, tobacco products with filters and cups for beverages, indicating how waste should be disposed of, presence of plastic in the product and resulting negative environmental impact.
- viii. Member States with marine waters to set minimum annual collection rates of waste fishing gear containing plastic.
- ix. Member States to report annually to the European Commission on the amounts of fishing gear placed the market and on the amounts of waste fishing gear collected.
- x. The European Commission shall request the European committee for standardisation to develop a harmonised standard for a circular design of fishing gear.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

1. Follow up to the Single-use Plastic Directive
2. Proposal for a Regulation on Ecodesign for Sustainable Products (ESPR)

Brief description:

1. As a follow-up of the Single-Use Plastic Directive, the Commission also adopted a decision on a [standardization request to the European Committee for Standardisation as regards circular design of fishing gear](#) (2021) and a decision laying down the [format for reporting data and information on fishing gear placed on the market and waste fishing gear collected in Member States](#) (2021). These two decisions are expected to increase the positive effect to be produced by the establishment of extended producer responsibility schemes and the creation of port reception facilities for waste from ships including marine litter (including fishing gear and passively fished waste) provided for by the Single-Use Plastic Directive and the Port Reception Facilities Directive respectively.
2. In order to deliver on commitments of the 2020 Circular Economy Action Plan and make sustainable products the norm in the EU, on 30 March 2022 the European Commission adopted a legislative proposal for an Ecodesign for Sustainable Products Regulation (ESPR). This instrument will enable targeted ecodesign rules (covering both performance and information requirements) to be laid down for a very wide range of products on the EU market, to make them more durable, repairable, recyclable, increase recycled content and make them more energy and resource efficient, amongst many other things. It also introduces other tools, including measures to prevent the destruction of unsold consumer goods. Priority products and areas for action will be set out in multiannual working plans.

Regulations on microplastics

Yes

Names of regulations:

Legislation on microplastics intentionally added to products

Brief description:

The European Commission has voted a legislation **to restrict microplastics intentionally added to products**, e.g. in cosmetics paints, detergents, fertilisers, artificial infill for synthetic turfs. The European Chemicals Agency reviewed the scientific basis for considering a restriction under REACH and concluded that “health & environmental risks justify an EU-wide restriction”. ECHA scientific committees assessed the measure and adopted their opinion. The proposed EU-wide restriction covers intentionally added microplastics in multiple applications including agriculture, horticulture, cosmetic products, paints, coatings, detergents, maintenance products, infill material in artificial turfs, medical and pharmaceutical applications. The measure will now be sent to the Council and the European Parliament for a scrutiny period of 3 months and it is expected to be adopted and published in Q4 2023.

As a step further, in the March 2020 new **Circular Economy Action Plan**, the European Commission committed to address the presence of microplastics in the environment by

addressing also **unintentional releases of microplastics** by developing labelling, standardisation, certification and regulatory measures. Work is ongoing on how best to address unintentional releases of microplastics. In the course of this analysis, the Commission has identified 6 major sources of releases: paints, tyres, pellets, textiles, geotextiles and detergent capsules.

Government actions on microplastics

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Others (please specify)

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

EU Waste Framework Directive

Brief description:

In relation to waste management, the EU Member States have implemented effective separate (household) collection schemes and have built in economic incentives for better waste treatment (e.g. landfill/ incineration charges) as well as Extended Producer Responsibility (EPR) schemes.

In May 2018, the EU revised its waste legislation to make it fit for the future. In the context of the prevention of waste, the revised EU Waste Framework Directive requires Member States to identify products that are the main sources of littering, notably in natural and marine environment, and take appropriate measures to prevent and reduce litter from such products. The Directive also requires Member States to develop and support information campaigns to raise awareness about waste prevention and littering. In the future, Member States management plans will have to contain measures to combat and prevent all forms of littering and to clean up all types of litter. With regard to enforcement they are required to take the necessary measures to prohibit the abandonment, dumping or uncontrolled management of waste, including littering

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Directive on Port Reception Facilities(EU) 2019/883

Brief description:

The Directive covers all waste from ships, with a special focus on addressing marine litter originating from shipping, including from the fishing and recreational sectors. To this end, the Directive provides for a mix of incentives and enforcement measures to maximise waste delivery on shore to adequate port reception facilities, where the waste should be properly managed (e.g. through separate collection). The Directive strengthens the financial incentive for delivery by providing for a 100% indirect fee for garbage (MARPOL Annex V waste) to be

paid irrespectively of volumes delivered. This fee gives all ships a right to deliver all garbage waste, including waste fishing gear and passively fished waste, without facing any further additional fees.

This should result in a robust framework to tackle (plastic) waste originating both from ships as well as from other sources e.g. waste fished out from the sea and delivered to port. The Directive ensures that port reception facilities are available for the management of this waste in line with the principles of the Circular Economy.

Member States shall ensure that monitoring data on the volume and quantity of passively fished waste are collected and reported to the Commission. The Commission Implementing Decision laying down the rules for the monitoring data methodologies and the format for reporting passively fished waste was adopted in January 2022.

Yes

Names of actions:

Directive on Port Reception Facilities(EU) 2019/883

Brief description:

The Directive covers all waste from ships, with a special focus on addressing marine litter originating from shipping, including from the fishing and recreational sectors. To this end, the Directive provides for a mix of incentives and enforcement measures to maximise waste delivery on shore to adequate port reception facilities, where the waste should be properly managed (e.g. through separate collection). The Directive strengthens the financial incentive for delivery by providing for a 100% indirect fee for garbage (MARPOL Annex V waste) to be paid irrespectively of volumes delivered. This fee gives all ships a right to deliver all garbage waste, including waste fishing gear and passively fished waste, without facing any further additional fees.

This should result in a robust framework to tackle (plastic) waste originating both from ships as well as from other sources e.g. waste fished out from the sea and delivered to port. The Directive ensures that port reception facilities are available for the management of this waste in line with the principles of the Circular Economy.

Member States shall ensure that monitoring data on the volume and quantity of passively fished waste are collected and reported to the Commission. The Commission Implementing Decision laying down the rules for the monitoring data methodologies and the format for reporting passively fished waste was adopted in January 2022.

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

World Clean-up Day 2018

Brief description:

On the occasion of World Clean-up Day in September 2018, some 50 EU delegations and representations joined NGOs, embassies, schools and volunteer networks to organise beach clean activities across the world. A year later, over 80 countries took part in the #EUBeachCleanup campaign. Such activities took also place in 2020 and 2021.

Removal of plastic litter from the ocean

Yes

Names of actions:

Port Reception Facilities Directive

European Maritime, Fisheries and Aquaculture Fund

Brief description:

The Port Reception Facilities Directive provides for adequate port facilities enabling the reception of marine litter passively fished at sea by fishers. There is a requirement for port fees to be independent of the amount of passively fished waste brought ashore.

The European Maritime and Fisheries Fund and the new European Maritime, Fisheries and Aquaculture Fund provide financial support to fishing for litter activities and investments in ports to provide adequate reception facilities for lost fishing gear and marine litter.

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Commission Implementing Decision of 10.2.2021 on a standardization request to the European Committee for Standardisation as regards circular design of fishing gear in support of Directive (EU) 2019/904

Brief description:

The standard for circular design of fishing gear should provide the level playing field for Organisations to develop higher quality and lower environmental impact fishing gear that is easily reused, repaired, re-manufactured, and recycled at the end-of-life stage, and should provide Organisations the opportunity to act sustainably for healthier planet.

The deadline to deliver the standard for circular design of fishing gear is set for February 2025.

Names of actions (2):

Policy Framework for Biobased, biodegradable and compostable plastics

Brief description (2):

The European Commission adopted a [policy framework](#) on the sourcing, labelling and use of biobased plastics, and the use of biodegradable and compostable plastics on 30 November, 2022. This builds on the 2020 Circular Economy Action Plan and the 2018 Plastics Strategy.

The aim of this policy framework is to provide a better understanding of the challenges and benefits that stem from their use. It also sets out the conditions to ensure that overall, the environmental impact of their production and consumption is positive. It aims to fill policy gaps, guide future EU policy or legislation on such matters and provide orientation for the market with a view to avoiding any unsustainable developments. It will therefore guide citizens, public authorities and economic operators in their policy, purchasing or investment decisions. A common understanding across the EU on the production and use of these plastic materials will prevent differences at national level and fragmentation of the single market

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Plastics Circularity Multiplier group

Brief description:

Twenty innovation projects teamed up to support the EU efforts to steer the plastics industry into the circular economy. The recently formed Plastics Circularity Multiplier group will share resources and expertise to enhance the impact of the projects receiving funding from the EU's Horizon 2020 research and innovation funding programme. More specifically, the Plastics Circularity Multiplier group will communicate to policymakers, the public and industry on a range of EU-funded innovations on plastics.

Others

Names of actions:

1. European Circular Economy Stakeholder Platform
2. Commission Implementing Decision of 10.2.2021 on a standardization request to the European Committee for Standardisation as regards circular design of fishing gear in support of Directive (EU) 2019/904

Brief description:

The European Circular Economy Stakeholders Platform is a joint initiative of the European Commission and the European Economic and Social Committee. It is an online platform to exchange best practices, knowledge and strategies to accelerate the transition towards the circular economy. As a place for knowledge, the platform features different contributions from stakeholders: good practices, national, regional and local strategies, studies and reports on the Circular Economy and commitments. In the section "good practices", stakeholders are able to submit directly their experiences to the platform. The sections on national, regional and local strategies, on knowledge and on voluntary commitments feature examples of the type of contribution we wish to collect. Many projects and initiatives on plastics, including their alternatives, can be found in the Platform's database, which is being continuously updated.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Names of actions:

Network of European Blue Schools

Brief description:

The Network of European Blue Schools is an initiative of EU4Ocean, the European Ocean Coalition that connects diverse organisations, projects and people contributing to ocean literacy and the sustainable management of the ocean. EU4Ocean is the place where new ideas and joint actions come to life to make a bigger change. Supported by the European Commission, this bottom-up inclusive initiative aims at uniting the voices of Europeans to make the ocean a concern of everyone.

This Network of European Blue Schools aims to inspire teacher, school director or staff of education services, to challenge their students, from kindergarten, primary, lower and upper secondary, technical or vocational schools, to develop a “Find the blue” project that links them to the ocean or the sea. By successfully completing the project and sharing its results, schools will receive the European Blue School label.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Awareness raising campaign

Brief description:

The European Commission launched an awareness raising campaign to highlight the role of citizens in combatting plastic pollution and marine litter. Together with the United Nations Environment Programme and other partners, the Commission coordinates a global network of aquariums to raise public awareness about plastic pollution. Leading by example, the European Commission has also phased out all single-use plastic cups in water fountains and vending machines in all its buildings and at all meetings.

The EU not only finances dedicated projects focused on awareness-raising but also requires dissemination and communication activities in almost all EU-funded projects against litter

Awareness raising measures are part of requirements under Extended Producer Responsibility schemes for producers of single-use plastic products and producers of fishing gear.

Awareness-raising campaigns related to MPL – Local

No

Awareness-raising campaigns related to MPL - International/Regional

No

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

EU Research and Innovation

Brief description:

Through the EU Research and Innovation Programmes Horizon 2020 (2014-2020) the European Union has funded a number of projects to prevent marine litter and reduce its impact as well as to increase its knowledge base and inform citizens, for example [CLAIM](#), [GOJELLY](#), [TOPIOS](#), [SeaChange](#), [ResponSeable](#), [EUROqCHARM](#), SEALIVE, Bio-Plastics Europe, MAELSTROM, In-No-Plastic, and LABPLAS.

In the new Research and Innovation Programme (2021-2027), Horizon Europe, specific area for research on seas, oceans and inland waters, and a dedicated Mission 'Restore our Ocean and Waters by 2030', are envisaged for strengthening knowledge and understanding in order to protect, restore and sustainably manage marine, inland and coastal ecosystems and prevent pollution, including marine litter. With its systemic approach, the Mission 'Restore our Ocean and Waters by 2030' will address ocean and waters as one and play a key role in achieving climate neutrality and restoring nature by reducing plastic litter at sea, nutrient losses and the use of chemical pesticides and by making the blue economy climate-neutral and circular with zero-net maritime emissions. In the Mission work programme 2022 there are specific topics supporting the fight against pollution through research and innovation, namely:

- Actions to prevent, minimise and remediate chemical pollution, with a focus on the Mediterranean basin (indicative budget EUR 16 million);
- Prevent and eliminate litter, plastics and microplastics: Innovative solutions for waste-free European rivers (indicative budget EUR 10 million)
- Marine litter and pollution – Smart and low environmental impact fishing gears (indicative budget EUR 10 million)

Moreover, through the European Maritime, Fisheries and Aquaculture Fund (EMFAF), the EU can finance projects to prevent and fight marine litter, supporting concrete methodologies and technologies for reducing the volume and harmfulness of sea-based sources of marine litter and for removing and/or recycling it in an environmentally sound and efficient way. Member States can also support investments in port facilities to receive and treat waste from ships.

Projects financed under the previous programming period (2014-2020) are, for example:

MarGnet (<http://www.margnet.eu>)

AQUA-LIT (<https://aqua-lit.eu/>)

NetTag (<http://net-tag.eu>)

BLUENET (<https://www.bluenetproject.eu/>)

OCEANETS (<http://oceanets.eu/>).

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Brief description:

Around the EU, the four Regional Sea Conventions (in Mediterranean, Northeast Atlantic, Baltic and the Black Sea) developed and implemented, with EU technical and financial support, plans against marine litter;

G7 (in 2015) and G20 (in 2017) also adopted Action Plans against marine litter. Regional plans and initiatives against marine litter exist (Southeast and Northwest Pacific, East Asian Seas) or are under development (Persian Gulf, NE Pacific, Arctic) also outside the EU.

The EU finances projects in its neighbourhood that provide technical assistance to stakeholders, and promotes regional cooperation (Mediterranean and Black Sea) and the Commission services are working on large projects that will contribute to marine litter reduction internationally, for example in Southeast Asia, the Pacific and South America (in the order of EUR800 million, for the period 2014-17).

In May 2019, the EU played a central role to achieve international decision-making on trans-boundary movements of most plastic waste subject to the controls of the Basel Convention. The new rules (which will enter into force in 2021) will improve controls on exports and imports of plastic waste. Countries on the receiving end will be able to refuse foreign shipments of mixed and unsorted plastic waste. It is important to stress that the EU has stricter rules than the Basel Convention: this means that, from 2021, it will be prohibited for the EU to export plastic waste covered by the Basel Convention to countries outside the OECD. The EU is signatory of the Barcelona Convention for the Protection of the Marine environment and Coastal Region of the Mediterranean.

Others

6.5.3. Challenges

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify here:)

6.5.4. Best Practices

National level

- (a) Comprehensive approach to plastic production, use and disposal in the EU's Plastic Strategy as part of the EU's Circular Economy Action Plan
- (b) Binding legislation for monitoring and assessing marine litter, for defining acceptable thresholds, setting targets and for taking measures to reduce quantities of litter and harm from litter
- (c) Integrated approach covering all sources of plastic litter and microplastics
- (d) Legislation on the reduction of the impact of certain plastic products on the environment, targeting the top 10 single-use plastic products most often found on Europe's beaches and seas as well as fishing gear containing plastics
- (e) Legislation on port reception facilities for the delivery of waste from ships, including from fishing vessels and delivery of passively fished waste without additional fee.
- (f) Establishment of baselines for marine litter quantities in the coastal and marine environment
- (g) Work towards the establishment of regulatory thresholds to prevent harm from litter in the marine coastal environment, including socio-economic aspects
- (h) International and regional approach, coordination with neighbouring countries and third countries

Local level

Private sector

International cooperation

6.5.5. References and Reading Links

5. Further information: *(Please indicate further detailed information, if any, e.g. name and address of related website, name of published reports and materials)*

- A European Strategy for Plastics in a Circular Economy;

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:28:FIN>

- Directive on the reduction of the impact of certain plastic products on the environment (SUP Directive);

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0904&from=EN>

- International Ocean Governance: [an agenda for the future of our oceans](#)

https://ec.europa.eu/maritimeaffairs/policy/ocean-governance_en

- Directive on port reception facilities;

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1570190453030&uri=CELEX:32019L0883>

- Marine Strategy Framework Directive;

https://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

- Good Environmental Status – Marine Litter;

https://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index_en.htm

- Revision of the Waste Legislation:

https://ec.europa.eu/environment/waste/target_review.htm

- EU threshold value for macro litter on coastlines

<https://mcc.jrc.ec.europa.eu/main/dev.py?N=41&O=454>

Commission Implementing Decision of 10.2.2021 on a standardization request to the European Committee for Standardisation as regards circular design of fishing gear in support of Directive (EU) 2019/904

<https://ec.europa.eu/growth/tools-databases/mandates/index.cfm?fuseaction=search.welcome>

- Commission Implementing Decision (EU) 2021/958 of 31 May 2021 laying down the format for reporting data and information on fishing gear placed on the market and waste fishing gear collected in Member States and the format for the quality check report in accordance with Articles 13(1)(d) and 13(2) of Directive (EU) 2019/904 of the European Parliament and of the Council
- https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2021.211.01.0051.01.ENG&toc=OJ%3AL%3A2021%3A211%3ATOC
- Commission Implementing Regulation (EU) 2022/92 of 21 January 2022 laying down rules for the application of Directive (EU) 2019/883 of the European Parliament and of the Council as regards monitoring data methodologies and the format for reporting passively fished waste:

[EUR-Lex - 32022R0092 - EN - EUR-Lex \(europa.eu\)](#)

6.5.6. Contact Details: *(Please specify name and email address)*

6.6. France

Key Highlights

- Action Plan for the Marine Environment and Coastlines Strategic Documents (Marine Strategy Framework Directive – MSFD)
- Biodiversity plan: Target - “0 plastic reaching the sea in 2025”
- National Roadmap against Marine Litter “0 plastic reaching the sea 2019-2025”
- National Roadmap for a circular economy
- National “3R” strategy on single use plastic packaging
- Actions under OSPAR convention

6.6.1. Policy and Frameworks

National Action Plan

Name:

Action Plan for the Marine Environment and Coastlines Strategic Documents (Marine Strategy Framework Directive – MSFD)

Brief description:

the MSFD aims at protecting more effectively the marine environment across Europe by achieving the good environmental status of the EU marine waters. The comprehensive document identifies the main pressures such as marine litter. As each EU member States, France have drawn up a programme of measures to attain good environmental status. The first cycle of the programme closed in 2021, the second cycle is now being applied including dedicated actions targeting marine litter consistent with water framework directive.

Name:

Biodiversity plan: Target - “0 plastic reaching the sea in 2025”

Brief description:

the biodiversity plan has been published in 2018. It sets up the national strategy to protect biodiversity. It tackles multiple aspects of the national environmental policy such as climate adaptation and plastic reduction.

Name:

National Roadmap against Marine Litter “0 plastic reaching the sea 2019-2025”

Brief description:

the objective of this roadmap is ambitious: ending the dumping of plastic waste at sea by 2025 by implementing 35 actions aiming at preventing plastic pollution and raising awareness. This national roadmap translates the biodiversity plan into concrete actions.

Name:

National Roadmap for a circular economy
(<https://circulareconomy.europa.eu/platform/fr/node/783>)

Brief description:

It aims at achieving a transition towards a circular economy by providing national citizens with the means to adopt a more sustainable consumption and make progress in waste separation.

Name:

National “3R” strategy on single use plastic packaging

Brief description:

This strategy has been adopted by decree in April 2022 and defines actions and measures to implement the 3R objectives for 2025 as specified by the “3R” Decree for reduction, reuse and recycling of single use plastic packaging for 2021-2025; and presents a vision for reaching the goal to eliminate all single use plastic packaging by 2040

Legal Framework

Name:

The legislation for energy transition for green growth (2015)

Brief description:

The legislation for energy transition for green growth (2015) set up the prohibition of non-compostable plastic bags for 2017 and progressively extended recycling to all plastic packaging by 2022.

Name:

The legislation for Reclaiming biodiversity, nature and landscapes law (2016)

Brief description:

The legislation for Reclaiming biodiversity, nature and landscapes law (2016) has set up a ban for microbeads in cosmetics for 2018 and a ban for cotton-buds in 2020.

Name:

The legislation for trade relations balance in the agricultural sector and healthy and sustainable diet (EGAlim, 2018)

Brief description:

The legislation for trade relations balance in the agricultural sector and healthy and sustainable diet (EGAlim, 2018) has planned a ban on plastic stirrers and straws in 2020, and a ban of food containers in collective catering for 2025.

Name:

The legislation against waste and for a circular economy (2020)

Brief description:

The legislation against waste and for a circular economy (2020) has defined a goal of zero single-use plastic by 2040, with targets for deposits, recycling and reuse. This law is notably based on the principle of extended producer responsibility, according to which producers are

responsible for financing or organizing the prevention management and clean-up of waste from their products.

Name:

“3R” Decree for reduction, reuse and recycling of single use plastic packaging for 2021-2025 period

Brief description:

This executive decree has been adopted in April 2021 in the context of the legislation against waste and for a circular economy, it defines 3R objectives for single-use plastic packaging for the period 2021-2025 which are: reduce, reuse and recycle.

Indicators

Examples of targets for the legislation against waste and for circular economy:

- 5% of reused packaging by 2023
- 10% of reused packaging by 2027
- 50% less single use plastic bottles by 2030
- 100% recycled plastic by 2025
- 20% reduction target for single-use plastic packaging (expressed as tonnages of incorporated plastic / reference year 2018) by 31st December 2025, taking into account that at least 50% of this target must be achieved through the reuse of packaging
- 77% of plastic bottles collected by 2025.

Targets for marine litter reduction:

A threshold has been defined at the EU level and it sets a target for good environmental status of a maximum of 20 litter items for 100 meters of beaches.

At OSPAR: OSPAR contracting parties set the aim to reduce single-use plastics (SUP) and marine related items by 50% by 2025 and 75% by 2030. Another indicator analyses the plastic particles present in fulmar stomachs with the aim of finding no more than 0.1 g of plastics in stomach of less than 10% of fulmars. 2 other indicators concern marine litter on seafloor and the ingestion of litter by sea turtle. (France also applies the indicators of the Barcelona convention which are relatively the same as at OSPAR).

In the framework of the Marine Framework Directive environmental objectives have been defined with as target a decrease in the amount of litter found in the marine environment. Concerning the reduction of the input and presence of land-based litter found at sea and on the coastline, the indicator is the quantities of litter of terrestrial origin most represented on the seabed and on the coastline. Relatively to the reduction of the input and the presence of litter at sea from maritime activities, uses and facilities, the indicators are the quantities of the most represented litter from the main maritime activities on the coastline and on the seabed and the quantity of wastes collected in fishing ports from maritime fishing activities.

6.6.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

reinforcement of extended producer responsibility schemes and development new ones

Targeted products:

plastic packaging, plastic bottles, containers, expanded polystyrene, ...

Brief description:

The legislation against waste and for a circular economy creates 11 new EPR schemes and extend existing ones (straws, expanded polystyrene boxes, plastic confettis, etc.);

We have seen a positive improvement over the last two years

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

progressive ban of some single use plastic products

Targeted products:

Plastic bags, plastic packaging, plastic bottles, cups, cutlery, plates, containers, expanded polystyrene, ...

Brief description:

The legislation for energy transition for green growth (2015) sets up the prohibition of non-compostable plastic bags since 2017;

The legislation against waste and for a circular economy progressively forbids the sale and use of certain plastic items, it forbids the single-use plastic items listed in the European directive as well as cotton-bud and microbeads;

From January 2021: ban on straws (except in medical settings), cutlery, stirrers, EPS food containers (for take-away and ready-to-eat food), EPS bottles, plastic-coated paper plates, balloon sticks (except for industrial or professional uses), steak skewers, confetti; ban on the free distribution of water in plastic bottles in establishments receiving members of the public;

From January 2022 : ban on plastic packaging for fruit and vegetables except for packages weighing 1.5kg or more; on plastic teabags; on the free distribution of plastic toys (such as by fast-food chains); ban on public procurement of single-use plastics for use in government buildings except where required for health or safety;

From January 2023: disposable tableware is banned in restaurants serving more than 20 covers at a time, for everything that is consumed on the premises: meals are now served on washable and reusable tableware.

Numerical data, if any:

Plastic bags have been forbidden and are less found in the environment.

We cannot deduce any trends as to the presence of single-use items general in the environment yet. However, in 2020, single-use plastic items represented 19% of the litter collected during national beach litter monitoring with a median of 77 SUP/100meter. In 2021, the median was of 37 SUP/100m, representing 23% of the litter found on the French coastline. In 2022, the SUP median was 32 SUP/100m, representing 18% of the litter found on the French coastline.

We have seen a positive improvement over the last two years

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

roadmap for circular economy

Brief description:

Establishment of a roadmap for circular economy (100% of plastics to be recycled in 2025, with targets for a better collection of plastics, targets for a better recyclability of plastic products, etc.), and a study of a nation-wide deposit system for plastic bottles and other beverage containers

Introduction of a definition of bulk selling in the national legislation and creation of an obligation for shops with a surface area of more than 400 meters to make reusable containers available to consumers;

Definition of standard ranges of reusable packaging for the catering sector, as well as for fresh products and drinks;

Allocation of at least 5% of the annual packaging extended producer responsibility Organisation contribution to the development of solutions for the reuse of packaging (implementation in 2022);

Modulation of the financial contributions paid by producers to EPR Organisations according to environmental performance criteria, including the possibility of reuse;

Improvement of consumer information on the possibilities of re-use (implementation in 2022).

Multiple studies have been ordered to research centers. For instance: "Reuse of packaging and alternatives to single-use plastic packaging" or "Development of a methodological framework for comparative LCA of alternatives to single-use plastic packaging"

Numerical data, if any:

A study from ADEME noted that :

"Since 2013, the bulk retail sector has experienced considerable growth in the consumer products market consumer goods market. From a turnover of 100 million euros excluding tax in 2013, the sector has grown to 1.2 billion euros in 2019, a 12-fold increase in 6 years. The franchised network of bulk grocery stores Day by Day forecasts a turnover of 3.2 billion excluding VAT in 2027 and 8,000 points of sale in 2040 (all channels combined)."

We have seen a positive improvement

Regulations on microplastics

Yes

Names of actions:

Brief description:

The law of February 10 2020 relative to the fight against waste and the economy circular foresee that sites producing, handling or using plastic pellets, and transport of pellets be endowed of equipment and procedures to prevent the loss and leaks granules of plastics industrial that represent a part microplastics susceptible to be found in the environment.

It also foresees setting the implementation of regular inspections by independent-certified Organisations, the first audit reports will be published this year (Decree n°2021-461 of 16 April 2021 relative to the prevention of losses of granules of industrial plastics in the environment)

France contributes to European negotiations to prevent microplastics in products (REACH regulation)

To prepare potential regulation and actions, France is studying methodologies for monitoring microplastics in rivers, sewage and beach sediments.

Comments:

We have not assessed yet the impact of these actions.

Preliminary results obtained during the monitoring of microlitter on the French coastline indicated that more that 30% of microplastics with a size 1-5mm found in 2022 are pre-production pellets. Preliminary results obtained during the monitoring of microlitter (2015-2020) on surface on the French Submarine Regions indicated no decrease of quantity of microplastics (300 um-1000 um)

No particular change observed

Government actions on microplastics

Yes

Names of actions:

Microfiber filter on washing machines

Brief description:

As of January 2025, all new washing machines in France will have to include a microfiber filter to stop synthetic clothes from polluting our waterways.

No particular change observed

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Brief description:

Simplify the sorting process for citizens and extend it to all types of household plastics: Since January 1, 2020, 35 million of French can dispose of all packaging and paper, without exception, in the recycling bin. The integrality of the population should be concerned by the end of 2022;

Communication through medias on sorting;

Experiment deposit schemes;

Decision to create a new EPR Organisation for industrial and commercial packaging before 2025, including packaging from the HORECA sector (Decree No. 2023-162 of 7 March 2023 on packaging waste and establishing the extended producer responsibility channel for packaging used to market products consumed or used by professionals involved in catering activities)

The legislation against waste and for a circular economy dictates that the terms of reference of the EPR Organisations should include targets for reducing the amount of packaging placed on the market, particularly single-use plastic packaging. Failure to reach these targets is sanctioned (implementation in 2023)

Numerical data, if any:

- Total post-consumer plastic waste generation: 3,7Mt
- Total of post-consumer plastics collected for recycling : 1,3 Mt.
- The rest is either incinerated or disposed of in landfill.
- Source : ADEME, Le recyclage en France : l'essentiel 2019, 2019.

For plastic packaging, the latest figures are the following:

- total amount of post-consumer plastic packaging waste : 2,2Mt
- recycling rate (2020): 21,4%
- recovery rate 65% (including recycling)

No particular change observed

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Brief description:

- On-land actions:
 - Elaborate recommendations for municipalities in order to fight illegal dumping;
 - Provide municipalities good practices and a national guide to fight litter and monitor landfills along the coastline;

- Identify solutions for the substitution of expanded polystyrene and support fishermen toward these solutions;
- Prevent the leakage of preproduction plastic pellets into the environment through an involvement of the industries;
- The national plan for the reduction of former coastal landfills was launched in February 2022 with a €30 million fund over 10 years to rehabilitate these former sites subject to marine hazards. After an inventory, 12 sites should be rehabilitated as part of this action.
- Actions on rivers and waste and rain water:
 - Integrate objectives concerning marine litter in inland waters planning documents;
 - Launch actions to prevent the leaks of plastic filtering sieves from water treatment plants into the environment
- Actions on the seashore and at sea
 - Implement the collection and recycling of fishing gears and aquaculture waste in link with the European directive (exemple of projects: GHOSTMED, RECUPMED, etc.);
 - Projects are funded to tackle plastic pollution in the oversea territories;
 - Encourage and develop passive fishing for litter actions and actions to improve waste reception and management in ports, in accordance with the EU directive 2019/883;
 - Increase the number of ports joining the European “clean port” certification;
 - Provide fishermen and mussel farmers good practices to prevent waste from net cuttings and from mussel farming

No particular change observed

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Brief description:

Support clean-up campaign organized by NGOs on beaches and along the coastlines;

Launch of the citizen science platform on marine litter to identify the clean-up actions taking place

Numerical data, if any:

The platform gathers 355 Organisations, 600 events were recorded in 2021 via the platform, with the participation of 18,775 people. These events resulted in the collection of 883 m3 of litter, i.e. more than 65 tons of litter.

NGOs are financially supported each year.

We have seen a positive improvement over the last two years

Removal of plastic litter from the ocean

Yes

Names of actions:

France is leading fishing for litter.

Brief description:

Fishing for litter consist of the retrieval by fishermen of litter collected accidentally during fishing operations. Progressively, France is transposing the directive 2019/883 of 17/04/19 on port reception facilities for the deposit of ship waste which ask countries to report the quantity of waste accidently fished.

Numerical data, if any:

Through the sampling of 4 ports, in 2021, fishing for litter would represent 166 m3 of waste per year (based on the collection of 47 trawls)

(Source: Reseaclons 2022)

The call for projects to tackle plastic pollution in the oversea territories has granted a total of 266 548 euros granted for projects that contribute to litter retrieval before and in the coastal environment.

In addition, in 2022, nearly 250 fishing vessels from 16 ports conducted fishing for litter actions. These actions led to the removal of more than 270 cubic meter of litter from the ocean.

No particular change observed

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Brief description:

definition of standard ranges of reusable packaging for the catering sector, as well as for fresh produce and drinks

Since January 2023, packaging producers have been required to market a minimum proportion of reused packaging annually in France, i.e. 5% in 2023 and 10% in 2027 (Decree no. 2022-507 of April 8, 2022 relating to the minimum proportion of reused packaging to be placed on the market each year)

No particular change observed

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Brief description:

- Identifying new fishing gears that intend to prevent impacts in the marine environment.

In 2020, the Ministry of ecological transition launched the basis for an Accelerating Strategy “Recyclability, recycling and reincorporation of materials” in order to support innovation in the private sector. The strategy targets plastic as a priority material.

The ADEME has planned to launch a study in 2021 to characterise the sources of recoverable waste in France and to identify and analyse the most promising chemical recycling methods for treating these sources

No particular change observed

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

In 2020, the Ministry has launched the “Beaches without plastic litter” chart in link with local authorities. This chart is composed of 3 categories of actions and public awareness is one of them. Raising awareness through education is a commitment that local authorities are to implement. Multiple educational actions are already taking place.

Creation of educative marine protected areas and Organisation of collection of marine litter.

Financing Organisations to propose workshops for fishing for litter actors including fishermen and students of training Organisations in the sea trades

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Brief description:

- Actions on the seashore and at sea;
 - Implementation of awareness raising actions to the benefit of fishing and aquaculture activities;
 - raise awareness of amateur boaters through the “I sail, I sort” campaign.
- Awareness raising actions
 - put in place a citizen science platform on marine litter to identify the clean-up actions that take place, monitor the data and share best practices;
 - develop awareness raising and actions to inform citizens of the pollution, its impacts and the good practices to have.
- Multi-stakeholder involvement
 - regular consultation of stakeholders involved in marine litter issues (NGOs, experts, agencies...) through annual meetings.
 - implement voluntary commitments of NGOs, major retailers and brand owners (through the “National Pact on plastic packaging”) on prevention measures (elimination of harmful or unnecessary plastic packaging and improved recycled content) accompanied by a monitoring system with pertinent features (transparency, independence, auditable).

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Brief description:

Support the associations that launch awareness raising actions and clean-ups;

Actions with fishermen, ports, collectivities, youth, etc.

Development of marine educational area: a small coastal maritime area, managed in a participatory way by the students and teachers of an elementary school, following principles defined by a charter

“Beaches without plastic litter” chart in link with local authorities:

- indications at the entrance of beaches and signs "here begins the sea" next to certain sewers
- raise awareness among shopkeepers, sports clubs, owner of tourist establishments, etc.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Actions under OSPAR convention

Brief description:

In the context of the ICG-ML, the working group dedicated to marine litter, the OSPAR Secretariat has developed a communication kit on the actions led by the Contracting Parties in the implementation of the Marine Litter Regional Action Plan. This kit also aims at raising awareness on the work implemented through OSPAR and on the impact on marine litter.

We have seen a positive improvement over the last two years

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

The Ministry of Ecology partners up with national agencies and research centers (such as ADEME, IFREMER and CEDRE) to lead scientific research on marine litter

Brief description:

- Actions on rivers and waste and rain water
 - quantify the litter carried through rivers;
 - quantify litter carried through waste water;

- identify the areas where litter accumulates in rivers;
- identify the actions/tools to prevent or recover litter in rivers and waste and rain water and experiment them;
- evaluate the discharge of litter by rain water and elaborate strategies for action;
- define a common methodology to monitor riverine litter and microplastic pollution.
- Actions on the seashore and at sea
 - monitor litter and microplastics on beach sediments and at sea and in biota (fulmars and turtles);
 - determine the areas where litter accumulates at sea and on the coastline and the possibility of actions;
 - identify and put in place actions to improve litter collection in ports in link with the European directive.
 - quantification of marine litter/ microplastics in seafloor sediments
 - measuring the impact of microplastics from WWTPs
 - develop models for marine litter / microplastics transport at sea
 - development of an indicator of ingestion of litter by sea turtles and implementation of its monitoring
 - develop and define a common methodology to monitor microplastic pollution in sediment and biota.
- Research
 - federate and give better voice to the scientific community;
 - launch studies on plastic alternatives that do not impact health and the environment;
 - launch studies on the recycling of plastics that have been at sea

The citizen science platform on marine litter allow research centers to dispose of local datas thanks to the categorization made by collectors.

Numerical data if any:

The platform gathers 355 Organisations, 600 events were recorded in 2021 via the platform, with the participation of 18,775 people. These events resulted in the collection of 883 m3 of waste, i.e. more than 65 tons of waste.

About the inputs of rivers, a study (LEESU, 2021) indicated that the dynamic probabilistic approach would provide the most reliable results with estimates of flows from the Seine to the sea of between 100 and 200 t/year.

About the inputs of wastewater, a study (CEREMA, 2020) estimated the flow of macro-waste discharged from wastewater treatment systems in the metropolitan area to be between 2,000 and 9,000 tons of dry matter per year.

We have seen a positive improvement over the last two years

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Brief description:

Participation in regional sea conventions for knowledge and best practices sharing and implementation of action plans;

Participation in international fora, negotiations and guidelines: JRC, UNEP, IMO, UN World Ocean Assessment II, GESAMP, European Technical Group on Marine Litter, Basel convention, OSPAR convention, Barcelona Convention, etc.;

Organisation of a workshop to identify the different methodologies to monitor riverine macroplastic pollution in the OSPAR area (regional sea convention);

Promote international cooperation among European willing member states for the exchange of best practice and as an advocacy towards the European Commission to implement facilitating measures ("European Plastics Pact").

Participation in research projects to improve and standardize methods for sampling and extracting of floating microplastics (JPI Ocean: Andromeda (<https://www.andromedaproject.net/>))

We have seen a positive improvement over the last two years

6.6.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments

Nuance:

A progression in the awareness can be observed. According to the ADEME annual barometer "French and the environment" 2021, a third of French people rank waste among the two most worrying environmental problems, behind global warming and the degradation of biodiversity.

- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development

Nuance:

The strategy France 2030 plans to fund 300 million euros to the plastic recycling industry (action: strengthen investment in the recycling chain and incorporation of plastics).

- Project delays due to COVID-19

Others (Please specify here:)

6.6.4. Best Practices

National level

The prohibition of single-use plastic items (which are most found in the marine environment) is a good way to develop alternatives, to avoid plastic litter by tackling the pollution at source and to provide citizens with a safer choice of products and develop new habits of consumption. It is also very coherent with a better use of resources and the implementation of a circular economy.

(b) A citizen science platform is very useful to give a clear idea of all the clean-ups that occur and of the quantity (and qualification) of litter collected. Such a platform is a way to share the good guidelines to conduct clean-ups (to preserve biodiversity and the nesting of birds, etc.) and to communicate on this issue and on actions and link the population who wants to get involved to the NGOs already in place.

(c) The Ministry is developing the national charter “Beaches without plastic waste”. Coastal municipalities are invited to sign this charter in order to implement 15 concrete actions of awareness raising, clean-up and prevention of marine litter on their beaches. It is useful to shed a light on good practices, improve communication between municipalities and realize an annual evaluation of the actions.

The extended producer responsibility schemes allows to finance the collection and recycling of certain waste. They can be particularly relevant when certain wastes are most found whose collection can be difficult to put in place (for instance: cigarette buds).

The 2020 legislation against waste and for a circular economy creates a re-use observatory that will be responsible for assessing the relevance of reuse solutions from an environmental and economic point of view, for defining the national trajectory aiming at increasing the share of reused packaging on the market in relation to single-use packaging. It will also be in charge of supporting, in coordination with eco-Organisations, experiments and the deployment of the resources needed to achieve the objectives defined in the terms of reference.

Local level

An efficient waste management and fight against littering (fine)

Awareness raising: since 2017, some municipalities have been implementing awareness-raising campaigns through the installation of "Here begins the sea" signs near sewer drains, in order to encourage citizens to dispose of their waste in the appropriate facilities and thus prevent litter.

Municipalities have put in place nets to prevent litter from reaching the sea and rivers.

Within the framework of the government's Recovery Plan, more than 200 million euros have been earmarked for the plastics sector over the period 2020-2022 to support companies and local authorities in their efforts to reuse and recycle (ORPLAST is one of them).

Private sector

Development of links with the industrial sector: the “National Pact on plastic packaging” allows a commitment from the companies and the implementation of recycling, reusing and

reducing plastic packaging targets. Moreover, an exceptional financial support scheme for the sale of recycled materials (to compensate the difference between the price of recycled materials and virgin materials” has been implemented by the ADEME at the end of 2020, enabling 60 projects to be supported. In 2021, the ADEME has also launched the ORPLAST project, a financial scheme aiming at increasing the incorporation of plastic recycling raw materials by plastic manufacturers as a substitute for virgin material by supporting feasibility/test studies and investments (adaptation of equipments, etc...).

The Clean Sweep Operation is an international program for the actors of the plastic industry, and designed to prevent the loss of plastic pellets in the aquatic environment. It provides companies a guide with good practices to follow.

International cooperation

Participation to meetings and working groups (UN, G7, G20, RSC, EU, etc)

France organized in 2017 and 2019 a workshop to share results and methodologies of existing projects analyzing riverine plastic pollution. Harmonized methodologies are needed for a long-term plastic pollution monitoring in rivers and should help assess measures efficiency. The outputs of this workshop was an exchange of knowledge, improved relations between researchers and NGOs running riverine litter monitoring projects and a first draft summarizing advantages and disadvantages of every method discussed during the workshop.

6.6.5. References and Reading Links

Anti waste law for a circular economy

<https://www.ecologie.gouv.fr/loi-anti-gaspillage-economie-circulaire>

https://circulareconomy.europa.eu/platform/sites/default/files/anti-waste_law_in_the_daily_lives_of_french_people.pdf

6.6.6. Contact Details: *(Please specify name and email address)*

- Mr. Lucas LEPELIER - lucas.leperlier@developpement-durable.gouv.fr

6.7. Germany

Key Highlights

- the German Resource Efficiency Programme (ProgRess) in February 2012
- MSFD Programme of Measures (PoM)
- Action Plan “Nein zur Wegwerfgesellschaft”
- Runder Tisch Meeresmüll (RTM, www.muell-im-meer.de)
- Amendment of the Packaging Act
- Legal Frameworks :
 - Kreislaufwirtschaftsgesetz (KrWG)
 - Wasserhaushaltsgesetz (WHG)
 - Hohe-See-Einbringungsgesetz (HSEG)
- The German national ecolabel “Blue Angel” is currently working on criteria for artificial grass pitches without microplastic releasing infill.
- The “Reduction of litter already present in the marine environment” is part of the German Programme of Measures under the MSFD (Measure UZ5-07)

6.7.1. Policy and Frameworks

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

German Resource Efficiency Program III (ProgRess III)

MSFD Programme of Measures (PoM)

Action Plan “Nein zur Wegwerfgesellschaft”

Brief description:

ProgRess III:

With the adoption of the German Resource Efficiency Programme (ProgRess) in February 2012, Germany was among the first countries to determine targets, guiding principles and approaches to the conservation of natural resources. The German government is obligated to submit a report to the Bundestag on developments in resource efficiency in Germany every four years and to update the programme. The first update report, ProgRess II, was adopted by the Federal Cabinet on 2 March 2016, the second, ProgRess III, on 17 June 2020. ProgRess III includes measure 78:

“Initiating an international convention for protecting the world’s oceans from plastic waste

The German government, together with other ambitious countries, is striving to initiate an international convention on protecting the world’s oceans from plastic waste. Plastic waste entering our oceans is currently a major environmental problem and puts an enormous strain

on natural resources that endangers organisms, marine ecosystems and human health, for example through microplastics which can be absorbed by eating fish. At the fourth session of the United Nations Environment Assembly (UNEA 4), the proposal for an international convention for protecting the oceans from plastic waste was met with widespread support. However, a mandate has not yet been issued. Together with like-minded countries, the German government will draw up an agenda for further steps to enhance cooperation on the prevention of plastic waste. An important intermediate target is to achieve a consensus at UNEA 5 on a mandate to develop a legally binding convention.”

MSFD PoM:

The Marine Strategy Framework Directive (MSFD, 2008/56/EC) aims at achieving or maintaining a Good Environmental Status in European Marine Waters. Descriptor 10 in Annex I demands, that marine litter should not harm the marine environment. To achieve this goal, a monitoring of litter in the different marine compartments has been set up and 11 measures have been adopted to tackle the relevant sea- and land-based sources.

Action Plan

At the end of 2018, the German Federal Environment Ministry presented its 5-point plan for less plastic and more recycling. The goal: Out of the throwaway society. With the 5-point plan, the BMU has initiated important steps toward less superfluous packaging, fewer products to throw away, less waste, and more recycling. From currently more and more waste to less and less waste. The following priorities are important:

Avoiding superfluous products and packaging - and banning them if necessary. This applies, for example, to disposable products, but also to deliberately used microplastics in cosmetics.

Make packaging more environmentally friendly, strengthen reusable packaging.

Promote environmentally friendly product design.

Close material cycles through intelligent and high-quality recycling.

Reducing input of plastic litter into the environment

National Action Plan

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

German Resource Efficiency Program III (ProgRes III)

MSFD Programme of Measures (PoM)

Action Plan “Nein zur Wegwerfgesellschaft”

Brief description:

ProgRes III:

With the adoption of the German Resource Efficiency Programme (ProgRes) in February 2012, Germany was among the first countries to determine targets, guiding principles and approaches to the conservation of natural resources. The German government is obligated to submit a report to the Bundestag on developments in resource efficiency in Germany every four years and to update the programme. The first update report, ProgRes II, was adopted by the Federal Cabinet on 2 March 2016, the second, ProgRes III, on 17 June 2020. ProgRes III includes measure 78:

“Initiating an international convention for protecting the world’s oceans from plastic waste

The German government, together with other ambitious countries, is striving to initiate an international convention on protecting the world’s oceans from plastic waste. Plastic waste entering our oceans is currently a major environmental problem and puts an enormous strain on natural resources that endangers organisms, marine ecosystems and human health, for example through microplastics which can be absorbed by eating fish. At the fourth session of the United Nations Environment Assembly (UNEA 4), the proposal for an international convention for protecting the oceans from plastic waste was met with widespread support. However, a mandate has not yet been issued. Together with like-minded countries, the German government will draw up an agenda for further steps to enhance cooperation on the prevention of plastic waste. An important intermediate target is to achieve a consensus at UNEA 5 on a mandate to develop a legally binding convention.”

MSFD PoM:

The Marine Strategy Framework Directive (MSFD, 2008/56/EC) aims at achieving or maintaining a Good Environmental Status in European Marine Waters. Descriptor 10 in Annex I demands, that marine litter should not harm the marine environment. To achieve this goal, a monitoring of litter in the different marine compartments has been set up and 11 measures have been adopted to tackle the relevant sea- and land-based sources.

Action Plan

At the end of 2018, the German Federal Environment Ministry presented its 5-point plan for less plastic and more recycling. The goal: Out of the throwaway society. With the 5-point plan, the BMU has initiated important steps toward less superfluous packaging, fewer products to throw away, less waste, and more recycling. From currently more and more waste to less and less waste. The following priorities are important:

Avoiding superfluous products and packaging - and banning them if necessary. This applies, for example, to disposable products, but also to deliberately used microplastics in cosmetics.

Make packaging more environmentally friendly, strengthen reusable packaging.

Promote environmentally friendly product design.

Close material cycles through intelligent and high-quality recycling.

Reducing input of plastic litter into the environment

Legal Framework

Yes

If yes, list your country’s legislation including name and brief description here:

Name:

Kreislaufwirtschaftsgesetz (KrWG)

Wasserhaushaltsgesetz (WHG)

Hohe-See-Einbringungsgesetz (HSEG)

Indicators

Yes

If yes, list your indicators here:

Acc. to EU MSFD and regional provisions (OSPAR, HELCOM): Beach litter, litter on the seafloor and plastic particles in the stomachs of seabirds (Northern fulmars are common/core indicators

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Target region supported by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

No

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Amendment of the Packaging Act

Targeted products:

plastic bags with a thickness between 15- 50 micrometers

Brief description:

Since 1.1.2022 the use of plastic bags with a thickness between 15- 50 micrometers is forbidden by law.

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Amendment of the Packaging Act

Brief description:

- A mandatory minimum use of recyclates for certain single-use plastic beverage bottles from 2025

- an obligation to offer reusable packaging alternatives for single-use plastic food packaging and single-use beverage cups since 2023

- An extension of the compulsory deposit to almost all single-use plastic beverage bottles and all beverage cans since 2022

Regulations on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Others (please specify)

The German national ecolabel “Blue Angel” is currently working on criteria for artificial grass pitches without microplastic releasing infill. The criteria will be of special interest for green public procurement of cities / communes.

Environmentally sound waste management

Enforcement of proper waste management system

No

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

No

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

The “Reduction of litter already present in the marine environment” is part of the German Programme of Measures under the MSFD (Measure UZ5-07)

Brief description:

See also

<https://www.muell-im-meer.de/ergebnisse/hinweise-zur-durchfuehrung-von-kuestennahen-umweltgerechten-muellsammelaktionen-best>

Removal of plastic litter from the ocean

Yes

Names of actions:

The “Reduction of litter already present in the marine environment” is part of the German Programme of Measures under the MSFD (Measure UZ5-07)

Brief description:

There are various initiatives for installing technique in order to remove plastics from the ocean. The Fishing for Litter initiative is widely implemented in German harbors and some others also passed the pilot phase, e.g. the seabins, the Seekuh or removal campaigns by divers of derelict fishing gear.

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

- Criteria for “Reusable systems to-go for food and beverages (DE-UZ 210)” of the German national ecolabel “Blue Angel”.
- Amendment of the Packaging Act

Brief description:

- A mandatory minimum use of recyclates for certain single-use plastic beverage bottles from 2025. The ecolabel’s aim for reusable cup systems is to reduce the number of disposable cups and to strengthen environmentally friendly reusable cup systems. The criteria include requirements for the cups themselves as well as for the suppliers.
- an obligation to offer reusable packaging alternatives for single-use plastic food packaging and single-use beverage cups

Public-private partnerships for creating and implementing innovative solution

No

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

The “Inclusion of the topic of marine litter in learning goals” is part of the German Programme of Measures under the MSFD (Measure UZ5-01). An education program to reach out to different age classes and professionals who work in the marine environment has been developed and disseminated. Education material is available from various initiatives initiated by public authorities and NGOs.

See also: www.muell-im-meer.de

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Runder Tisch Meeressmüll (RTM, www.muell-im-meer.de)

Brief description:

The “Runder Tisch Meeressmüll” (www.muell-im-meer.de) has been set up to operationalize the national MSDF PoM. Around 130 stakeholders from different sectors are involved. It also serves as a great network to spread e.g. initiatives for awareness raising.

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

One measure of the MSFD regards “Local provisions” (UZ5-08).

Brief description:

The RTM has produced two guidances for municipalities on best practice examples to prevent plastic waste and on legal options to tackle marine litter. In addition DE is partner in the Interreg-project CAPonLITTER,. In this context an Action Plan has been developed which major cities/municipalities are currently signing up to.

See also:

[https://www.muell-im-](https://www.muell-im-meer.de/Kommunen-Regelungsmoeglichkeiten)

[meer.de/Kommunen-Regelungsmoeglichkeiten](https://www.muell-im-meer.de/Kommunen-Best-Practice)

<https://www.muell-im-meer.de/Kommunen-Best-Practice>

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Within Grant Programme “Marine:DeFraG”

OSPAR/HELCOM Regional Action Plans on Marine Litter

Brief description:

The German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer (BMUV) is supporting the engagement of the German government with its Grant Programme against Marine Litter ‘Marine Debris Framework – Regional hubs around the globe’ (Marine: DeFRAG). The main goal of the Grant Programme is to prevent plastic waste at the source.

See <https://www.z-u-g.org/en/responsibilities-and-tasks/grant-programme-against-marine-litter/>

Both Regional Sea Conventions for the Protection of the North-East-Atlantic (OSPAR) and the Baltic Sea (HELCOM) have Regional Action Plans in place which address the relevant sea- and land-based sources for Marine Litter as well as awareness raising and removal. DE is leading on a number of actions.

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

R&D projects to test monitoring methods for litter in the different marine compartments and biota

Brief description:

Meso litter on beaches

Floating litter (ship and airborne)

Remote sensing

Lost angling gear

Secondary microplastics in marine mammals

Microplastics in fish

Entanglement in sea bird breeding colonies

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

No

Recycling system improvement

Proper waste management system (including lack of local capacity)

Data collection related to waste in general

Data collection related to marine plastic litter

Lack of awareness among citizens, business, local governments

Lack of financial incentives for waste treatment in general

Lack of financial incentives for technology development

Project delays due to COVID-19

National level

Local level

Private sector

International cooperation

6.7.2. Measures and Achievements

6.7.3. Challenges

6.7.4. Best Practices

6.7.5. References and Reading Links

6.7.6. Contact Details: *(Please specify name and email address)*

6.8. India

Key Highlights

- The National Marine Litter Policy of India and Plastic Waste Management Rules
- The Plastic Waste Management (Amendment) Rules,
 - Extended Producer Responsibility (EPR) on plastic packaging
 - Ban on identified single-use plastic items
- Policy to promote innovative solutions for eco-alternatives to single-use plastic
- BIS notification on "Classification for cosmetic raw materials and adjuncts
- National Policy on Marine Fisheries, 2017
- Ghost Gear Upcycling
- Cleanup of marine plastic litter
- Community participation and Public-private partnerships in plastic waste management
- Education and awareness-raising on Lifestyle for the Environment (LiFE)
- Monitoring and Scientific research on marine plastic litter
- International collaboration on marine litter assessment and management

6.8.1. Policy and Frameworks

National Action Plan

In preparation

Please provide the name of your action plan or strategy with a brief description here:

Name:

National Marine Litter Policy of India and Plastic Waste Management Rules

Brief description:

Steps towards the formulation of a national marine litter policy have been initiated by the Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Earth Sciences (MoES), Ministry of Science & Technology, and Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D). The MoFAH&D has established a National Task Force for preparation of National Action Plan identifying the actions to be implemented in the coming years. Studies have been undertaken to identify the source to sink of litter, especially the plastic waste that flows into India's coast and ocean waters. The exercise was the first step towards framing a national marine litter policy with the objective of ocean cleanup, which is in line with UNEP's "Clean Seas Campaign".

The National Marine Litter Policy aims to:

- track and monitor litter in riverine, coastal, ocean, and marine ecosystems,
- Monitoring of Marine Litter through remote sensing and AI Technique
- develop circular economy solutions for preventing marine litter in ecosystems,
- implement extended producer responsibility (EPR) to reduce, reuse, and recycle plastics with the participation of the private sector, such as the recycling industry and other stakeholders, as well as informal waste recyclers,
- implement management and mitigation measures to overcome the impact of marine litter for clean and healthy oceans,
- engage in the development of sustainable coastal tourism through the ecolabel certification of beaches to minimize beach litter.
- reduce and control the sea based marine plastic litter in the country, especially in the shipping and fisheries sectors in India

Several studies have been undertaken to map the marine litter, which is important to the policy framework. Further, the policy promotes economic, ecological, and public health, driving innovation and technology, capacity building and supporting international cooperation, which are critical components of a sustainable blue economy. Further, several national workshops have been conducted and envisaged involving scientists from different research institutions, stakeholders, policymakers, industry experts, and academic experts to prepare a roadmap for formulating the National Marine Litter Policy and evolve best practices for management of marine litter.

Plastic Waste Management Rules

- Land based sources of unmanaged and littered plastic waste are major contributors to marine plastic litter. The strategy adopted by the Ministry of Environment, Forest and Climate Change, Government of India for reducing land based sources of unmanaged and littered plastic waste, has the following two pillars:
- Ban on single use plastic items, which have high littering potential and low utility, and thus cannot be collected, and
- Implementation extended producer responsibility on plastic packaging

The following steps have been taken by the Ministry of Environment, Forest and Climate Change, Government of India:

A country-wide ban has been imposed on identified single use plastic items from 1st July 2022. The ban was notified on 12th August 2021. There is also a ban imposed on light weight plastic carry bags in order to have better collection and reuse. The Ministry of Environment, Forest and Climate Change notified the Guidelines on Extended Producer Responsibility (EPR) for plastic packaging vide Plastic Waste Management (Amendment) Rules, 2022, on 16th February 2022. The Guidelines stipulate mandatory targets on EPR, recycling of plastic packaging waste, reuse of rigid plastic packaging and use of recycled plastic content. The guidelines provide for moving towards sustainable plastic packaging and reducing the plastic foot print. The implementation of ban on identified single use plastic items coupled with extended producer responsibility on plastic packaging will reduce pollution caused by littered and unmanaged plastic waste. The implementation of EPR on plastic packaging will lead to

- reduction in littered and unmanaged plastic waste,
- promote circular economy of plastic packaging waste,
- promote development of new alternatives to plastics

- development of new business models, and
- move towards sustainable plastic packaging

The EPR framework under Plastic Waste Management Rules, at present, has around 21000 registered Producers, Importers, and Brand Owners, with a cumulative EPR target of around 3 million tonnes. There are around 2000 registered plastic waste processors covered under the EPR framework.

The implementation of ban on identified single use plastic items coupled with extended producer responsibility on plastic packaging will reduce pollution caused by littered and unmanaged plastic waste.

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

1) The Environment (Protection) Act (1986)

Brief description:

The Environment (Protection) Act was enacted in 1986 with the objective of providing for the protection and improvement of the environment (which includes water, air, land, human beings, other living creatures, plants, microorganisms, and properties) and for matters connected therewith. The act was last amended in 1991.

In order to reduce the land based sources of unmanaged and littered plastic waste following rules have been notified:

2) Solid Wastes Management Rules, 2016

Brief description:

The Solid Waste Management Rules, 2016, are based upon the principles of circular economy the focus of the rules is processing of solid waste including plastic waste. The Rules mandate specific role and responsibilities of stakeholders including local authorities. The criteria for sanitary landfill sites and solid waste processing facilities including pollution control measures are specified.

3) Plastic Waste Management Rules, 2016

Brief description:

The Government of India notified the Plastic Waste Management (PWM) Rules, 2016 in suppression of the earlier Plastic Waste (Management and Handling) Rules, 2011. The salient features of the PWM Rules, 2016 are:

These rules are applicable to every Waste Generator, Local Body, Gram Panchayat, Importer, Producer and Brand Owner.

- Carry bag made of virgin or recycled plastic, less than 120 microns in thickness are prohibited. The provision of thickness is not applicable to carry bags made up of compostable plastic, complying IS/ISO: 17088.
- Waste Generators including institutional generators, event organisers are mandated not to litter the plastic waste, segregate waste and handover to authorized agency and pay user fee as prescribed by ULB and spot fine in case of violation.
- Producer, Importer and Brand Owner shall fulfill Extended Producer Responsibility as

per Guidelines for EPR on plastic packaging.

- Encourage use of non-recyclable plastic waste for road construction, energy recovery, waste to oil or co-processing in cement kilns etc.
- Central Pollution Control Board/State Pollution Control Boards/Pollution Control Committees along with Urban Development Department of State / Union Territory (are the authorities for enforcement of the provisions of PWM Rules, 2016, relating to registration, manufacture and use of plastic products and multi-layered packaging, processing and disposal of plastic wastes.
- Urban Development of the State or a Union Territory and concerned Gram Panchayat in the rural area of the State or a Union Territory are the authority for enforcement of the provisions of PWM Rules.

4) The Plastic Waste Management (Amendment) Rules, 2021

Brief description:

The Amendment notified on 12th August 2021 bans identified single use plastic items which have high littering potential and low utility with effect from 1st July 2022. The amendment prohibits manufacture, import, stocking, distribution, sale and use of the following identified single use plastic items:

- Ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene [Thermocol] for decoration;
- Plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron, stirrers.

The notification also prohibits manufacture, import, stocking, distribution, sale and use of plastic carry bags having thickness less than seventy-five microns with effect from 30th September 2021, and having thickness less than thickness of one hundred and twenty microns with effect from the 31st December, 2022. Further, non-woven plastic carry bags shall not be less than 60 GSM with effect from the 30th September 2021.

5) The Plastic Waste Management (Amendment) Rules, 2022

Brief description:

Guidelines on Extended Producer Responsibility (EPR) for plastic packaging vide Plastic Waste Management (Amendment) Rules, 2022, on 16th February 2022. The EPR Guidelines provide a framework for environmentally sound management of plastic packaging introduced in the market by Producers, Importers and Brand owners (PIBOs) till end of its life in order to reduce environmental pollution caused by littered and unmanaged plastic packaging waste and leading to protecting and improving the quality of the environment. The EPR guidelines stipulate the following mandatory targets for Producer, Importer and brand owners dealing with plastic packaging:

- extended producer responsibility,
- recycling of plastic packaging waste collected under EPR,
- reuse of rigid plastic packaging and
- use of recycled plastic content in plastic packaging

The EPR Guidelines prescribes role and responsibilities of Producer, Importer and Brand owners, Plastic waste processors, State Pollution Control Board/Pollution Control Committees and Central Pollution Control Board. The EPR Guidelines provides methodology for fulfillment of EPR obligations. The provision for verification, audit and monitoring of PIBOs and Plastic Waste Processors (PWP) has also been made.

Indicators

Yes

Please list your indicators here:

The indicators for reduction in land based sources of unmanaged and littered plastic waste

- Plastic waste processing
- Plastic packaging covered under EPR for a particular year
- Plastic Packaging waste recycled/processed in a particular year
- Reuse of rigid plastic packaging
- Use of recycled plastic content
- Enforcement of ban on identified single use plastic items

6.8.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/ to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

No

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Plastic Waste Management (Amendment) Rules, 2021

Targeted products:

- Ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene [Thermocol] for decoration;
- Plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron, stirrers.

The notification also prohibits manufacture, import, stocking, distribution, sale and use of plastic carry bags having thickness less than seventy-five microns with effect from 30th September 2021, and having thickness less than thickness of one hundred and twenty microns with effect from the 31st December, 2022. Further, non-woven plastic carry bags shall not be less than 60 GSM with effect from the 30th September 2021

Directions have been issued under Section 5 of the Environment (Protection) Act, 1986 to the following:

- Plastic raw material manufacturers should stop supplying plastic raw materials for the manufacture of banned single-use plastic items.
- SPCBs/PCCs were directed to revoke / modify consent / registration issued to banned SUP producers.
- State Urban Development Department has been directed to take necessary action for the implementation of the SUP ban. Separately, customs authorities have been asked to stop the import of banned SUP items.

The following online platforms are in operation for effective monitoring of the ban on identified single-use plastic items and plastic waste management in the country: (a) National Dashboard for monitoring of comprehensive action plan implementation, (b) CPCB Monitoring Module for Compliance on Elimination of Single-Use-Plastic, and (c) CPCB Grievance Redressal App.

We have seen a positive improvement over the last two years

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Plastic Waste Management (Amendment) Rules, 2022 – Guidelines for Extended Producer Responsibility on Plastic Packaging and

Brief description:

Guidelines for Extended Producer Responsibility on Plastic Packaging

The mandatory targets for reuse of rigid plastic packaging and use of recycled plastic content in packaging and steps to be taken towards sustainable plastic packaging encourage sustainable / circular product design and reduction in plastic footprint.

Regulations on microplastics

In preparation

Names of regulations:

BIS notification on

“Classification for cosmetic raw materials and adjuncts, Part 2: List of raw materials generally not recognised as safe for use in cosmetics” by incorporating non-biodegradable polymeric microbeads in the banned list.

Brief description:

Ban on the use of non-biodegradable polymeric in personal care products from 2020

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

1. **Plastic Waste Management Rules, 2016; Solid Waste Management Rules, 2016; and Life Style for Environment (LiFE)**

Enforcement of Rules is done by State Pollution Control Board/Pollution Control Committee and Central Pollution Control Board

We have seen a positive improvement over the last two years

Prevention of littering, illegal dumping, and unintentional leakage of waste into the ocean

Yes

Names of actions:

Plastic Waste Management Rules, 2016 and Solid Waste Management Rules, 2016 and

Lifestyle for the Environment

Brief description:

Littering by waste generators is prohibited as per **Plastic Waste Management Rules, 2016 and Solid Waste Management Rules, 2016**

Lifestyle for the Environment" (the "LiFE Movement"). This initiative encourages a lifestyle that focuses on mindful and deliberate utilization of resources and aims to change the present 'use and dispose of' consumption habits.

A successful amalgamation of this global initiative with beach cleaning, environmental awareness, and a plastic-free life needs collective effort and robust action by the Pro-Planet People.

- Segregated waste disposal.
- Reduced single-use plastic
- Beach and river cleaning initiatives.
- Installation of trash booms at rivers and tidal creeks.
- In public places PET bottle recycling machines are installed.
- Patrolling along the beaches to prevent littering and illegal dumping of waste.

Abandoned, lost, or otherwise discarded fishing gear (ALDFG) recycling facility at fishing harbours to recycle plastic waste collected by fishermen to produce a new material used for road surfacing.

We have seen a positive improvement over the last two years

Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?

Yes

- **Clean Seas Program**

MoES has joined the United Nations on the "Clean Seas Program" to develop strategies for estimating and reducing Marine Litter/Plastic in the oceans, which is also a part of SDG 14.

- **National Marine Litter Policy**

The NML Policy which is under development, entails development of beaches for eco-tourism, with a preference for clean beaches and 'zero waste' approaches.

- **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**

Brief description: Blue revolution involves sustainable and responsible development of the fisheries sector. As a part of Swachh Bharat Abhiyan, support under PMMSY support prevention of pollution of oceans and seas and protection of their ecology (swachh sagar).

- **National Action Plan on Marine Plastic Litter from Sea based sources**

- The NAP on Marine Plastic litter which is under development aims to prevent, reduce and control the SBMPL in the country, especially in the shipping and fisheries sectors in India.

- **National Policy on Marine Fisheries, 2017**

- Ensure the health and ecological integrity of the marine living resources of India's Exclusive Economic Zone (EEZ) through sustainable harvests for the benefit of present and future generations of the nation.
- The policy highlights marine environment and pollution issues including microplastics and ghost nets. The policy supports regulatory mechanisms to control pollutants from land and sea-based sources which can be effectively controlled.

We have seen a positive improvement over the last two years

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

- Swachh Sagar, Surakshit Sagar/Clean Coast, Safe Seas

A 75-day citizen-led initiative aimed at improving coastal and ocean health via community action by Ministry of Earth Sciences and information compiled by National Centre for Coastal Research. Beach cleaning activities were carried out simultaneously along India's entire coastline. The coastal cleanup campaign took place at 75 beaches across the country, with 75 volunteers for every kilometer of coastline.

- Swachh-Nirmal Tat Abhiyan

Brief description: It is a nationwide cleanliness-cum-awareness drive conducted at 50 identified beaches located in 10 coastal states/UTs of India.

- Blue Flag certification

Brief description: Blue Flag certification is a globally recognized eco-label. In India, presently, twelve beaches have been awarded the Blue Flag certification. The solid waste management (SWM) system at Blue Flag Beach enables waste collection, segregation, recycling and disposal. The efforts include managing the generated solid waste in a scientific and holistic manner by installing composting and other methodologies for transforming solid waste into useful commodities. In addition, regular cleaning is carried out to remove small litter materials such as cigarette butts, plastic wrappers, bags, glass, metal particles, etc. with the help of manual cleaning and mechanical vehicles called surf rake.

We have seen a positive improvement over the last two years

Numerical data, if any:

Aimed to reduce about 1500 tonnes of plastic waste

Removal of plastic litter from the ocean

Yes

Names of actions:

Swachh Sagar, Surakshit Sagar

Brief description:

Swachh Sagar, Surakshit Sagar/Clean Coast, Safe Sea Campaign, is a 75-day citizen-led initiative, aimed at improving coastal and ocean health via community action. The goals of the campaign include 1) Consume Responsibly; 2) Segregate waste at home and; 3) Dispose Responsibly; which target transformation and environmental conservation through behavior change.

Names of actions:

Swachhata Action Plan

Brief description:

Swachha Sagar Abhiyan is a clean ocean mission framework developed by the Ministry of Earth Sciences and their subordinate research institutions, and studies are being conducted to estimate the level of contamination and understand the effect of microplastics on biota.

Names of actions:

Coastal Clean Seas

Brief description:

India is a signatory to the United Nations' "Coastal Clean Seas" campaign. Regular beach clean-up activities were planned in this campaign for the period of 2018-2022. During this period, National Centre for Coastal Research in association with Indian Coast Guard, other governmental and non-governmental research and educational Institutes cleaned more than 150 beaches. The campaign discovered that single-use plastics accounted for more than half of all plastic waste. Single-use plastics are now prohibited in India as of July 1, 2022.

Names of actions:

Suchitwa Sagaram:

Brief description:

An initiative asking the fishermen to bring plastics back to the shore. Kerala fishermen now fishing for plastic to clean up the seas.

We have seen a positive improvement over the last two years

Numerical data, if any:

Aimed to reduce about 1500 tonnes of plastic waste

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Ministry of Micro, Small and Medium Enterprises (MSMEs)

Brief description:

Steps are also being taken to promote the manufacturing of alternatives to banned single-use plastic items by bringing in technology and innovations, facilitating credit availability and access, promoting availability and adoption of alternatives, and building capacities.

MoEFCC organized an India Plastic Challenge Hackathon in 2021 to develop eco-alternatives.

Two startups in the area of alternatives to single use plastics were awarded.

A completely biodegradable alternative to thermocol from paddy straw waste (Parali) has been developed. This innovation will use Parali and also replace thermocol.

Packaging material from seaweed has been developed as innovative alternative to single-use plastics.

Governments have been taking initiatives to promote eco-alternatives to ban single-use plastic items, in line with the Lifestyle for Environment (LiFE) mission.

National Expo on Eco-Alternatives to single use plastic and start up conference was held 2022 on 26th and 27th September 2022 in Chennai. More than 150 manufacturers of eco-alternatives from across the country participated in the Expo. The eco-alternatives included material made from sea-weed, bagasse, rice and wheat bran, rice stubble, plant and agricultural residue, banana and areca leaves, jute and cloth

Self-help groups have been mobilized in the states to stitch cloth bags, and in some cases, cloth bag vending machines have been set up in marketplaces.

Others

Usage of plastic waste in road construction was initiated

Defence Research and Development Organisation (DRDO) Lab DFRL has developed biodegradable cutlery technology.

We have seen a positive improvement over the last two years

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Ghost Gear Upcycling

Brief description:

DSM Engineering Materials, a Pune-based company working on converting 'ghost nets' collected from the sea into surfboards. Already 6000 tonnes of 'ghost nets' have been converted, while presently 2000 tonnes of ghost nets are processed annually.

Greenwaves Environmental Solutions is collaborating with WWF India on the 'Ghost Gear Upcycling' project. The project upcycles ghost nets into products like bracelets, pouches, doormats, and pots. The concept of upcycling fish nets is aimed at reducing the impact of marine pollution and providing alternative livelihoods for fisherwomen.

Numerical data, if any:

Presently about 2000 tonnes of ghost nets are processed annually.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

In preparation

Names of actions:

National Education Policy, 2020

Brief description:

In India, environmental education is mandated by the Supreme Court of India and overseen by the National Council of Education Research and Training (NCERT). The National Curriculum Framework, developed by NCERT, includes a "Protection of the Environment" component that focuses on environmental education through human behaviour which is directly related to man's interaction with the biophysical environment. Environmental education in the student's curriculum will teach students the importance of following good littering practices.

Names of actions:

Climate Literacy and Marine Litter Management (CLMLM)

Brief description:

It is an education and communication campaign. The campaign design provided space for knowledge sharing and community dialogue with a view to developing insights for future adaptation and livelihood action.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Beach Environment & Aesthetic Management Service (BEAMS)

Brief description:

Under this program, various activities related to pollution abatement, beach awareness, aesthetics, safety, surveillance service, and environmental education, etc., have been done at identified beaches with the aim of achieving international standards for Blue Flag Beach Certification.

Names of actions:

Swachh Sagar, Surakshit Sagar/ Clean Coast, Safe Sea

Brief description:

A mobile app called “Eco Mitram” was launched to spread awareness about the campaign and to encourage voluntary registration for the beach cleaning activity. It is the first of its kind and longest-running coastal cleanup campaign in the world, with the highest number of people participating in it. Through this campaign, a mass behavioural change among the masses is intended by raising awareness about how plastic usage is destroying our marine life. A mobile app and dashboard named “SS Sagar” was developed and launched by National Centre for Coastal Research for the beach litter data collection.

Names of actions:

Swachh-Nirmal Tat Abhiyan

Brief description:

It is a nation-wide cleanliness-cum-awareness drive conducted at 50 identified beaches located in 10 coastal states/UTs of India.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Versova beach

Brief description:

The largest beach clean-up program joined by 1,000 volunteers, including local residents of Versova, slum-dwellers, politicians, celebrities, and schoolchildren. Cleanup has been carried out every Sunday for the past several years.

Names of actions:

Clean-up drive at Andaman and Nicobar Islands

Brief description:

Clean-up drives and public awareness campaigns were held on the major tourist beaches of the Andaman and Nicobar Islands. The participants included multiple groups, such as government, non-government and local groups, to engage in concerted beach clean-up activities.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

UNEP Tide Turners' Plastic Challenge

Brief description:

The challenge is a global initiative to educate young people about plastic pollution. It is developed by the United Nations Environment Programme's (UNEP) Clean Seas Campaign, supported by the UK Government's Department of Environment, Food, and Agriculture.

We have seen a positive improvement over the last two years

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Research projects undertaken by various governmental Organisations

Brief description:

- NCSCM conducted an extensive field assessment of marine litter and microplastics along the Indian Coast and the oceanic islands.
- NCCR continuously monitors the marine litter in beaches and oceans and working with Cefas (UK), CSIRO (Australia), JAMSTEC (Japan) and Norway towards the development of techniques for quantification of marine litter and mitigation of marine plastic debris. A publication on research work has been documented in Marine Pollution Bulletin, which clearly shows reduction in marine litter after implementation of ban on single use plastics. Copy enclosed.
- CSIR-NIO carried out research on microplastics in personal care products, organic pollutants such as PAHs and POPs.
- Researchers from various colleges, universities, and other research Organisations have carried out scientific research on plastic flows and ocean surface microplastics.
- Fishery Survey of India (FSI), Govt. of India is conducting regular field assessment of plastic litter including ghost nets at fishing grounds in the Indian Exclusive Economic Zone (EEZ). In addition, FSI is lead agency in International Maritime Organisation (IMO)-Food and Agricultural Organisation (FAO) Glolitter partnership project.
- Indian Council of Agricultural Research (ICAR)- Central Marine Fisheries Research Institute (CMFRI), is conducting studies on various aspects of marine litter, abundance of marine litter in fishing grounds and beaches, developing litter maps, assessing presence of microplastics in oceanic environment and in biological systems

We have seen a positive improvement over the last two years

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Others

Yes

Names of actions:

Promotion of Countermeasures against Marine Plastic Litter in Southeast Asia and India

Brief description:

The United Nations Environment Programme (UNEP) implemented a project funded by the Ministry of Foreign Affairs (MOFA), and the Government of Japan in collaboration with local partners such as line ministries, academia, and civil society, aimed to develop countermeasures to reduce plastic waste in the regions of the Mekong basin, the Ganga Basin and Mumbai by conducting surveys and outreach activities.

Names of actions:

Circular Economy Solutions Preventing Marine Litter in Ecosystems project (CES-ML)

Brief description:

The National Centre for Sustainable Coastal Management (NCSCM), Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India in collaboration with the GIZ, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) is implementing a circular economy project to prevent marine litter in three Kerala, Tamil Nadu, and Uttar Pradesh. The project supports relevant regulatory authorities, like the Central Pollution Control Board (CPCB) and State Pollution Control Boards (SPCBs) in Kerala, Tamil Nadu, and Uttar Pradesh, in developing and using digital technologies to quantify and track marine litter, monitor leakages in the selected ecosystems, and work on implementing extended producer responsibility (EPR).

Names of actions:

2030 Roadmap for India-UK future relations

Brief description:

The Prime Ministers of the United Kingdom and India agreed on an ambitious framework for UK-India partnerships finding innovative solutions to tackle plastic and marine pollution.

Names of actions:

Commonwealth Litter Programme (CLiP)

Brief description:

Under the Commonwealth Litter Programme (CLiP), the UK's Centre for Environment Fisheries and Aquaculture Sciences (CEFAS) and India's National Centre for Coastal Research (NCCR) launched a pilot project to understand deteriorating seawater quality due to marine litter. Under CLiP, the UK has partnered with India for a longer term and channeled its efforts to facilitate the creation of a strong scientific evidence base to bring out India's National Marine Litter Strategy.

Names of actions:

INOPOL

Brief description:

The India-Norway cooperation project on capacity building for reducing plastic and chemical pollution in India (INOPOL) is a part of the India-Norway Joint Marine Pollution Initiative and involved partnerships of key Indian and Norwegian Organisations working in the sustainability space to explore various dimensions of plastic and chemical pollution in India, with particular focus on Gujarat, and to jointly develop a holistic action plan for its mitigation. The project aims to implement the Stockholm Convention on Persistent Organic Pollutants by providing science-based knowledge and strengthening the local and regional capacity to prevent and mitigate the environmental threat posed by plastic and chemical pollution.

Names of actions:

Indo-Pacific Ocean Initiative (IPOI)

Brief description:

The Prime minister of India has instigated the Indo-Pacific Ocean Initiative (IPOI) during the 14th East Asia Summit, 2019. Maritime Ecology is one of the seven pillars of IPOI and India's National Centre for Coastal Research and Indian National Center for Ocean Information Services are the identified partners of the pillar. The mitigation of marine debris pollution is one of the focus areas of Maritime Ecology Pillar emphasizing on understanding the magnitude of the plastic marine debris problem in the Indo-Pacific and utilization of regional cooperation to highlight existing best practices, policies, technologies and innovations from EAS countries.

We have seen a positive improvement over the last two years

6.8.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify here:)

6.8.4. Best Practices

National level

The **Defense Research and Development Organisation (DRDO)** Lab has developed a technology for biodegradable cutlery. Biodegradable tableware (spoon, fork, spork, bowl, khullad, plate, and teacup) can be used as an alternative to plastic tableware. DRDO & Ecolastic Products Pvt. Ltd. (Hyderabad) have jointly developed technology to make compostable plastics. This technology of starch-based compostable bags/films is being commercialized, and it is competitive and meets the performance requirements of most short-life applications.

National Institute of Ocean Technology (NIOT), Ministry of Earth Sciences, Government of India, has developed plastic films using marine seaweed.

The **Central Pollution Control Board (CPCB)** has certified around 200 compostable plastic manufacturers who are producing films, bags, cutlery items, straws, gloves, aprons, thermoformed products, etc.

Swachh Sagar, Surakshit Sagar: The campaign by Ministry of Earth Sciences includes 75 volunteers, who have been allocated to clean the beaches at every km of the 7500 km long Indian coastline. This is a step towards India's commitment to protect 30% of its oceans, waters, and lands by 2030 in a phased manner.

Adoption of Lifestyle For Environment (LiFE)

The Hon'ble Prime Minister of India, Shri Narendra Modi, announced Mission LiFE, to bring individual behaviours to the forefront of global climate action governed by a circular economy, which would be defined by mindful and deliberate utilization. The mission plans to create and nurture a global network of individuals, namely 'Pro-Planet People,' to promote environmentally friendly lifestyles.

Local level

Vengurla model: Vengurla is a coastal town in India where a landfill was converted into a waste management park called "Swachh Bharat Waste Park". The local communities have practiced waste segregation at the source and have currently achieved 95 % waste segregation. A local body in the town earns Rs. 1.5 lakh/month from processing the generated waste. The park now hosts a biogas plant, a briquette-making plant, a segregation yard, and a plastic crusher unit. The municipal council has installed GPS on solid waste collection vehicles to keep track of the vehicle's location. This helps to achieve 100% door-to-door collection.

Versova Beach: In 2015, Versova was one of the dirtiest beaches in the world, but is now pristine. This is due to the largest beach clean-up programme initiated by Afroz Shah and later joined by 1,000 volunteers, including local residents of Versova, slum-dwellers, politicians, celebrities, and school children. Cleanup has been carried out every Sunday for the past several years, and about 5 million Kg of plastic waste have been removed.

Waste Management Agency of Goa has set up treatment plants for the processing of non-biodegradable waste.

A Delhi based artist diverted 250 Kg of plastic from landfills and converted waste into art.

Private sector

Private companies are working on the conversion of 'ghost nets' collected from the sea into valuable products. A Pune-based company converts 'ghost nets' into surfboards, while a Vishakapattanam-based company makes products like bracelets, pouches, doormats, and pots from them. The concept of upcycling fish nets reduces the impact of marine pollution and also provides alternative livelihoods for fisherwomen.

An Indian-based company, in response to the plastic waste crisis, made edible seaweed cups that come in various colours and flavours, from orange to green. The company also produces edible food wrapping and single-use sachets, typically used for instant coffee or food condiments.

International cooperation

- India and United Kingdom have been collaborating under Commonwealth Litter Programme (CLiP) on scientific endeavors to share knowledge, techniques and improving understanding of marine plastic pollution.
- India, Australia, and Singapore come together to address marine pollution with a focus on plastic debris.
- India and Norway to work jointly towards mitigating marine plastic litter and microplastics; issue joint statement.
- India and Germany sign an agreement on 'Cities combating plastic entering the marine environment'
- India and Japan have joined hands to fight plastic pollution through data collection, advanced scientific research, and development, which will aid both governments in rolling out helpful policies to address plastic pollution in our waterways.
- The Government of India through the Department of Fisheries (DoF), MoFAH&D is participating in the IMO-FAO GloLitter Partnership (GLP) Project as a Lead Partnering Country (LPC) with the aim of prevention and reduction of Marine Plastic Litter (MPL) and in particular, sea-based MPL (SBMPL) to reverse the negative environmental impacts of plastic discard and loss. The project is funded by the Government of Norway, represented by the Norwegian Agency for Development Cooperation (NORAD) and implemented by the IMO in cooperation with the FAO.

6.8.5. References and Reading Links

6.8.6. Contact Details: *(Please specify name and email address)*

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6.9. Italy

Key Highlights

- Directive 2008/56/EC on Marine litter
- Regional Plan on the Marine Litter Management in the Mediterranean in the Framework of Article 15 on the Land Based Sources Protocol
- DIRECTIVE 2019/904/EC on the reduction of the impact of certain plastic products on the environment. D.Lgs 196/2021
- Programme of measures according to Article 13 of the MSFD (2021)
- National legislative measure: ban of microplastics in soaps, creams, toothpastes (2018)
- “Life Blue Lakes” project under LIFE Programme (coordinated by Legambiente)
- Clean up initiatives by national NGOs: Legambiente, Marevivo, WWF and others
- UNEP-MAP Barcelona Convention
- National programme Mo.Ri.net (Monitoring, Census, Collection and Recycling of Ghost Nets: Fishermen as protagonists of sea conservation). The programme was conducted by ISPRA, PolieCo, Siena University, Capo Carbonara MPA and Asinara National Park.
- GESAMP Working Group on seabased sources of marine litter.

6.9.1. Policy and Frameworks

National Action Plan

Name:

Implementation of the Directive 2008/56/EC on Marine litter and the Regional Plan on the Marine Litter Management in the Mediterranean in the Framework of Article 15 on the Land Based Sources Protocol.

Brief description:

According to the art. 11 of the Marine Strategy Framework Directive, every 6 years, Italy plans and reports to the European Commission the assessment status of the marine environment related to the Descriptor 10 (Marine litter). To do that, a National Monitoring program on beach litter, floating litter, seafloor litter, microlitter, and litter ingested by biota is developed in order to verify the marine good environmental status (GES) according to the threshold values defined or trend assessment. To achieve the GES according to the art. 13 of the MSFD, programme of measures is defined. Moreover, Italy according to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols (Barcelona Convention) is implementing the updated Regional Plan on the Marine Litter Management in the Mediterranean, amended, in Antalya (Türkiye), 7-10 December 2021, during the 22nd Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols.

Legal Framework

Yes

2015. National legislative measure to reduce the improper discarding of small and micro waste (receipts, chewingum, tissues, cigarette butts, etc.) in the environment. In particular, municipalities shall install special containers for the collection of cigarette butts in the streets, in parks and high social gathering places. Tobacco producers shall implement information campaigns, in collaboration with the Ministry of Environment, Land and Sea, with the aim to raise consumer awareness about the harmful consequences for the environment resulting from the littering of cigarette butts.

2018. National legislative measure: ban light and ultralight shopping plastic bags that are not biodegradable and compostable.

2018. National legislative measure: ban of microplastics in soaps, creams, toothpastes.

2019. National legislative measure: ban of plastic cotton buds sticks

2020. Italy joined the European Plastic Pact (EPP) (<https://europeanplasticspact.org/signatories/>)

2021. Transposition of DIRECTIVE 2019/904/EC on the reduction of the impact of certain plastic products on the environment. D.Lgs 196/2021.

2021. Transposition of DIRECTIVE 2019/883/EC on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC. D.Lgs 197/2021.

2021. Updated Programme of measures according to Article 13 of the MSFD:

Design and implementation of measures to improve the management of litter generated by fishing and aquaculture activities, including discarded equipment, favoring, where possible, its reuse, recycling and recovery.

Implementation of training and awareness measures to increase knowledge and promote the education of the public and economic operators to prevent and combat marine litter.

Study, design and creation of a collection and disposal chain for litter collected accidentally by fishermen: "Preparation of a regulatory tool for the implementation of a collection and disposal chain for litter accidentally collected by fishermen, in implementation of Directive 883/2019".

Study, design and creation of a supply chain for fish boxes to facilitate the transition from the use of disposable polystyrene boxes to washable and reusable ones.

Establishment of an inter-ministerial, multidisciplinary technical panel of experts on the subject of sea floor litter that includes representatives of the competent ministries for DCF and MSFD and national experts. The purpose of the technical panel is to contribute with its expertise to the building of a thorough and multidisciplinary knowledge framework by systematizing the information and data available in order to identify the most suitable measures to combat the impacts of waste on the seafloor.

Measure concerning the application of the new Directive 904/2019 regarding the creation of EPR (Extended Producer Responsibility) systems: preparation of a Ministerial Decree for the creation of EPR systems for the products referred to Article 8 of Directive 904/2019 and of Annex PART E section 1, as well as of mussel farming nets, for the correct management of the end of life of fishing and aquaculture equipment.

Evaluation of tools for the reduction of litter from river sources also through the use of experimental sustainable prototypes for their interception.

Study, design and creation of the marine litter recycling chain.

Design and testing of experimental prototypes for the removal of microplastics by wastewater treatment plants.

Identification and verification of functional tools for the geolocalization of fishing gears that exert high negative impacts on ecosystems as a result of loss at sea (e.g. monofilament gillnets and triplets; pots), also through the use of experimental prototypes).

In preparation

Please list your country's legislation including name and brief description here:

Name:

Update of D.Lgs 197/2021 on port reception facilities for the delivery of waste from ships.

Brief description:

Collection of stakeholder remarks about national implementation.

Indicators

Please list your indicators here:

Definitions of ENVIRONMENTAL TARGETS (Target) pursuant to Ministerial Decree of February 15, 2019, according to the implementation of the Directive 2008/56/EC.

T 10.1 Tends to decrease the number / quantity of marine litter present on the coasts, in the surface layer of the water column, on the seabed and the rate of increase of marine litter and micro-litter in the surface layer of the water column is reduced by reducing the introduction and increasing the collection of marine litter at sea and on the coasts.

T 10.2 The trend in the amount of marine litter ingested by marine animals is decreasing.

T 10.3 Knowledge gaps on the origin, state, composition, dispersion and impact of litter at sea are reduced through the increase of survey programs.

6.9.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for	<input type="checkbox"/> Yes <input type="checkbox"/> No

sustainable MPL management	
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Transposition of DIRECTIVE 2019/904/EC in Italian D.Lgs 196/2021.

Targeted products:

Single use plastic.

Brief description:

The objectives of this Directive are to reduce the impact of certain plastic products and to promote the transition to circular economy.

e.g. To introduce extended producer responsibility for fishing gear and their components containing plastic to ensure separate collection of waste fishing gear and recycling.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

2018. National legislative measure:

ban light and ultralight shopping plastic bags that are not biodegradable and compostable.

2019. National legislative measure:

ban of plastic cotton buds sticks

Actions for encouraging sustainable / circular product design

- Programme of measures according to Article 13 of the MSFD (2021)
- National Strategy for Circular Economy
- MEC (Minimum Environmental Criteria)
- Introduction of measures that incentivate the ecodesign of textile products in the EPR Italian system.

Brief description: I

- Action 1
 - Study, design and creation of a supply chain for fish boxes to facilitate the transition from the use of disposable polystyrene boxes to washable and reusable ones.
 - Study, design and creation of the marine litter recycling chain.
 - Study, design and creation of a collection and disposal chain for litter collected accidentally by fishermen: "Preparation of a regulatory tool for the implementation of a collection and disposal chain for litter accidentally collected by fishermen, in implementation of Directive 883/2019.
- Action 2
 - Policy targets by 2035:
 - the introduction of binding eco-design specifications.
 - promotion of eco-innovation as a tool of competitiveness e sustainability and identification of tools to develop opportunities for eco-innovation in the context of the circular economy;
 - promotion of technologies and methodologies for the use and efficient product management;
 - promotion of new business models that maximize the circularity of products (e.g. models of product-as-a-service).
- Action 3
 - MEC are defined for the environmental sustainability of consumption in the public administration sector.
- Action 4
 - To eliminate dangerous components and substances also with reference to microplastics released into the environment

- To reduce quality defects that lead the consumer to discard textile products
- To use blended techniques of fibers and fabrics that promote adaptability to multiple uses and repairability.

Regulations on microplastics

Yes

- National legislative measure: ban of microplastics in soaps, creams, toothpastes (2018).
- Programme of measures according to Article 13 of the MSFD (2021).

Brief description:

- Regulation 1
On January 1, 2020, the ban on microplastics came into force. The law prohibits “placing on the market rinse-off cosmetic products with an exfoliating or cleansing action containing microplastics”. The penalties range from fines to the stop of production.
- Regulation 2
Design and testing of experimental prototypes for the removal of microplastics by wastewater treatment plants.

Government actions on microplastics

Yes

Names of actions:

Design and testing of experimental prototypes for the removal of microplastics by wastewater treatment plants.

Brief description:

Programme of measures according to Article 13 of the MSFD (2021).

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of actions:

“Life Blue Lakes” project under LIFE Programme (coordinated by Legambiente).

Brief description:

The project aims to reduce the presence of microplastics in Italian lakes, through governance, training, information and awareness activities aimed at institutions, stakeholders and citizens, in particular by developing solutions and promoting participatory processes aimed at adopting good practices, in line with the European Strategy for Plastics in the Circular Economy.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

National Programme for Waste Management

Brief description:

The National Program for Waste Management is a tool that guides and supports regional waste management planning to ensure compliance of planning criteria with the objectives of EU legislation. It also aims to enforce the sustainability, efficiency, effectiveness and cost-effectiveness of waste management systems throughout the national territory.

Targets:

To contribute to sustainable use of resources and reduce potential negative environmental impacts of waste cycle;

Progressive rebalancing of socio-economic gaps in the waste management;

Strengthen the awareness and virtuous behavior of economic actors and citizens for waste reduction and valorisation;

To promote a waste cycle management that contributes to the achievement of the objectives of climate neutrality.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

D.Lgs 197/2021.

Brief description:

This law aims to protect the marine environment from the negative effects of waste discharges from ships and to ensure the proper functioning of maritime traffic by improving the availability and use of adequate port reception facilities for waste collection.

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Clean up initiatives by national NGOs: Legambiente, Marevivo, WWF and others.

Brief description:

Initiatives with citizens to remove marine litter from beaches.

We have seen a positive improvement over the last two years

Removal of plastic litter from the ocean

Yes

Names of actions:

Initiative of the Ministry of the Environment and Energy Security to clean up the sea of marine litter.

National programme Mo.Ri.net (Monitoring, Census, Collection and Recycling of Ghost Nets: Fishermen as protagonists of sea conservation). The programme was conducted by ISPRA, PolieCo, Siena University, Capo Carbonara MPA and Asinara National Park.

Transposition of DIRECTIVE 2019/883/EC in Italian D.Lgs 197/2021 on port reception facilities for the delivery of waste from ships.

Clean up initiatives by national NGOs: Legambiente, Marevivo, WWF and others.

Brief description:

The Castalia ships, specialized in the recovery of hydrocarbons, this year (2021) is supporting the Ministry of the Ecological Transition to collect floating marine litter and in particular plastic waste, both in protected marine areas and in areas in front of river mouths. For this activity, the Ministry is also supported by Corepla, the National Consortium for the collection, recycling and recovery of plastic packaging, for an experimental project for the recycling of plastic material recovered from the sea fleet.

This programme aims at making a concrete contribution to solving the problem of floating rubbish deposited on the seabed. The objective is to restore compromised marine habitats through concrete waste removal actions (plastic waste and ALDFG), actively involving fishermen and raising awareness on the issue through dissemination activities.

This Directive aims to protect the marine environment against the negative effects from discharges of waste from ships, including fishing for litter, using ports located in the Union, while ensuring the smooth operation of maritime traffic, by improving the availability and use of adequate port reception facilities and the delivery of waste to those facilities.

Initiatives with diving centres to remove marine litter from the seabed.

Numerical data, if any:

Action 1.

First data from December 2020 to February 2022 of the action 1. focused on marine plastic litter collected: 6.400 kg

Trend shows the highest presence of plastic wastes in the areas in front of the river mouths.

Awaiting for new data sets elaborations for the second part of 2022

We have seen a positive improvement over the last two years

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Programme of measures according to Article 13 of the MSFD (2021).

MEC (Minimum Environmental Criteria)

Tax credit for the purchase of recycled materials from separate waste collection

Brief description:

- Action.1

- Design and implementation of measures to improve the management of litter generated by fishing and aquaculture activities, including discarded equipment, favoring, where possible, its reuse, recycling and recovery.
- Measure concerning the application of the new Directive 904/2019 regarding the creation of EPR (Extended Producer Responsibility) systems: preparation of a Ministerial Decree for the creation of EPR systems for the products referred to Article 8 of Directive 904/2019 and of Annex PART E section 1, as well as of mussel farming nets, for the correct management of the end of life of fishing and aquaculture equipment.
- Action.2
 - MEC setting a minimum quantity of recycled plastic for products are established for the following areas: interior furniture, urban furniture, work footwear, building, cultural events, public green space etc.
- Action.3
 - In order to increase the recycling of mixed plastics and aiming at reducing the environmental impact of packaging, all companies that purchase products made with materials deriving from the separate collection of plastic packaging can be granted, for each of the years 2023 and 2024, a tax credit of 36 per cent of the expenses incurred and documented for the aforementioned purchases.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Rivers anti-pollution barriers

Brief description:

Initiatives for the installation of collection devices positioned in the section of some rivers (Po, Aniene and Tiber) to collect litter. The intercepted litter is collected by COREPLA a private company for plastic recycling.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

ISPRA, the Italian National Institute for Environmental Protection and Research every year organizes environmental education initiatives for sustainability, aimed at schools of all levels (<https://www.isprambiente.gov.it/it>).

The Researchers' Night is an initiative promoted by the European Commission since 2005 that involves thousands of researchers and research institutions in all European countries every year. The goal is to create opportunities for researchers and citizens to meet to spread scientific culture and knowledge of the research professions in an informal and stimulating context.

ScienzaInsieme to promote scientific dissemination. It offers to a wide audience the opportunity to experience science in laboratories, in conferences, seminars, scientific cafes, tours, exhibitions and during the numerous activities designed for children and families and

the schools. ScienzaInsieme spreads information, news, videos on the main events and initiatives in the scientific world <https://www.scienzainsieme.it/>

Ministry of Education: "Rigenerazione scuola" programme: activities aimed at promoting awareness and knowledge of problems associated with the consumption of disposable plastic and at promoting sustainable lifestyles are planned for the school community.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Names of actions:

"Plastic free" campaign promoted by Ministry of Ecological Transition that involves different actors (municipalities, universities etc.)

Awareness-raising campaigns related to MPL promoted by NGOs (Marevivo, WWF etc.)

" Strategia nazionale per la lotta contro l'inquinamento da plastica" (National strategy to combat plastic pollution) – *in progress*

Brief description:

- 1-2. Raise awareness about plastic pollution and promotion of virtuous behaviors and sustainable use of resources. Promotion of reduction and progressive elimination of disposable plastic.
- 3. This Strategy will include measures to encourage the adoption of responsible behavior in the purchase of single-use plastic products and to provide consumers of certain categories of single-use plastic products and fishing gear containing plastic the following informations:
 - The availability of reusable alternatives, reuse systems and management options for the aforementioned waste;
 - The impact on the environment, in particular the marine environment and inland waters, of the dispersion or other inappropriate waste disposal of such single-use plastic products and fishing gear containing plastic;
 - The environmental impact of bad practices, the percentage of plastic content in certain products, as well as the impact of improper waste disposal methods of these single-use plastic products on the sewage system, domestic gray water discharges and road drains for rainwater;
 - Disposal and management of biodegradable and compostable products.

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Marine Strategy Framework Directive Article 11 Monitoring Programmes

Brief description:

- Beach litter
 - Scope: Data collection on quantity, composition, trends and possible sources of marine litter present on beaches.

- Parameter: Number of objects per category on 100 m of beach.
- Method: Monitoring of transects represented by a strip of beach of 100 m. Counting and characterization of Items larger than 2.5 cm (longest side) including cigarette butts.
- Frequency: Twice a year
- From 01 February to 30 April (Spring)
- From 01 October to 31 December (Autumn).
- Floating litter
 - Scope: Data collection on quantity, composition, and territorial distribution of waste in the surface layer of the water column.
 - Parameter: Numbers of items by category per square kilometre (km²) in the surface layer of the water column.
 - Method: A visual census monitoring with a dedicated observer within a defined strip along the entire path of the transect of a maximum of 5 m.
 - Frequency:
 - Coastal waters: six surveys a year, every two months.
 - Offshore: three / five surveys per season for each transect.
- Riverine inputs of litter entering the sea
 - Scope: Data collection on floating litter entering the sea.
 - Parameter:
 - Within the same river, number of items (divided by category) / hour.
 - In order to normalize the data with other rivers, the parameter becomes: number of items (divided by category) / hour / meter²
 - Method: Visual census of floating macro-litter larger than 2.5 cm to be carried out on at least half the width of the river (the observation strip) and from a height not exceeding 10 m.
 - Frequency.
 - Five monitors per season (20 monitors per year).
- Seafloor litter
 - Scope: Data collection on spatial distribution, type and quantity of litter in the seabed and the possible impact that it can cause to benthic organisms.
 - Parameter.
 - Number of items per category per km²
 - Spatial distribution of litter on the bottom.
 - Number of individuals of each species affected by litter.
 - Method.
 - Hard bottom: using ROVs along transects of known length, georeferenced high-resolution image-data (photos / videos) will be acquired and analyzed.
 - Soft bottom: MEDITS / SOLEMON samplings with trawl nets.
 - Frequency.
 - Biennial for hard bottom.

- Annual for soft bottom.
- **Microlitter**
 - Scope: Evaluate the abundance and composition of microlitter, in particular microplastics, present in the surface layer of the water column.
 - Parameter: Number of micro particles per m² by shape and colour.
 - Method: Use of a “manta net” (330 µm mesh) towed for 20 minutes along a linear path, with a speed between 1 and 2 knots.
 - Frequency.
- Coastal waters: twice a year.
- Offshore: once a year.
- **Marine litter ingested by *Caretta caretta***
 - Scope: Establish the quantity and composition of ingested marine litter on dead specimens of *Caretta caretta* analyzing the gastrointestinal contents.
 - Parameter.
- F0% =% of turtles that have ingested litter on the total number of stranded specimens.
- (g) = amount of marine litter ingested in grams.
 - Method: The specimens of *Caretta caretta* are subjected to necropsy. The analysis of littering *C. caretta* is carried out in the laboratory immediately after the recovery of dead organisms.
 - Frequency: Based on the findings of specimens stranded throughout the year.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

- Marine Strategy Framework Directive
- UNEP-MAP Barcelona Convention
- GESAMP Working Group on seabased sources of marine litter.

Brief description:

Common Implementation StrategyThe Directive requires from Member States detailed and coordinated input. In order to facilitate this work, Member States and the European Commission have set up an informal programme of coordination, the Common Implementation Strategy (CIS).

Implementation of the Ecosystem Approach (EcAp) in the Mediterranean by the Contracting parties in the context of the Barcelona Convention for the Protection of the Marine Environment and the Coastal region of the Mediterranean and its Protocols.

The GESAMP WG 23 is headed by FAO and IMO and cosponsored by UNEP. The overall objective of WG 43 is to build a broader understanding of sea-based sources of marine litter, in particular from shipping and fishing sectors, including the relative contribution of different sources, analysis of plastic use and management within both industries and the range and extent of impacts from sea-based sources of marine litter. The Working Group will also work to build a more comprehensive understanding of specific types of sea-based sources of marine litter, and to guide interventions on these sources based on identified priorities.

IMO's Marine Environment Protection Committee (MEPC) in 2021 adopted its Strategy to address marine plastic litter from ships, which sets out the ambitions to reduce marine plastic litter generated from, and retrieved by, fishing vessels; reduce shipping's contribution to marine plastic litter; and improve the effectiveness of port reception and facilities and treatment in reducing marine plastic litter

6.9.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.9.4. Best Practices

Local level

Plastic free islands

Pantelleria, Lipari, Ustica, Lampedusa, Linosa and other islands: disposable plastic containers and tableware are banned.

"*Tremiti Plastic Free Islands*" had as its general objective the improvement of waste management on the islands and their reduction, favoring the use of innovative tools. The project envisaged various activities carried out with the fundamental contribution of the islanders, which were substantially implemented with two lines of activities related to the fishing sector and domestic composting.

More info: <https://www.isolesostenibili.it/tag/plasticfree/>

International cooperation

PLASTIC BUSTER project

Financed by the ENI CBC Med Programme, Plastic Busters CAP kicked-off in January 2022 to consolidate and fully leverage the knowledge obtained by five key previous projects to develop tailored-made capitalization actions in the north and the south of the region,

ultimately aiming to support decision-makers and stakeholders in tackling marine litter issues by integrating EbM (Ecosystem Based Management Approach) into ICZM (Integrated Coastal Zone Management) planning towards good environmental status. Project activities in Italy, Greece, Spain, Egypt, Tunisia, Lebanon, Jordan – implemented by a team of universities, research institutes, environmental NGOs, national and local authorities, and other civil society agents under the leadership of ITALY.

<https://plasticbustersmpas.interreg-med.eu/>

6.9.5. References and Reading Links

6.9.6. Contact Details: *(Please specify name and email address)*

- Diana Corradi: corradi.diana@mase.gov.it
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6.10. Japan

Key Highlights

- National Action Plan for Marine Plastic Litter (formulated in 2019)
- Waste Management and Public Cleansing Act
- Act on Promotion of Resource Circulation for Plastics
- Law Concerning Special Measures for Conservation of the Environment of the Seto Inland Sea
- Act on Promotion of Resource Circulation for Plastics
- Act on Promoting the Treatment of Debris that Drift Ashore
- Policy actions for encouraging plastic alternatives
- “Guidelines for Harmonizing Ocean Surface Microplastic Monitoring Methods” (Published in 2019, revised in 2020)
- Clean Ocean Material Alliance (CLOMA) UMIGOMI Zero Week

6.10.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name:

National Action Plan for Marine Plastic Litter (formulated in 2019)

Brief description:

In May 2019, the “National Action Plan for Marine Plastic Litter” was formulated. The action plan listed effective countermeasures to realize a world without additional pollution from plastic in the following eight fields: 1) Sound waste management systems, 2) Prevention of littering, illegal dumping and unintentional leakage of waste into the oceans, 3) Collection of scattered waste on land, 4) Innovation in development of and conversion to alternative materials, 5) Removal of plastic litter from the oceans, 6) Multi-stakeholder involvement and awareness-raising, 7) Sharing scientific information and knowledge: R&D and Monitoring, and 8) International cooperation.

Legal Framework

Yes

Please list your country’s legislation including name and brief description here:

Name 1:

Waste Management and Public Cleansing Act

Brief description:

Legislation to protect living environments and improve public health through waste generation control and appropriate waste treatment. Under the Waste Management and Public Cleansing Act, municipalities are obliged to formulate a basic waste management plan. In accordance with the national policy, the plan formulated by municipalities is required to show specific methods and target figures, such as “reduction in emissions per capita”, “recovery rate of resources from waste”, and “reduction of waste for final disposal”, as well as “target values for cost efficiency of waste treatment”.

Name 2:

Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging

Brief description:

The volume of containers and packages is now approximately 70% of the total municipal solid waste. This Act was enforced in 1997 in order to promote efficient use of recycled containers and packages generated and reduction of wastes by shifting those wastes into recyclable resources.

Name 3:

Act on Promotion of Resource Circulation for Plastics

Brief description:

This Act, which came into force in 2022, involves all stakeholders, including municipalities, businesses and consumers, to promote “3R + Renewable” in each stage of the lifecycle, from product design to waste disposal, of plastic products. This includes (i) the Guideline for Design of Plastic-containing Products, (ii) Rationalizing use of “specified plastic-containing products”, and (iii) Accelerating sorted collection and recycling of plastics by municipalities, manufacturers, retailers, and businesses.

Details can be found here:

https://www.gov-online.go.jp/eng/publicity/book/hlj/html/202205/202205_09_en.html

Name 4:

Law Concerning Special Measures for Conservation of the Environment of the Seto Inland Sea

Brief description:

In addition to the measures to remove and reduce marine plastic litter, revision was made recently to clarify the importance of emissions reduction.

Indicators

Yes

Please list your indicators here:

“National Action Plan for Marine Plastic Litter” includes five indicators for monitoring progress:

Amount of plastic waste generated, recycled, heat recovered, incinerated without energy recovery, and landfilled

Amount of land-based litter collected, illegal dumping, and scattered waste

Amount of marine litter collected by clean-up activities

Production capacity and amount of consumption of alternative materials such as marine degradable plastics and paper

Increment of plastic waste generated, recycled, heat recovered, incinerated without energy recovery, and landfilled, as a results of international cooperation

6.10.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Charge for plastic shopping bags

Reducing the use of “specified plastic-containing products”

Targeted products:

Plastic shopping bags

Specified plastic products

Brief description:

From July 2020, retailers and service providers are implementing to charge for plastic shopping bags.

From April 2022, retailers and service providers who provide “specified plastic products**” are required to implement any initiatives (for example, confirming customer’s preference on the use / non-use of the products, giving consumers point rewards for not receiving the products, charging for their use, or offering items made from alternative materials) to reduce the amount of waste of the plastic products.

*refers to total of 12 plastic items: forks, spoons, table knives, stir sticks, straws; hairbrushes, combs, razors, toothbrushes, shower caps; hangers and clothing covers.

Numerical data, if any:

Estimated amount of plastic bags for domestic distribution decreased to about 100,000 tons in FY2021, from about 200,000 tons in FY2019.

(reference)

Encyclopedia on market share of packaging materials (2021)

(Japan Comprehensive Economic Research Center Co., Ltd)

Rate of refusing plastic shopping bags in stores

	Before introduction of charges	After introduction of charges
Convenience stores	Approx 23%	Approx 75%
Grocery stores	Approx 57%	Approx 80%

(Reference)

“Effect of introduction of charges to plastic shopping bags” (Ministry of the Environment Japan)

[20220128result.pdf \(env.go.jp\)](#)

We have seen a positive improvement over the last two years

Ban on use of single-use plastic products (e.g. shopping bags, straws)

No

Act on Promotion of Resource Circulation for Plastics demands retailers and service providers who provide “specified plastic-containing products” to implement any initiatives to reduce the amount of waste of the plastic products. (See 3.1.1 for details)

No particular change observed

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Enforcement of environmentally friendly design under the Act on Promotion of Resource Circulation for Plastics

Brief description:

The government published “the Guideline for Design of Plastic-containing Products” as a way to encourage designers and manufacturers of plastic-containing products to produce environmentally friendly design. The Guideline prescribes using less plastic, reducing excessive packaging, designing products that are easy to disassemble and separate, and using recycled plastic and bio-based plastic.

Numerical data, if any:

Amount of waste plastics generated (slightly decreased compared to FY2019)

	FY 2019	FY 2020	FY 2021	FY 2022
Plastics Generated (kt)	8,500	8,220	8,240	Under investigation

(reference)

"The status of production, disposal, recycling and treatment of plastic products" (Plastic Waste Management Institute JAPAN)

We have seen a positive improvement over the last two years

Regulations on microplastics

Yes

Names of regulations:

Act on Promoting the Treatment of Debris that Drift Ashore

Brief description:

The Act defines basic principles for the measures required for the smooth treatment of debris that drift ashore and the measures required for the control of its generation. In particular, the act has a provision on microplastics (see below), which resulted in countermeasures such as reduction of micro-beads contained in scrubs.

No particular change observed

“Article 11-2: In order to control microplastics from flowing into sea areas, business entities must endeavor to control the use of microplastics in products which will be released into rivers and other public waterways or sea areas after using the products in an ordinary way, and must endeavor to control the generation of waste plastics.”

<https://www.japaneselawtranslation.go.jp/ja/laws/view/4233>

Government actions on microplastics

Yes

Name of action 1:

Harmonization of ocean surface microplastics monitoring methodologies

Brief description:

Japan is taking the lead in harmonization of monitoring methods globally, which resulted in publication of “Guidelines for Harmonizing Ocean Surface Microplastic Monitoring Methods” in 2019 (revised in 2020).

http://www.env.go.jp/en/water/marine_litter/guidelines/guidelines.pdf

Name of action 2:

Compilation and sharing of ocean surface microplastics monitoring data

Brief description:

A global database for compiling and sharing monitoring data is currently being developed in collaboration with related initiatives.

The database provides global maps of microplastic density in the ocean surface and serves as a tool in addressing marine plastic pollution.

Name of action 3:

Development of a harmonized guidelines for monitoring marine litter using remote sensing technologies

Brief description:

Another guideline is also being developed for enhancing coverage and effectiveness of marine litter monitoring (including plastics) through application of remote sensing technologies, aiming to promote knowledge sharing and harmonization of monitoring methodologies.

Names of actions 4:

Promotion of research on (1) the state and impact of microplastics on human health and the environment, (2) leakage to ocean, and (3) countermeasures for reducing leakages.

Brief description:

There are large knowledge gaps in the distribution of microplastics and their impact on living organisms and ecosystems.

The ministry initiated a survey research on the distribution of microplastics in marine areas since 2014.

In addition, a survey research on the impact on living organisms and ecosystem is ongoing since FY2018 under the Environment Research & Technology Development Fund.

Names of actions 5:

Resource circulation strategy for plastics

Brief description:

Promoting countermeasures to prevent microplastics leakage into sea, for example, by the reduction of micro-beads contained in body scrubs.

Name of action 6:

Compilation and dissemination of “Good Practices” for reducing microplastics

Brief description:

A collection of initiatives and technologies by Japanese companies, contributing to the prevention, reduction, and collection of microplastics. The good practices are then disseminated and internationally.

We have seen a positive improvement over the last two years

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of actions 1:

Reduction of micro-beads contained in body scrubs

Brief description:

In January 2019, the cosmetics industry association set a voluntary standard to stop using microplastic beads in body scrubs.

We have seen a positive improvement over the last two years

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Enforcement of proper waste management systems

Brief description:

Comprehensive enforcement of waste collection based on public cooperation, e.g. appropriate waste segregation and disposal practice, in accordance with waste management and recycling regulations;

Installation of recycling facilities to increase domestic recycling capability and to improve recycling of polystyrene foam boxes (commonly used in fisheries) with the latest technologies;

Enforcement of collection and appropriate treatment of used plastics in agricultural sector in collaboration with relevant associations;

Enforcement of onshore collection and appropriate treatment of plastic wastes, such as used fishing gear in line with guidelines developed in 2020;

Support for ODA programs in developing countries with regard to waste regulations, capacity and institutional building for waste management, formulation of action plans, and installation of high-quality environmental infrastructure such as waste-to-energy plants.

We have seen a positive improvement over the last two years

Numerical data, if any:

Amount of waste plastic recycled, heat recovered, incinerated without energy recovery, and land filled (ratio of effective use (thermal recovery and recycling) was 87.1% in FY2021, an increase of 0.8% compared to FY2020)

	FY2018	FY2019	FY2020	FY2021	FY2022
Recycling	2,140kt	2,130kt	2,000kt	2,060kt	Under investigation
Heat recovery	5,070kt	5,130kt	5,090kt	5,110kt	Under investigation
Incineration of waste without energy recovery + landfill	1,410kt	1,250kt	1,120kt	1,070kt	Under investigation
Total	8,610kt	8,500kt	8,220kt	8,240kt	Under investigation

(reference)

"The status of production, disposal, recycling and treatment of plastic products" (Plastic Waste Management Institute JAPAN)

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Brief description:

Strengthening of patrol by national and local government;

Prevention of unintentional leakage of plastics through appropriate use and proper management of fishing gear by fishers.

No particular change observed

Numerical data, if any:

Collected amount of land-based litter, illegal dumping, and scattered waste

	Total litter (t)	Plastic litter (t) (estimate)
FY2017	91,320	9,940
FY2018	86,023	7,952
FY2019	to be investigated	to be investigated
FY2020	to be investigated	to be investigated
FY2021	to be investigated	to be investigated

(Reference)

"Estimated amount collected by clean-up and collection activities":

Estimated total amount of litter, excluding the amount collected on the coast, based on the amount collected by prefectures and municipalities

"Amount proportion of plastics ":

Estimated amount of plastic litter collected, based on the results of those local governments which have data on the amount of plastic

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Yes

Names of actions:

Implementation of the Basic Act on Ocean Policy and the National Action Plan for Marine Plastic Litter

Brief description:

Expansion of socio-economic activities is influencing ocean environment globally in various ways, including through water pollution from marine litter such as plastics.

Based on policy / legal instruments such as the Basic Act on Ocean Policy, Japan is promoting comprehensive domestic and international efforts to maintain and conserve marine environment and ecosystems, such as countermeasures against marine litter.

At the same time, these measures, including those on marine plastic litter, are also positioned as incentives for growth, based on the idea that innovation is required approach rather than restricting economic activity for effective use of plastics.

As described elsewhere in this report, various efforts are underway to reduce environmental and socioeconomic impacts of marine litter including plastic, towards realizing a world without plastic pollution.

We have seen a positive improvement over the last two years

Although it's hard to judge overall, there have been positive improvements regarding measures to tackle marine litter.

Others (Please specify)

The “MARINE Initiative” was launched focusing on (1) Management of waste, (2) Recovery of marine litter, (3) Innovation, and (4) Empowerment, including provision of training for 10,000 officials engaging in waste management all over the world by 2025. To date, Japan has already trained 17,000 personnel under this initiative. Based on the MARINE Initiative, Japan, in cooperation with international Organisations, has implemented numerous projects to tackle marine plastic pollution.

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Collection of scattered waste on land

Brief description:

Nationwide clean-up events during “UMIGOMI Zero Week” (“umigomi” means marine litter in Japanese). Approximately 430,000 people participated in the event in 2019. Since 2020, we have been working to prevent COVID-19 by distributing guidelines for cleaning events, and in 2021 there were 150,000 participants. and in 2022 there were 260,000 participants.

Support for the “Adopt Program” for citizens to carry out cleaning, beautification and management activities with a strong attachment to local public areas;

Support for clean-up and litter collection activities in cooperation with river administration authorities, local governments, and residents.

No particular change observed

Comment:

Collected amount of marine litter from clean-ups;

Data collected in	Total litter (t)	Plastic litter (t) (estimate)
FY2016	29,931	10,900
FY2017	45,539	16,600
FY2018	32,486	11,900
FY2019	27,310	10,000
FY2020	27,740	(※) 4,892
FY2021	39,007	7,251

※ After FY2020, the estimation method was revised.

(Reference)

Comprehensive Investigation on Measures to Tackle Beach Debris

https://www.env.go.jp/water/post_80.html

Total litter: The above data describes the amount collected by local government.

Marine plastic litter: estimated by multiplying the volume of processed litter by the proportion of plastic litter calculated through sample survey. After FY2020, estimated by multiplying the volume of artificial marine litter by the proportion of plastic litter calculated from survey values based on the beach litter composition survey Guidelines developed in FY2019.

Removal of plastic litter from the ocean

Yes

Names of actions:

Removal of plastic litter from the ocean

Brief description:

Support for local governments to collect and treat coastal marine litter in accordance with “Act on Promoting the Treatment of Marine Debris Affecting the Conservation of Good Coastal Landscapes and Environments to Protect Natural Beauty and Variety” (hereafter “Marine Litter Act”);

Support for collection of marine litter by fishers in collaboration with local governments/communities. In order to expand this effort, a demonstration project was started from FY2020. In addition, when fishers volunteer to collect marine litter, the national government now covers the cost for processing the litter. 28 prefectures declared their support for fishers.

Collection of floating marine litter using marine environment maintenance vessels in enclosed sea areas, and by port administration authorities in port areas.

No particular change observed

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Policy actions for encouraging plastic alternatives

Brief description:

Acceleration of research and technological development by utilizing available funds including Green Innovation Fund, based on the “Roadmap for Development, Introduction and diffusion of Marine Biodegradable Bio-based Plastics”. This include but not limited to analysis of biodegradation mechanism, development of new resin, reduction of manufacturing costs, and international standardization;

Support for development of marine biodegradable plastic, especially for fishing gear;

Support for replacement of plastic products with paper, marine biodegradable plastics, cellulose materials, etc. through the “Demonstration Project for a Plastic Resource Circulation System toward a Decarbonized Society”. The project was initiated to support

actions on microbeads in FY2020, and was also implemented in FY2021 targeting actions on other plastic materials.

We have seen a positive improvement over the last two years

Numerical data, if any:

Budget scale for encouraging plastic alternatives R&D, pilot program, capital investment, etc.

	FY2022
National budget	JPY 186.09 billion

※ The estimation method was revised from the 5th report

※ The national budget above is the total amount of related government's projects which partly include a budget for encouraging plastic alternatives

(reference)

Meeting materials for expert conference on measures against articles that drift ashore

http://www.env.go.jp/water/marine_litter/conf.html

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions 1:

Clean Ocean Material Alliance (CLOMA)

Brief description:

“Clean Ocean Material Alliance (CLOMA)” has developed valuable partnerships among relevant business operators along the plastic supply chain, ensuring the creation of various innovative approaches;

From FY2020, research began to develop fishing gear that is easy to recycle, such as gear made of a single plastic material and gear made of multiple materials that can be easily disassembled and separated;

CLOMA's activities also include financial support for public-private partnerships at the local level to implement pilot projects to reduce marine plastics from 2021

We have seen a positive improvement over the last two years

Comments:

Budget scale of Public-private partnerships

	FY2022
National budget	JPY 320 million

Others

Development of international standards on measuring fiber fragments released from textiles and products.

Financial support for fundamental research of innovative technologies related to developing biodegradable polymers.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Name of Action 1:

Marine Litter Learning Materials (for elementary and junior high school students and high school students)

Brief description:

A summary of the current status of marine debris, spill routes, and other basic information.

No particular change observed

Awareness-raising campaigns related to MPL – National

Yes

Names of actions 1:

Plastics Smart

Brief description:

Plastics Smart is a campaign implemented by the Ministry of the Environment, Japan, in 2019 aiming to create a national trend and advance initiatives to prevent the generation of marine litter, while encouraging proper understanding of the state of marine plastic pollution through public awareness activities and public information, with the key phrase, “a smart relationship with plastic.”

As of March 2023, over 3,100 initiatives have been registered to the Plastics Smart website, and information is spreading widely both in Japan and abroad through the campaign site and various events.

<https://plastics-smart.env.go.jp/>

Name of Action 2:

UMIGOMI Zero Week

Brief description:

Clean-up campaign “UMIGOMI Zero Week” (“umigomi” means marine litter in Japanese) (Also see 3.3.1.)

Name of action 3:

Good Practices for Reducing Microplastics

Brief description:

“Good Practices for Reducing Microplastics” is a collection of initiatives and technologies by Japanese companies, contributing to the prevention, reduction, and collection of microplastics. The good practices are then disseminated and internationally.

Name of Action 4:

Marine Plastic Litter Academic Symposium

Brief description:

The symposium is annually held since 2021 with the aim of sharing the progress and results of research on marine plastic litter in Japan with the general public as well as expanding the research and promoting further research. In 2023, the symposium was two days long and more than 300 people attended.

We have seen a positive improvement over the last two years

Numerical data, if any:

Number of registered cases for “Plastics Smart” campaign

	FY2021	FY2022
Total	2,806	3,180

(reference)

<https://plastics-smart.env.go.jp/>

Clean-up campaign “UMIGOMI Zero Week” (“umigomi” means marine litter in Japanese) was organized with the participation of 150,000 citizens in 2021.

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions 1:

Local Blue Ocean Vision Project

Brief description:

Local governments have conducted model projects to measure marine litter in coastal regions and inland areas. Seven regions were newly selected as model areas in FY2022

Name of Action 2:

“UMIGOMI Zero” declaration by local governments (“umigomi” means marine litter in Japanese)

Brief description:

Declaration of intent to promote marine litter control in the region. As of Janu 2023, 126 local governments have been declaration to the “UMIGOMI Zero”

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL - International/Regional

Yes

Name of actions 1:

Regional Knowledge Centre for Marine Plastic Debris

Brief description:

Regional Knowledge Centre for Marine Plastic Debris was established at ERIA (Economic Research Institute for ASEAN and East Asia) in 2019 with the support of the Ministry of the

Environment, Japan. The center carries on information-sharing to raise awareness and promote actions taken by private sector and citizens in ASEAN plus three countries.

The specific approaches are as follows;

Creating an online platform to share good practices accomplished by the private sector

Providing information on related policies for the private sector

Sharing positive case studies of good practices of private companies

Name of actions 2:

Contributions to the G20 Report on Actions against Marine Plastic Litter and relevant website updates

Brief Description:

Japan has provided support to the G20 presidency countries to carry out the G20 Marine Plastic Litter reporting initiative since 2019. Actions against marine plastic litter taken by 36 countries and 8 institutions / NGOs are summarized in the latest report.

Name of actions 3:

ASEAN-Japan Eco-school Project

Brief Description:

Based on the "Future Leaders' Declaration on ASEAN-JAPAN Cooperation for International Marine Plastic Waste", the ASEAN-Japan Centre, an international Organisation, has been implementing an eco-school project to provide education on marine plastic litter issues since FY2021. This project is in line with "Public Awareness, Education & Outreach" which is one of the four areas in the ASEAN Regional Action Plan for Combating Marine Debris in ASEAN Member States (2021-2025), and it aims to further strengthen the partnership between Japan and ASEAN through inter-generational and cross-sectoral cooperation with the collaboration of young people, educational institutions, and government agencies. In March 2023, the 2nd International Symposium on Marine Debris Education was held online, and students from elementary school to high school who have attended Eco-School lectures in Japan and ASEAN countries participated, and then presented student-led initiatives to reduce marine plastic debris and protect the oceans. (According to the secretariat of the ASEAN-Japan Centre, 2,300 people registered to participate.)

We have seen a positive improvement over the last two years

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Name of action 1:

Harmonization of Microplastics Monitoring Methodologies in the Ocean

Brief description:

Taking the lead on international harmonization of monitoring methods.

“Guidelines for Harmonizing Ocean Surface Microplastic Monitoring Methods” (Published in 2019, revised in 2020)

http://www.env.go.jp/en/water/marine_litter/guidelines/guidelines.pdf

Name of action 2:

Sharing and Compilation of Ocean Microplastics Monitoring Data

Brief description:

Developing a global database to share and compile monitoring data in collaboration with related initiatives. The database provides global maps of microplastic density in the ocean surface as a tool to addressing marine plastic pollution.

Name of action 3:

Development of the harmonized guidelines for monitoring using remote sensing technologies

Brief description:

This aims at enhancing more comprehensive coverage and effectiveness of the monitoring of marine litter, including plastics, by using the technologies, knowledge sharing and harmonization of the methodologies.

Name of action 4:

Investigation and estimation of domestically-generated amounts and routes, as well as an investigation into floating plastic

Brief description:

In order to understand the domestically-generated amounts and routes of marine litter, promoting Investigation and estimation.

Names of actions 5:

Research on methods for evaluating the impact of marine plastic litter, including microplastics, on living organisms and ecosystems.

Brief description:

In this study, the Ministry of Environment investigated the exposure and toxicity of MPs for the purpose of examining the particle effects of MPs on aquatic organisms. The Ministry of Environment grasped the latest domestic and international trends by conducting a literature survey on toxicity information and hazard assessment data, etc., and held peer reviews and review committees by experts.

Name of action 6:

Development of survey guidelines and case studies for marine plastics

Brief Description

In order to understand the historical amount and composition of litter discharged from land to the ocean via rivers, survey guidelines and case studies were developed and shared with local governments and research institutes

Name of action 7:

Survey on ecological impact on fish and shellfish that have ingested microplastics (implemented by the Fisheries Technology Research Institute)

Brief description:

The survey carries out various measurements with fish and shellfish fed with microplastics, such as the residence time of microplastics in their body and the amount of toxic substances eluted in their digestive organs, which were absorbed by microplastics.

We have seen a positive improvement over the last two years

Numerical data if any:

Budget scale of Monitoring & Scientific research

	FY2022
National budget	JPY 265 million

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions 1:

Sharing and Compilation of Ocean Microplastics Monitoring Data

Brief description:

Taking the lead on international sharing and compilation of ocean surface microplastics monitoring data.

Developing a global database to share and compile monitoring data, and promoting international data linkage and harmonization in collaboration with related initiatives.

Names of actions 2:

Training program on marine litter monitoring methods

Brief description:

Training program on monitoring methodologies of marine litter (floating litter, ocean surface microplastics, seabed litter, and beach litter) conducted every year for governmental officials and researchers responsible for the monitoring in Southeast Asian countries.

We have seen a positive improvement over the last two years

6.10.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments

- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.10.4. Best Practices

National level

Japan enacted the Act on Promotion of Resource Circulation for Plastics in April 2022.

Local level

Support for collection and treatment of coastal marine litter by local government

We promote the collection and treatment of marine litter by local governments, through the “Project for promoting local measures against coastal marine debris” based on the “Marine Litter Act” (FY2022 budget: JPY 8.059 billion). In addition, fishery multi-functional measures (FY2022 budget: JPY 1.700 billion) are being used to encourage fishers to take action on the collection and treatment of marine litter including marine plastics, for the maintenance and recovery of the marine ecosystem. Furthermore, we encourage local governments to cooperate with fishers to bring any litter they collect while fishing to port, making use of subsidies under the “Marine Litter Act”. In order to expand this effort, we started a demonstration project in FY2020. In addition, when fishers volunteer to collect marine litter, the national government provides full support for the litter processing cost and supports 28 prefectures.

Private sector

Released “Good Practices for Reducing Microplastics” compiling a collection of good practices on the efforts and technologies of Japanese companies. Available from May 2021, and revised in November 2022.

International cooperation

International cooperation to developing countries

Under the “MARINE Initiative” explained above in 3.2.3, Japan provides support to empower developing countries to promote waste management, recover marine litter, and innovate, including training for 10,000 officials engaging in waste management worldwide by 2025.

Japan will continue to provide support to ASEAN countries, based on the ASEAN+3 Marine Plastics Debris Cooperative Action Initiative, for various measures such as: awareness raising for local governments, citizens and business units; development of national action plans on marine litter; capacity building for proper waste management including waste-to-energy infrastructure; as well as promoting knowledge-sharing through “Regional Knowledge Centre for Marine Plastic Debris” housed in Economic Research Institute for ASEAN and East Asia (ERIA).

Japan also cooperated with international Organisations to implement numerous projects to tackle marine plastic pollution. For example, Japan has earmarked over USD 1.1 million to support the United Nations Environment Programme (UNEP) to implement countermeasures against marine plastic litter in Southeast Asia and India (CounterMEASURE) by using novel technologies and methodologies to track plastic pollution at its source along the Mekong and Ganges rivers. This project also supports local partnerships for reducing plastic pollution. Since May 2020, the 2nd phase of CounterMEASURE has been implemented on a larger scale with a substantial contribution (USD 5.7 million) from Japan. The project aims to generate and share scientific knowledge on plastic pollution in the Ganges, Mekong, and selected rivers in Sri Lanka to inform policy and decision-making processes at local, national, regional, and global levels.

Japan, in collaboration with UNEP, has implemented Project on Promotion of Community Resilience Against Plastic Pollution and Climate Change in the Mekong River Basin aiming to monitor plastic pollution in Mekong River Basin countries. This project aims to monitor plastic pollution in Mekong River Basin countries, to support adoption of community action plans, to investigate changes in river ecosystems that stems from plastic pollution and climate change. It also develops a list of technologies and tools for decarbonisation in response to climate change. Through the project, development of implementation plans for a resilient society will be facilitated. It also provides technical support for collection of plastic wastes and recycling business models. The project will be finalized in March 2023.

Lastly, Japan and UNEP will be working towards enhancing tools and protocols for assessment and monitoring capabilities with the Mekong River Commission (MRC), and to strengthen national and local waste management systems, for plastic pollution management in the Mekong River Basin and in the Pacific Islands. The project will be starting in April 2023.

Additionally, Japan-ASEAN Integration Fund (JAIF) financed several projects to mitigate marine plastics in Indonesia, Cambodia, Singapore, Thailand, Philippines, Brunei, Vietnam, Malaysia, Myanmar and Lao People's Democratic Republic.

Furthermore, UNEP International Environmental Technology Centre (UNEP-IETC) has implemented a project on "Support for research on environmentally sound management, technology and treatment with Plastic Waste throughout Asia" based on the Osaka Blue Ocean Vision. The project includes a study on Needs Assessment of Environmentally Sound Technologies for Plastic Waste Management and also available technologies for plastic waste management (USD 909,090). The project also aims to update technical guidance and capacity building based on best available techniques, good practices, environmental practices and risk reduction developed with various stakeholders for the sound management of waste during the COVID-19 pandemic.

Japan is also starting the project with UNEP-IETC focusing on environmentally sound management of plastic waste. The project will analyze and evaluate good practices in plastic waste management in Japan and other countries, prepare action plans, organize a series of project meetings and support other plastic waste recycling projects, to establish a sustainable management system for plastic waste, which is required after the entry into force of international legally binding instrument on plastic pollution. Implementing plastic waste management in an environmentally sound manner is recognized as the most important measure, as it contributes to building a circular economy by preventing the leakage of plastic waste into the environment and promotes recycling.

6.10.5. References and Reading Links

- **National Action Plan for Marine Plastic Litter (Japanese only)**

<http://www.env.go.jp/water/Marine%20plastic%20litter%20countermeasure%20action%20plan.pdf>

- **Resource Circulation Strategy for Plastics (Japanese only)**

<https://www.env.go.jp/press/files/jp/111747.pdf>

- **The Act on Promotion of Resource Circulation for Plastics**

https://www.gov-online.go.jp/eng/publicity/book/hlj/html/202205/202205_09_en.html

- **Subsidy for the local government (Japanese only)**

<https://www.env.go.jp/content/000100994.pdf>

- **Good Practices for Reducing Microplastics**

https://www.env.go.jp/en/water/marine_litter/gp_frm.html

- **Clean Ocean Material Alliance**

<https://cloma.net/english/>

- **CounterMEASURE**

<https://www.unep.org/news-and-stories/press-release/japan-unep-deepen-cooperation-plastic-pollution-and-post-conflict>

- **G20 Report on Actions against Marine Plastic Litter**

<https://www.env.go.jp/press/files/en/938.pdf>

- **Introduction of Fee-incurring Plastic Checkout Bags Starts in July 2020 in All Stores across Japan**

https://www.meti.go.jp/english/press/2019/1227_007.html

- **Plastic Smart**

<https://plastics-smart.env.go.jp/>

6.10.6. Contact Details: *(Please specify name and email address)*

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6.11. Mexico

Key Highlights

- National Action Plan for Marine Debris and Plastic Pollution is currently under development
- General Law of Circular Economy Initiative.
- Single use plastic products prohibition
- Campaign “Last stop: the ocean” (2021)
- Beach cleanups focused on reduce marine plastic litter.
- With the support of the Commission for Environmental Cooperation, an outreach campaign was developed for Mexico, the U.S. and Canada, called “Last Stop: The Ocean”
- Mexico has recently presented the National Inventory of Plastic Pollution Source

6.11.1. Policy and Frameworks

National Action Plan

In preparation

National Action Plan for Marine Debris and Plastic Pollution is currently under development:

with the support of UNEP, the National Action Plan for Marine Debris and Plastic Pollution is currently under development, through consultation workshops for the development of the marine plastic litter inventory and will be concluded this year.

Legal Framework

Yes

Please list your country’s legislation including name and brief description here:

Name:

1. General Law for the Prevention and Integral Management of Waste (LGPGIR)
2. Prevention and sound waste management Law and Regulation

Brief description:

1. At federal level there is no specific legislation on MPL, however, the LGPGIR establishes the policy on waste management. In Mexico, waste is divided into three categories: urban solid waste, special handling waste, and hazardous waste
2. This Law considers the prevention and minimization of the generation of waste, its release into the environment, and its transfer from one environment to another, as well as its comprehensive management to avoid health risks and damage to Ecosystems.

Indicators

No. Indicators and strategies will be developed for The Marine Plastic Litter National Program that is being processed.

6.11.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

No

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Single use plastic products prohibition

Targeted products:

Plastic bags

Brief description:

There are different initiatives at the local level to discourage disposables use.

However, most state governments have amended their legislation to ban single-use plastic products or replace them with other materials.

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

General Law of Circular Economy Initiative.

Brief description:

The initiative is focused in maintain the products, materials, and resources within the economic cycle for as long as possible, to minimize the waste generation.

Regulations on microplastics

No

There are no regulations on the issue of microplastics at the federal level. Regarding state legislation, Mexico City prohibits the commercialization, distribution and delivery of products that contain intentionally added microplastics (Solid Waste Law), however its application and verification has not been defined.

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Others (please specify)

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Sound waste prevention and management programs are developed in the municipal and regional level.

Brief description:

Planning instruments that allow the establishment of objectives and strategies in terms of comprehensive waste management.

In addition, the federal government carries out some actions to promote integrated waste management; however, municipal governments are responsible for the management of urban solid waste.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

No

Not at the federal level. In 2018, the German Agency for International Cooperation (GIZ), the company LafargeHolcim and its subsidiary company GEOCYCLE, together with the government of the state of Quintana Roo, collaborated on the OLAS (Clean Oceans) project, whose main objective was to prevent plastic waste generated on land from reaching aquatic ecosystems.

(<https://coprocesamiento.org/olas-cierra-2019-con-buenos-resultados/>)

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Beach cleanups focused on reduce marine plastic litter.

Brief description:

There are different initiatives for cleaning beaches driven by government authorities, academia, and NGOs.

In addition, a lot of actions to clean beaches of marine litter are carried out by NGOs, hotels, private companies and some municipalities.

Removal of plastic litter from the ocean

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

No

Some local governments have promoted the use of biodegradable materials, particularly compostable ones, but they have faced other problems such as the lack of laboratories to certify the material, as well as the lack of monitoring activities.

Public-private partnerships for creating and implementing innovative solution

No

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

No

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

SEMARNAT has carried out some information campaigns such as the following:²¹

"No straw is fine."

"Protection of Mexico's oceans, seas and coasts".

"For our health and the planet's health, no disposable plastics, use reusable"

Brief description:

The purpose of these campaigns was to discourage the use of single-use plastics, as well as the importance of preserving and protecting marine resources from the threats they currently face due to plastic waste pollution.

²¹ <https://www.gob.mx/semarnat/es/articulos/sin-popote-esta-bien-157223?idiom=es>

<https://www.gob.mx/semarnat/prensa/semarnat-lanza-campana-para-la-proteccion-de-los-oceanos-y-su-biodiversidad>

The campaigns was launched the campaign with the purpose of aware society the importance of caring for and protecting our marine resources from pollution from single-use plastics, climate change and species trafficking.

Awareness-raising campaigns related to MPL – Local

No

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Names of actions:

Campaing "Last stop: the ocean"²²

Brief description:

With the support of the Commission for Environmental Cooperation, an outreach campaign was developed for Mexico, the U.S. and Canada, called "Last Stop: The Ocean"

This campaign aims to raise awareness among the population living inland that garbage can "travel" to the ocean through drains and rivers.

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

No

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

1. Marine Litter and Microplastics Working Group in LAC.
2. Academia efforts oriented to work with international groups to generating technical information and developing capabilities in marine plastic litter topics

Brief description:

1. Mexico is part of this working group whose objective is to establish a regional cooperation and coordination mechanism to address the issue of marine debris and microplastics, which generates the exchange of information on best practices and experiences, technology assessment, capacity building and institutional strengthening among other points.
2. UAM-A (Universidad Autónoma Metropolitana) is leading most of the efforts

²² <http://www.laststoptheocean.com/>

6.11.3. Challenges

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.11.4. Best Practices

National level

Mexico has recently presented the National Inventory of Plastic Pollution Sources, that can be consulted in the following website:

https://www.gob.mx/cms/uploads/attachment/file/817333/INFCP_RE_2023.pdf

Local level

Private sector

International cooperation

In addition to the marine litter working group, Mexico is part of Marine Litter Action Plan for the Northeast Pacific 2022-2026, along with Guatemala, Salvador, Honduras, Nicaragua, Costa Rica, Panama and Colombia.

<https://marviva.net/wp-content/uploads/2022/06/Plan-de-Accio%CC%81n-de-Basura-Marina-2022-2026.pdf>

6.11.5. References and Reading Links

6.11.6. Contact Details: *(Please specify name and email address)*

6.12. Saudi Arabia

Key Highlights

- National action plan for sustainable management of Marine Litter in the Red Sea coast of Kingdom of Saudi Arabia
- New 'Waste Management Law'
- Mostadam Program
- PERSGA program to support marine institute and universities to conduct researchh

6.12.1. Policy and Frameworks

National Action Plan

Yes

Name:

National action plan for sustainable management of Marine Litter in the Red Sea coast of Kingdom of Saudi Arabia.

Brief description:

The plan is part of a regional effort by the 'The Regional Organisation for Conservation of the Environment of the Red Sea and the Gulf of Aden'. A final action plan has been approved for implementation which is scheduled to start soon. Key components include: Public awareness campaigns, engagement plans with key stakeholders, evaluation of enforcement mechanisms, adequacy of port reception facilities at the red sea, developing and monitoring flagship demonstration actions, engage private companies to phase out single use plastic bags, water bottles, straws, etc... plan for coastal land owners to regularly collect litter plastic from their area of operation, re-survey beaches with baseline data, support local marine research institutes to protect coastal marine environment from littering in addition to training and capacity building.

Legal Framework

Name: New 'Waste Management Law'

Brief description:

The new law provides for key requirements for waste minimization, segregation and recycling. It also provides for the implementation of Extended Producer Responsibility principles and the strict regulation of waste activities across the value chain from point of generation to final treatment with key emphasis on circular economy principles. It also provides for stringent monitoring and penalties for violations including illegal dumping and burning of waste.

Indicators

No

6.12.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean Sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost, and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing Gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology-based plastic waste re-use, recycling, and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

The national center for waste management (MWAN) is promoting circular economy principles, EPR is a major part of this program.

There has been communication with different stakeholders to develop initiatives to prevent and reduce plastic waste generation. Key initiatives prevention and reduction of plastic waste generation include:

List of initiatives:

PepsiCo, SABIC, (PepsiCo, SABIC, etc.).

EPR (currently considering various options for introducing fees on special wastes including batteries, ELVs, packaging waste and used tires)

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Name of actions – Baseline study and Business model of implementing EPR or user fee on single use plastic bags.

Targeted products:

Single use plastic products mainly shopping bags.

Brief description: The study is currently at kickoff stage by MWAN to develop the appropriate EPR business models for managing single use plastic bags and considering a range of options including use restrictions, imposing user fee and/or a combination.

Actions for encouraging sustainable / circular product design

Name of actions: Mostadam Program

Brief description: this is the new Saudi Green Building Standard developed to buildings and communities. MVWAN is in constant discussion to promote and make it a standard requirement to use post-consumer recycled products in the design of new projects (Recycled aggregates, wood, steel and others).

Regulations on microplastics

Government actions on microplastics

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Others (please specify)

Environmentally sound waste management

Enforcement of proper waste management system

New Waste Management Law' and Implementing Regulations

Brief description: The new law and regulations were developed in the context of promoting circular principles to waste management including prioritizing. sustainable consumption of material, reducing waste and reuse of material by generators as well as recycling with a key objective of diverting waste from landfill. The law also provides for implementing Extended Producer Responsibility (EPR) and contracting with licensed service providers along with strict monitoring requirements and penalties upon violators reaching millions of US dollars.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Name of Actions: This action is part of the "National Action plan " for sustainable management of Marine Litter in the Red Sea coast of Kingdom of Saudi Arabia

Removal of plastic litter from the ocean

Yes

Name of Actions: This action is part of the "National Action plan" for sustainable management of Marine Litter in the Red Sea coast of Kingdom of Saudi Arabia

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Name of Actions: New Law and regulations

Brief description: The new law clearly requires waste generators to comply with the following actions:

Sustainable consumption of material.
Reuse of material.

Waste minimization.

Segregation of recyclables.

Plastic waste is clearly targeted and will be impacted by the above policy requirement. In addition, new EPR requirements under development will help and incentivize plastic products design including recyclability products.

Public-private partnerships for creating and implementing innovative solution

Yes

Name of Actions: Some initiatives are currently under consideration.

Brief description: The mandate of MWAN calls for promoting private investments in waste activities for the purpose of developing innovative solutions and achieving economic sustainability for the sector.

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

This item has been listed as a key component of the National Action Plan as described in section above.

Awareness-raising campaigns related to MPL – National

Yes

Name of Action: The National action plan for sustainable management of marine litter in red seacoast of kingdom of Saudi Arabia

Brief Description:

~Produce, publish and or disseminate education and awareness material using electronic media, information sheet, brochure etc.

~Organize awareness workshop on impact of marine litter for various stakeholder such as teacher and govt. officials.

~Develop strong linkages with key govt. department to inform officials/decision makers about important information related to marine litter.

~Develop strong linkage with newspaper reporters/editors to encourage them to communicate information about environmental and health aspects.

Awareness-raising campaigns related to MPL - Local

Awareness-raising campaigns related to MPL - International/Regional

Others

The KSA is participating in the “Intergovernmental negotiating committee” (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment.

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Name of Actions: This action is part of the "National Action plan" for sustainable management of Marine Litter in the Red Sea coast of Kingdom of Saudi Arabia

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Name of Action:

PERSGA

Brief Description: In one of its key tasks the PERSGA

initiative calls for encouraging and supporting local marine institutes and universities to conduct research on protective and regulatory and regulatory measures for protecting the coastal and marine environment from the litters arising from urban and rural areas.

Others

6.12.3. Challenges

- Recycling system improvement
- Proper waste management system including lack of capacity.
- Data collection related to waste in general.
- Lack of awareness among citizens, business, local government
- Lack of financial incentives for waste Treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID 19

6.12.4. Best Practices

National level

Local level

Private sector

International cooperation

6.12.5. References and Reading Links

6.12.6. Contact Details: *(Please specify name and email address)*

- Dr. Abdullah Faisal Sbai
ceo@mwan.gov.sa

6.13. South Africa

Key Highlights

- National Waste Management Strategy (2020)
- National Environment Management Waste Act
- Extended Producer Responsibility Regulations
- Plastic Bag Regulations South African National Standard (SANS) 695 (Compulsory Specification for Plastic Carrier Bags to improve recyclability of plastic bags)

6.13.1. Policy and Frameworks

National Action Plan

Yes

Name:

National Waste Management Strategy (2020)

Brief description:

The overall purpose of the revised NWMS is to provide government's policy and strategic interventions for the waste sector. The strategy advocates the concept of a circular economy, and the following outcomes are expected to be achieved by all relevant stakeholders and sectors of society: prevention of waste, and where waste cannot be prevented ensure that 40% of waste is diverted from landfill within 5 years; 55% within 10 years; and at least 70% within 15 years leading to Zero-Waste going to landfill

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

National Environmental Management Waste Act

Extended Producer Responsibility Regulations

Plastic Bag Regulations

South African National Standard (SANS) 695 (Compulsory Specification for Plastic Carrier Bags to improve recyclability of plastic bags)

Plastics Master Plan, which is intended to serve as South Africa’s national action plan to tackle plastic pollution and achieve sustainable production and consumption of plastics.

Brief description:

Implementation of Industry Waste Management Plans: Under the National Waste Act the paper, packaging, electrical, electronic, and lighting industries are required to implement industry waste management plans indicating how these industries will deal with its extended producer responsibility and decrease packaging in the environment, amongst other aspects.

Waste management practices across the country are analyzed in terms of the waste management hierarchy. The key elements of the waste hierarchy are as follows:

1. Waste avoidance and reduction
2. Re-use
3. Recycling
4. Recovery
5. Treatment and Disposal

Indicators

Yes

Please list your indicators here:

1. In South Africa, the majority of plastic waste still ends up in landfills.
2. Recycling is a key element of circulating plastic material in the economy. However, while all plastics are technically recyclable, not all plastics are currently recycled in practice in South Africa.
3. The end-use market demand for recycled material is still one of the limiting factors for growth of the plastic recycling sector in South Africa. This is largely linked to the competitive price of virgin plastic.

6.13.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Plastic Bag Regulations

Targeted products:
Single-use shopping bags

Brief description:

In 2019, Government carried out a review of the Plastic Carrier Bags and Flat Bags Regulations of 2003. As a result, the proposed changes to the regulations are that plastic carrier bags and plastic flat bags must be made from a minimum of 50% post-consumer recycle from the 01 January 2023 and by 01 January 2027 be made from 100% post-consumer recycle.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Banning of plastic bags that has a thickness of less than 24 microns

Targeted products:

Plastic Carrier and Flat Bags

Brief description:

In 2003, South Africa introduced the plastic bag regulations in a bold move to address the challenge of plastic bag litter. The regulations essentially made the provision of thicker, more durable plastic bags compulsory. The compulsory specification was subsequently developed prescribing that only plastic carrier bags and flat bags of the minimum thickness of 24 microns can be manufactured or imported into the country

Actions for encouraging sustainable / circular product design

In progress

Names of actions:

UNIDO project on Support for transitioning from conventional plastics to more environmentally sustainable alternatives.

Brief description:

Funded by the Government of Japan, this 3-year project (initiated in 2020) supports the identification and implementation of opportunities for sustainable alternative materials, including bio-plastics, and will support the implementation of the Industry Waste Management Plan of the plastic packaging industry by building up the capacity to increase the quality and amount of recyclables.

Regulations on microplastics

No

Government actions on microplastics

In preparation

Names of actions:

Microplastics research

Brief description:

Establishment of microplastics laboratories: this initiative under the Commonwealth Litter Programme will enhance research on microplastic pollution and offer opportunities for scientific training and capacity-building with the DFFE and the Nelson Mandela Metropolitan University.

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of regulations: Studies of Microplastics in Vaal River

Brief description:

It is also difficult to assess the environmental and public health risks linked to microplastics. That's because scientists are still learning about how microplastics move through various pathways and where people are most vulnerable to exposure.

In an attempt to bridge this gap, Wits recently studied common carp fish collected from South Africa's Vaal River. The findings were troubling. They took samples from 26 fishes' digestive tracts and found a total of 682 particles – ranging from seven to 51 particles per fish. That means the river is considerably polluted with microplastics.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions: Environmental Management Inspectors

Brief description:

EMIs have wide investigative powers and are empowered to fulfil their specific mandates using all the powers of a member of the South African Police Service who is not a commissioned officer, permitting them to conduct an inspection where there is reasonable suspicion of a criminal offence.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Municipal Cleaning and Greening

Brief description:

The aim of Municipal Cleaning and Greening Programme is to combat the environmental degradation and ensure that our country is free from litter and illegal dumps, and this will be done through mass public employment of the unemployed with a special prioritisation women, youth and persons living with disabilities

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Marine litter is not covered as a direct intervention in South Africa under the Blue Economy unit. Circular economy and waste are covered under the Operation Phakisa Waste Lab. This initiative aimed at enhancing the chemicals and waste economy, by among others, increasing commercialisation of the circular economy and creating value from resources currently discarded as waste.

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

National Working for the Coast Programme:

Brief Description

A job creation initiative targeting women, youth, and persons with disabilities, focusing on promoting responsible coastal management through regular collection of litter on along South Africa's beaches and waterways.

Good Green Deeds programme: a nation-wide programme aimed at mobilising the public to clean local communities and raise awareness around illegal dumping and waste management

The Department has embarked on an initiative to contribute toward marine pollution prevention by tackling the litter (especially plastic litter) along rivers and other waterways. The Source to Sea Litter Combatting Project will be implemented in all the district coastal municipalities of South Africa over a period of 6 months. The Project will mobilise a total of 1600 youth nationally (100 per district municipality) to recover litter from hotspot areas along the rivers and other waterways.

Annual International Coastal Clean-up Day: celebrated in the 3rd week of September each year

Removal of plastic litter from the ocean

Yes

Yes

Names of actions:

Beach Clean ups

Brief description:

The Department do conduct beach clean ups on a regular basis and when there has been floods which causes the beach to be full of plastic waste.

In South Africa, we have NGO's which are created specifically to do beach clean ups

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

National Waste Management Strategy

Brief description:

The Strategy promotes alternatives to landfilling, composting and energy recovery options, promoting approaches to the design and packaging of products that reduce waste and encourage reuse, repair and recycling.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Extended Producer Responsibility

Brief description:

EPR requires the manufacturers and importers of products to bear a significant degree of responsibility for the impact their products have on the environment, Extended Producer Responsibility ensures that those products are either recycled or up-cycled, and that waste products diverted to landfill is kept at a minimum.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

Municipal Cleaning and Greening Programme aims to fight the environmental degradation and ensure that the country is free from litter and illegal dumps, and this will be done through mass public employment of the unemployed with a special prioritisation women, youth and persons living with disabilities.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Good Green Deeds programme: a nation-wide programme aimed at mobilising the public to clean local communities and raise awareness around illegal dumping and waste management

National Consumer Awareness

Brief description:

The National Consumer Awareness is a demonstration of ensuring the purchaser or buyer knows about the information about items and products so that they will be aware of how they are disposed.

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Operation Clean Sweep

Brief description:

An industry led initiative aimed at reducing the accidental loss of pellets, flakes, and powder from processing facilities into the environment.

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Annual International Coastal Clean-up Day: celebrated in the 3rd week of September each year

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Science review of marine plastic pollution research in South Africa: led by the National Department of Science and Technology through the CSIR's Waste Innovation Roadmap, this study reviewed the sources and pathways of plastic marine litter, transport, and fate of marine plastic litter, impacts on biota and ecology, economic impacts and monitoring

methods. The findings were published in the May / June 2020 special edition of the South African Journal of Science and highlighted the gaps in knowledge and research opportunities for the future.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

In progress

Names of actions:

Participation in the development of the UNEA 5.2 resolution on plastic pollution and the subsequent Intergovernmental Negotiating Committee meetings.

Brief description:

The treaty has a strong research focus looking at monitoring at all levels of plastics in the environment.

6.13.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.13.4. Best Practices

National level

National Plastics Colloquium: Hosted by the Minister of Forestry, Fisheries and Environment, this is a regular platform that brings together Government, the private sector, civil society and academia to identify innovative solutions and build more effective partnerships to enhance plastic waste management thereby reducing plastic pollution.

National Recycling Enterprise Support Programme (RESP): This programme is primarily targeted at new or recently formed business entities that have developed business plans that demonstrate a high potential to make a significant impact within the waste economy and aims to support the establishment of at least two recycling companies in 9 provinces.]

Local level

Private sector

Plastics SA - The promotes recycling initiatives within the plastics sector, and which coordinates the South African volunteer-based International Coastal Clean-up initiative in partnership with the Oceans Conservancy.

Sustainable Seas Trust - SST is a Non-Profit Organisation (NPO) that supports and connects communities across Africa through research, education, enterprise development and growing awareness about ocean conservation and plastic pollution.

Sustainable Seas Trust – Development of an African Marine Litter Monitoring Manual and Guide (2020)

Sustainable Seas Trust – Development of a Sample Preparation Manual for the Analysis of Plastic-related Pollutants (2022)

WWF South Africa - The convenor of the SA Plastics Pact, which brings together various players across the plastics value chain to rethink the way plastics are designed, used and reused and to implement locally designed solutions towards a circular economy for plastics in South Africa. The WWF-SA has also been working with major retailers in South Africa to standardise On Pack Recycling Labels (OPRLs) with major retailers, to alert consumers on whether the packaging can or cannot be recycled.

International cooperation

Sweden and the Swedish Agency for Marine and Water Management (SwAM) in collaboration with DFFE Source to Sea screening study of pollution and flows the Umgeni River catchment in KwaZulu-Natal. This project applied the SIWI Source to Sea Practitioners' Guide to the assessment of sources of plastic litter along the river catchment. A follow-up study has been completed that carried out an assessment of the socio-economic impacts of plastic pollution along the Umgeni River catchment.

Nairobi Convention: Development of a Regional Marine Litter Action Plan for the Western Indian Ocean Region (2018).

Abidjan Convention: Development of a Regional Marine Litter Action Plan for the West, Central and Southern African region (ongoing).

International Union for the Conservation of Nature (IUCN): MARPLASTICS Initiative aimed at reducing plastic leakage to the environment by focussing on 4 outputs.

Commonwealth Marine Litter Project (CLiP): The programme supports six ODA-eligible Commonwealth countries to develop national litter action plans focusing on plastics entering the oceans.

6.13.5. References and Reading Links

6.13.6. Contact Details: *(Please specify name and email address)*

6.14. South Korea

Key Highlights

- The 1st National Action Plan on marine litter and marine contaminated sediment (2021-2030)
- Marine litter and contaminated sediment Management Act
- Act on Conservation and Utilization of the Marine
- ROK is working towards the goal of zero Marine plastic waste by 2050. Middle target is reducing generation of MPL by 60% by 2030 compared to 2018
- Regulations on the safety standards etc. of cosmetics (2017)
- Designation of, and safety and labeling standards for, consumer chemical products subject to safety verification (2020)
- The 3rd national action plan on rivers and estuaries (2021-2025)
- Biodegradable fishing gears dissemination
- Target Utilization Rate of Recycled Raw Materials
- Adopt-a-beach project
- Marine debris 'picking up + jogging' campaign in 2022
- 'Tell me! + Pick up!' Campaign in 2023
- Coastal Garbage monitoring
- Use of ICT

6.14.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name: The 1st National Action Plan on marine litter and marine contaminated sediment (2021-2030)

Brief description:

the plan incorporates comprehensive measures to address various marine litter ranging from contaminated sediment to marine plastic litter including microplastics based on resource circulation and carbon-neutral approach. The plan sets its goal to cut the amount of marine plastic litter by 60% until 2030 and will achieve MPL-free ocean by 2050 through meticulously designed 5 marine litter reduction strategies and 40 action plans.

1. Prevention

- Enhance management of the marine litter source from the sea such as ALDFG, the waste from ships
- Enhance management of the marine litter entering from the land through marine litter barrier at estuaries and clean-up activities at estuaries
- Enhance management of the foreign marine litter source through international cooperation on marine litter policies and research

2. Reinforcement of marine litter collection

- Expand the target areas of marine litter collection with a goal to cover remote places
- Enhance public-private partnership to leverage various marine litter related stakeholders to encourage wide participation for clean-up activities
- Develop innovative marine litter collection technologies and increase the number of marine litter monitoring sites to obtain accurate marine litter data

3. Enhance infrastructure for marine litter disposal and recycling

- Increase the number of eco-friendly marine litter disposal areas for local fishermen communities
- Introduce pre-processing facilities for marine litter in order to effectively recycle
- Research and development for new and efficient recycling technologies

4. Comprehensive approach to strengthen marine litter management system

- Establish 'National Marine litter Committee' in order to do prompt decision making for urgent marine litter related issue
- International cooperation through regional, multilateral, bilateral frameworks

5. Public education and campaigns to raise awareness

- Design various education and public campaigns targeting all range of age groups

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

1. Marine litter and contaminated sediment Management Act
2. Act on Conservation and Utilization of the Marine

Brief description:

1. Marine Litter and Contaminated Sediment Management Act has its main goal on managing marine litter (including marine plastic waste and microplastics) using environment-friendly and life-cycle approach. It was established in 2019 and put into effect in 2020 to advance marine litter management system of the Republic of Korea.

In accordance with the act the national marine litter management plan is established every 10 years to ensure strategic and systematic management for marine litter and to give guidelines which central government and local government can follow to tackle the problem.

2. Act on Conservation and Utilization of the Marine Environment prescribes matters necessary for the prevention, improvement, response, and recovery with regard to marine pollution, by managing sources that generate pollutants, such as ships, marine facilities, and marine spaces, and regulate discharge of marine pollutants such as oil and noxious liquid substances. Before the enactment of the 'Marine Litter and

Contaminated Sediment Management Act in 2020, marine debris was managed based on this act and 5 yearperiod national marine litter management plans were established from 2009.

Indicators

Yes

Please list your indicators here:

ROK is working towards the goal of zero Marine plastic waste by 2050. Middle target is reducing generation of MPL by 60% by 2030 compared to 2018. Indicators are below

Amount of collected marine litter through national marine litter removal projects
 Amount and type of marine litter collected by national marine litter monitoring program
 Amount and type of microplastics in oceans evaluated by the microplastic distribution monitoring research

6.14.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Deposit system for disposable cups

Targeted products:

Disposable cups used in beverage-selling brand stores (Sejong and Jeju areas) with more than 100 operating branches nationwide

Brief description:

Disposable cups used in beverage-selling brand stores (Sejong and Jeju areas) with more than 100 operating branches nationwide include a resource circulation deposit(300won) when sold. Customers can get their deposit refunded by returning the disposable cup.

We have seen a positive improvement over the last two years

Numerical data, if any:

Applied in 659 stores

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Regulation of Single-Use Items

Targeted products:

Ban on the use of single-use cups, plastic straws, and free provision of single-use bags and shopping bags in facilities such as group feeding centers, food service businesses, and large-scale stores

Brief description:

Starting from November 2022, the compliance requirements for each industry will be strengthened and the range of single-use items subject to regulation will be expanded.

We have seen a positive improvement over the last two years

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Evaluation System for Recyclability

Brief description:

Evaluate the factors that impede the recyclability of products, containers, etc. being produced, processed, and sold, and encourage manufacturers to make improvements in the product manufacturing phase to promote recycling.

We have seen a positive improvement over the last two years

Regulations on microplastics

Yes

Names of regulations:

Regulations on the safety standards etc. of cosmetics (2017), Designation of, and safety and labeling standards for, consumer chemical products subject to safety verification(2020).

Brief description:

The manufacturing of cosmetics and non-prescription drugs intended for cleansing, exfoliating, and other purposes that include solid plastics with sizes of 5mm or less is prohibited. The manufacture, sale, import and use of cleaning and laundry products containing microplastics are also prohibited.

We have seen a positive improvement over the last two years

Comments:

There have been efforts to enact legislation related to microplastics include policy discussions and debates in the National Assembly, to establish a special law on micro plastics.

Government actions on microplastics

Yes

Names of actions:

Cross-ministerial meeting on microplastics

Brief description:

A cross ministerial meeting on microplastics was established to share information on microplastics-related policies and R&D status being implemented by each ministry and to develop an effective response system.

We have seen a positive improvement over the last two years

Comments:

The decisions to establish a comprehensive government-wide strategy for microplastics was made during the 2019 Ministerial meeting on Science and Technology, and as a result, the cross ministerial meeting on microplastics was launched in December 2022. This meeting aims to establish a systematic response to microplastics.

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of regulations:

Legislative actions on microplastics

Brief description:

Civil society Organisation, "Consumer Climate Action" has been engaged in legislative activities related to microplastics, including organizing discussions co-held with National Assembly on reducing microplastic pollution since 2021

We have seen a positive improvement over the last two years

Comments:

Policy discussions and debates in the National Assembly on the establishment of a special law on microplastics.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Installation of Citizen-friendly Waste Treatment Facilities

Brief description:

Local governments that want to install waste treatment facilities (incineration and landfill facilities) will create a complex facility linked to leisure and sports facilities by collecting the preferences and opinions of nearby residents from the project planning stage. Also, they will determine the form of securing and supplying demand for waste-derived energy.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

1. The 3rd national action plan on rivers and estuaries (2021-2025)
2. Fishing Gear management system

Brief description:

1. MOE establishes a national action plan every 5 years to effectively manage rivers and estuaries in particular that can be easily polluted by the waste entering from the land. The plan takes multi-faceted approaches using life-cycle and resource circulation approach
2. It is the system to prevent fishing gear from being dumped into the ocean
 - Fishing gear producers and salers have to write the list and restore it for 3 years
 - Sellers have to collect deposit when selling fishing gear and pay back when fishers return them
 - Owner of the fishing gear have to register their ownership

We have seen a positive improvement over the last two years

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions & Brief description

Marine environment keepers :

- MOF organizes a group of local residents who live nearby the sea and assign them a mission to oversee the coast. With financial support from MOF, Marine environment keepers carry out clean-up activity to remove marine plastic at a beach
- the number of keepers has increased from 1000 in 2020 to 1200 in 2022

We have seen a positive improvement over the last two years

Comments:

From 2021 to 2022, Marine environment keepers collect 41,996 tons of scattered waste on beach. It prevents waste from moving to ocean or other beach.

Removal of plastic litter from the ocean

Yes

Names of actions:

National marine litter removal project

Brief description:

MOF has been implementing a national scale removal project targeting the seaside, national ports and fishing ports and major fishing areas of Korea and now expand the targeting area even farther to cover blind spots such as remote islands. A part of a project involves operation of 664 marine litter dump in main fishing ports to prevent fishing gear being marine litter, operation of clean-up vessels which remove marine litter at all national ports, fishing ports and remote-islands

We have seen a positive improvement over the last two years

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

1. Biodegradable fishing gears dissemination
2. Target Utilization Rate of Recycled Raw Materials

Brief description:

1. National enterprise where MOF develops and disseminates eco-friendly fishery equipment such as nets and buoys to fishermen
2. Producers of plastic (producing over 10,000 tons of PET annually) will be required to comply with a target utilization rate (3%) for recycled raw materials starting from 2023.

We have seen a positive improvement over the last two years

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Adopt-a-beach project

Brief description:

MOF is working on establishing a system where MOF matches a group of people (NGOs, Corporations etc.) with a beach to facilitate private sector's participation in coastal clean-up activities.

We have seen a positive improvement over the last two years

Numerical data, if any:

Significant expansion of beach adoption agencies : 20 in 2021, 23 agencies → '22, 73 agencies in 107 agencies

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

Names of actions:

- 1) Online platform for ocean environment education
- 2) Moving class for ocean environment

Brief description:

1) operating online lecture targeting listeners including elementary school and middle school students, general public, experts etc. opening special lecture on ocean environment or liberal arts lecture 7 times annually

2) using 8tons truck that is remodeled to have various teaching tool, visit the kindergarten or school to provide marine environment education for future generations.

We have seen a positive improvement over the last two years

Comments:

Awareness of moving class for ocean environment participants becomes positive

Numerical data, if any:

Marine Environmental Awareness Improvement Score : (before education) 73.5→ (after education) 82.3

Awareness-raising campaigns related to MPL – National

Yes

Names of actions& Brief description:

Marine debris 'picking up + jogging' campaign in 2022 : A campaign for the general public to pick up trash on the beach while jogging

'Tell me! + Pick up!' Campaign in 2023 : A national campaign to activate the marine debris reporting system through the Safety Report app and pick up small trash directly

We have seen a positive improvement over the last two years

Numerical data, if any:

500 citizens collect 18tons of marine litter in 10 beaches

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

1. Adopt-a-beach project

A beach adoption program where companies, Organisations, schools, etc. cherish and take care of a specific beach like their own pet to promote citizens' participation in beach cleanup activities and it is operated by local government

2. Coastal clean up day

On third Friday of every month regional MOF and Korea marine Environment Management Corporation (KOEM) conduct nation-wide coastal clean-up activity at 12 different regions.

We have seen a positive improvement over the last two years

Numerical data, if any:

Significant expansion of pet beach adoption agencies : 20 in 2021, 23 agencies → '22, 73 agencies in 107 agencies

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

International Coastal clean up day : On third friday of september every year MOF holds International Coastal Clean up day ceremony where multistakeholders participate in clean-up activity at a beach.

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Coastal Garbage monitoring

Use of ICT

Brief description:

1. Coastal garbage monitoring :
Measures coastal garbage by type (paper, plastic, wood, etc.) by number and weight at 2-month intervals at 60 major coastal locations across the country
2. Use of ICT :
Reorganize the existing visual monitoring system into an ICT-based monitoring system using satellites and drones, and expand coastal waste monitoring survey peaks (60 → 120 or more sites)

We have seen a positive improvement over the last two years

Comments:

Expanding monitoring survey peaks, the more data is collected

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Strengthening and Improvement for Marine Litter response in Indonesia

Brief description:

“Strengthening and Improvement for Marine Litter response in Indonesia” project aims to enhance the marine litter monitoring capacity of Indonesia through a joint pilot marine litter monitoring conducted in Labuan

Bajo, Indonesia. Through this project, MOF is also working with the Indonesian government to establish a guideline to properly conduct marine litter monitoring in Indonesia through.

In progress

Discussions are underway to promote ‘Korea-China joint monitoring research on marine debris’ for a joint response to the plastic waste problem

No particular change observed

6.14.3. Challenges

Check the challenges that your country has faced:

Recycling system improvement

Proper waste management system (including lack of local capacity)

Data collection related to waste in general

Data collection related to marine plastic litter

Lack of awareness among citizens, business, local governments

Lack of financial incentives for waste treatment in general

Lack of financial incentives for technology development

Project delays due to COVID-19

Others (Please specify)

6.14.4. Best Practices

National level

Local level

Local government, Chungcheongnam-do has established its own lifecycle management system of generation prevention, collection, storage, and transportation treatment to reduce

marine debris. Installation of river inflow blocking facilities, designation of regional marine environment education centers, produce a digital marine debris distribution map and establish a local region recycling facility, etc.

Private sector

'Adopt-A Beach project' : As a result of active promotion by MOF, Private sector's voluntary participations for cleaning beaches are facilitated. The number of company and Organisation who participate in 'adopt-a beach project' increases from 20 in 2021 to 73 in 2022 .

International cooperation

NOAA International Marine Debris Conference (IMDC) Series

Republic of Korea held 'International Marine Debris Conference' in September 2022 in Busan with UN Environment and NOAA assisted it. Since 1984, NOAA has hosted six International Marine

Debris Conferences that engage a wide array of key stakeholders and the public to discuss all aspects of the

marine debris issue. This conference was action, solution, and change-oriented and included sharing of

lessons learned and best practices to reduce and prevent marine debris and its impacts; promoting international colearning; exchanging innovative ideas such as market incentives and communication strategies; and sharing the latest research initiatives, methods, and results

6.14.5. References and Reading Links

Framework act on resources circulation

The 1st National Resource Circulation plan (2018-2027)

The 3rd national action plan on rivers and estuaries(2021-2025)

Marine Litter and contaminated sediment management act

The 1st National action plan on marine litter and marine contaminated sediment(2021-2030)

Ministry of Environment website (<http://www.me.go.kr>)

Ministry of Ocean and Fisheries website (<http://www.mof.go.kr>)

6.14.6. Contact Details: *(Please specify name and email address)*

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6.15. Türkiye

Key Highlights

- “Circular on the Preparation and Implementation of Marine Litter Provincial Action Plans”
- "Charging of Plastic Bag" application, there was a 62,5% decrease in the use of plastic bags from 2019 to 2022
- Environmental Law amendment published in the Official Gazette No. 30621 and dated 10.12.2018
- Provincial Action Plan on Marine Litter
- Zero Waste Blue Movement
- Turkish National Integrated Marine Pollution Monitoring Program

6.15.1. Policy and Frameworks

National Action Plan

No

Legal Framework

Yes

Please list your country’s legislation including name and brief description here:

Name:

“Circular on the Preparation and Implementation of Marine Litter Provincial Action Plans”

Brief description:

Türkiye runs tackling marine litter studies under the National legislation called “Circular on the Preparation and Implementation of Marine Litter Provincial Action Plans” issued in 2019.

In coordination with relevant institutions / NGOs at regional level “Marine Litter Provincial Action Plans” are prepared and applied by all the related stakeholders and under the responsibility of the Governors, in all coastal provinces of Türkiye for 5-year periods

Indicators Yes**Please list your indicators here:**

The marine litter monitoring component as a part of National Marine Monitoring Program covers all the seas around Türkiye, and the indicators of marine litter were designed according to IMAP (Integrated marine Monitoring Program of Barcelona Convention) and EU-MSFD (Marine Strategy Framework Directive). Microplastics (in sediment, water column), floating litter (surface water), seafloor litter (macro litter), digested litter (microplastics in biota), beach litter indicators have been monitored in pilot regular stations through National Marine Monitoring Program.

 Under Development**Please list your indicators here:**

The indicator; “Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles” has not been fully applied. It is under development. The activities for these indicators depends on literature data. In 2023-2025 monitoring period ingested litter will be monitored in biota (fish).

6.15.2. Measures and Achievements**Please choose one to indicate whether your country implements the following measures**

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Charging of plastic bags

Targeted products:

Single used plastic bags

Brief description:

In order to prevent environmental pollution, raise awareness for environment and efficient management of resources, the Procedures and Principles Regarding the Charging of Plastic Bags have been put into effect as of January 1, 2019. For the application of charging plastic bags, "Procedures and Principles for Amending the Procedures and Principles Regarding the Pricing of Plastic Bags" has been updated and published with the Ministerial Approval every single year.

We have seen a positive improvement over the last two years

Comments:

According to the results achieved in the National Monitoring Program (monitoring beach litter component in pilot beaches) during 2020-2022 period, it is observed that the action "Charging of Plastic Ban" led a positive improvement in beaches.

Numerical data, if any:

With the "Charging of Plastic Bag" application, there was a 62,5% decrease in the use of plastic bags from 2019 to 2022 of time and with this reduction rate, the formation of 760,000 tons of plastic waste originating from plastic bags was prevented. With this reduction, the import of plastic raw materials necessary for the production of plastic bags in Türkiye has been prevented and approximately 5,24 billion Turkish Liras have been saved, as well as 31.500 tons of greenhouse gas emissions have been prevented. In addition, the level of knowledge and awareness on the subject has been created in our citizens, a serious change in behavior has taken place, and the use of reusable carrying equipment (cloth bags, nets, etc.) has become widespread in the society. Within the scope of the application started in 2019, plastic bags are sold at 0,25 Turkish Liras per piece, regardless of their size and content, including taxes, and this amount continues to be applied as 0,25 Turkish Liras without any change in 2020, 2021. 2022 and 2023

Ban on use of single-use plastic products (e.g. shopping bags, straws)

No

Actions for encouraging sustainable / circular product design

No

Regulations on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Environmental Law amendment

Brief description:

By the Environmental Law amendment published in the Official Gazette No. 30621 and dated 10.12.2018, Additional Article-11 titled "recycling contribution share" came into force in order to regulate the collection of recycling contribution share from the producers and importers of the products listed in the Annex-1 of the law. All packaging including plastic bags, tires, accumulators, batteries, mineral oil, vegetable oil, medicine, electrical and electronic equipment and beverage packaging are included in the Annex-1.

The Recycling Contribution Share which is an incidence of "polluter pays" and "extended producer responsibility" principles aims to finance the development of the waste

management infrastructure and to meet the necessary expenses for collection, transportation and recycling of packaging and other special wastes as well as encouraging the reduction of waste generation.

The Regulation on Recycling Contribution Share prepared by our Ministry was published in the Official Gazette dated 31/12/2019 and numbered 30995 (4. Repeating) and was put into effect as of 01/01/2020.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Environmental Law

Brief description:

In Article 8 of the Environment Law published in the Official Gazette dated 11/8/1983 and numbered 18132; contains the following provision. *"It is forbidden to directly or indirectly deliver, store, transport, dispose of all kinds of wastes and residues to the receiving environment, in a way that harms the environment, and to carry out similar activities in violation of the standards and methods determined in the relevant regulations.*

In cases where there is a possibility of contamination, the concerned parties prevent pollution; In cases where pollution occurs, the polluter is obliged to take the necessary measures to stop the pollution, to eliminate or reduce the effects of pollution." Within the framework of Article 8th, studies are carried out to prevent illegal dumping.

Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?

In progress

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Provincial Action Plan on Marine Litter

Brief description:

Public institutions, municipalities, NGO's clean up marine plastic litter on a regular basis as defined in the Provincial Action Plans on Marine Litter.

We have seen a positive improvement over the last two years

Removal of plastic litter from the ocean

Yes

Names of actions:

Provincial Action Plan on Marine Litter

Brief description:

Public institutions and municipalities clean up the areas defined in the Provincial Action Plans on Marine Litter on a regular basis.

We have seen a positive improvement over the last two years

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Zero Waste Blue Movement is the main program that covers the public awareness campaigns regarding MPL. Stakeholders especially NGO's execute their studies in line with Provincial Action Plans on Marine Litter.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Zero Waste Blue Movement

Brief description:

Under Zero Waste Blue Movement public awareness campaigns are executed on a regular basis at national level by the Ministry of Environment, Urbanization and Climate Change as well as other relevant institutions.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Zero Waste Blue Movement

Brief description:

Under Zero Waste Blue Movement, public awareness campaigns are executed on a regular basis in line with Provincial Action Plans on Marine Litter

We have seen a positive improvement over the last two years

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Turkish National Integrated Marine Pollution Monitoring Program

Brief description:

Türkiye has developed a monitoring strategy by adopting an integrated and ecosystem-based monitoring approach for our seas and coasts, namely "Integrated Marine Pollution Monitoring Program (DEN-IZ)"

Within the scope of DEN-IZ; under the heading IMAP Marine Litter (Descriptor 10 / IMAP 22-23, 24 -partly), microplastics and marine and coastal litter are monitored. Microplastics in seawater and sediment, macro-litter on the seafloor, as well as digested litter (in the fish stomach) are monitored on a pilot scale. Floating litter was monitored in Black Sea in 2022 and will be monitored in both Sea of Marmara and Black Sea between 2023 and 2025.

We have seen a positive improvement over the last two years

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Participation in international technical group activities on litter monitoring guidelines and determination of baseline/treshhold values: Barcelona Convention

Brief description:

"Integrated Marine Pollution Monitoring Program (DEN-IZ)" in other words National Marine Monitoring Program" is in compliance with the national legislation, Regional Marine Conventions (Bucharest and Barcelona Conventions), and EU directive (MSFD).

We have seen a positive improvement over the last two years

Other studies on marine litter by Türkiye are carried out through the CORMON groups established within the framework of the Barcelona Convention UNEP-MAP within the context of the EC-AP approach. The recent studies are determination of threshold and baseline values of some of the litter indicators and monitoring guidelines. So evaluations of data among the countries or national level will be held according to some settled limit values.

6.15.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments

- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.15.4. Best Practices

National level

Ministry of Environment, Urbanization and Climate Change (MoEUCC) has implemented “Integrated Marine Pollution Monitoring Program (IMPM)” in order to monitor the quality and pollution of marine environment and coasts of Turkey- Aegean Sea, Black Sea, Mediterranean Sea and Marmara Sea- which provides the basis for national marine and coastal management policy and strategies. This program has been designed as a three-year program since 2014 in order to obtain regular and continuous data, to monitor seasonally.

Details of the program; National monitoring program covers monitoring in marine water, sediment, biota and sea floor of some specific indicators of biodiversity, commercial fisheries, food web, eutrophication, sea floor integrity, hydrographical conditions, contaminants and marine litter descriptors.

Micro plastics have been studied in sea water and sediment during all summer seasons, in fish stomach at only one term (once every three year) for one each of the marines. Macro litter has been at the sea bottom during the trawl surveys.

This program has been designed as a three-year program since 2014 in order to obtain regular and continuous data, to monitor seasonally. 2023-2025 monitoring programme is now ongoing and will be finalized at the end of 2025. Monitoring marine litter is made in pliot scales. In 2023-2025 periods, in addition to microplastics (in marine water and sediment), litter on the beach, seafloor litter; the new litter monitoring component in this 2023-2025 program is monitoring floating macro litter on sea surface in Black Sea and Marmara Sea. And litter in biota (digested litter) (fish stomach, mussels) will be monitored again in pliot scales in all of the seas of Türkiye.

6.15.5. References and Reading Links

6.15.6. Contact Details: *(Please specify name and email address)*

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6.16. United Kingdom

Key Highlights

- Environmental Improvement Plan 2023 (EIP23)
- UK Plastics Pact (UKPP) (Voluntary)
- Single Use Plastic (SUP) Directive (EU Directive 2019/904 on the reduction of the impact of certain plastic products on the environment)
- The Environmental Protection (Plastic Plates etc. and Polystyrene Containers etc.) (England) Regulations 2023
- Beverage Cups and Containers- Department for Agriculture, Environment and Rural Affairs (DAERA) Consultation
- Responsible Fishing Vessel Standard (RFVS)
- A net zero target for greenhouse gas emissions by 2050 at the latest
- Reduction of Single-Use Plastic

6.16.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Many UK policies, such as waste management, are devolved matters, which means each administration (England, Wales, Scotland and Northern Ireland) has its own strategies and action plans. Below, and in subsequent sections these are classified either as UK, where they pertain to all four administrations, or by each administration where the policies are devolved.

Name: **United Kingdom**

Brief description:

UK Marine Strategy

The UK Marine Strategy provides the framework for assessing and taking measures to achieve and maintain Good Environmental Status (GES) in UK seas. It covers a wide range of biodiversity and marine environment descriptors including marine litter.

In March 2021 an updated UK Marine Strategy Part Two was published, setting out the monitoring programmes that will be used to assess progress towards updated GES targets, published in the updated UK Marine Strategy Part One in 2019. We are currently updating the UK Marine Strategy Part Three, which sets out a programme of measures for achieving or maintaining GES, following a consultation which ran September -November 2021 and are aiming to publish by summer 2023.

UK Plastics Pact (UKPP) (Voluntary)

UKPP members cover the entire plastics value chain and are responsible for the majority of plastic packaging sold through UK supermarkets, and approximately two thirds of the total plastic packaging placed on the UK market.

By 2025, the aim of the UK Plastics Pact is to transform the UK plastic packaging sector by meeting four world-leading targets.

- 100% of plastic packaging to be reusable, recyclable or compostable
- 70% of plastic packaging effectively recycled or composted
- Eliminate problematic single-use items.
- 30% averaged recycled content across all packaging

Name: England

Environmental Improvement Plan 2023 (EIP23)

Five years ago, the government published the 25 Year Environment Plan (25YEP), which set out the vision for a quarter-of-a-century of action to help the natural world regain and retain good health. In 2023 a revised plan was published: EIP23. It reinforces the intent of the 25YEP: where the 25YEP set out the framework and vision, this plan sets out the plan to deliver.

The Resources and Waste Strategy for England

The Resources and Waste Strategy for England, published in 2018, contains commitments towards reducing marine plastic pollution through circular economy policy measures and international cooperation.

Litter Strategy for England

One way in which waste ends up in the marine environment is through littering that occurs on land. We published the Litter Strategy for England in April 2017, setting out our aim to deliver a substantial reduction in litter and littering within a generation. The Litter Strategy brings together communities, businesses, charities and schools to bring about real change by focusing on three key themes: education and awareness; improving enforcement; and better cleaning and access to bins. We publish a dashboard of different indicators each year to monitor the extent of litter and littering in England.

Waste Prevention Programme for England

The Waste Prevention Programme is being revised following consultation in 2021. The new Programme, 'Maximising Resources, Minimising Waste', builds on and embeds the strategic principles referred to in the Resources and Waste Strategy. Our goal is for a circular economy approach which retains products and goods in circulation for as long as possible and at their highest value. The new Programme will set out priorities for action to manage resources and waste in accordance with the waste hierarchy.

Name: Scotland

Brief description:

Marine Litter Strategy, published in 2022. This refreshed Strategy and action plan provides the framework for marine litter policy and legislation development through five key themes of improving behaviour, reducing litter sources, supporting litter removal, improving monitoring and strengthening co-ordination both nationally and internationally.

As the majority of marine litter comes from land, the Marine Litter Strategy is closely linked with our terrestrial strategy for litter and fly-tipping, Towards a Litter-Free Scotland, which is currently under review and a refreshed version expected in 2023. Fly-tipping, coastal or otherwise, comes under the Rural Crime Strategy, 2019-2022. The improved management of plastic as a material is targeted through our circular economy strategy, Scotland: Making Things Last – A Circular Economy Strategy. Our Circular Economy Bill consultation was published in May 2022.

Name: Northern Ireland

Brief description:

New Decade New Approach

In January 2020, the priorities of the restored Executive were published in the New Decade New Approach (NDNA) document. NDNA includes the commitment that the Executive will create a plan to eliminate plastic pollution. The plan will await ministerial approval before publication for consultation thereafter. In line with this plan the Marine Litter Capital Grant Scheme was established in 2021 and is now in its third year. Among its aims, the grant scheme supports groups and organisations to prevent litter and plastic pollution from entering the marine environment.

Single Use Plastic (SUP) Directive (EU Directive 2019/904 on the reduction of the impact of certain plastic products on the environment)

In December 2020, as agreed by the Withdrawal Agreement Joint Committee, the Northern Ireland Protocol was amended to include certain articles of the EU Single-Use Plastic Directive. Once introduced:

- Article 5 will ban (cannot be 'placed on the market' and products cannot be introduced however retailers can use existing stocks) 1) cotton bud sticks, 2) cutlery (forks, knives, spoons, chopsticks), 3) plates, 4) straws, 5) beverage stirrers, 6) sticks to be attached to and to support balloons, 7) food containers made of expanded polystyrene, 8) beverage containers made of expanded polystyrene including their caps and lids, 9) cups for beverages made of expanded polystyrene including covers and lids, 10) products made from oxo-degradable plastic.
- Article 7 – markings and labelling requirements will become mandatory for – Sanitary towels (pads), tampons and tampon applicators, wet wipes, tobacco products with filters, and drinking cups must bear a “conspicuous, clearly legible and indelible” label on the packaging or on the product itself. The label must inform consumers of appropriate waste management options for the product or waste disposal means to be avoided, as well as the presence of plastics within the product and the negative impact of littering.

Reduction of Single-Use Plastic Beverage Cups and Containers- Department for Agriculture, Environment and Rural Affairs (DAERA) Consultation

Following consultation in late 2021, DAERA is currently considering proposals for the reduction of the usage of Single-use Plastic (SUP) beverage cups and food containers in Northern Ireland. The goal of the policy is to reduce the use of the targeted types of SUP packaging and to encourage the wider take up of multi-use and/or single-use non-plastic alternatives.

Circular Economy Strategy (Consultation opened 9th January 2023, closed 29th March 2023)

The Department for the Economy (DfE) is currently developing a Circular Economy Strategy (CES) for Northern Ireland. Recognising Circular Economy as a crosscutting theme for the Executive, this work is progressed in partnership with officials across the Government Departments. Focus areas have been identified which present the greatest opportunity to lead the transition. These include four business sectors and four material flows, one of which is packaging including plastics.

The Northern Ireland Waste Prevention Programme

Reviewed in 2019, and an interim revised programme with 22 actions was published in July 2020 to provide a short extension to the programme pending the introduction of a new Circular Economy Waste Package (CEWP).

Northern Ireland Marine Litter Strategy

Published in 2013 and an update is expected to take place in 2023/24 as part of an overall litter strategy including terrestrial and marine litter as part of a Waste Strategy Plan.

Name: **Wales**

Brief description:

Wales Marine Litter Action Plan 2020-23

Has prevention, collaboration and long-term solutions as its core principles. The plan sets out actions to address marine litter at source through preventative action, connecting the community through a volunteer led response and promoting behaviour change through targeting messaging and interaction.

Wales Waste Prevention Programme – 2013-2050

The Waste Prevention Programme will ensure that householders and businesses in Wales are able to reduce:

- The quantity of waste, including through the reuse of products or the extension of the life span of products.
- The adverse impacts of the generated waste on the environment and human health.
- The content of harmful substances in materials and products.

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name: **United Kingdom-wide legislation**

Brief description:

The Marine Strategy Regulations 2010 (legislation.gov.uk): The Marine Strategy Regulations 2010 require necessary measures to be taken to achieve or maintain GES in UK seas. To help assess progress against GES it is broken down into 11 qualitative descriptors, including marine litter. These regulations make it law for the Secretary of State with the consent of DA Ministers to produce indicators and targets and review these periodically.

Ongoing Shipping Regulations with Amendments

- The Merchant Shipping (Prevention of Pollution by Garbage from Ships) Regulations 2020
- The Merchant Shipping and Fishing Vessels (Port Waste Reception Facilities) 2003 (as amended)
- IMO Action Plan for Marine Litter from Ships 2018

These measures incorporate international standards to prohibit the discharge of garbage (including fishing gear) into the sea from ships and ensuring adequate port waste reception facilities. They provide a framework to prevent the discharges of garbage in UK controlled waters and for ships to deliver their waste ashore to port waste reception facilities.

Plastic Packaging Tax: In April 2022 the UK introduced a plastic packaging tax charged at £200 per tonne of plastic packaging that contains less than 30% recycled plastic. This is paid by manufacturers and importers of plastic packaging and will help encourage the use of recycled plastic instead of virgin material within plastic packaging. On 1 April 2023, the rate of the tax increased to £210.82 per tonne.

International Conventions

London Convention 1972 (Convention on the Prevention of Maritime Pollution by Dumping of Wastes and Other Matter) and 1996 Protocol; and the OSPAR (Oslo and Paris) Convention 1999 - These promote the effective control of all sources of marine pollution and the need to take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter including bulky items of iron, steel and concrete. OSPAR agreed a new North East Atlantic Environment Strategy (NEAES) in 2021, which sets OSPAR's strategic direction up until 2030 and includes strategic and operational objectives on marine litter.

OSPAR launched the second Regional Action Plan on Marine Litter in June 2022 at the UN Ocean Conference. The Plan sets out the action that Contracting Parties will take to prevent and reduce marine litter from sources on land and at sea.

Through this Second Regional Action Plan on Marine Litter (RAP ML 2), OSPAR will continue the work to prevent and significantly reduce marine litter in the North-East Atlantic that began with the first RAP-ML which ran from 2014-2021. The UK is leading and supporting on actions in the new RAP, including on preventing marine litter from aquaculture, preventing pellet loss and bridging the gap between monitoring and policy.

The UK is a Party to the **Basel Convention** on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. The requirements of the Basel Convention have been fully implemented in UK law through the retained **EU Waste Shipment Regulations** and the **UK Transfrontier Shipment of Waste Regulations**.

The Environment Act contains regulation-making powers which will allow the Government to deliver on its commitment to ban the export of plastic waste to non-OECD countries. We plan to consult by the end of Summer 2023 on options to deliver the ban.

Littering

The Environmental Protection Act 1990 and Litter (Northern Ireland) Order 1994 make littering a criminal offence, require local authorities and other bodies to keep their land clear of litter and refuse and provide local authorities with powers to take enforcement action against littering. The standards that land managers (primarily local authorities) are expected to meet in keeping their land clear of litter and refuse are set out in each administration's statutory code of practice.

Landfill Tax - Landfill Tax was introduced on 1 October 1996 to encourage waste producers and the waste management industry to switch to more sustainable alternatives for disposing of material. There is a lower rate of tax, which applies to less polluting qualifying materials covered by two Treasury Orders, and a standard rate, which applies to all other taxable material disposed of at authorised landfill sites.

Previously, the tax applied across the UK but from 1 April 2015 it was devolved to the Scottish Parliament and Welsh Parliament/ Senedd Cymru from 1 April 2018 in Wales.

Voluntary Measures

Responsible Fishing Vessel Standard (RFVS) – the RFVS is a global-scale fishing vessel-based program certifying high standards of vessels management and safety systems including crew rights, safety and well-being. In June 2020, the final RFVS was publicly

shared and officially handed over from Seafish to Global Seafood Assurances, following a two-year, collaborative development process.

The RFVS requires that procedures shall be put in place for the management and recording of:

- lost, 'end-of-life', or recovered (third-party) fishing gear; and
- inorganic / non biological waste produced from vessel operations, including gear repair activities and waste that is recovered from the marine environment, shall be brought ashore to be managed in a manner that will not have a detrimental impact on the environment.

Food and Agriculture Organisation (FAO) Code of Conduct for Responsible Fisheries (CCRF) - This provides a framework for national and international efforts to ensure sustainable exploitation of aquatic living resources in harmony with the environment. It includes retrieval of lost or abandoned fishing and aquaculture gear (and fragments of gear) and banning of dumping. It is a recognised Code of Conduct which UK seafood businesses need to be aware of. On behalf of the UK Devolved Authority / Fisheries Administrations, Seafish continues to coordinate and submit the biennial CCRF Aquaculture Questionnaire to the FAO.

Legislation by administration

Name: England

Brief description:

Environmental Protection (Microbeads) (England) Regulations 2017 ban on the sale and manufacture of microbeads in rinse-off personal care products, helping to prevent billions of tiny plastic pieces from entering the ocean every year.

The Environmental Protection Regulations 2020 (Plastic Straws, Cotton Buds and Stirrers) (England)

We introduced legislation to restrict the supply of single-use plastic straws and single-use plastic-stemmed cotton buds with some exemptions (for medical reasons) and banned the supply of plastic drink stirrers in October 2020.

The Single Use Carrier Bags Charges (England) (Amendment) Order 2021 Since 5th October 2015, large retailers in England have been required by law to report on and charge for all single use plastic carrier bags. On 21 May 2021, the charge was increased to 10p and extended to all retailers.

The Marine Licensing (Exempted Activities) Order 2011 enables activities to remove litter without licenses.

Name: Northern Ireland

Brief description:

Environmental Protection (Microbeads) Regulations (Northern Ireland) 2018 - legislation to ban microbeads from certain personal hygiene products.

Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations (Northern Ireland) 2022 - These Regulations set an overall recycling target as well as material-specific recycling targets for 2023 on obligated producers in Northern Ireland in relation to glass, plastic, aluminium, steel, paper/board and wood.

Single Use Carrier Bags Charge (Amendment and Revocation) Regulations (Northern Ireland) 2022 - Amends the cost of a single use carrier bag from 5p to 25p

Packaging Waste (Data Reporting) Regulations (Northern Ireland) 2023 - Packaging Waste (Data Reporting) Regulations are designed to make sure that industry takes full responsibility for packaging wastes produced as a result of their commercial activities. The regulations place a duty on us to monitor compliance with them in Northern Ireland.

Climate Change (Northern Ireland) Act 2022

With reference to the commitment in New Decade New Approach to bring forward a Climate Change Act, the Act was passed by the Assembly on 9 March 2022 and received Royal Assent on 6 June 2022. It includes

- A net zero target for greenhouse gas emissions by 2050 at the latest
- A requirement for climate action plans and carbon budgets to be set for all sectors and
- The need to ensure a just transition to help sectors move to net zero

Reuse and repair of textiles and reducing plastic consumption and waste will reduce the overall generation of waste and reduce carbon emissions, contributing to net zero.

The Waste (Circular Economy) (Amendment) Regulations (Northern Ireland) 2020

The regulations came into effect in Northern Ireland on 18 December 2020. The legislation includes requirements for measures to ensure better compliance with the waste hierarchy, a widening of the scope of waste streams that must be separately collected and incrementally increasing recycling targets. It also defines specific recycling targets for packaging, requires specific measures for littering and sets minimum requirements for all extended producer responsibility schemes.

Name: **Scotland**

Brief description:

The Environmental Protection (Single-use Plastic Products) (Scotland) Regulations 2021 (legislation.gov.uk) – applies to single-use plastic cutlery, straws, stirrers, balloon sticks, plates, expanded polystyrene cups and food containers

The Single Use Carrier Bags Charge (Scotland) Regulations 2014

The Environmental Protection (Microbeads) (Scotland) 2018

The Environmental Protection (Cotton Buds) (Scotland) 2019

The Deposit and Return Scheme for Scotland Regulations 2020 All drinks containers up to 3l including plastic bottles.

Code of Practice on Litter and Refuse (2018)

Environmental Protection Act 1990 - Fixed penalty notices of £80 can be issued for littering, or following prosecution a fine can be charged of up to £2,500.

Regulatory Reform (Scotland) Act 2014 - A fly-tipping fixed penalty notice of £200 can be issued, or on prosecution an individual can be sentenced to imprisonment and risk a fine of up to £40,000

To enable activities to remove litter without licenses - **The Marine Licensing (Exempted Activities) (Scottish Inshore Region) Order 2011**

Name: **Wales**

Brief description

The Single Use Carrier Bags Charge (Wales) Regulations 2011

The Environmental Protection (Microbeads) (Wales) 2018

The Environmental Protection (Single Use Plastic Products) (Wales) Bill - The Environmental Protection (Single-use Plastic Products) (Wales) Bill | GOV.WALES

In preparation

Please list your country's legislation including name and brief description here:

Name: The Environmental Protection (Plastic Plates etc. and Polystyrene Containers etc.) (England) Regulations 2023

Brief description: From October 2023 we will introduce legislation banning the supply to the end user of single use plastic plates, trays, bowls, except when used as packaging, and banning the supply of single-use plastic cutlery and balloon sticks, and certain types of polystyrene cups and food and beverage containers, in England.

Indicators

Do you have the MPL-specific indicators or data collection framework in your country?

Yes

Please list your indicators here:

The UK Marine Strategy uses marine litter as an indicator of clean seas, showing changes to the amount of litter in the marine environment, including litter on beaches, on the seafloor and floating litter. Beach litter surveys are completed annually or quarterly and cover a representative number of beaches. Data from trawl surveys, typically carried out for fish stock assessments, are used to monitor the amount of litter on the seafloor. After each tow all litter items are emptied from the net and counted and classified. Beached fulmars or individuals accidentally killed are collected as part of a monitoring programme in the Greater North Sea to assess the plastics found in their stomachs. Fulmars forage exclusively at sea, generally at the surface of the water. The amount of plastic they ingest can be used as a proxy for the abundance of floating litter in their environment and how this is changing. Indicators for seafloor litter, beach litter and litter found in Fulmar stomachs have been developed and expert groups are working to improve the data. Additional monitoring programmes are being developed to record the amount of microplastics in sediment and in biota.

The UK Marine Strategy Part One assessment indicators of beach litter, seabed litter and plastic particles in fulmar stomachs are also used for reporting to the OSPAR monitoring and assessment programme. These allow the abundance, trends and composition of marine litter in the OSPAR Maritime Area to be determined for different marine compartments (floating, seafloor and coast).

Under Development

Please list your indicators here:

OSPAR is currently working to develop new indicators, including microplastics in sediments. The microplastics indicator will address levels in marine sediments and will cover the whole OSPAR Maritime Area. The Microplastics in Sediment Expert Group at OSPAR is led by Cefas.

6.16.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

The Single Use Carrier Bags Charges (England) (Amendment) Order 2021

Targeted products: Single use plastic carrier bags

Brief description: Since 5th October 2015, large retailers in England have been required by law to report on and charge 5p for all single use plastic carrier bags. On 21 May 2021, the charge was increased to 10p and extended to all retailers.

Names of actions:

Single Use Carrier Bags Charge legislation. In Northern Ireland, Scotland and Wales this applies to all retailers:

Targeted products: Single use plastic carrier bags

Brief description: **Northern Ireland:** From 2015, the levy charge was extended to carrier bags of any material with a 5p levy. 1 April 2022 The Single Use Carrier Bags Charge (Amendment and Revocation) Regulations (Northern Ireland) 2022 came into operation making some amendment including increasing the levy from 5p to 25p on ALL bags costing £5 or less.

Scotland: the carrier bag minimum charge increased from 5p to 10p in April 2021.

Wales: In 2019 the efficacy of the bag charge was reviewed to inform future actions regarding changes in levies or charging scope.

Names of actions: **Plastic Packaging Tax**

Targeted products: Packaging made predominantly from plastic by weight

Brief description: In April 2022 the UK introduced a plastic packaging tax charged at £200 per tonne of plastic packaging that contains less than 30% recycled plastic. This is paid by manufacturers and importers of plastic packaging and will help encourage the use of recycled plastic instead of virgin material within plastic packaging. On 1 April 2023, the rate of the tax increased to £210.82 per tonne.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions: **The Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations 2020**

Targeted products: Plastic straws, cotton buds and stirrers.

Brief description: We introduced restrictions on the supply of plastic straws, cotton buds and stirrers, with some exemptions, e.g. for medical reasons.

Names of actions:

The Environmental Protection (Cotton Buds) (Scotland) 2019

Targeted products: Cotton buds

Names of actions:

The Environmental Protection (Single-use Plastic Products) (Scotland) Regulations 2021 (legislation.gov.uk)

Targeted products / Brief Description: See above

In preparation

The Environmental Protection (Single-use Plastic Products) (Wales) Bill | GOV.WALES

Welsh Government are committed to tackling marine litter and reducing the reliance upon single use plastic items. In 2022 we introduced the Bill which proposes to ban many of these items and beginning in Autumn 2023 this will come into force.

Targeted products:

- Plates – this includes paper plates with a laminated plastic surface
- Cutlery – for example forks, spoons, knives
- Drinks stirrers – those designed for stirring drinks or liquid food
- Cups made of expanded or foamed extruded polystyrene
- Takeaway food containers made of expanded or foamed extruded polystyrene
- Sticks for balloons
- Plastic-stemmed cotton buds
- Drinking straws

This will come into force in Autumn 2023.

- Plastic single-use carrier bags
- Polystyrene lids for cups and takeaway food containers
- Oxo-degradable plastic products

These product bans will come into force in 2024

Actions for encouraging sustainable / circular product design

Yes

Names of action: **The Resources and Waste Strategy for England**

Brief description:

Through the Resources and Waste Strategy for England we committed to:

- Work towards all plastic packaging placed on the market being reusable or recyclable by 2025.
- Ban plastic products where there is a clear case for it and alternatives exist
- Stimulate demand for recycled plastic by introducing a tax on plastic packaging with less than 30% recycled plastic
- Deliver on the Greening Government Commitment to eliminate consumer single-use plastics from central government buildings

*In light of subsequent evidence and feedback, we do not support the use of compostable plastic packaging. Though we recognise there is a valid role for compostable plastics in some niche applications, we do not think that packaging as a whole constitutes a niche application. We are therefore focusing on working towards packaging being reusable and recyclable in the first instance, with compostable plastic used only where no other option is available.

Name of action: **Sustainable Production Goals**

Brief description:

Introduce a deposit return scheme to incentivise increased recycling of drinks containers (plastic bottles and cans). [see below]

Introduced in April 2022, a tax on plastic packaging with less than 30% recycled plastic (See 3.1.1 above). The Plastic Packaging Tax provides a clear economic incentive for businesses to use recycled materials in the production of plastic packaging, which in turn creates greater demand for these materials and stimulates increased collection and recycling of plastic waste, diverting it away from landfill or incineration.

Harness the potential of extended producer responsibility for other product types [see below]

Set minimum requirements through eco-design to encourage resource efficient product design - The Government's Resources and Waste Strategy for England committed to review and consulting on measures such as Extended Producer Responsibility and product standards for five waste streams including fishing gear and textiles, as well as reviewing the existing producer responsibility schemes for waste electrical and electronic equipment (WEEE), batteries and end of life vehicles. Development of these policies is underway, with the first (a consultation on changes to the WEEE system) expected later this year.

Promote innovation to support the circular economy, drive the use of safer and sustainable chemicals and reduce the risks to human health and the environment caused by hazardous chemicals in waste, through a Chemicals Strategy later this year.

Develop a model for realising resource efficiency savings, working with businesses through 'resource efficiency clusters'

Our Resources and Waste Strategy outlines our plans and current activity to drive a shift to a more circular economy. Our forthcoming Waste Prevention Programme will set out how we will work with businesses to improve resource efficiency and minimise the amount of waste created across several key sectors – we hope to publish this later this year.

Name of action: **CEN Standard**

Brief description: The UK is supporting the development of a standard for circular design of fishing and aquaculture gear through CEN (European Committee for Standardization). Work has commenced, with expected delivery by the end of 2024.

Name of action: **UK Plastics Pact**

Brief description: The government provides funding to the Waste and Resources Action Programme (WRAP), who run the UK Plastics Pact (UKPP). UKPP members cover the entire plastics value chain and are responsible for the majority of plastic packaging sold through UK supermarkets, and approximately two thirds of the total plastic packaging placed on the UK market.

Through our funding and industry fees, WRAP is:

- Providing one-to-one support for their Plastic Pact members working on refill and reuse pilots.
- Working towards the ambition of making reuse mainstream by 2025.

The UKPP ambitious targets to achieve by 2025 for plastic packaging are:

- 100% to be reusable, recyclable or compostable
- 70% to be effectively recycled
- 30% average recycled content across all plastic packaging
- Eliminate problematic or unnecessary single-use plastic packaging items

Significant progress has been made. Since 2018, there has been an 84% reduction in problematic and unnecessary single-use plastic packaging; 70% of plastic packaging is now recyclable (up from 66% in 2018); 50% of plastic packaging is recycled (up from 44% in 2018); and 22% of plastic packaging is made up of 30% recycled content (up from 8.5% in 2018).

In progress

The Government's Resources and Waste Strategy for England committed to review and consult on policy measures such as Extended Producer Responsibility (EPR) and product standards for five waste streams including textiles, bulky waste (furniture) and fishing gear.

EPR for packaging: Invoke the 'polluter pays' principle and extend Producer Responsibility for packaging, ensuring that producers pay the costs of disposal of packaging they place on the market. Introduce higher packaging recycling targets and modulate producers' fees to increase recycling rates, incentivise producers to consider the packaging they use, reduce the amount of packaging they use, design their packaging in a way that encourages responsible disposal, and encourage the use of reusable and refillable alternatives. EPR will include payments for the cost of managing packaging discarded in street bins and a requirement to clearly label all primary packaging and shipment packaging with a common recycle mark (the recycle 'swoosh') and the relevant wording (Recycle or Do not recycle) to inform people whether it can or cannot be recycled. EPR will also support the introduction of film and flexible plastic packaging for recycling from 2027.

The Packaging Waste - Data Reporting Statutory Instrument (SI) came into force on the 28th February 2023. These regulations require producers of packaging to collect and report data on the amount and type of packaging that they place on the market. This data is required to calculate the fees that these producers will be required to pay to cover the cost of managing this packaging as part of the Extended Producer Responsibility (EPR) for packaging scheme which is planned to start in 2024 and will be implemented under The Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations SI (in development).

Deposit Return Scheme (DRS) for drinks containers - UK Government, Welsh government and the Department of Agriculture, Environment and Rural Affairs in Northern Ireland are developing a joint Deposit Return Scheme which will cover England, Wales and Northern Ireland, which will commence from 1st October 2025. A separate scheme is being delivered in Scotland.

Consumers are charged a deposit up-front when they buy a drink in a container that is in scope of the scheme. The deposit can then be redeemed when the empty container is returned to a designated return point. The deposit provides a financial incentive for consumers to return drinks containers for recycling. The objectives of this system include boosting recycling levels, reducing littering, and offering greater opportunities to collect higher quality, uncontaminated materials in greater quantities thus promoting a circular economy. The scheme will include: all single-use drinks containers from 50 ml up to 3ltr. In England and Northern Ireland, materials included are polyethylene terephthalate (PET) bottles; steel and aluminium cans. In Wales, the scheme will also include glass.

Regulations on microplastics

Yes

Names of regulations:

Environmental Protection (Microbeads) (England) Regulations 2017

The Environmental Protection (Microbeads) (Scotland) 2018

Environmental Protection (Microbeads) Regulations (Northern Ireland) 2018

The Environmental Protection (Microbeads) (Wales) 2018

Brief description:

Bans on the sale and manufacture of microbeads in rinse-off personal care products, helping to prevent billions of tiny plastic pieces from entering the ocean every year.

Government actions on microplastics

Yes

Names of actions: **Operation Clean Sweep**

Brief description:

Pre-production plastic pellets (nurdles) are the basic feedstock used in the production of plastic items. They can be lost from the supply chain and enter the environment. It's estimated that up to 53 billion nurdles are lost each year, and they are one of the biggest sources of microplastic in the marine environment. To address this issue the UK is working with the British-Irish Council and with the British Plastics Federation to strengthen Operation Clean Sweep, an international initiative which aims to reduce plastic pellet loss to the environment. The scheme ensures that companies train staff to sweep up spills, have the facilities to dispose of spilt pellets and cover drains to prevent run-off.

In preparation

The development of regulations to limit tyre wear emissions of particles depends on the development of an internationally recognised test procedure for measuring them. This issue is being examined by the Working Party on Pollution and Energy within the UN ECE, which includes UK officials from the Department for Transport, other international governments, and the automotive industry. As part of this work, the UK is supporting the development of a UN Regulation on the measurement of tyre abrasion, expected to be delivered in 2024.

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of regulations:

Operation Clean Sweep

The Great Nurdle Hunt

The Big Microplastic Survey

International Pellet Watch

Brief description:

As noted earlier, Operation Clean Sweep is an international initiative which aims to reduce plastic pellet loss to the environment.

The Great Nurdle Hunt tracks the volume of nurdles on beaches. The purpose of the Hunt is to collect data on the nurdles found on beaches around the world and use this to demonstrate the problem of plastic and microplastic pollution. The Hunt is run by Fidra, an environmental charity based in Scotland, working in conjunction with various organisations in Scotland and the wider UK.

The Big Microplastics Survey is an international citizen science project with the objective of collecting data on microplastic pollution. It began in 2018 at the University of Portsmouth and is currently directed by the University and Just One Ocean. The success of the Survey depends on the contributions of volunteer surveyors around the world who collect samples from coastal and riverside sites.

Various universities in the UK contribute to the International Pellet Watch, a volunteer-based global monitoring program collecting data on persistent organic pollutants (POPs) and other plastic pollutants.

Others (please specify)

The UK has committed to a ban on exports of plastic waste to non-OECD countries

Description:

The UK Government has committed to consulting on options to deliver a ban on plastic waste exports to countries that are not members of the Organisation for Economic Co-operation and Development (OECD), and work is underway to make this happen.

We plan to consult by the end of Summer 2023 on options to deliver the ban and, as a precursor to that consultation, Defra has commissioned research to better understand existing plastic waste recycling capacity in the UK and OECD member countries. This research will be key to the development of policy options to implement the commitment.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

The following acts and regulations are in place to enforce proper waste management:

1. **Pollution Prevention and Control Act 1999**. Regulation making powers for a pollution control system and for other measures to prevent and control pollution.
2. **Environmental Protection Act 1990**. Defines the structure and authority for waste management and control of emissions into the environment.
3. **Environment Act 1995** established the Environment Agency and gave it and other appropriate regulators the powers to enforce against illegal activities.

Names of actions: **Port Waste**

Brief description: The UK is undertaking a review of the current port waste reception facility regime to ensure it remains adequate and effective. The review will take into consideration best practices from other port waste reception facility regimes around the world and also identify any policy changes that may be required.

Names of actions: **Trapping or screening of drainage / rivers**

Brief description: Many storm overflows which discharge into rivers or the sea from the combined sewerage system in England do have screens. The requirement for screens is set as a condition of the Environmental Permit for discharge.

Trapping or screening drainage / rivers can result in the retention of solids and can create a maintenance issue. The preferred option is to deal with litter / flushed items at source, although not always practicable.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions: **International Convention for the Prevention of Pollution from Ships (MARPOL)**

Brief description:

The UK is a signatory to the International Convention for the Prevention of Pollution from Ships (MARPOL) under the International Maritime Organisation (IMO), the main international convention covering prevention of pollution of the marine environment by ships from

operational or accidental causes. MARPOL Annex V seeks to eliminate and reduce the amount of garbage being discharged into the sea from ships and includes a ban on the disposal into the sea of plastics and fishing gear, in addition to other types of garbage.

Names of actions: **UK Regulations on the Prevention of Pollution by Garbage from Ships 2020 (S.I. 2020/621)**

Brief description:

The UK's Regulations on the Prevention of Pollution by Garbage from Ships 2020 ([S.I. 2020/621](#)) brings in the International Convention for the Prevention of Pollution by Garbage from Ships (MARPOL Annex V) into UK law.

Under the Regulations, discharge of all garbage into the sea is prohibited with very limited exceptions. In all cases the discharge of plastic is prohibited.

The Regulations require fishing vessels to record the discharge or loss of fishing gear in the Garbage Record Book or ship's logbook and require fishing vessels to report the accidental loss or discharge of fishing gear which poses a significant threat to the marine environment or navigation.

Under the Regulations it is an offence to fail to report the discharge of fishing gear which poses a significant threat to the marine environment or navigation to (a) the ship's flag State and (b) any coastal state who has jurisdiction over the waters where the loss or discharge occurs.

Names of actions: **The UK's Port Waste Reception Facilities Regulations (S.I 2003/1809)**

Brief description:

The UK's Port Waste Reception Facilities Regulations (S.I. 2003/1809) put legal obligations on ports and vessels to manage ship generated waste. All ports and terminals must provide adequate Port Waste Reception Facilities for waste generated by ships. Ships including fishing vessels are required to deliver their ship generated waste to the port waste reception facilities.

Links to regulations:

The Merchant Shipping and Fishing Vessels (Port Waste Reception Facilities) Regulations 2003 (S.I. 2003/1809), further information can be found [here](#).

The Merchant Shipping (Prevention of Pollution by Garbage from Ships) Regulations 2020 (S.I. 2020/621), further information can be found [here](#).

Names of actions: Plastic Pellets

Brief description:

Plastic pellets (nurdles) are the basic feedstock used in the production of plastic items. They can be lost from the supply chain and enter the environment. It's estimated that up to 53 billion nurdles are lost each year, and they are one of the biggest sources of microplastic in the marine environment. To address this issue, the administrations supported the development of a Publicly Available Specification developed by the British Standards Institution, which sets out how any business handling or managing pellets can reduce pellet loss. This is the first of its kind and was published in July 2021.

We have worked across the British-Irish Council, OSPAR and the plastics industry to support the development of an international certification scheme to implement the fundamental requirements of this standard, ensuring that pellet loss is prevented and any accidental spills are cleaned up effectively.

In 2019, the British Irish Council Ministers recognised the need to address pellets as a source of microplastics and committed to learn from a trial supply-chain approach in Scotland.

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

The Great British Beach Clean (Marine Conservation Society)

Brief description:

The Great British Beach Clean is a week-long citizen science event, where hundreds of beach cleans take place up and down the UK. Litter data collected drives our conservation work and also feeds into the International Coastal Clean-up (ICC).

The Scottish Government also funds Local Coastal partnerships around the coastline to work with local businesses, organisations and volunteers, to support and facilitate beach cleans.

Removal of plastic litter from the ocean

Yes

Names of actions:

KIMO Fishing for Litter

Brief description:

The UK supports Fishing for Litter, and the development of similar local schemes. This is a voluntary, unpaid litter bycatch removal scheme by commercial fishermen, run by KIMO UK, which provides fishing boats with bags to collect passively caught litter found at sea during normal fishing operations and arranges for waste disposal.

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions: **Biodegradable and Compostable Plastics**

Brief description:

In April 2021 we published our response to the call for evidence on the need for standards for bio-based, biodegradable, and compostable plastics.

On biodegradable plastics, repeated and strong concerns were raised in the responses to the call for evidence regarding the extent to which plastics marketed as biodegradable actually biodegrade in the open environment. There is currently a lack of evidence these materials consistently breakdown in real world environments, so may be a source of plastic and microplastic pollution.

For compostable plastics, these must be treated in industrial composting facilities to be broken down and, when processed incorrectly, can be a source of microplastics and contaminate recycling streams. Currently there is insufficient industrial composting capacity throughout England to manage compostable plastics at end of life. Stakeholder engagement and responses to our call for evidence highlighted that even when compostable plastics are sent to industrial composters, they are often stripped out along with other plastics and landfilled or incinerated.

The full consultation response can be found here: [Standards for biodegradable, compostable and bio-based plastics: call for evidence - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/standards-for-biodegradable-compostable-and-bio-based-plastics-call-for-evidence)

Names of actions: **Reuse**

Brief description: Reuse is key to delivering our ambition of eliminating all avoidable plastic waste by 2042. We want to see greater use of reusable/refillable packaging which is why we have said we will do further work on measures to increase reuse and refill with the aim of introducing obligations on packaging producers from 2025 once the new arrangements for EPR are in place. One such measure could be to modulate the fees producers pay for managing their products once they've been discarded (become waste) to reward producers who use reusable systems.

Additionally, as mentioned previously, we are supporting the development of reuse/ refill schemes by industry, through our funding of WRAP who run the UKPP.

Names of actions: **Oxodegradable / Oxobiodegradable Plastics**

Brief description: As a result of the evidence received in response to the call for evidence and the review by the Hazardous Substances Advisory Committee on oxo-degradable plastics, we are minded to consult on a ban on these materials.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

- Research and Innovation Fund
- Plastics and Waste Innovation Fund
- Smart Sustainable Plastic Packaging
- Sustainable Manufacturing and Environmental Pollution (SMEP)

Brief description:

The UK has put together a package of over £100m for research and innovation to tackle the issues that arise from plastic waste:

£40m has been set aside through the Plastics Research and Innovation Fund and the Plastics and Waste Innovation Fund for research and development, including £10m specifically to pioneer innovative approaches to boosting recycling and reducing litter.

UKRI's **Smart Sustainable Plastic Packaging (SSPP)** Challenge is the largest and most ambitious UK government investment to date in sustainable plastics packaging research and

innovation. Since its inception in 2020, SSPP has deployed almost £60m of public funding – and is on track to leverage over £200m of private money – to support bold, ambitious innovation to deliver a step change in the UK’s ability to reduce, reuse and recycle plastic packaging waste.

The **SMEP programme**, delivered in partnership with the United Nations Conference for Trade and Development, has committed up to £9m to address plastics pollution. SMEP is supporting 9 plastics pollution mitigation solutions across Ghana, Zimbabwe, Nigeria, Kenya and Democratic Republic of Congo and Nepal. Plastics solutions underway include establishing a multi-stakeholder research and development hub; plastics waste used as feedstock for solar power roof tiles; biodegradable mulch film; re-used plastic for plastic boat building; biodegradable fishing nets; plastic waste collection from rivers; tech-enabled plastic waste management systems; compostable lateral flow test cassettes; and tech-enabled waste management to repurpose plastics waste.

International

Innovate UK has developed and funded work on sustainable plastic packaging in India as well as South Africa, Kenya, Chile, Mexico and Colombia.

Specifically, we have provided £279,000 funding to establish a Plastics Pact in India and more than £3.7m for a dedicated Global Sustainable Plastic Packaging Programme to demonstrate demand driven innovation by sourcing innovation that addresses specific targets to reduce plastic pollution in Asia, Africa and Latin America. This has included the following support for research and innovation into solutions to tackle the global plastics challenge:

Funding for technical research projects to dive deeper into the challenges facing the Plastic Pact members including sachets and small formats, rPET – using recycled plastic in food grade packaging, the role of informal waste workers, re-use and refill business models.

Piloted initial feasibility studies to help us understand how UK innovators can work with the Plastic Pacts to resolve challenges.

Two new Plastic Pacts are being established to build the global Pact network. Countries have been selected according to population size, waste problem and local interest. In addition, existing Plastic Pacts in India, Kenya, South Africa and Chile are being supported to stimulate collaboration, convene pilots, identify technical experts required to deliver innovations and engage Pact members in adopting innovation through this programme.

Innovation Challenges are being run to meet the specific Pact country targets to reduce plastic pollution. Innovative SMEs are conducting Market Feasibility Studies and direct links will be made between Pact members and innovators to demonstrate how to accelerate the achievement of Pact targets through innovation.

An online Innovation Exchange is being established to co-ordinate collaboration and learning across the Plastic Pact members to share best practice and innovative approaches. A pipeline of the best innovations from the UK will be showcased on this innovation platform to stimulate global collaboration and interest from the global plastic packaging supply chain.

As part of SSPP’s and Innovate UK’s on-going engagement with India, we are planning a Global Expert Mission to India in May 2023. The objective of this mission is to both understand the challenges of sustainably managing plastic waste in India and to seek opportunities for collaborative innovation between the two countries

Public Private Partnerships (PPP)

Through public-private partnerships with Unilever and the mobile industry association (GSMA), RED are supporting the development of innovative business models that

encourage plastics reduction, reuse, recycling and reintegration into a circular supply chain. This includes an investment in Côte D'Ivoire (Coliba) that provides mobile credit to consumers in return for recycling plastic waste and Mr Green Africa, a Kenyan company primarily involved in the aggregation, sorting, cleaning, processing and reselling of plastics, among several other examples. Work was completed with Unilever and EY to landscape options for investments and steps needed to create an at-scale integrated supply chain for recycled material across sub-Saharan Africa ([see here](#)) and a similar project for South Asia (India and Bangladesh) is in its last phase.

The **Global Plastic Action Partnership (GPAP)** brings together governments, businesses, civil society and academia in countries committing to tackling plastic pollution, to support meaningful and tangible action - including through the convening of multistakeholder task forces needed to tackle plastic pollution inclusively.

Activities within these partnerships focus on mobilising funding and leveraging expertise in-country to create circular economic solutions. GPAP launched three pilot National Plastic Action Partnerships (NPAP) in Indonesia, Ghana and Vietnam, with the former focused on devising a pathway to help the Indonesian Government to meet its target of reducing marine litter by 70% by 2025. GPAP has since announced further partnerships with Pakistan, Nigeria, the Indian state of Maharashtra, and Ecuador, with ongoing activities also taking place in Mexico and South Africa, among other countries. GPAP's ambition is to engage 25 partner countries by the year 2025.

The partnership is funded and supported by the governments of Canada and the United Kingdom as well as corporate partners Coca-Cola and Nestlé. The UK plays a strategic role on the Global Steering Board, as well as having representation across the national partnership Steering Boards (usually from the respective High Commission or Embassy in-country), which helps foster international collaboration.

GPAP are currently developing their toolkit of modular services to respond to partners' individual needs. This includes the National Assessment and Monitoring Tool (NAM) which enables countries to assess plastic pollution, quantify the economic, environmental and social implications of different solution scenarios, and develop actions towards a circular plastics economy.

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Domestic

Through the British-Irish Council commitment the UK is working to facilitate marine litter education materials for professional fishers, schools and others through the sharing of materials and resources.

International

The UK funds the **Tide Turners Plastic Challenge**, which is an environmental education and youth (18-35) engagement programme delivered by the United Nations Environment Programme (UNEP), in partnership with the World Organisation of the Scouts Movement (WOSM), the World Association of Girl Guides and Girl Scouts (WAGGS), as well as specific

in-country partners. So far over 500,000 young people have participated in the challenge. The badge not only encourages young people to take action to reduce plastic waste in their own lives, but helps them become leaders in their communities to make sure that as many people as possible join the global fight to tackle the scourge of single-use plastics that is damaging the ocean.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Anti-litter campaign

Brief description:

Defra launched the “Keep it, Bin it” anti-litter campaign in 2018 with Keep Britain Tidy. The campaign, which includes images of litter in the marine environment, encourages people to dispose of their litter responsibly, calling time on rubbish excuses for littering and telling people to keep hold of their rubbish until they find a bin. The campaign has been publicised through various media channels, including on social media and at travel hubs across England. More recently, Keep Britain Tidy has also made the campaign available to local authorities and landowners for local use.

Awareness-raising campaigns related to MPL – Local

No

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

The UK supports small projects in a number of countries.

- Tearfund (£3m) Tearfund runs plastics projects in Haiti (£1m) and Pakistan (£2m), working with communities on waste collection.
- WasteAid (£80k) Preventing plastics from reaching the ocean in Cameroon.

WasteAid had two grants under UK Aid Direct’s Small Charities Challenge Fund (SCCF) operating in Kenya and Gambia. Both programmes ended in November 2020 and June 2021 respectively.

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

The UK water industry has been working to reduce the amount of litter entering the environment from sewage and waste water systems through extensive investment measures to improve coastal sewage treatment works and collecting systems, including adding screening to and/or reducing volumes from overflows to limit polluting events. In addition, there have been campaigns by water companies to educate the public and businesses on

items and material that should not be disposed of in sewers, avoiding blockage and reducing items that might otherwise pass through sewers and treatment processes. Measures to address pollution from surface water runoff and drainage are also likely to reduce litter entering rivers and other water bodies.

Current monitoring for the UK Marine Strategy

- a) Seafloor litter bycatch data is recorded during fisheries surveys, providing a spatial coverage of benthic macro-litter.
- b) Macro and mesoplastics which have been littered, deposited from land (carried by wind, rivers, run off) or washed from the sea onto beaches are surveyed quarterly from around the UK mainland.
- c) Floating industrial and user litter fragments are monitored from the stomach contents of stranded Fulmar seabirds. Most reported strandings are from the Greater North Sea region, with little data from the Celtic Seas.
- d) An indicator for assessing the prevalence of microplastics in sediments is under development, with the expectation that sediment grain size can be included.

Recent and ongoing research:

- a) Concluded in 2021, a fishing and aquaculture gear inventory for the UK, and knowledge on the economics and process of recycling end-of-life fishing gear to allow an informed assessment of the impacts of a potential Extended Producer Responsibility scheme (The reports from this research on end-of-life fishing and aquaculture gear have been published here: [Science Search \(defra.gov.uk\)](#)).
- b) Defining and evaluating the pathways of terrestrial litter to the marine environment - evidence review.

Currently funded relevant UK government research includes:

- a) Bio-Plastic-Risk - Investigation of Biodegradable plastics as an environmental pollutant in terrestrial and marine environments.
- b) Tyre-Loss – Investigation into the prevalence and impact of tyre-wear particles in the marine environment.
- c) MINIMISE - Current and future effects of microplastics on marine ecosystems.

In response to current national and global concerns in relation to the environmental impact of microplastics, National Highways undertook a review of academic research to date to understand the potential sources of microplastics from highways and to try to understand the scale of the problem. Initial findings have indicated that roads are potentially a significant source of microplastics into the environment with Tyre Particulate Wear the principal source although road markings and litter were also identified.

The Phase 1 report can be found here:

<https://s3.eu-west-2.amazonaws.com/assets.highwaysengland.co.uk/Knowledge+Compendium/Investigation+of+microplastics+from+brake+and+tyre+wear+in+road+runoff.pdf>

National Highways have commissioned further work and are working with the Environment Agency to look to quantify the nature of the problem through field investigations. This work will be done in partnership with the Environment Agency, and we will publish further findings in 23/24.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

OSPAR (Convention for the Protection of the Marine Environment of the North-East Atlantic)

The UK monitors surface litter in the Greater North Sea by recording the volume and type of plastics found in the stomachs of the Northern Fulmar seabird. This data is reported to OSPAR to contribute to the monitoring of surface litter in the North Atlantic Maritime area.

Through the Blue Planet Fund, the UK has launched a newly designed **Ocean Country Partnership Programme** (OCP). The OCP aims to tackle marine pollution, support sustainable seafood practices and manage and protect marine biodiversity by helping developing countries partner with UK scientists, and support them to access world-leading ocean science expertise.

6.16.3. Challenges

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.16.4. Best Practices

National Level

Through our **Environmental Improvement Plan 2023** the UK is committed to leading efforts to protect the marine environment. To tackle marine pollution, we will pursue a sustainable, international and transboundary approach that prioritises reducing global reliance on plastics, increases economically viable recycling processes, and promotes maritime practices that prevent harmful matter entering the seas. Our **Resources and Waste Strategy for England** is framed by natural capital thinking and guided by two overarching objectives:

- To maximise the value of resource use; and
- To minimise waste and its impact on the environment.

This Strategy complements and helps deliver other government strategies which relate to the environment and include our ambitions to double resource productivity and eliminate avoidable waste by 2050. As well as the 25 Year Environment Plan and the Environmental Improvement Plan 2023, they include: the Clean Growth Strategy, the Industrial Strategy, and the Litter Strategy. It also responds to the recommendations of the 2017 Government

Office for Science Report, 'From Waste to Resource Productivity'. This explores how we can treat waste as a valuable resource and this Strategy takes forward a number of its recommendations. We will deliver this through policies, actions and commitments which adhere to at least one of five strategic principles:

- To provide the incentives, through regulatory or economic instruments if necessary and appropriate, and ensure the infrastructure, information and skills are in place, for people to do the right thing;
- To prevent waste from occurring in the first place, and manage it better when it does;
- To ensure that those who place on the market products which become waste to take greater responsibility for the costs of disposal – the 'polluter pays' principle;
- To lead by example, both domestically and internationally; and
- To not allow our ambition to be undermined by criminality.

Our Strategy will contribute to the delivery of five strategic ambitions:

- To work towards all plastic packaging placed on the market being recyclable or reusable by 2025;
- To work towards eliminating food waste to landfill by 2030;
- To eliminate all avoidable plastic waste over the lifetime of the 25 Year Environment Plan;*
- To double resource productivity by 2050; and
- To eliminate avoidable waste of all kinds by 2050.

* The Environmental Improvement Plan, published in January 2023, introduced a plastic waste interim target, which will enable us to track progress against the 2042 commitment. The target is that by 31 January 2028, the total mass of residual municipal plastic waste in the most recent full calendar year does not exceed 42kg per capita. This is equivalent to a 45% reduction from 2019 levels.

Local level

Fishing for Litter

The UK supports Fishing for Litter, and the development of similar local schemes. This is a voluntary, unpaid litter bycatch removal scheme by commercial fishermen, run by KIMO UK, which provides fishing boats with bags to collect marine-sourced litter found at sea during normal fishing operations and arranges for waste disposal.

Private sector

The UK also supports non-governmental organisations, businesses and initiatives including 'Marine Conservation Society', Odyssey Innovation, and the Global Ghost Gear Initiative.

Marine Conservation Society

The UK funds the Marine Conservation Society to record litter from sections of our coast which helps us monitor the levels and trends of plastic pollution across several years. This data is used in combination with other monitoring data to inform our decisions about how to tackle marine litter. We welcome these efforts which provide valuable citizen science data and, encourage more people to become stewards of the marine environment. In 2021, the Marine Conservation Society's Great British Beach Clean reported that plastic and polystyrene pieces (0-50cm), cigarette stubs, packets, plastics caps and lids and string/cord were the most common items on UK beaches. In 2022, the Marine Conservation Society's Great British Beach Clean reported that plastic and polystyrene pieces (0-50cm), cigarette stubs, glass items, packets such as from crisps and sweets, and plastic caps and lids were the most common items found on English beaches.

Odyssey Innovation

The UK has been working closely with Odyssey Innovation (OI), a leading organisation with a goal of tackling marine plastic pollution. OI is a member of our industry expert Steering Group on end-of-life fishing gear; and in 2022, they delivered a Welsh Government-funded pilot recycling scheme for fishing gear.

Global Ghost Gear Initiative + Food and Agriculture Organisation

In 2017 the UK signed up to the Global Ghost Gear Initiative (GGGI), the world-renowned experts and pioneering alliance of the fishing industry, private companies, NGOs and governments working to solve the global abandoned, lost and discarded fishing gear (ALDFG) problem. We collaborate with GGGI on regional interventions via technical workshops, bespoke training and other outreach initiatives.

The UK supports the Global Ghost Gear Initiative (GGGI) and the Food and Agriculture Organisation of the United Nations (FAO) international best practices outlined in the GGGI Best Practice Framework for the Management of Fishing Gear and the FAO Voluntary Guidelines for the Marking of Fishing Gear. The UK Commissioned an OECD Report on ghost gear which made recommendations to the G7 on how members can tackle ghost gear, including by joining the GGGI and by implementing the FAO guidelines.

International cooperation

Plastic Pollution Treaty

The UK is committed to tackling plastic pollution, co-sponsoring the proposal to prepare a new international legally binding instrument on plastic pollution and wants to see a high level of ambition from countries throughout the Intergovernmental Negotiating Committee process. At INC1, the UK supported a treaty that will restrain the production and consumption of plastic to sustainable levels, address plastic design and encourage more recycling and re-use of plastic.

The UK is also a founding member of the High Ambition Coalition to End Plastic Pollution, a group of over 50 countries calling for a target under the treaty to stop plastic from flowing into the environment by 2040.

International Maritime Organisation (IMO)

The UK is active at the IMO debating the issue of Marine Plastic Litter and responding to requests for information via correspondence groups. In 2018, the IMO adopted an Action Plan to address marine plastic litter from ships and in 2021 a Strategy to address marine plastic litter from ships.

The Marine Environment Protection Committee (MEPC) adopted the Strategy, which sets out the ambitions to reduce marine plastic litter generated from, and retrieved by, fishing vessels; reduce shipping's contribution to marine plastic litter; and improve the effectiveness of port reception and facilities and treatment in reducing marine plastic litter.

The Convention on Biological Diversity

As leader of the Global Ocean Alliance (GOA), the UK led calls for ambitious and meaningful outcomes for the ocean from the UN Convention on Biological Diversity (CBD) COP15, which concluded in Montreal in December 2022.

After four years of intensive, global efforts, COP15 agreed a transformational framework which sets the trajectory for the next decade of global action on biodiversity loss. The Kunming-Montreal Global Biodiversity Framework (KMGBF) sets out a clear mission: to halt and reverse biodiversity loss by 2030, and includes a highly ambitious package of 23 targets for 2030 and 4 goals for 2050. The KMGBF includes a target to reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including by preventing, reducing, and working towards eliminating plastic pollution.

Following agreement of the GBF, the UK will continue as Chair of the Global Ocean Alliance after COP15, to champion ocean action within the CBD and beyond, including to support the implementation of the KMGBF in the ocean.

United Nations (UN)

SDGs

The UK is committed to SDG Target 14.1: ‘By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution’. Progress towards SDG14 targets will underpin the sustainable development of the ocean. At the United Nations Ocean Conference in June 2022, the United Kingdom showed its ongoing commitment to supporting the delivery of SDG14 through the following key announcements:

- The UK joined the High Level Panel for a Sustainable Ocean Economy, a global initiative which brings together governments, businesses, financial institutions, the science community and civil society to drive the transition to a sustainable ocean economy.
- £150 million under the Blue Planet Fund will be invested in a new global programme, known as COAST, to protect and restore valuable coastal and marine habitats such as corals, mangroves and seagrasses, improve the sustainability and productivity of small-scale fisheries, and help developing countries unlock aquaculture’s potential.
- Up to £100 million of Blue Planet funding will also be used to support the implementation, management and enforcement of Marine Protected Areas, which are created to limit potentially damaging activity at sea and support the recovery of key habitats and marine species, and other effective conservation measures in developing countries

The UK continues to support the **UN Clean Seas Campaign**. The UK also supports and is committed to the **Global Partnership on Plastic Pollution and Marine Litter**.

OSPAR

As a Contracting Party to the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, the UK develops and implements actions under the OSPAR Regional Action Plan for Marine Litter and participates in monitoring programmes to assess regional trends in marine litter. The UK attends the Intersessional Correspondence Group on Marine Litter to coordinate work to tackle this issue, developing and implementing actions under the OSPAR Regional Action Plan for Marine Litter. Contracting Parties agreed the North East Atlantic Environment Strategy 2030 in 2021, which includes strategic and operational marine litter objectives. Strategic Objective 4 is to “Prevent inputs of and significantly reduce marine litter, including microplastics, in the marine environment to reach levels that do not cause adverse impacts to the marine and coastal environment with the ultimate aim of eliminating inputs of litter”.

To achieve this, OSPAR adopted the second [Regional Action Plan on Marine Litter](#) in 2022, which sets out the programme of work on marine litter to 2030. The UK is leading and supporting on a number of actions to tackle marine litter from both land and sea-based sources, including an action on preventing and reducing marine litter from aquaculture and preventing the loss of plastic pellets in the supply chain. At the UN Ocean Conference in June 2022, OSPAR's Second Regional Action Plan on Marine litter was accepted as a UN Voluntary Commitment (Ocean Action 47413).

The RAP ML 2 will be implemented, as far as possible, in cooperation with other relevant work and initiatives from regional and global organisations, including UNEP and other Regional Seas Conventions, the International Maritime Organisation, the Convention on Biological Diversity, the European Union, Fisheries Regional Advisory Councils, North-East Atlantic Fisheries Commission and River Basin Commissions.

INdIGO project

The INdIGO project (INnovative fishing Gear for Oceans) aims to develop the first fishing gear with a controlled lifespan that is biodegradable in the marine environment. The project also intends to define a strategy to improve the recycling of fishing gear at the end of its life and to promote a circular economy. A range of partner institutions are involved across France and England, including Cefas, whose main role has been to test samples of biodegradable plastics in different environments. The project runs until June 2023 and is funded by the European Regional Development Fund.

The Blue Planet Fund (BPF)

The UK has launched a £500 million Blue Planet Fund that will support developing countries to protect the marine environment and reduce poverty.

Financed from the UK Official Development Assistance Budget, the Blue Planet Fund helps eligible countries reduce poverty, protect and sustainably manage their marine resources and address human-generated threats across four key themes: biodiversity, climate change, marine pollution, and sustainable seafood.

The BPF aims to reduce marine pollution through action on land-based and sea-based sources that also contributes to improved livelihoods and healthier environments.

The Commonwealth Clean Ocean Alliance (CCOA)

CCOA brings together member states, businesses, NGOs and civil society from across the Commonwealth to commit to action on plastics, share best practice, leverage funding and push for global action.

6.16.5. References and Reading Links

6.16.6. Contact Details: *(Please specify name and email address)*

6.17. United States of America

Key Highlights

- Save Our Seas 2.0 Act, Title 3, Section 301 EPA National Strategy for Reducing Plastic and Other Waste in Waterways and Oceans
- U.S. Marine Debris Act
- Clean Water Act (EPA)
- Infrastructure Investment and Jobs Act (multiple federal agencies)
- Resource Conservation and Recovery Act (EPA)
- Save Our Seas 2.0 Act (EPA/NOAA/others)
- Microbead-Free Waters Act (FDA)
- Toxic Substances Control Act (EPA)
- Rivers and Harbors Appropriations Act (Army Corps of Engineers)
- Microbead-Free Waters Act
- Produced study “The Economic Impacts of Marine Debris on Beach Recreation”
- Solid Waste Infrastructure for Recycling (SWIFR) Grant Program
- Consumer Recycling Education and Outreach Grant Program
- Waste Prevention & Strengthening Recycling (USAID)
- Solid waste management capacity building projects in Southeast Asia in collaboration with UNEP's The Coordinating Body on the Seas of East Asia (COBSEA)

6.17.1. Policy and Frameworks

National Action Plan

In preparation

Please provide the name of your action plan or strategy with a brief description here:

Name:

Save Our Seas 2.0 Act, Title 3, Section 301 EPA National Strategy for Reducing Plastic and Other Waste in Waterways and Oceans

Brief description:

The United States does not currently have a national action plan specific to marine plastic litter. There are several national-level laws, as described in 2.2 “Legal Framework”, that provide a comprehensive legal framework to address marine plastic litter. Domestic legislation also created an inter-agency body (the U.S. Marine Debris Coordination Committee, described below), that ensures cooperation across U.S. agencies to address marine debris more broadly.

Further, through NOAA's Marine Debris Program, the U.S. has developed eleven sub-national marine debris action plans that identify and prioritize activities to reduce marine debris impacts, coordinate local level implementation, and help better understand the scope and scale of the issue in the U.S. coastal and marine environment. The NOAA Marine Debris Program also has a national level strategic plan that drives priorities and actions.

EPA is developing a Strategy under the **Save Our Seas 2.0 Act, Title 3, Section 301**, which provides actions needed in the United States to reduce the amount of plastic waste entering waterways and oceans. The strategy identifies strategic objectives and voluntary actions that all U.S. stakeholders can implement to reduce, reuse, collect, and capture plastic waste. This strategy is not a comprehensive strategy for the U.S. government as a whole. EPA anticipates publishing a draft of the Strategy for public comment later this year.

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

U.S. Marine Debris Act

Clean Water Act (EPA)

Infrastructure Investment and Jobs Act (multiple federal agencies)

Resource Conservation and Recovery Act (EPA)

Save Our Seas 2.0 Act (EPA/NOAA/others)

Microbead-Free Waters Act (FDA)

Toxic Substances Control Act (EPA)

Rivers and Harbors Appropriations Act (Army Corps of Engineers)

A. U.S. Marine Debris Act

The U.S. Marine Debris Act, originally passed in 2006, established a national Marine Debris Program within NOAA to identify, determine sources of, assess, prevent, reduce, and remove marine debris and address the adverse impacts of marine debris on the economy of the United States, marine environment, and navigation safety. The Act also set forth direction for the U.S. Coast Guard to address ship-based waste in accordance with MARPOL requirements.

In 2012, the Act was amended to include provisions for NOAA to address marine debris resulting from natural disasters and severe weather events, in recognition of the high volume of debris that can be caused by such events.

In 2018, the Act (renamed the "Save Our Seas Act") was further amended to expand work across the U.S. government, most notably with the Department of State, to engage foreign governments, especially those of high marine debris source countries, to better address marine debris through strengthened solid waste management. The 2018 Act also mandated that the U.S. government consider addressing marine debris in all future trade agreements. (The Save Our Seas Act 2.0 was passed in December 2020 and is noted in Section D below)

The Act also created the Interagency Marine Debris Coordinating Committee (IMDCC), the federal interagency coordinating body responsible for addressing marine debris. IMDCC is made up of six agencies named in the Marine Debris Act, led by NOAA, as the chair, and EPA as vice-chair. The Department of Defense, Department of Homeland Security, Department of the Interior, and Department of State participate as members.

IMDCC is primarily responsible for sharing information, assessing and implementing best management practices, and coordinating interagency responses to everyday marine debris and severe marine debris events.

IMDCC ensures coordination of federal agency research priorities, monitoring techniques, educational programs, and regulatory actions.

IMDCC is also responsible for recommending priorities and strategies, both nationally and internationally, to identify, determine sources of, assess, reduce, prevent, and mitigate the adverse impact of marine debris on the marine environment, natural resources, and vessels.

B. Clean Water Act (EPA)

The Clean Water Act (CWA) requires each state to establish water quality standards for all bodies of water in the state. Water quality standards consist of the designated beneficial use(s) of a waterbody, plus a numerical or narrative statement identifying maximum concentrations of various pollutants that would not interfere with the designated use. Many states have established narrative criteria for trash or floatables, which inherently include plastic waste.

CWA also allows for states to list waters impaired by pollutants, including trash/plastic waste. Unless planned measures can be taken to address impairments, the Act requires that states or EPA develop Total Maximum Daily Loads (TMDLs) for those pollutants. Several states have trash-impaired waterbody listings.

The National Pollutant Discharge Elimination System (NPDES) regulates some stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. Operators of these sources might be required to obtain an NPDES permit before they can discharge stormwater. A large number of NPDES permits have provisions addressing the stormwater nexus for trash entering waterways.

The Nonpoint Source Management Program requires states to develop nonpoint source management programs, and EPA has subsequently required updates for these programs. Trash is a pollutant that can be addressed through such programs, and nonpoint source grants authorized by Section 319 can be used to address trash pollution.

C. Infrastructure Investment and Jobs Act (IIJA)

The Act was signed into law on November 15, 2021. The bill:

Solid Waste Infrastructure for Recycling Grants: Provides a total of \$275,000,000 (\$55M/yr from FY22-FY26 to remain available until expended) for grants under section 302(a) of the Save Our Seas 2.0 Act (Public Law 116–224). The EPA may provide grants to: Implement the strategy developed under section 301(a); Support improvements to local post-consumer materials management, including municipal recycling programs; and assist local waste management authorities in making improvements to local waste management systems.

Consumer Recycling Education and Outreach Grants: Provides \$75,000,000 (\$15M/yr from FY22-26 to remain available until expended) to award education and outreach grants focused on improving material recycling, recovery, management, and reduction and directs EPA to develop a model recycling program toolkit for States, tribes, local governments. Funded projects should inform the public about residential or community recycling programs, provide information about the recycled materials that are accepted, increase collection rates and decrease contamination.

D. Resource Conservation and Recovery Act (EPA)

The Resource Conservation and Recovery Act (RCRA) charges EPA to protect human health and the environment from potential hazards of waste disposal; conserve energy and natural resources; reduce the amount of waste generated; and ensure that wastes are managed in an environmentally sound manner by establishing minimum national criteria for solid waste facilities. RCRA regulations are generally implemented by states and tribes and/or at the local level, with state, tribal or local governments having the option to put forth regulations that are more stringent than the national standards. These national standards are critically important to ensuring the sound management of solid waste nationwide. Facilities that do not meet these standards are considered open dumps that must close. EPA implements the conservation mandate in RCRA through its Sustainable Materials Management Program. Sustainable materials management (SMM) is a systemic approach to using and reusing materials more productively and effectively over their entire life cycles. By looking at a material's entire life cycle, we can find new opportunities to reduce environmental impacts, conserve resources and reduce costs. Recycling and waste diversion programs also are primarily implemented at the state, tribal and local levels.

E. Save Our Seas 2.0 Act

The Save Our Seas 2.0 Act is composed of three main pieces:

Strengthening the United States' domestic marine debris response capability with a Marine Debris Foundation, a genius prize for innovation, and new research to tackle the issue.

Enhancing global engagement to combat marine debris, including formalizing U.S. policy on international cooperation, enhancing federal agency outreach to other countries, and exploring the potential for a new international agreement on the challenge.

Improving domestic infrastructure to prevent marine debris through new grants for and studies of waste management and mitigation.

F. Microbead-Free Waters Act

The Microbead-Free Waters Act prohibits the manufacturing, packaging, and distribution of rinse-off cosmetics containing plastic microbeads.

The law also applies to products that are both cosmetics and non-prescription drugs, such as toothpastes.

G. Toxic Substances Control Act

Under TSCA, EPA has the authority to require testing of chemical substances such as those that may be in plastic waste entering the environment, and subsequently the authority to regulate these substances.

While TSCA Section 6 can potentially be used for the purpose of addressing unreasonable risks specific to chemical substances that may be in plastic waste, that section of TSCA was amended in 2016 and U.S. implementation of those amendments is ongoing. Section 6 requires EPA to systematically prioritize and evaluate existing chemical substances under their conditions of use, including disposal, and, where unreasonable risks are identified as part of the evaluation, to impose regulatory requirements or restrictions to eliminate those risks. A TSCA risk evaluation would necessarily include an assessment of any risks from the disposal of plastic waste. EPA has a number of ongoing chemical risk evaluations under Section 6 of TSCA, including for several chemicals used as plasticizers (please see <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/list-manufacturer-requested-risk-evaluations-under-tsca>).

H. Rivers and Harbors Appropriations Act

The Rivers and Harbors Appropriations Act authorizes the Army Corps of Engineers to issue permits for the discharge of materials of any kind into navigable waters under section 13.

Indicators

No

6.17.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No*
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No*
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

No

Ban on use of single-use plastic products (e.g. shopping bags, straws)

No

Comments:

*There are no single use plastic policies at the national level. Solid waste management, including policies and measures on single use plastics, are determined and implemented at the state and local level.

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Environmentally Preferable Purchasing Program

Safer Choice and Design for the Environment voluntary certification programs

National Recycling Strategy: Part One of a Series on Building a Circular Economy for All

Save Our Seas 2.0, Title 3, Section 301 "National Strategy for Reducing Plastic and Other Waste in Waterways and Oceans"

Brief description:

Through its Environmentally Preferable Purchasing Program, EPA makes efforts to improve the sustainable marketplace and uses the federal purchasing power to help catalyze the supply and demand of sustainable products. The program is in the process of expanding and updating the *Recommendations of Specifications, Standards and Ecolabels for Federal Purchasing*, which leverages private sector environmental performance standards and ecolabels to achieve several environmental priorities of the administration. Standards and ecolabels included in the Recommendations often contain criteria to promote plastic waste reduction in both products and packaging. EPA also developed the Safer Choice and the Design for the Environment (DfE) voluntary certification programs to make it easier for people to find products that meet EPA's rigorous health and environmental criteria. Certified products must also meet product performance standards and sustainable packaging measures.

National Recycling Strategy: Part One of a Series on Building a Circular Economy for All

The National Recycling Strategy was published in November 2021 and identifies strategic objectives and actions needed to create a stronger, more resilient, and cost-effective U.S. municipal solid waste recycling system. Recycling has been a critical component of the EPA’s decades-long efforts to implement the Resource Conservation and Recovery Act (RCRA) and its more recent efforts to pursue a Sustainable Materials Management (SMM) approach, which aims to reduce the environmental impacts of materials across their lifecycle. Building on the National Framework for Advancing the U.S. Recycling System and EPA’s long history of providing data, tools, information and other resources to support recycling in the United States. The strategy aligns with and supports implementation of the National Recycling Goal - to increase the recycling rate to 50 percent by 2030.

In progress

National Strategy for Reducing Plastic and Other Waste in Waterways and Oceans: Part of a Series on Building a Circular Economy for All

EPA is developing a “National Strategy for Reducing Plastic and Other Waste in Waterways and Oceans” which provides actions needed in the United States to reduce the amount of plastic waste entering waterways and oceans. The strategy identifies strategic objectives and voluntary actions that all U.S. stakeholders can implement to reduce, reuse, collect, and capture plastic waste.

Regulations on microplastics

Yes

Names of regulations:

Microbead-Free Waters Act

Brief description:

The Microbead-Free Waters Act prohibits the manufacturing, packaging, and distribution of rinse-off cosmetics containing plastic microbeads.

The law also applies to products that are both cosmetics and non-prescription drugs, such as toothpastes.

Government actions on microplastics

Yes

Names of actions:

Report on Microfiber Pollution (in preparation)

Microbead-Free Water Act

Brief description:

US NOAA and EPA developed a report on microfiber pollution as a requirement of the Save Our Seas 2.0 Act of 2020. The report will be published in 2023 and will provide the United States Congress with an overview of the microfiber pollution issue, while also outlining a path forward for federal agencies, in partnership with other stakeholders, to address this problem.

Please refer to section 2.2 for more information on the Microbead-Free Water Act.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Resource Conservation and Recovery Act (EPA)

Brief description:

The Resource Conservation and Recovery Act (RCRA) charges EPA to protect human health and the environment from potential hazards of waste disposal; conserve energy and natural resources; reduce the amount of waste generated; and ensure that wastes are managed in an environmentally sound manner by establishing minimum national criteria for solid waste facilities. RCRA regulations are generally implemented by states and tribes and/or at the local level, with state, tribal or local governments having the option to put forth regulations that are more stringent than the national standards. These national standards are critically important to ensuring the sound management of solid waste nationwide. Facilities that do not meet these standards are considered open dumps that must close. EPA implements the conservation mandate in RCRA through its Sustainable Materials Management Program. Sustainable materials management (SMM) is a systemic approach to using and reusing materials more productively and effectively over their entire life cycles. By looking at a material's entire life cycle, we can find new opportunities to reduce environmental impacts, conserve resources and reduce costs. Recycling and waste diversion programs also are primarily implemented at the state, tribal and local levels.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

EPA Trash Free Waters

NOAA Marine Debris Program Prevention Grants

Brief description:

Please see below.

EPA Marine Litter Related Voluntary Work

Trash Free Waters – is a voluntary program that emphasizes stakeholder engagement to assist U.S. communities with addressing primarily land-based sources of marine litter. Within the United States, there have been well over 80 place-based projects that have been or are being developed and implemented with financial or technical assistance from the Trash Free Waters program. These include projects addressing outreach/education, trash capture, source reduction efforts, monitoring, research, and more. Trash Free Waters also develops tools and resources that provide useful information to help stakeholders keep trash out of waterways. Tools include a [best practices compendium](#) so that municipalities, NGOs, and others can get information on costs and effectiveness of various management practices; a litter control policy and [program document](#) for the Gulf states; a [Trash Stormwater Permit Compendium](#) outlining effective stormwater permit trash provisions for use by stormwater permit writers and stormwater planners; a [trash assessment protocol](#) that allows for detailed

characterization of trash pollution to inform management practices, permit provisions, and impaired waterbody listings; [a Report on Priority Microplastics Research Needs](#); regional, state, and multi-state Trash Free Waters strategies, and a new pilot project to launch reusable foodware systems at city-scale with four partner cities, in addition to several other information resources.

NOAA Marine Debris Program Prevention Grants

NOAA's Marine Debris Program supports projects across the country that use outreach and education as a way to prevent marine debris. These projects aim to change behavior, especially among youth, and provide them with hands-on experiences that deepen their understanding of the marine debris problem. Additional projects support engagement with industry partners to reduce the loss of fishing gear, and the occurrence of abandoned and derelict vessels.

Marine Debris Act

Development of ten subnational (US state or regional) action plans to coordinate and spur local action to address marine debris.

Development of ten emergency response guides to aid local US authorities in preparing for severe marine debris events, from storms, hurricanes, etc., and to assist in faster responses to such events.

Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?

Yes

Names of actions:

Produced study "The Economic Impacts of Marine Debris on Beach Recreation"

Solid Waste Infrastructure for Recycling (SWIFR) Grant Program

Consumer Recycling Education and Outreach Grant Program

Brief description:

This study was undertaken by NOAA to better understand the relationship between coastal tourism economies and marine debris. More specifically, the study looked at how the amount of marine debris on beaches can affect the behaviors of beachgoers and as a result, the economies of coastal communities that depend on tourism. The study revealed that doubling the amount of marine debris on beaches within these coastal areas would decrease the number of days visitors spend on those beaches. This decline in beach visitor days would result in fewer tourism dollars spent, and translate into a decrease in local jobs.

Solid Waste Infrastructure for Recycling (SWIFR) Grant Program - The Solid Waste Infrastructure for Recycling program provides grants to implement the National Recycling Strategy to improve post-consumer materials management and infrastructure; support improvements to local post-consumer materials management and recycling programs; and assist local waste management authorities in making improvements to local waste management systems.

Consumer Recycling Education and Outreach Grants: Provides \$75,000,000 (\$15M/yr from FY22-26 to remain available until expended) to award education and outreach grants focused on improving material recycling, recovery, management, and reduction and directs EPA to develop a model recycling program toolkit for States, tribes, local governments.

Funded projects should inform the public about residential or community recycling programs, provide information about the recycled materials that are accepted, increase collection rates and decrease contamination.

Others (Please specify)

International Cooperation

- **Waste Prevention & Strengthening Recycling (USAID)**

- **Save Our Seas Initiative** - In June 2022, USAID launched a new global flagship initiative to combat ocean plastic pollution globally—the Save Our Seas Initiative. The initiative includes \$103 million in funding to support 14 country and regional programs in key countries and regions that represent 40 percent of total global mismanaged plastic waste. The Save Our Seas Initiative builds on successes and lessons from USAID’s experience implementing ocean plastics solutions on the ground over the past six years, while scaling these approaches within key countries and to additional geographies for greater impact. Specifically, the Save Our Seas Initiative draws on effective methods for reducing mismanaged waste in partner countries developed under USAID’s existing global program Clean Cities Blue Ocean; leverages the expertise and relationships of our field Missions to expand country-level and regional programs to scale these efforts; and catalyzes greater private sector, donor, and interagency funding and partnerships to crowd-in additional funding.
- **Clean Cities, Blue Ocean (CCBO)** – As part of the Save our Seas Initiative, Clean Cities Blue Ocean is a five-year USAID global program that works in 25 cities and towns across 10 countries (Philippines, Vietnam, Indonesia, Sri Lanka, the Maldives, Fiji, Micronesia, Papua New Guinea, the Dominican Republic, and Peru) to build and advance circular economies and reduce ocean plastic pollution. Through a combination of technical assistance and grants, CCBO works to improve solid waste management systems in cities and municipalities that are at the heart of the global plastic pollution crisis, build capacity and commitment for the 3Rs (reduce, reuse, and recycle), and promote sustainable social and behavior changes. In support of these objectives, the program partners with local and multinational corporations to effectively leverage private sector expertise, investment, and supply chains. Because they are a vital part of the waste value chain and key to the creation of a circular economy, CCBO also economically empowers informal waste collectors, especially women, through building capacity, providing access to credit, and facilitating safe working conditions.
- **Municipal Waste Recycling Program (MWRP)** – USAID supported local Organisations to reduce land-based sources of marine plastic pollution through grants and technical assistance in Indonesia, Philippines, Sri Lanka and Vietnam to improve solid waste management and waste recycling efforts. Under MWRP, USAID supported 30 grants focusing on three priority areas: 1) strengthening capacity of local actors and their collaboration, 2) introducing locally appropriate innovations and improving decision making, and 3) supporting engagement with the private sector for developing and implementing market-driven solutions to marine plastic pollution and strengthening the recycling value chain. The scope of the grants ranged from community-led awareness raising and education campaigns to improving working conditions of informal waste collectors, engaging and empowering women, collaborating with the private sector, and supporting local governments in their efforts to collect and manage waste sustainably.

- **Infrastructure Investment (USAID):**

- **Development Finance Corporation (DFC) partial loan guarantee for Circulate Capital** – USAID signed an agreement with Circulate Capital to provide a \$35 million, 50 percent loan-portfolio guarantee through DFC to incentivize private capital investment in the recycling value chain in South and Southeast Asia. The agreement leverages more than \$100 million from a private-sector investment strategy managed by Circulate Capital, a firm dedicated to incubating and financing companies and infrastructure that prevent ocean plastic that is backed by multinational corporations, including PepsiCo, Procter & Gamble, Dow, Danone, Unilever, and Coca-Cola.
- **Cartagena Convention Land-Based Sources (LBS) Protocol for the Wider Caribbean Region** - The Protocol is an agreement under the Cartagena Convention (CC) that obligates Contracting Parties to address pollution from marine litter, nutrients and wastewater. The US is a Contracting Party to the CC and LBS and participates in the Open-Ended Working Group that advises the Secretariat on efforts aimed at these issues.
- **Asia Pacific Economic Cooperation Forum Engagement** – The Department of State worked closely with industry and NGO partners to focus attention on combating marine debris using environmentally sound waste management best practices, innovation, and outreach in APEC. The EPA, under the APEC project. “Enhancing source separation and segregation of waste” as a means to address marine plastic litter in the APEC region. The project included an [implementation guide](#) that takes waste practitioners step-by-step through establishing a labor-intensive separate waste collection and utilization system in small-to-medium sized cities in APEC region. This guide includes a case study of a project in Vietnam that exemplifies this approach as well as a virtual waste symposium to educate officials in APEC region on the implementation guide as well as case studies of similar approaches throughout the region.
- **Global Ghost Gear Initiative Engagement** – The GGGI is seen as the preeminent global Organisation comprised of national governments, NGOs, and industry with the objective of combating abandoned, lost, or otherwise discarded fishing gear.
- **Department of State Marine Debris Grants** – The Department of State has administered over four million dollars in grants aimed at helping address marine debris from both land and sea-based sources.
- **NOAA support to Urban Ocean Initiative** – NOAA’s Marine Debris Program is supporting the Urban Ocean Initiative, an effort led by the Ocean Conservancy, an international marine environmental NGO, to better address land-based debris resulting from urban environments. This initiative will provide a platform for select city governments around the world to connect with one another as well as with community leaders, academia, and the private sector to develop, share, and scale solutions to the ocean plastics crisis.

International Cooperation

- **Solid waste management capacity building projects in Southeast Asia in collaboration with UNEP's The Coordinating Body on the Seas of East Asia (COBSEA)**
 - *Malaysia*- [Increased recovery of recyclables](#) in the Mersing Island archipelago through training of local stakeholders to segregate and collected waste at households and resorts. The project built a small waste transfer facility, procured waste bins and raised public awareness through a partnership with local resorts.
 - *Indonesia* – Project enhanced the operation of a Community-based [materials recovery facility](#) (MRF) by adding two waste bank units to Makassar City. This included training for users as well as procurement of standard equipment. In

parallel, the second project also supported a [social enterprise startup](#) to empower local women in Untia to produce recycled products from single-use plastic items.

- **Solid Waste Management and Capacity Building Tools & Projects- Trash Free Waters**

- *Trash Free Waters International Implementation Guide* – EPA developed tool that provides step-by-step guidance in establishing a Trash Free Waters (TFW) program and projects. TFW is EPA’s participatory framework in involving stakeholders at the national, state, and local levels in decision-making for solutions to address marine, coastal and watershed issues related to marine plastic litter, as well as identifying and executing improvements to solid waste management.
- *Jamaica* - Prioritize marine litter and solid waste management needs and develop projects and activities, including: procuring bins in Whitehouse-Bluefields communities; training schools and local staff in placing them and using the bins; and educating the general public about the impacts of trash.
- *Panama* - Prioritize marine litter and solid waste management needs and develop projects and activities, including: identified included public awareness raising on solid waste management and the impacts of trash with local schools and universities. The project also included installation of a river trash boom on the Juan Diaz River.
- *Peru* - Stakeholder workshop held involving over 70 participants. The pilot project identified for Chincha addressed solid waste management through helping two communities segregate and selectively collect at the source in order to recover more valuable recyclable material and prevent that material from entering waterways and the ocean.

- **Additional international efforts**

- Proven Practice Guide to Improve Waste Management and Address Plastic Pollution in Southeast Asia - The guide aims to holistically examine aspects of plastic pollution mitigation projects across a spectrum of implementation areas, which are detailed in the proven practice modules and include: stakeholder engagement, capacity building, implementation, social and behavior change, data and evaluation, and financing.

Strengthening the Connection Between Marine Litter and Solid Waste Management – Central America and Dominican Republic Trade Agreement and Panama Free Trade Agreement - Through an interagency agreement with the Department of State, EPA worked with the national governments of Panama, Costa Rica, and the Dominican Republic to engage all stakeholders in identifying solutions to the marine litter problem through improvements in solid waste management. Activities included virtual national dialogues, assisting in their development of national action plans for marine litter, and on-the-ground projects that support the countries’ own efforts. National action plans were completed in Costa Rica (2021), Panama (2022), and the Dominican Republic (2023). In addition, EPA used appropriated funds to support the development of national action plans for marine litter in El Salvador (completed in 2022) and Guatemala (to be completed in 2023). The EPA completed all 3 planned workshops on landfill management in Panama, Costa Rica, and the Dominican Republic in late summer 2021 and in 2022 conducted a sub-regional workshop in Central America Northern Triangle (El Salvador, Honduras and Guatemala).

Stormwater Runoff and Marine Litter Prevention- Commission for Environmental Cooperation (CEC) – The U.S., Canada and Mexico are implementing projects to reduce marine litter along the transboundary watersheds since 2017. The current CEC

(“Last Stop the Ocean” refer to 3.5.2) project on marine litter includes the development of a toolkit and training guide for decision makers on the stakeholder engagement process. Specifically, the CEC released the *Reducing Marine Litter Through Local Action: A Toolkit for Community Engagement* which is targeted towards inland communities, including urban inland areas. The messaging includes a focus on water and trash flow, the full life cycle of a product, and concrete actions that offer individual solutions. Please also refer to 3.5.2 awareness-raising campaigns related to marine plastic litter section for more details as well as information on the “Last Stop: the Ocean,” public information campaign

- **Waste Prevention & Strengthening Recycling (USAID)**

USAID’s Save our Seas Initiative - USAID launched two 5-year bilateral programs in October 2022 in Sri Lanka and the Maldives and in Vietnam. The programs aim to reduce ocean plastic pollution at its source by strengthening subnational government capacity for solid waste management, supporting national governments to implement plastics policies including Extended Producer Responsibility (EPR), reducing plastic use, and empowering informal waste workers. In Kenya, USAID launched its first plastic pollution activity through the Mombasa Plastics Prize to encourage aspiring entrepreneurs and young leaders to develop solutions within informal settlements.

As part of the Save our Seas Initiative, **USAID’s Clean Cities Blue Ocean Program** has to date:

- safely managed nearly 410,000 metric tons of waste and recyclables overall;
- secured over 55,000 metric tons of plastic (the equivalent of over 6 billion 1-liter plastic bottles) from leaking into the environment;
- reduced, recovered, and diverted over 570 metric tons of plastic and other low-value waste from disposal;
- trained over 3500 individuals from local government, the informal waste sector, and local Organisations to build local capacity for solid waste management planning and programs;
- directly impacted over 8.6 million individuals who have experienced improved air and water quality as a result of landfill remediation activities or have improved access to waste services as a result of new local businesses and Organisations.
- awarded over \$6.1 million through 36 grants to local partners to implement effective, locally-led solutions;
- mobilized over \$8.5 million in additional public and private investments for improved solid waste management systems and infrastructure;
- formed strategic partnerships with local governments; donors including Norad and KOICA; and private sector partners, including Nestle Philippines, the Coca-Cola Foundation, and Tetra Pak, to build sustainable, circular economies.

USAID’s Municipal Waste Recycling Program- From 2016 to 2021, USAID’s Municipal Waste Recycling Program supported 30 grantees with \$5.5 million USD in 32 locations across Indonesia, the Philippines, Sri Lanka, and Vietnam. The program partnered with more than 40 local governments and over 100 local businesses and Organisations. The impacts of these activities include improving access to Solid Waste Management and recycling services for over 3.8 million people, with additional 5.4 million indirect beneficiaries. The program diverted 20,600 metric tons of plastic waste from the ocean and supported the development of over 60 new and improved laws and regulations to reduce future ocean plastic pollution.

- **Infrastructure Investment (USAID):**

Development Finance Corporation (DFC) partial loan guarantee for Circulate Capital-The Fund has invested over \$80 million to 14 companies in India and Indonesia, with more to come. USAID also entered a tripartite partnership with Circulate Capital and Prevented Ocean Plastic Southeast Asia (POPSEA)—itself a product of the DFC-backed investment—to build and operate financial sustainable plastic recovery systems.

Cartagena Convention - The LBS Protocol published a 2019 report, entitled “State of the Convention Area Report” (SOCAR) that provided the first ever compilation of national baseline data on coastal water quality rather than data extrapolated from global assessments.

Global Partnership on Marine Litter and Plastic Pollution - NOAA staff serve on the GPML Steering Committee to help guide its work. EPA has financially supported the development of a digital platform to share information on marine litter and plastics on a global level.

Striving for Increased Public Participation in Environmental Protection in Central America through a Small Grants Program with Civil Society Organisations - To date, this Department of State (DOS) program provided training to over 5,000 people, with 160 people actively involved in community-based initiatives. This initiative strengthened solid waste management capacity in 10 communities through training 61 municipal employees and authorities, resulting in the improved management of over 3,500 tons of solid waste, including 43 tons of plastic waste recycled.

Asia Pacific Economic Cooperation Forum – Successes included receiving endorsement from APEC members for a revision to a 2009 report on the direct economic costs to APEC economies due to marine debris. The report revises estimates of the direct costs of marine debris to member economies to support arguments to strengthen regulatory and non-regulatory actions. DOS also developed a marine debris management and innovation sub-fund and contributed US \$800,000 to the fund. The fund will serve as a dedicated resource for APEC projects aiming to tackle the marine debris problem. DOS continues to engage major source countries in Southeast Asia to encourage policy changes needed to prevent and reduce marine debris. There are four projects that have been approved by APEC member economies to address and better understand marine debris in the APEC region. The United States, through DOS, NOAA, EPA, and FDA, implements projects to better understand and address many aspects of the marine debris/marine plastic litter issue through the APEC Oceans and Fisheries Working Group, including through implementation of approved APEC projects.

Global Ghost Gear Initiative Engagement – In 2020 the United States joined the GGGI as a government member and is working with the Organisation to combat ghost gear globally through promotion of the voluntary gear marking guidelines developed by the FAO with input from the GGGI.

United States Department of State Marine Debris Grants – The Department of State (DOS) has provided several grants that help address different aspects of the marine debris issue. One example is a grant provided to the Center for Community Health Research and Development which implemented a project titled, “Social Mobilization For Marine Waste Management”, which aimed to reduce marine debris via social change in Ly Son Island, Vietnam. The project has established a local steering committee on environmental protection; delivered 50 new public waste receptacles; gathered more than 300 people to clean 15km of coast; collected 500kg plastic waste;

trained 50 people in waste collection and processing; trained 45 community leaders in communications skills; trained 600 households in proper waste sorting, resulting in a ten-fold increase in the percentage of households practicing proper waste sorting; and provided 3,000 households with reusable shopping baskets to replace single-use plastic bags.

- Additionally, grantee WWF Peru implemented the project titled, “Making a business out of a problem: Creating a circular economy for abandoned, lost, and discarded fishing gear in Peru,” with the intent to prevent and reduce the amount of Abandoned, Lost, or otherwise Discarded Fishing Gear (ALDFG) entering Peru’s coastal waters by collecting and recycling end-of-life fishing gear. The project launched net collection programs in three communities, obtained signed letters of commitment from the three largest anchoveta fisheries in Peru (Tasa, Copeinca, Austral), and secured a supply of more than 200,000 kg annually of end of life fishing nets for recycling.
- DOS worked with grantee Ocean Conservancy on the development of the project titled “Implementing Best Practices for Fishing Gear Management to Reduce and Prevent ALDFG in the Caribbean Region,” to reduce and prevent the incidence of abandoned, lost, or otherwise discarded fishing gear (ALDFG) in Jamaica and Dominica. The grantee incorporated the Global Ghost Gear Initiative Best Practices Framework into the COAST checklist for incentivizing good fisheries management practices through an insurance product, and made progress toward implementing the framework; developed innovative fishing gear and gear marking technologies to prevent ALDFG and facilitate gear recovery; and gathered information on the most prevalent types of ALDFG in Caribbean nations to develop a standardized gear retrieval protocol.
- DOS supports innovative technologies and approaches to combatting marine debris through our grants. This includes grantee WWF-Hong Kong, who developed a project titled “All Hands on Deck - A Community-Based Marine Litter Reduction Programme”, which conducted three coastal cleanup activities, three community fora, selected three types of alternative fish boxes to be tested by the fishing industry to reduce polystyrene marine debris, and engaged the major players (including fishery and seafood industries, and manufacturers of boxes) to obtain support to change from polystyrene to alternative boxes.
- Another grantee, The Global Knowledge Initiative (GKI), developed a project called “Building Ecosystems to Reduce Waste in Our Oceans - Ocean Plastic Prevention Incubators”. GKI, and subgrantees SecondMuse and Circulate Capital, aim to reduce marine debris by building effective waste management and plastic recycling economies in Indonesia and the Philippines. The grantees have drafted three case studies and one policy guideline; hosted a workshop that led to the establishment of a stakeholder meeting forum; planned a public Plastics Festival in Surabaya to raise awareness; and built a database of more than 200 waste and recycling operators and potential partners.

Basel Plastic Waste Partnership - The Plastic Waste Partnership was established at the 14th COP to the Basel Convention and held the first meeting in March 2020. The goal of the PWP is to significantly reduce and in the long-term eliminate the discharge of plastic waste and microplastics into the environment, in particular the marine environment. Four project groups were established to begin work focusing on: plastic waste prevention and minimization; plastic waste collection, recycling and other recovery including financing and related markets; transboundary movements of plastic waste; and outreach, education and awareness-raising. The US engages in all four project groups.

U.S.-Mexico-Canada Agreement - In 2020, the U.S.-Mexico-Canada Agreement (USCMA) free trade agreement went into effect between the three nations. This agreement continues the already strong collaboration between these governments to address marine debris in North America. In 2020, the U.S. also passed domestic legislation that provided \$8 million in funding to NOAA's Marine Debris Program to address marine debris in North America of which NOAA is allocating over \$7 million on marine debris projects in the region in 2021-2024. This legislation provides funding to address marine debris, and other environmental issues through the trilateral Commission on Environmental Cooperation.

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

NOAA Marine Debris Program Removal Grants

Brief description:

NOAA's Marine Debris Program provides annual funding to partners in the U.S. to support locally driven, community-based marine debris removal projects. These projects benefit coastal habitat, waterways, and wildlife including migratory fish. Since 2006, NOAA has supported over 100 marine debris removal projects and removed more than 22,500 metric tons of marine debris from our coasts and ocean.

Removal of plastic litter from the ocean

Yes

Names of actions:

NOAA Marine Debris Program Removal Grants

Brief description:

NOAA's Marine Debris Program provides annual funding to partners in the U.S. to support locally driven, community-based marine debris removal projects. These projects benefit coastal habitat, waterways, and wildlife including migratory fish. Since 2006, NOAA has supported over 100 marine debris removal projects and removed more than 30,000 metric tons of marine debris from our coasts and ocean.

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

No

Public-private partnerships for creating and implementing innovative solution

No

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Refer to:

- **3.2.2** regarding the Trash Free Waters Program and the NOAA Marine Debris Program Prevention Grants
- **3.2.4** regarding the Stormwater Runoff and Marine Litter Prevention – Commission for Environmental Cooperation (CEC)

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

EPA National Recycling Strategy

Brief description:

Please see below.

Resource Conservation and Recovery Act (EPA) Voluntary Programs

- **National Recycling Strategy** –The National Recycling Strategy was published in November 2021 and identifies strategic objectives and actions needed to create a stronger, more resilient, and cost-effective U.S. municipal solid waste recycling system. Recycling has been a critical component of the EPA’s decades-long efforts to implement the Resource Conservation and Recovery Act (RCRA) and its more recent efforts to pursue a Sustainable Materials Management (SMM) approach, which aims to reduce the environmental impacts of materials across their lifecycle. Building on the National Framework for Advancing the U.S. Recycling System and EPA’s long history of providing data, tools, information and other resources to support recycling in the United States. The strategy aligns with and supports implementation of the National Recycling Goal - to increase the recycling rate to 50 percent by 2030.
- **Recycling Education and Outreach (REO) Grant Program** - The Bipartisan Infrastructure Law provides \$75 million total from Fiscal Year 2022 to Fiscal Year 2026 for grants to fund a new Recycling Education and Outreach Grant Program. Projects funded through the grant program will:
 - Inform the public about residential or community recycling or composting programs.
 - Provide information about the materials that are accepted as part of residential or community recycling or composting programs.
 - Increase collection rates and decrease contamination across the nation.

The Bipartisan Infrastructure Law also requires EPA to develop a model recycling program toolkit. This toolkit can be used by grant applicants to help design or improve recycling, composting, and other material management programs

Clean Water Act

- **Trash Free Waters Voluntary Work in the US** – Since 2013, the Trash Free Waters Program has provided technical or financial assistance on over 80 domestic, place-based projects across the United States, including source reduction, trash capture, outreach and education, research, and other types of projects..”

Marine Debris Act

- Development of public awareness materials and social media platforms for sharing information to increase awareness and drive behavioral change to reduce the amount and impacts of marine debris

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

NOAA International Marine Debris Conference (IMDC) Series

Commission for Environmental Cooperation (CEC) – Last Stop the Ocean

Brief description:

Please see below

International Marine Debris Conference (IMDC) series – Since 1984, NOAA has hosted or supported seven International Marine Debris Conferences that engage a wide array of key stakeholders and the public to discuss all aspects of the marine debris issue. The last event, the 7IMDC, was held in September 2022 in the Republic of Korea and included over 900 attendees from 89 countries. This conference is action, solution, and change-oriented and includes sharing of lessons learned and best practices to reduce and prevent marine debris and its impacts; promoting international co-learning; exchanging innovative ideas such as market incentives and communication strategies; and sharing the latest research initiatives, methods, and results.

Commission for Environmental Cooperation (CEC) – Last Stop the Ocean

As referenced within section 3.2.4, the CEC, an international collaboration between Canada, Mexico and the United States on environmental issues of common interest in North America has launched a pilot project to raise public awareness about the flow of litter downstream to the ocean. Litter capture devices are being deployed in streams in three inland communities across North America. Litter caught in the traps are being analyzed to help understand the sources and types of marine litter in order to stop it from occurring in the first place. In the U.S. the goal of the pilot project in the Quad Cities area to spur dialogue and connect inland communities to the global issue of marine litter. The Quad Cities Region is home to 400,000 people living in cities on both the U.S. states of Iowa and Illinois sides of the Mississippi River. Trash traps were installed in three creeks in Davenport, Iowa to catch trash and prevent it from flowing downstream to the Mississippi River and eventually into the Gulf of Mexico. The next step is to employ a public information campaign: “Last Stop: The Ocean”. The campaign is created for cities, local or regional governments, watershed associations, NGOs and educational institutions, this collection of materials is designed to create awareness on water and trash flows and provide simple solutions for individuals to prevent and reduce land-based marine litter. It was developed by the CEC in collaboration with Environment and Climate Change Canada (ECCC), Mexico's Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), and the EPA, as part of a trinational collaborative project on building solutions to reduce marine litter.

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

NOAA Marine Debris Monitoring and Assessment Program

EPA Research

Brief description:

NOAA implements its Marine Debris Monitoring and Assessment Program (MDMAP), a citizen science initiative that engages partner Organisations and volunteers across the United States in completing shoreline marine debris surveys. Through regular monitoring, NOAA and its many partners systematically collect data to compile a record of the amount and types of debris in the environment, track the progress of existing marine debris prevention initiatives, and identify targets for future mitigation efforts.

NOAA's Shoreline Monitoring Field Guide and Marine Debris Monitoring and Assessment Technical Memo provide shoreline and surface water monitoring techniques and considerations for monitoring other parts of the marine environment and are used as the basis for marine debris monitoring activities globally ([Link to Shoreline Monitoring Field Guide](#) & [Link to Technical Memo](#)).

NOAA also maintains an MDMAP online database including data collected through shoreline marine debris surveys. All data is openly available for data analysis efforts, and it is intended that the data can be used to develop more effective prevention and mitigation strategies to prevent the impacts of marine debris. (Link to database: <https://mdmap.orr.noaa.gov/login>.)

EPA Research:

Research on end-of-life plastic management, including analysis of the plastics life cycle and tracking chemical additive releases.

Research on waste recovery and beneficial reuse of plastics, including comparison of single-use plastics with alternatives by quantifying the environmental costs and full value for sustainable management of plastic materials and techniques to identify, sort and process plastics resins and additives used in electronic products.

Development of methods and tools to maximize the reuse of plastics and minimize disposal, including assessing alternatives to single-use plastics and plastic substitutes. This research supports the National Recycling Strategy.

EPA developed sample collection methods and a hybrid sediment extraction method for microplastics in sediments for the National Coastal Condition Assessment (NCCA) conducted as part of the National Aquatic Resource Surveys (NARS) <https://www.astm.org/d8333-20.html>

In progress

EPA is expanding its methods research to include characterization of microplastics in drinking water, stormwater, and wastewater.

EPA is evaluating human health effects of exposure to microplastics and ecological effects on freshwater and marine systems.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

APEC Marine Debris Shoreline Monitoring Decision Framework

EPA Research Collaborations

Brief description:

- The Department of State and NOAA concluded a project in the APEC region to develop a tool to assist in the shoreline monitoring of marine debris in the Asia Pacific Region. This project developed a decision framework that helps non-technical audiences select the most appropriate shoreline marine debris monitoring protocol.
- EPA and the Global Water Research Coalition have partnered on microplastic research including a round robin comparison and method harmonization for microplastic characterization and development of science briefs and fact sheets.
 - [GWRC Science Brief Microplastics](#)
 - [Microplastic Fact Sheet](#)

In progress

- EPA is collaborating with the National Institute of Standards and Technology (NIST), American Chemistry Council, and members of the National Nanotechnology Initiative to develop standard reference materials for microplastic analyses.
- EPA is collaborating with the Southern California Coastal Water Research Project on microplastic methods testing and with the American Society for Testing and Materials (ASTM) to develop standard methods for the collection and extraction of microplastics in water <https://www.astm.org/d8332-20.html> & <https://www.astm.org/d8333-20.html>

Others

Resource Conservation and Recovery Act (EPA) Voluntary Programs

Facts and Figures Report - EPA began collecting and reporting data on the generation and disposition of waste in the United States more than 30 years ago. EPA releases an annual report, *Advancing Sustainable Materials Management: Facts and Figures*, to provide information on Municipal Solid Waste (MSW) generation, recycling, composting, combustion with energy recovery and landfilling. The report analyzes MSW trends in generation and management, materials and products, and economic indicators affecting MSW. The most recent Facts and Figures report contains data through calendar year 2018.

Recycling Economic Information (REI) Report – This report provides national economic information on the impacts of recycling, namely jobs, wages, and taxes in order to increase the understanding of the economic implications of material reuse and recycling. The most recent report was published in 2020.

Department of Energy Plastics Innovation Challenge

The Plastics Innovations Challenge will focus resources from across the U.S. Department of Energy to create a comprehensive program to accelerate innovations that will dramatically reduce plastic waste in oceans and landfills and position the U.S as global leaders in advanced plastics recycling technologies and in the manufacture of new plastics that are

recyclable by design. The Plastics Innovation Challenge will draw on both fundamental and applied research capabilities within National Labs, universities and industry. Using a coordinated suite of funding opportunities, critical partnerships, and other programs, the Plastics Innovation Challenge sets the following 5 goals for the United States to reach by 2030:

Develop collection technologies to prevent plastics from entering waterways or facilitate its removal.

Develop biological and chemical methods for deconstructing plastic wastes into useful chemicals.

Develop technologies to upcycle waste chemical streams into higher value products, encouraging increased recycling.

Develop new plastics that are recyclable by design and can be scaled for domestic manufacturability

Support a domestic plastics upcycling supply chain by helping companies scale and deploy new technologies in domestic and global markets.

Clean Water Act

- **Waste Management and Inclusive Capacity Building- Trash Free Waters-**
 - In US Federal fiscal years FY19-20, the Trash Free Waters program has verified 100 waterbodies cleaner from trash from efforts related to program activity.
- **National Coastal Condition Assessment 2010** is a statistical survey of the condition of U.S. marine and Great Lakes coasts. The most recent report can be found [here](https://www.epa.gov/sites/production/files/2016-01/documents/ncca_2010_report.pdf): https://www.epa.gov/sites/production/files/2016-01/documents/ncca_2010_report.pdf
 - Scleractinian coral microplastic ingestion: Potential calcification effects, size limits, and retention. Research supported by the Environmental Protection Agency. <https://www.ncbi.nlm.nih.gov/pubmed/30301077>
 - Novel method for the extraction and identification of microplastics in ocean trawl and fish gut matrices. Research supported by the Environmental Protection Agency. <https://www.semanticscholar.org/paper/Novel-method-for-the-extraction-and-identification-Wagner-Wang/0faad963e6c2d3e676ce0b64e203a4bdf133bc4a>

Marine Debris Act

- Development of technical papers summarizing the state of the science on several marine debris-related topics.
- Development of Marine Debris Monitoring Shoreline Protocols and media for protocol training.
- Funding a number of research projects to examine the fate, transport, and impacts of marine debris in partnership with academic universities.

6.17.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)

- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

Recycling System Challenges

Education and Outreach - It can be difficult for consumers to understand what materials can be recycled, how materials can be recycled, and where to recycle different materials. This confusion can lead to placing recyclables in the trash or throwing trash in the recycling bin or cart. Therefore, it is important to enhance education and outreach to consumers on the value of recycling and how to recycle properly.

Infrastructure - Some recycling infrastructure does not match today's waste stream. Communication between the manufacturers of new materials and products and the recycling industry needs to be enhanced to prepare for and optimally manage the recycling of new materials.

Markets for Secondary Materials - Domestic markets for recycled materials need to be strengthened in the United States. There is also a need to better integrate recycled materials and end-of-life management into product and packaging designs. Improving communication among the different sectors of the recycling system is needed to strengthen the development of existing materials markets and to develop new innovative markets.

Measurement - Stakeholders across the recycling system agree that more consistent measurement methodologies are needed for measuring recycling system performance. These more standardized metrics can then be used to create effective goals and track progress.

6.17.4. Best Practices

National level

NOAA Reports and Technical Memos on Marine Debris: <https://marinedebris.noaa.gov/reports-and-technical-memos#pub-term-39>

Microplastics Expert Workshop report: https://www.epa.gov/sites/production/files/2018-03/documents/microplastics_expert_workshop_report_final_12-4-17.pdf

Model Recycling Program Toolkit - The Model Recycling Program Toolkit is an interactive collection of EPA and other materials. Toolkit materials can help states, territories, local governments, tribes, schools, nonprofit Organizations, companies, and public-private partnerships create effective programs for recycling, composting, anaerobic digestion, reuse, repair and waste reduction. Materials in the toolkit can help communities increase

participation in recycling programs and reduce contamination in the recycling stream. <https://www.epa.gov/recyclingstrategy/model-recycling-program-toolkit>

DOI Secretary's Order to Reduce Plastic Pollution - The Secretary of the Interior has directed the Department to develop strategies to reduce the amount of plastic waste it produces <https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3407.pdf>

Local level

NOAA's Marine Debris Program provides summaries of past projects undertaken at a local or community-level that use outreach and education to prevent marine debris: <https://marinedebris.noaa.gov/current-efforts/prevention>

EPA Trash Free Waters Best Practices Compendium: <https://www.epa.gov/trash-free-waters/aquatic-trash-prevention-national-great-practices-compendium>

Private sector

[Operation Clean Sweep](#) provides guidelines to help plastics industry operations managers reduce the loss of pellets, flakes and powder to the environment.

The [Sustainable Packaging Coalition](#) provides training and guides for sustainable packaging.

International cooperation

[The Trash Free Waters International Implementation Guide](#) – a tool that provides step-by-step guidance for including all stakeholders, either at the national, state, or community level in decision-making to address land-based sources of marine litter.

[Best Practices for Solid Waste Management: A Guide for Decision-Makers in Developing Countries](#) - The Guide covers a diverse set of important topics for city-level decision-makers around the world including stakeholder engagement, waste management planning and economics, waste collection and transportation, prevention, minimization, and recycling, landfill design and operation, and energy recovery.

[Virtual Landfill Construction & Operations Workshop](#) - This virtual workshop contains module presentations, links to videos of the instructors delivering the modules, and the manuals/reference documents on which the workshop is based. The target audience is private and public sector solid waste management officials.

[USAID Clean Cities Blue Ocean \(CCBO\) Virtual Event and Training Hub](#): hosts live and on-demand webinars and trainings on ocean plastic pollution and solid waste management.

[The Building Blocks of a Circular Economy: USAID's Local Systems Approach to Reducing Ocean Plastic Pollution](#): primer on USAID's approach to ocean plastic pollution.

[USAID Tool: Solid Waste Capacity Index for Local Governments \(SCIL\) Assessment Tool](#): enables local governments to self-assess their current capabilities associated with key criteria needed to develop and maintain a sustainable solid waste management system.

[USAID Tool: Solid Waste Cost-of-Service Analysis - Guidelines for Local Governments and Editable Tool](#): provides guidance to local governments in low- and middle-income countries to determine the costs of solid waste management and 3R programs.

[USAID Tool: Funding Options for Solid Waste Systems in Low- to Middle-Income Countries](#): provides guidance to local governments on funding options to develop economically sustainable solid waste management systems.

USAID Tool: Street Litter Audit Guidebook and Tables: provides practical guidance on conducting street litter audits—a standardized approach to measuring the extent and impacts of litter on city streets and walkways to help to understand the extent of the litter problem in communities.

USAID Tool: Marine Litter Audit Guidebook and Tables: provides practical guidance on measuring the rate, extent, and composition of litter that is intentionally deposited on, or washes onto, a beach area to measure the extent and impacts of marine litter on beach-front areas in communities.

USAID Case Study: Building Local Government Capacity for Improved Solid Waste Management Systems - Asia, Latin America, the Caribbean.

USAID Case Study: A model for waste site remediation to reduce climate impacts and ocean plastic pollution (Dominican Republic).

USAID Case Study: Empowering Informal Waste Workers - Asia, Latin America, the Caribbean.

USAID Case Study: Stopping Ocean Plastic Pollution from Cities: A USAID Case Study from Parañaque City, Philippines.

USAID Case Study: Report on Behavior Change in Local Systems to Mitigate Ocean Plastic Pollution.

USAID Case Study: Marine Plastic Debris and Solid Waste Management in Peru.

USAID Report: Extended Producer Responsibility Thought Leaders Roundtable (EPR) - Summary.

USAID Report: Circularity Assessment Protocol Manila, Philippines.

USAID Report: Social and Behavior Change for Improved Solid Waste Management and 3R Practices - Trials of Improved Practices: Final Results – Samaná Province, Dominican Republic.

USAID Report: The Women in Waste's Economic Empowerment (WWEE) Activity: empowers and trains women through a small business incubator program to establish or expand women-owned recycling or waste businesses.

USAID Report: Understanding the Ocean Pollution Problem in Latin America & the Caribbean.

Report with contributions from USAID's Clean Cities Blue Ocean Program: Turning the Tide: How Can Indonesia Close the Loop on Plastic Waste?

Report with contributions from USAID's Clean Cities Blue Ocean Program: A Seat at the Table: The Role of the Informal Recycling Sector in Plastic Pollution Reduction, and Recommended Policy Changes

6.17.5. References and Reading Links

2018-2019 Interagency Marine Debris Coordinating Committee Biennial Report to the US Congress:

[https://marinedebris.noaa.gov/sites/default/files/2018-2019 IMDCC Biennial Report to Congress.pdf](https://marinedebris.noaa.gov/sites/default/files/2018-2019%20IMDCC%20Biennial%20Report%20to%20Congress.pdf)

National Parks Service Ocean Plastics: <https://www.nps.gov/subjects/oceans/ocean-plastics.htm>

U.S. Agency for International Development Save Our Seas Initiative <https://www.usaid.gov/save-our-seas>

U.S. Agency for International Development Ocean Plastics: <https://urban-links.org/issue/ocean-plastic-pollution/>

U.S. Agency for International Development program Clean Cities Blue Ocean: <https://urban-links.org/project/ccbo/>

U.S. Agency for International Development Municipal Waste Recycling Program: <https://urban-links.org/project/municipal-waste-recycling-program-mwrp/>

The Bipartisan Infrastructure Law: Transforming U.S. Recycling and Waste Management: <https://www.epa.gov/infrastructure/bipartisan-infrastructure-law-transforming-us-recycling-and-waste-management>

U.S. EPA SMM Facts and Figures Report: <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/advancing-sustainable-materials-management-0>

U.S. EPA National Recycling Strategy: <https://www.epa.gov/recyclingstrategy> NOAA's Marine Debris Program: <https://marinedebris.noaa.gov/>

DOI Secretary's Order to Reduce Plastic Pollution - U.S. Department of the Interior Secretary's Order to Reduce Plastic Pollution: <https://www.doi.gov/pressreleases/secretary-haaland-issues-order-phase-out-single-use-plastics-protect-public-lands-0>

6.17.6. Contact Details: *(Please specify name and email address)*

- G20 Point of Contact - U.S. EPA: Toni Harmer – Harmer.Toni@epa.gov
- U.S. Environmental Protection Agency: Daniela Wojtalewicz - Wojtalewicz.Daniela@epa.gov
- U.S. Agency for International Development: Clare Romanik - cromanik@usaid.gov
- National Oceanic and Atmospheric Administration: Steve Morrison - steve.morrison@noaa.gov
- U.S. Department of State: Larke Williams - williamsls@state.gov
- U.S. Department of the Interior: Steve Tryon – Stephen_tryon@ios.doi.gov
- U.S. National Aeronautics and Space Administration: Laura Lorenzoni – laura.lorenzoni@nasa.gov



6.18. Antigua and Barbuda

Key Highlights

- National Bottle Deposit Scheme and a Waste-to-product
- Environmental Protection Levy (Amendment) Bill, 2023
- Litter Control and Prevention Act, 2019
- Prohibition Order for Shopping Plastic Bags and Polystyrene
- Closing the Plastic Tap
- Plastic Waste Free Island
- The ReMLit OECS project

6.18.1. Policy and Frameworks

National Action Plan

Name:

National Bottle Deposit Scheme and a Waste-to-product

Brief description:

National bottle-to-bottle collection scheme to encourage the return of PET bottles for 20 cent. To ensure the bottles are diverted for the landfill and process at the appropriate recycling facility. On the other hand focus is also being made to collect non-recyclable bottles and use as a resource to make products such as chairs, bottles, and souvenir's.

Legal Framework

Name:

Environmental Protection Levy (Amendment) Bill, 2023

Brief description:

The Bill amendment is to strengthen the legislation to cover payment from local manufactures who uses blown preforms on island to distribute water. Therefore, enabling the scheme to be established where residents and citizens can be paid for post-consumer used bottles returned to bottle collection points.

Indicators

Under Development

Please list your indicators here:

- Prohibition Orders for single-use plastic and polystyrene (shopping bags, straws, etc.)
- Promotion of innovative solutions
- Boosting multi-stakeholder involvement and awareness-raising
- Beach clean-ups

6.18.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

No

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Actions for encouraging sustainable / circular product design

Regulations on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Environmentally sound waste management

Enforcement of proper waste management system

Names of actions:

Litter Control and Prevention Act, 2019

Brief description:

Acts as a legislation to educate, minimise, and institute penalties against persons littering.

No particular change observed

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Names of actions:

Litter Control and Prevention Act, 2019

Brief description:

Acts as a legislation to educate, minimise, and institute penalties against persons littering.

No particular change observed

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

In progress

Cleanup of marine plastic litter

Collection of scattered waste on beach

Names of actions:

National clean-up days and NGO'S beach clean-ups

Brief description:

Individual events held throughout the year in an effort to clean the beach fronts, trails, and mangrove areas

Maintenance and cleanliness of the general beach surroundings

We have seen a positive improvement

Removal of plastic litter from the ocean

No

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Names of actions:

Prohibition Order for Shopping Plastic Bags and Polystyrene

Brief description:

Legislation that prohibits the importation, sale and use of single use plastics of a varying categories egg cartons, bags, food containers, and utensils

We have seen a positive improvement over the last two years

Public-private partnerships for creating and implementing innovative solution

Names of actions:

Closing the Plastic Tap

Brief description:

The purpose of this project is to demonstrate effective, quantifiable solutions to address recyclable and unrecyclable plastic waste (the biggest fraction of plastic waste generated) and plastic leakage from Caribbean Small Island Developing States (SIDS).

We have seen a positive improvement over the last two years

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

Through intergovernmental committees and stakeholder mobilizing in the field of plastics we are able to spread the message in schools and varying communities about the impacts of

plastics on the environment and how individuals contribute to the problems currently being faced and actions that can be used to avert those issues.

No particular change observed

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Plastic Waste Free Island

Brief description:

Bottle-to-Bottle buyback program with a educational component to bring awareness to impacts of plastic waste

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Awareness-raising campaigns related to MPL – International/Regional

Yes

Names of actions:

Remlit OECS project

Brief description:

The **ReMLit project** which aims to reduce and control marine pollution in the Eastern Caribbean

We have seen a positive improvement over the last two years

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

No

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

No

6.18.3. Challenges

Check the challenges that your country has faced:

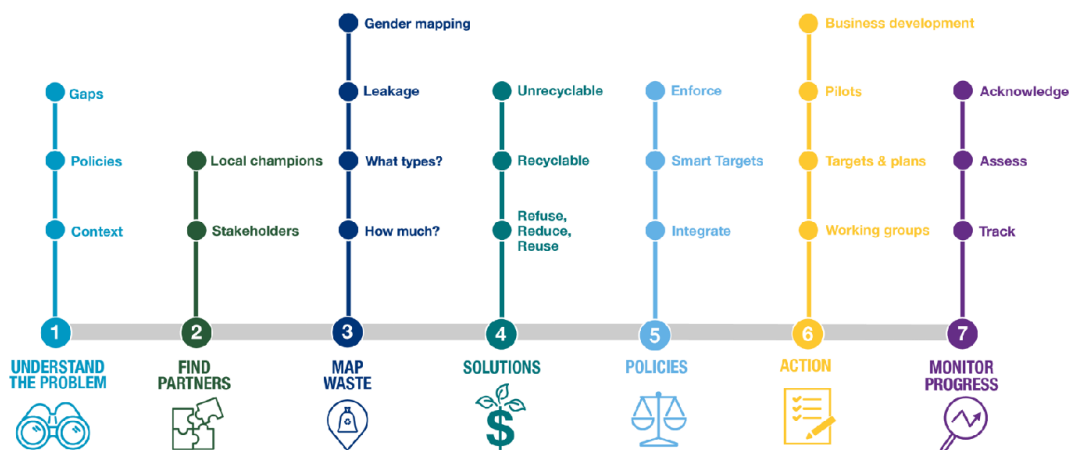
Recycling system improvement

Proper waste management system (including lack of local capacity)

- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.18.4. Best Practices

National level



Local level

Private sector

International cooperation

6.18.5. References and Reading Links

-  [plastic-waste-free-islands-caribbean-ec](#)
-  [iucn_blue-print-report_final.pdf](#)
-  [plastic-waste-free-islands-gender-repo](#)

6.18.6. Contact details: *(Please specify name and email address)*

- Indira James-Henry

Indira.james-henry@ab.gov.ag

6.19. Costa Rica

Key Highlights

- National Marine Waste Plan 2021-2030
- Comprehensive Waste Management Law (No.8839-2010)
- Law to combat plastic pollution and protect the environment. (Law No. 9786-2019).
- ADLFG Recovery and Recycling Project in the Pacific of Costa Rica (Agosto 2022-March 2023).
- National Recycling Strategy (updating 2023-2027)
- National Policy for Comprehensive Waste Management
- Comprehensive Waste Management Law (No.8839-2010)
- Law to combat plastic pollution and protect the environment. (Law No. 9786-2019).
- National Recycling Strategy (updating 2023-2027).
- National action plan of associations of developing countries glolitter

6.19.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name: National Marine Waste Plan 2021-2030

Brief description:

General objective

Intersectoral coordination of the prevention and comprehensive management of marine waste, aimed at improving the quality of ecosystems and the health of people.

Strategic Axes

1-Prevention and management of terrestrial sources

2-Prevention and management of marine sources

3-Education, awareness and communication

4-Regulations for the prevention and management of marine waste

5-Research, development, innovation and monitoring

6-Financing and cooperation mechanisms

Legal Framework

Do you have legislation on MPL? (including waste management and circular economy)

Yes

Please list your country's legislation including name and brief description here:

1: Comprehensive Waste Management Law (No.8839-2010)

Brief description: The purpose of this Law is to regulate the integral management of waste and the efficient use of resources, through the planning and execution of regulatory, operational, financial, administrative, educational, environmental and healthy monitoring and evaluation actions.

2: Law to combat plastic pollution and protect the environment. (Law No. 9786-2019).

This Law to combat plastic pollution and protect the environment, declares of public interest the plans, programs, projects, strategies and public or private undertakings of circular economy, prevention, reduction, reuse, recovery, treatment, disposal and education on the substitution and elimination of single-use plastic pollution, as well as initiatives for productive reconversion, conservation, sustainable use and research for the substitution, reduction and elimination of single-use plastic. It encourages special research programs for innovation, financing and accompaniment to micro and small companies that develop projects of conservation, reduction, recycling, prevention and productive reconversion of industries dedicated to the manufacture of plastic products.

The commercialization and free delivery of plastic bags to the final consumer in supermarkets and commercial establishments whose purpose is to transport the goods to their final

Destination is prohibited. Plastic bags that guarantee their reuse, that are certified with low environmental impact and biodegradable bags are excepted.

Other management instruments

1- National Recycling Strategy (updating 2023-2027). Develop an inclusive model for the integral management of solid waste in the country that allows the strengthening of capacities between the public sector, private sector and civil society, from 2016 to 2021.

2- National Strategy to replace Single Use plastic with renewable and compostable alternatives (updating 2023-2027).

It consists of the dissemination and monitoring of voluntary commitments from institutions, municipalities, companies and Organisations grouped into five strategic lines: -

1. Action by institutional suppliers to replace purchases of single-use plastic products with renewable and compostable alternatives.

2. Municipal action to generate incentives to replace single-use plastic with renewable and compostable products.
3. Consumer awareness and incentives for change.
4. Research and development of renewable and compostable alternatives.
5. Investment in productive activity for substitution.
6. National action plan of associations of developing countries glolitter to eradicate marine pollution caused by plastic garbage in the sea 2022-2024.

The purpose of this NAP is to establish a guiding framework containing concrete actions to help the country improve the management of SBML from shipping and fishing, as identified in the Country Status Assessment developed with the support from the GloLitter project. The National Action Plan is organized into these 5 sections:

- Actions related to legal, policy and enforcement reforms
- Actions related to institutional capacity and reforms
- Actions related to education and dissemination
- Actions related to regional and global cooperation
- Actions related to the participation of the private sector

4- ADLFG Recovery and Recycling Project in the Pacific of Costa Rica (Agosto 2022-March 2023).

Implement an ALDFG recovery and recycling model in a priority area of the Central Pacific of Costa Rica.

It is framed within the Project Action Plan GloLitter and compliance with Axis 2 (Prevention and management of marine sources) and Axis 3 (awareness and information) of the National Plan for Marine Debris 2021-2030

Pillars

I (ALDFG Recovery)

II (Elimination responsible for ALDFG)

5- Project: Prevention of Marine Waste in the Caribbean Sea (PROMAR) – Promoting Solutions of Circular Economy in the Dominican Republic, Costa Rica and Colombia. Caribbean Sea Chapter Costa Rica.

Promoting Solutions of Circular Economy in the Dominican Republic, Costa Rica and Colombia.

Work areas:

- 1: Mapping of Waste Flows and Monitoring Systems.
- 2: Economic Solutions Circulate in the Pilot Sites
- 3: Extended Responsibility of Producer and Political Dialogue.

6- Project: Support to the Government of Costa Rica in the development of a marine waste management strategy for two national fishing sectors.

The marine waste management strategy of the sectors of the artisanal fishing fleet located in the Responsible Fishing Marine Areas of the Gulf of Nicoya (AMPR-GN), namely: Puerto Nispero, Palito-Montero, Costa de Pájaros, Isla Caballo , Paquera-Tambor, Isla Venado and Tárcoles and the artisanal fishing fleet located in the Longline sector in Cuajiniquil, La Cruz, Guanacaste, responds to strategic action 2.1.1 Development of strategies for the prevention and management of waste produced by maritime transport , the fishing sector, aquatic activities and tourism of the National Marine Waste Plan (PNRM) 2021-2030.

The strategic objectives and action plans are designed around four axes:

- Axis 1: Management and prevention of waste from terrestrial and marine sources
- Axis 2: Education, awareness and information
- Axis 3: Regulations for the prevention and management of marine waste
- Axis 4: Valuation and Circular Economy.

[x] In preparation

Please list your country's legislation including name and brief description here:

1-National Strategy of the Circular Economy

1.1-The strategy has the following contents:

The long-term vision and mission, as well as the guiding principles on which this national-scope strategy has been built, which will have an implementation period from 2023 to 2050.

1.2- The general objective pursued, the specific objectives from which the strategic axes are derived (and their respective lines of action) and the cross-cutting objectives inherent in a just transition towards a sustainable and inclusive circular economy;

1.3- The prioritization of the productive sectors on which the implementation of this strategy will be leveraged under a sustainable territorial development approach;

1.4- The definition of the necessary enabling mechanisms to facilitate a cost-effective implementation of actions in the circular economy, such as adoption of clean technologies, creation of capacities (technical and non-technical) in the territory

2-National Policy for Comprehensive Waste Management

2.1-Will include topics as relevant as the work carried out by the sector of recuperators in the country their needs and rights as well as that it can be demonstrate lines of action that can generate real sanctions for those who do not comply with the provisions of Law 8839 such as operationalizing the extended producer responsibility and incentives for those who do carry out their responsibilities and go beyond them.

3-National Policy for Sustainable Production and Consumption (Executive Decree No.41032).

3.1- General objective:

Gradually adopt sustainable production and consumption patterns that contribute to the well-being of the population in general and of future generations, through the articulation of national planning instruments in a framework of inter-institutional and intersectoral coordination. The policy contains seven strategic axes:

- 1- Sustainable tourism
- 2- Sustainable Agrifood Systems
- 3- Sustainable production
- 4- Sustainable public purchases
- 5- Sustainable construction
- 6- Sustainable Lifestyles
- 7- Institutional strengthening

In addition, three transversal axes: Generation of Green Jobs, Comprehensive Waste Management and information and communication technologies.

Indicators

Do you have the MPL-specific indicators or data collection framework in your country?

Yes

Please list your indicators here:

In Costa Rica, the governing body for waste is the Ministry of Health, which has data and indicators related to:

- 1- Total waste generation by type and source of generation
- 2- Waste generation per capita
- 3- Tonnage of waste disposed of in sanitary landfills
- 4- Tonnage of waste that does not reach sanitary landfills
- 5- Tonnage of waste that takes the stream of recycling

- 6- Total waste generation by type and source of generation
- 7- Generation of recoverable recycled waste by province
- 8- Special handling waste managed by authorized managers
- 9- Hazardous waste managed by authorized managers
- 10- Type of treatment and final destination of the generated waste (sanitary landfill, landfill, processing, recycling, uncontrolled sites, etc.)

6.19.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

1-Approval of the creation of incentives (2%) for trade to replace single-use plastics.

Targeted products:

Via patent regulation. San Carlos approved a 2% incentive in the payment of commercial

Brief description:

A la fecha, 3 municipios, San Carlos, Tibás y Osa Osa, han aprobado la creación de incentivos comerciales para la sustitución de plásticos de un solo uso. Sin embargo, solo San Carlos y Tibás lo han puesto en práctica mediante patentes, y Tibás lo hizo a través de una tarifa diferenciada para la recolección de residuos.

In progress

It is an ongoing process to continue to grow in the direction of creating incentives for change.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

1- Prohibition of single-use plastics in the public sector.

Targeted products:

bags, straws, single-use crockery and glasses, plastic packaging

Brief description:

Guideline for the prohibition of single-use plastics in the public sector.

Names of actions:

2-Prohibition of the entry of single-use plastic into protected areas.

Targeted products:

bags, straws, single-use crockery and glasses, plastic packaging

Brief description:

Guideline National System of Protected Areas DE-944-2020.

3-Names of actions:

Law to combat plastic pollution and protect the environment No.9786-2019.

Targeted products:

bags and straws. Regulations for the production and commercialization of plastic bottles

Brief description:

Prohibition of commercialization and free delivery of plastic bags and straws. In the case of bottles, sustainability requirements must be met for production and marketing

Actions for encouraging sustainable / circular product design

In progress

Regulations on microplastics

In preparation

Government actions on microplastics

In preparation

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Others (please specify)

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Innovative Law and National Waste Plan in which implementation must be fine-tuned.

National Strategy for Single-use Plastic and National Strategy for the Recovery, Separation and Recovery of Waste (Recycling Strategy).

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

To date, four actions that impact the marine environment are implemented: the National Marine Waste Plan, diagnosis and action plan for two fishing sectors in the central and northern Pacific of the country, management of plastic waste and fishing gear in the central Pacific and pollution reduction project, extended projector responsibility and circular economy in the Costa Rican Caribbean, within the framework of the PROMAR project (Dominican Republic, Colombia and Costa Rica).

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

It is in the process of linking the management of marine waste with the theme of the blue economy together with the national system of conservation areas of the Ministry of Environment and Energy of Costa Rica

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Coordination of cleaning days in communities and coastal areas. Design of a Guide for the Collection of Waste on the Beach

Brief description:

Cleaning and collection activities on the beach have been coordinated with fishermen and fishermen, as well as with Non-Governmental Organisations that work on the country's coast.

Similarly, within the framework of the PROMAR project in the Costa Rican Caribbean, a guide was designed for cleaning up waste on the beach. This guide has been put into practice in four coastal locations in Costa Rica

Removal of plastic litter from the ocean

Yes

Names of actions:

Conditioning of a Coast Guard service boat, for the recovery of fishing gear abandoned at sea

Brief description:

With the projects with fishermen and fisherwomen that are being carried out, the cleaning of waste in the ocean begins. With the Coast Guard's spear refurbishment, the framework of the abandoned fishing gear collection project is expected to increase ocean cleanup

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

1-Circular Economy Strategy

2-Diagnosis of the existence of natural fibers that replace single-use plastic.

3-Incorporation of at least 50% recycled material in the design of packaging, packaging and bottles.

Brief description:

It has started with three strategic actions that reinforce what is consulted here. 1-With the circular economy strategy, it is intended that companies close their production circles, in order to avoid contamination of the external environment. 2-A diagnostic study has been carried out on the supply of raw materials (natural fibers) in Costa Rica, which can meet the needs for the substitution of plastic raw materials; 3-The incorporation of at least 50% recycled material in new products (packaging, packaging and bottles). Everything on the side of the reinforcement of the Extended Responsibility of the Producer (REP)

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

1-Circular Economy Strategy

2-Rethinking plastic consumption: from ideas to action.

Brief description:

This process begins with the aim of working on innovation in product design, new natural fiber raw materials and the drive for further research. With the Circular Economy strategy and other projects that will be promoted (at the end of April 2023, the project called Rethinking the Consumption of Single-Use Plastic will be launched: from ideas to action) greater results will be achieved by regard.

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Along with the Comprehensive Waste Management Law No.8839, a National Comprehensive Waste Management Plan was designed and updated for formal, primary, and secondary education. In addition, several non-governmental Organisations develop non-formal educational processes in communities and grassroots Organisations. In addition to the projects outlined in this document and that are implemented, non-formal educational processes have been designed and implemented in order to strengthen citizen responsibility and awareness.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

1-National Strategy for Recovery, Separation and Recovery of Waste.

2-Single Use Plastic Strategy.

Brief description:

1-In the past, six shorts on separation and types of waste were designed and advertised for six months on television, radio, and social networks. At least five training events on the Recycling Strategy, for public servants from public institutions and private companies throughout the country.

2- As of the date of this report, through the Plastic Free Zone Volunteer Network, different activities were carried out that included 550 volunteers and 3000 hours (lectures, training, support in workshops, beach cleaning and fairs).

A video was made with the participation of volunteers at Guacalillo beach and the Guarros school in the Garabito community. https://youtube/mn6BI_7zjC0

Arthur Wang, specialist in upcycling, was invited by the National Strategy for plastic substitution, as the main speaker at the 2018 Sustainability, Energy and Evolution congress.

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Design and dissemination of educational materials for the population

Brief description:

Within the framework of the projects that are carried out in the Pacific and Caribbean seas, educational materials with illustrations have been developed to better understand and sensitize the community.

2-Drawings in the sewers with messages to raise awareness about not depositing waste on sidewalks.

Brief description:

Some municipalities, such as the one in the province of San José, have designed drawings and educational messages on storm sewer covers with the legend "sea pollution begins here" and raise awareness not to deposit waste on city sidewalks

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Committee for the Management of Marine Residues of Latin America and the Caribbean

Brief description:

Within the framework of the Committee for Marine Waste Management in Latin America and the Caribbean, legal instruments related to waste management and the National Marine Waste Plan for marine waste management have been shared.

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

1-Investigation and Monitoring of waste on Pacific beaches.

2-Investigation and Monitoring of waste carried by marine currents and presence in sectors of Caribbean beaches.

Brief description:

1-Within the framework of the single-use plastic project, research has been carried out in various sectors of the Pacific coast, where amounts and types of plastic particles per square meter have been shown. 2-While the Caribbean (with the PROMAR project) and using the Monitoring Guide for plastic waste on the beach, waste carried by ocean currents (waste from national and international products) has been identified, and types and amounts of waste have been identified on the beach.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

No

Others

6.19.3. Challenges

Check the challenges that your country has faced:

Recycling system improvement

Proper waste management system (including lack of local capacity)

Data collection related to waste in general

Data collection related to marine plastic litter

Lack of awareness among citizens, business, local governments

Lack of financial incentives for waste treatment in general

Lack of financial incentives for technology development

Project delays due to COVID-19

Others (Please specify)

1-Cost of alternatives to plastic must be reduced

2-The public sector must stimulate the market, acquiring products with recycled raw materials and substitute materials for traditional plastic.

3- The State must stimulate the private sector of micro and medium-sized companies so that they transform waste and design products with alternative raw materials to single-use plastic.

6.19.4. Best Practices

National level

-In 2019 the government approved the Law to combat plastic pollution and protect the environment. This Law prohibits the acquisition of tableware, plastic (plates, spoons, glasses, straws). In the case of bottles, it requires for their production and marketing to meet special requirements such as using alternatives to single-use plastic or adding at least 50% recycled raw material.

2-The National System of Protected Areas, of the Ministry of Environment and Energy, approves the guideline that prohibits the entry of plastic packaging and products into protected areas by visitors.

3-In 2019, with the help of the United Nations Program, the Institute of Technical Standards and the intersectoral technical committee, the RCM classification (renewable, compostable in the marine environment) was created: a tool developed by the strategy to identify single-use products due to its origin, whether this source is renewable or not, and its compostability on land and under the marine environment once the product is discarded and twenty technical standards. As financial and logistical support for the Strategy, the contracting of INTECO (Institute of Technical Standards of Costa Rica) to carry out the nationalization of 6 norms related to the compostability of materials and an additional norm for the labeling of products. However, the Technical Standardization Committee created for this purpose continued to function until December 2020 and as a result of this, 18 more standards related to compostable plastics and labeling were generated.

Local level

There are some legal instruments to prohibit and regulate the use plastic in some municipalities (Talamanca y Santo Domingo), and In June 2019, Tibás launched the cantonal strategy called Tibás Free of Single-Use Plastics. The Municipality of Osa declared itself free of single-use plastic and reached an agreement to approve the first quarter of 2019 regulations, however the modification is still pending.

The 11 municipalities of the province of Guanacaste have joined forces to eliminate single-use plastics; the presentation and hearing process is underway with the corresponding municipal councils

Private sector

In some supermarkets you have to pay to have a plastic bag. Other supermarkets have prohibited the sale and promote reusable bags. In 2021, the market is boosted with renewable and compostable products, most of them imported.

During 2020 and in the midst of the pandemic, two new companies opened operations: Biosoluble, an importer of packaging products, especially biodegradable bags, and the Hidrobag company, a local manufacturer of bags made from modified cassava starch.

An inventory of potential raw materials to replace single-use plastics was carried out. As of December 2021, it has more than 100 alternative products to single-use plastics in the database. However, the offer in the market is much greater since new products are constantly being introduced to the market. Nationally manufactured products: paper bags and wrappers, wooden stirrers, metal and bamboo straws. Imported products: packaging and packaging of sugar cane bagasse, wheat bagasse, polylactic acid (PLA), forest leaf tablets, avocado seed products, cotton bags, linen, PLA bags, and local manufacturing of

cassava starch bags. Likewise, companies have already presented preforms for bottles based on PLA and resin.

International cooperation

International cooperation has been received for the National Marine debris Plan and training and information strategy for two fishing sectors in the central and northern Pacific of Costa Rica, from the United States Environmental Protection Agency (EPA). On behalf of the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety of Germany, for the Marine Pollution Reduction Project (PROMAR) in the Costa Rican Caribbean. And on behalf of the Canadian cooperation for the marine waste and fishing gear project in the central Costa Rican Pacific.

6.19.5. References and Reading Links

National Marine Waste Plan

<http://www.digeca.go.cr/> :

Single Use Plastic Strategy

https://www.google.com/search?q=Estrategia+Nacional+de+Pl%C3%A1stico+de+Un+Solo+Uso&rlz=1C1GCEU_esCR1043CR1043&og=Estrategia+Nacional+de+Pl%C3%A1stico+de+Un+Solo+Uso&aqs=chrome..69i57j0i22i30j69i60i2.15307j0j4&sourceid=chrome&ie=UTF-8

Waste collection, separation and recovery strategy (Estrategia de Reciclaje)

<https://www.ministeriodesalud.go.cr/index.php/biblioteca-de-archivos-left/documentos-ministerio-de-salud/ministerio-de-salud/planes-y-politicas-institucionales/planes-institucionales/estrategias-planes-institucionales/729-estrategia-nacional-de-reciclaje-2016-2021/file/>

The projects:

1-Waste and fishing gear from the Pacific.

2- National action plan of associations of developing countries glolitter to eradicate marine pollution caused by plastic garbage in the sea 2022-2024.

4-PROMAR Project, Reduction of pollution in the Costa Rican Caribbean.

6.19.6. Contact Details: *(Please specify name and email address)*

- Dirección de Gestión de Calidad Ambiental (DIGECA), Ministerio de Ambiente y Energía (MINAE), Costa Rica.
- MSc. Olman Mora Navarro (omora@minae.go.cr)
- MSc. Licidadia Rojas Rojas (Irojas@minae.go.cr)

6.20. Kiribati

Key Highlights

- Kiribati Waste Management and Resource Recovery Strategy
- Environment Act 2021
- Container Deposit Scheme, *Special Fund (Waste Recovery Act & Regulation) 2004*
- Customs Act 2019
- Pickathon Cleanup
- Waste repurposing trainings with local communities using plastics
- Promoting reusable shopping bags instead of plastic shopping bags

6.20.1. Policy and Frameworks

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

Kiribati Waste Management and Resource Recovery Strategy.

In preparation

Please list your country's legislation including name and brief description here:

Name:

Environment Act 2021

Brief description:

The BRS-Plastic project is a new project in Kiribati that govern plastic as part of an implementation framework (SSFA) from UNEP that coordinate internationally. The government of Kiribati has yet received its funding last December 19th, 2022. The aim of the project is to develop national plan/policy/legislation/ that will oversee the problem relate to plastic, identifying gaps and mitigate the impact of plastic to terrestrial and marine environment and significantly as a guideline for Kiribati legislation following issues related to plastic and for the 'enabling environment' future project related to plastic, microplastic, and marine plastic to be implemented nationally.

Indicators

No

6.20.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Container Deposit Scheme, Special Fund (Waste Recovery Act & Regulation) 2004

Targeted products:

PET bottles.

Brief description:

Container Deposit Schemes (CDS) specifically target beverage (drink) containers, and a significant part of the recyclable waste stream of a Pacific Island (including Kiribati) is usually drink cans and bottles. Deposits are paid on the target products before sale to the public, and refunds are paid out when the empty containers are collected and brought in by consumers. The Special Fund (Waste Recovery Act and Regulation) 2004 does not prohibit items to that of the Customs Acts 2019 but declare the levying of specific recyclable waste items/object such as aluminum can, PET bottles and Lead-Acid batteries. The deposit goes to the Special Fund controlled under Ministry of Finance for recycling fee. Currently only PET as a plastic form item is the only levied type of plastic on Kiribati, no MPL mentioned.

We have seen a positive improvement over the last two years

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Customs Act 2019

Targeted products:

non-biodegradable nappies, single-use shopping plastic bags, icebags.

Brief description:

The Customs authority through its Customs Act 2019 has solidified the banning of abovementioned targeted products through its legislation.

We have seen a positive improvement over the last two years

Actions for encouraging sustainable / circular product design

In progress

Regulations on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Environment Act 2021, Kiribati Waste Management and Resource Recovery Strategy

Brief description:

The Ministry of Environment, Lands, and Agricultural Development adopt the provision of enforcement as part of technical work. By this, Environment Inspection, site visiting, public complain regarding litter, illegal dumping, and Environment Impact Assessment is critically implemented at national level following the provision of the Environment Act 2021 and the Kiribati Waste Management and Resource Recovery Strategy.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Environment Act 2021

Brief description:

Provision of the Act such as littering, illegal dumping, etc., was clearly outline and managed at national level.

We have seen a positive improvement over the last two years.

Are linkages between marine litter and blue economy being studied by your country? Has your country taken any policy/ legal measures to address these linkages?

No

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Pickathon Cleanup

Brief description:

The Ministry of Environment held a national cleanup activity targeting public places such as parks, beaches, and public areas. This is implemented by other ministries around South Tarawa and each body are allocated with their respective clean-up areas.

We have seen a positive improvement over the last two years

Removal of plastic litter from the ocean

No

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Waste repurposing trainings with local communities using plastics as materials

Brief description:

Teaching women of local communities the skills to recreate products from plastics.

We have seen a positive improvement over the last two years

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Promoting reusable shopping bags instead of plastic shopping bags

Brief description:

Introducing the reusable shopping bags materials and buyers.

We have seen a positive improvement over the last two years

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

A book was written for year 4 primary school students which talked about waste management and its importance to our everyday lives, including keeping our beaches and oceans clean.

Ongoing school visits and radio awareness programs talking about the environment and its services and our needed roles to ensure the environment's sustainable services.

In preparation

A Communication Education and Public Awareness Strategy is in draft. This would be a key document in driving the education actions on the environment.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

National cleanups

Radio programs

Press releases

Poster competition

Brief description:

The above actions have been an ongoing program for the Kiribati Ministry of Environment, Lands and Agricultural Development to engage the public in waste management practices.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

No

Awareness-raising campaigns related to MPL - International/Regional

No

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

No

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

No

6.20.3. Challenges

Check the challenges that your country has faced:

Recycling system improvement

Proper waste management system (including lack of local capacity)

Data collection related to waste in general

- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.20.4. Best Practices

National level

National cleanup with Government ministries, Private sectors, local communities, NGOs, church groups and youth groups.

Waste repurposing trainings

Waste management trainings to youth

Ongoing awareness programs

Local level

Private sector

Adopting the reusable bag initiative

Maintaining proper waste receptacles at their business compounds

International cooperation

6.20.5. References and Reading Links

6.20.6. Contact Details: *(Please specify name and email address)*

- Teema Biko (Chemical and Hazardous Waste Management Officer) t.biko@melad.gov.ki
- Teniti Aro Taam (Solid waste management officer) t.taam@melad.gov.ki

6.21. Mauritius

Key Highlights

- Environment Protection (Control of Single Use Plastic Products) Regulations 2020 Environment Protection (Banning of Plastic Bags) Regulations 2020
- Research Collaborative Agreement (RCA) with the University of Mauritius on “Analytical monitoring of microplastics”
- “Plastics Waste Leakages and Marine Debris in the context of sustainable tourism in Mauritius” between the University of Mauritius and the University Kassel, Germany
- Environment Protection (Polyethylene Terephthalate (PET) Bottle Permit) Regulations 2001

6.21.1. Policy and Frameworks

National Action Plan

No

There is no specific National action plan/strategy on Marine Plastic litter. However, Government is funding several actions against plastic pollution.

The Government Vision is to make Mauritius a plastic free country within the nearest possible delay and ahead of the legally binding global agreement on plastic adopted by the United Nations Environment Assembly (UNEA) in February/March 2022, the Ministry of Environment, Solid Waste Management and Climate Change has already imposed a ban on several categories of single use plastic products and plastic carry bags through the promulgation of:

- the Environment Protection (Control of Single Use Plastic Products) Regulations 2020; and
- the Environment Protection (Banning of Plastic Bags) Regulations 2020

The Waste Management and Resource Recovery Act 2023 enacted to ensure:

- the environmentally safe and sound management of solid waste/ hazardous waste; and
- sustainable waste management system through the adoption of a circular economy approach focusing on waste reduction, reuse, treatment, safe disposal, material recovery and recycling.

The Republic of Mauritius has also undertaken projects/research as follows:

- “Management Instruments to Limit the Impact of Plastic Pollution on Marine Life” project carried out by the Mauritius Oceanography Institute (MOI) and funded by the National Environment and Climate Change Fund.
- Research Collaborative Agreement (RCA) with the University of Mauritius on “Analytical monitoring of microplastics”; and
- “Plastics Waste Leakages and Marine Debris in the context of sustainable tourism in Mauritius” between the University of Mauritius and the University Kassel, Germany.

The Ministry of Environment, Solid Waste Management and Climate Change tackles marine pollution through regular clean up campaigns on land to prevent solid wastes, especially plastics from entering into the sea. In addition, regular clean ups are carried out on public beaches by the Beach Authority.

Regular awareness and sensitization campaigns to the public at large are carried out and the curriculum of the primary and secondary school contains subject matters pertaining to pollution including marine plastic pollution.

Moreover, Mauritius also abides by the various international treaties on Marine pollution such as:

- the Nairobi Convention; to strengthen protection of the western Indian Ocean.;
- Indian Ocean Rim Association (IORA) Declaration on “combatting marine debris and a strategic framework of action on marine debris in the Indian Ocean; and
- Plastic Expedition in the Indian Ocean- ExPloI, involving the Seychelles, Mauritius, Comoros, Madagascar, Reunion Island. The ExPLOI project supported by the IOC aims to provide a comprehensive response to the problem of plastic pollution.

Furthermore, The Republic of Mauritius joined the High Ambition Coalition (HAC) to end plastic pollution” and participated in both Inter-Governmental Negotiating Committee (INC) held in Uruguay and Paris, to develop an ambitious international legally binding instrument based on a comprehensive and circular approach that ensures urgent action and effective interventions along the full lifecycle of plastics.

To conclude, Government has been fighting the tedious battle against plastic pollution for many years. There is growing concern about the specific impacts of plastic pollution, especially microplastics, on the marine environment due to the transboundary nature of plastic products and seriously affecting Mauritius as a Small island developing State. We are more than ever determine to take actions towards the long-term elimination of plastic in marine and other environments. The need for an enhanced international collaboration to facilitate access to technology, capacity-building, financial assistance and scientific and technical cooperation, is of utmost important.

Legal Framework

Yes

Please list your country’s legislation including name and brief description here:

Name:

Government has imposed a ban on non-biodegradable single use plastic and plastic carry bags through the promulgation of :

- The Environment Protection (Control of single use plastic products) Regulations 2020; and
- The Environment Protection (Banning of Plastic Bags) Regulations 2020.

As regards to the management of post-consumer beverage PET bottles, the Environment Protection (Polyethylene Terephthalate (PET) Bottle Permit) Regulations 2001 was promulgated.

Littering, illegal dumping into the ocean and on land is an offence under the Environment Protection Act 2002.

Unintentional waste into the ocean may entail enforcement notices under the above Act.

Brief description:

Under the Environment Protection (Control of Single Use Plastic Products) Regulations 2020, the manufacture, sale, supply and importation of the following 10 non-biodegradable single use plastic products has been banned since 15 January 2021:-

Plastic cutlery (forks, knives, spoons, chopsticks);

Plastic plate;

Plastic cup;

Plastic bowl;

Plastic tray;

Plastic straw (including sealed plastic straw forming an integral part of the packaging of another product);

Plastic beverage stirrer;

Plastic hinged container;

Plastic lid for single use plastic products; and

Receptacles of any shape, with or without lid, used to contain food which is intended for immediate consumption, either on the spot or takeaway and supplied by a food service business

Under the Environment Protection (Banning of Plastic Bags) Regulations 2020, the manufacture, sale, supply and importation of plastic bags has been banned since 01 March 2021 except for exempt plastic bags and biodegradable or compostable plastic bags.

The type of exempt plastic bags are those designed to be used:

for the disposal of waste, including quarantine and clinical waste;

for the purpose of agriculture;

for medical purposes;

for sampling or analysis;

as integral part of the packaging in which goods, materials or products are sealed prior to sale on the local market or for export; and

Transparent re-sealable bags with security tamper used by a passenger or carried by a passenger on transfer to carry liquids, aerosols or gels at an airport or on board of an aircraft.

The Environment Protection (Polyethylene Terephthalate (PET) Bottle Permit) Regulations 2001 is currently being reviewed and will eventually be replaced by a new enactment to provide for a collective Extended Producer Responsibility (EPR) scheme on beverage containers with an aim of achieving a collection & recycling rate of at least 80% in the shortest possible delay and thereby reducing the level of plastic bottles /containers pollution in the environment.

In preparation

Please list your country's legislation including name and brief description here:

Name:

The Waste Management and Resource Recovery Act 2023:

Brief description:

The Act accordingly provides for:

A department of Waste Management and Resource Recovery which shall:

- develop national strategies and actions plans for solid waste and hazardous waste
- implement measures related to the sustainable and integrated management of waste
- regulate the waste management sector; and
- monitor the collection, treatment and disposal of waste.

Indicators

Under Development

Please list your indicators here:

Projects and research are currently being undertaken to eventually to monitor microplastics in our marine environment which is also transboundary in addition to local inland generation.

Research Collaborative Agreement (RCA) with the University of Mauritius on “Analytical monitoring of microplastics”;

“Plastics Waste Leakages and Marine Debris in the context of sustainable tourism in Mauritius” between the University of Mauritius and the University of Kassel, Germany; and

“Management Instruments to Limit the Impact of Plastic Pollution on Marine Life” project carried out by the Mauritius Oceanography Institute (MOI) and funded by the National Environment and Climate Change Fund.

Brief description:

- The RCA aims to monitor and analyse microplastics collected chemically at selected sites over a period of six months which will be completed by end of 2023;
- Responsibilities & Duties of the project “Plastics Waste Leakages and Marine Debris in the context of sustainable tourism”
 - Carry out field work at study sites on waste leakages from beaches, tour operators including dive centres.
 - Organize and participate in different discussion groups with various stakeholders.
 - Assist in design of survey questionnaires
 - Interview waste collectors, waste carriers, tour operators, dive centres and other stakeholders.
- The project on “Management Instruments to Limit the Impact of Plastic Pollution on Marine Life” aims at identifying the chemical composition of the microplastics which will help in decision making for proper management of these plastics. The MOI initiated a long term monitoring programme offshore of Albion, whereby microplastic density is monitored monthly for a period of three years (2021 to 2024). As per data, the number of microplastic particles per m³ for 2019 was 109 ± 55.4 particles/m³ and 91.58 ± 51.89 particles/m³ in November 2021.

6.21.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Excise Duty introduced since 2006

Targeted products:

Beverage PET bottles

Brief description:

An Excise duty of Rs 2 is applicable on beverage PET bottles. This excise duty funds the the Financial Incentive Scheme introduced to the tune of Rs 15/Kg PET collected for recycling.

We have seen a positive improvement over the last two years

Comments:

Informal green jobs created for the post-consumer beverage PET bottle collection since the introduction of the Financial Incentive Scheme

Numerical data, if any:

PET recycling rate is currently around 45%.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Banning through promulgation of:

The Environment Protection (Control of Single Use Plastic Products) Regulations 2020; and

The Environment Protection (Banning of Plastic Bags) Regulations 2020

Targeted products:

Plastic carry bags and 10 single use plastic products banned.

Brief description:

Banning of 10 single use plastic products came into force since 15 January 2021 and the banning of plastic bags since 01 March 2021.

We have seen a positive improvement over the last two years

Comments:

Biodegradable alternatives and long lasting shopping bags have replaced plastic single use products and single use plastic bags

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Reduction in the weight of beverage PET bottles through reduction of the plastic content in the design of the bottles and caps.

In progress

Mauritius is currently working on a Roadmap on circular economy. One of the sectors being addressed is consumer goods, where the product life cycle perspectives will be taken into consideration. This will address the sustainability and circularity aspects of products at the design stage

We have seen a positive improvement over the last two years

Regulations on microplastics

No

Government actions on microplastics

In preparation

Comments:

Projects/Initiatives

Research Collaborative Agreement (RCA) with the University of Mauritius on “Analytical monitoring of microplastics”; and

Roadmap for “a plastic free Mauritius”

“Plastics Waste Leakages and Marine Debris in the context of sustainable tourism in Mauritius” in between University of Mauritius and University of Kassel, Germany.

The Mauritius Oceanography Institute (MOI) is carrying out a study on “Management Instruments to Limit the Impact of Plastic Pollution on Marine Life” and the project is funded by the the National Environment and Climate Change Fund for a period of three years (2021 to 2024). The project involves distribution of microplastics in water, sediments and marine organisms at 8 selected sites and setting up an additional permanent station on the East coast of Mauritius

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of regulations:

The Environment Protection Act 2002 promotes Environmental Stewardship and calls for collective cleanup actions.

We have seen a positive improvement over the last two years

Comments:

The Information and Education Division of the Ministry conducts regular awareness and sensitization campaigns to the public at large.

The curriculum of the primary and secondary school contains subject matters pertaining to pollution including marine plastic pollution.

Talks/ Exhibitions/debates competition/Workshops are organized by the Ministry with various target groups, including: school community, youth & women communities, senior citizens, NGOs/CBOs and private sectors.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Mauritius operates only one landfill for the disposal of solid waste. About 500,000 tonnes wastes are landfilled annually and plastic accounts for about 14% of the total waste.

Mauritius has designated specific locations (civic amenity centres) within its transfer station to segregate waste into various components including plastic waste. Recyclers eventually collect the plastic waste for recycling

In progress

The Government is currently working on an Integrated Solid Waste Management Bill which will cater for the extended producer responsibility (EPR) concept with a view for a proper management of waste

We have seen a positive improvement over the last two years

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Brief description:

Littering, illegal dumping into the ocean is an offence under the Environment Protection Act 2002.

Unintentional waste into the ocean may entail enforcement notices under the above Act.

Moreover, Government conducts regular sensitization and awareness campaigns against littering and illegal dumping.

We have seen a positive improvement over the last two years

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Yes

Names of actions:

Plastic Expedition in the Indian Ocean- ExPlol, involving the Seychelles, Mauritius, Comoros, Madagascar, Reunion Island.

One aspect of the cooperation involves the promotion of the circular economy in association with École Nationale Supérieure d'Arts et Métiers and AMVALOR on the valorization of research in the private sector and in action. They will propose innovative business models and technological solutions that have a positive impact on the environment and methods of production. AMVALOR will visit all IOC countries to ensure that their technological offer is appropriate locally for the plastic waste insular management. The project will then move toward starting an incubator in order to disseminate appropriate technology to the private sector as a profitable business.

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

The Beach Authority is responsible for maintaining and cleaning of public beaches in Mauritius.

Brief description:

Regular clean ups are carried out on public beaches.

We have seen a positive improvement over the last two years

Removal of plastic litter from the ocean

Yes

Names of actions:

Government in collaboration with relevant stakeholders carries out cleaning of the lagoons.

Brief description:

The stakeholders for the clean up campaign also include community participation

We have seen a positive improvement over the last two years

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Promotion of alternatives to plastics

Brief description:

The Ministry of Environment, Solid Waste Management and Climate Change has not limited its scope of action to enforcement measures only. Alternatives such as eco-friendly and long-lasting products are, concurrently, being promoted. Such alternatives comprise jute bags, cloth bags, plant-based bags, long lasting water bottles, and biodegradable containers, wooden cutleries, stirrers and straws, as well as palm and paper plates, cups, bowls and trays.

Over and above the promotion of alternatives, a series of related sensitisation and awareness campaigns have been carried out at the level of the port, airport, local authorities, community centres, and shopping malls.

We have seen a positive improvement over the last two years

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Government provides support to Small and Medium Enterprises (Tax rebate, loan scheme, etc)

Brief description:

Small and Medium Enterprises are encouraged and supported by Government in the development of alternative to plastics production.

Plastic recycling is also encouraged.

We have seen a positive improvement over the last two years

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

The Information and Education Division of the Ministry conducts regular awareness and sensitization campaigns to the public at large.

The curriculum of the primary and secondary school contains subject matters pertaining to pollution including marine plastic pollution.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Mauritius has developed a Master Plan for the Environment in the Republic of Mauritius for the next decade.

One of the thematic areas in this Master plan is on Environmental culture. The master plan defines a series of actions to be undertaken to bring about a behavioral change in mindset and to inculcate pro-environmental behaviors in our citizen.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Talks/Exhibitions/debates competition/Workshops are organized by the Ministry with various target groups, including: school community, youth & women communities, senior citizens, NGOs/CBOs and private sectors.

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Mauritius is a member state of the Indian Ocean Rim Association and participated in the Development of the IORA Declaration on Combatting Marine debris and a strategic framework of Action on Marine Debris in the Indian Ocean.

Plastic Expedition in the Indian Ocean- ExPloI, involving the Seychelles, Mauritius, Comoros, Madagascar, Reunion Island. The ExPloI project supported by the IOC aims to provide a comprehensive response to the problem of plastic pollution.

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Research Collaborative Agreement (RCA) with the University of Mauritius on “Analytical monitoring of microplastics”

Brief description:

The RCA aims to monitor and analyse microplastics collected chemically at selected sites over a period of six months

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Mauritius participated in the First UNEP Coordination meeting on: “Capacity Development to catalyse Actions and Commitments at the National and Global level to reduce plastic pollution, including in the marine environment” This UNEP project aims to support countries to address plastic pollution through the development and implementation of legal ; collaborative frameworks and strategic planning.

Names of actions:

Mauritius is a member state of the Indian Ocean Rim Association and participated in the Development of the IORA Declaration on Combatting Marine debris and a strategic framework of Action on Marine Debris in the Indian Ocean.

Plastic Expedition in the Indian Ocean- ExPloI, involving the Seychelles, Mauritius, Comoros, Madagascar, Reunion Island. The ExPloI project supported by the IOC aims to provide a comprehensive response to the problem of plastic pollution.

6.21.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.21.4. Best Practices

National level

Banning of single use plastic items

Local level

Promotion and support eco- friendly alternatives to plastic through the use of local resources available such as vacoas tree leaf and artisanal biodegradable products.

Private sector

Incentive to use alternative to plastic packaging

International cooperation

WTO taxation on plastic packaging and introduce EPR concept for goods having trans-boundary movement.

6.21.5. References and Reading Links

- <https://environment.govmu.org>

6.21.6. Contact Details: *(Please specify name and email address)*

- Dr. R. K. Foolmaun
Divisional Environment Officer
Plastic Management Division

Department of Environment

Ministry of Environment, Solid Waste Management and Climate Change

Tel : +230 2036200 (Ext 212)

E-mail: rfoolmaun@govmu.org

- Amarsingh Allock

Environment Officer/ Senior Environment Officer

Ministry of Environment Solid Waste Management and Climate Change

Ken Lee Tower

Cnr Barracks Street and St George Street

Port Louis

Tel : 203 6200 (241)

Email: aallock@govmu.org

6.22. Myanmar

Key Highlights

- National Plastic Action Plan in Myanmar is being developed with the technical assistance of (Japan-ASEAN Integration Fund
- Environmental Conservation Law (2012)
- Environment Conservation Rules (2014)
- Myanmar National Waste Management Strategy and Master Plan for Myanmar for 2018-2030.
- Local government initiated cleanup activities on Myanmar beaches

6.22.1. Policy and Frameworks

National Action Plan

Do you have a National Action Plan or strategy on MPL? Please choose one.

In preparation

Please provide the name of your action plan or strategy with a brief description here:

Name:

National Plastic Action Plan in Myanmar

Brief description:

National Plastic Action Plan in Myanmar is being developed with the technical assistance of (Japan-ASEAN Integration Fund (JAIF)) through “Strengthening Capacity for Marine Debris Reduction in ASEAN region through the formulation of National Action Plans for the ASEAN Member States and Integrated Land-to-Sea Policy Approach “ Phase II Project.

A technical working group for developing National Plastic Action Plan was organized with the representatives from relevant departments, cities development committees and private sectors.

Yangon, Patheingyi and Mawlamyine were selected as pilot cities in the first technical working group meeting to survey the leakage of plastic waste to the land/ river/ waterways that will be needed in the planning of the national action plan on plastic pollution. Therefore, regarding the leakage of plastic waste to land/ river/ watercourses (Macroplastic leakage), using Arc GIS Survey 123 Mobile Application, ground field surveys which were conducted in 233 points of artificial barrier, littering spot and uncontrolled dump in 34 townships of Yangon Region, that of 86 points in 10 wards in Patheingyi and that of 109 points in 29 wards of Mawlamyine City were conducted to develop plastic waste flow diagram. According to the field surveys, it has been observed that food wrapper and sachet, take - away containers and grocery bag are the most used.

Public satisfaction survey on SUPs was conducted through “Capacity Building on Environmentally Sound Management of Single-use Plastic and its Waste in Asia-Pacific Countries” Project with the assistance of BCRC China/SCRCAP.

According to the Public satisfaction survey, it was found that Single-use plastics bags, the second dominant SUP item is sachets, followed by beverage SUP cup and containers are the most used SUP items. In regard with willingness to accept certain policy options (eg. Ban, fee) regarding Single-use plastics and their waste, the majority of respondents have desired to ban SUP shopping bags, to minimize use of plastic bag if a charges system for use of SUPs, to pay a charge for food containers. Regarding the behavior of respondents, the public is systematically disposed as most of respondents usually put the plastic waste at a designated location or a trashcan, the majority of the respondents reuse plastic bags, sachets, food container (Styrofoam) only once while non-woven shopping bags are reused three times. It can also be seen that the majority of respondents strongly agree to use natural materials as alternatives for plastic food wrapper or container and have willingness to bring own container/ bottle to buy (refill) food, snacks and bathroom supplies to avoid plastic bags and sachets, and answer using natural materials or reusable containers (to refill at shops) will cause unnecessary trouble. Moreover, 90% of the respondents strongly agree on a ban on or significant reduction in use of Single-use plastics bags, packaging and other SUP items will effectively make the environment cleaner.

First draft of National Plastic Action Plan will be developed according to the above-mentioned surveys and will be submitted to the Technical working group.

Legal Framework

Do you have legislation on MPL? (including waste management and circular economy)

Yes

Please list your country's legislation including name and brief description here:

Name: 1)

- Environmental Conservation Law (2012)
- Brief description:

Chapter VIII Management of Urban Environment include management of wastes and pollution control.

Name: 2)

- Environmental Conservation Rules (2014)
- Brief description:

In Chapter (IX) Waste Management, the Ministry shall carry out waste treatment by the categories of business which emit or produce solid wastes, liquid wastes, emissions, radiations which contain poisonous and hazardous materials by establishing their own facility or center, or collective facility or center

Indicators

Do you have the MPL-specific indicators or data collection framework in your country?

Under Development

Please list your indicators here:

To establish a solid mechanism for understanding the progress of each action, and ensuring the overall implementation of the National Plastic Action Plan, reporting, and evaluation mechanisms will be included in National Plastic Action Plan.

6.22.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

No

Ban on use of single-use plastic products (e.g. shopping bags, straws)

No

Actions for encouraging sustainable / circular product design

No

Regulations on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Others (please specify)

Myanmar National Waste Management Strategy and Master Plan for Myanmar for 2018-2030 lists plastic as one of the priority waste streams and generally promotes a 3Rs (reduce, reuse and recycle) approach.

With the World Bank's technical assistance under the Regional Marine Plastics Framework and Action Plan through PROBLUE Trust Fund, plastics policy options and a roadmap (draft) have been developed through the survey and assessment for the top 10 priority plastic items leaking into the environment in Myanmar, which will be included in the national plastic action plan. It identified 14 policy options and grouped them into short-term, mid-term, and long-term measures.

State and Regional Plastic Waste Management Plans have developed by State and Region Environmental Conservation Department staff with the cooperation of other relevant departments and stakeholders

Environmentally sound waste management

Enforcement of proper waste management system

No

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

No

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Others (Please specify)

- Myanmar do not allow importing plastic waste but allow the import of plastic scrap only under these criteria:

(a) Plastic scrap to be imported must be clean, homogenous and ready to be used as raw materials.

(b) Recycling factories must have an Approval Letter or Environmental Compliance Certificate of an Environmental Management Plan, Initial Environmental Examination or Environmental Impact Assessment, which is approved by the Ministry of Natural Resources and Environmental Conservation.

Collection of scattered waste on beach

Yes

Names of actions:

Beach Clean up activities by local government and NGOs

Brief description:

Local government make cleanup activities on Myanmar beaches such as Napali, Chaungtha, Setse and Ngwe Saung beach to inspire local communities, on how young people can take action to aware about single-use plastics and how they can reduce, reuse and recycle.

Removal of plastic litter from the ocean

No

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

No

Public-private partnerships for creating and implementing innovative solution

No

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

No

Awareness-raising campaigns related to MPL – National

No

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

“Sunday Stop” campaign

Brief description:

In State and Region, State and Regional Environmental Conservation Department conduct awareness raising campaign on stop using single use plastic packaging on Sunday in markets.

Names of actions:

“No Thank You” campaign

Brief description:

To help support the vendors and reduce plastic waste, Prevent Plastics launched the “No Thank You” campaign, requesting vendors to put up a poster featuring the message “Your refusal toward one plastic bag can help support the vendor to save up nine kyats.”

Without needing persuasion, vendors happily put up posters at their shops, sharing that their lives would be much easier if shoppers brought their own bags. By reducing the number of plastic bags they use, vendors can save money and reduce their impact on the environment.

By saying “No Thank You” to plastic bags, shoppers can make a significant impact on the environment while also supporting local vendors.

More Info >> [https:// preventplastics.org/ the-no-thank-you-campaign-supporting-vendors-and-reducing-plastic-use/](https://preventplastics.org/the-no-thank-you-campaign-supporting-vendors-and-reducing-plastic-use/)

Names of actions:

awareness raising activities

Brief description:

State and Region Environmental Conservation Departments conducted awareness raising activities in states and regions with the cooperation of relevant stakeholders and department.

Awareness-raising campaigns related to MPL - International/Regional

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

A study conducted by the Fridtjof Nansen research vessel

Brief description:

with the support of the Government of Norway, FAO, Norway Institute of Marine Research (IMR) and Department of Fishery under Ministry of Agriculture, Livestock and Irrigation cooperated and implemented “The EAF- Nansen PROGRAMME” in 2018. In the 2018 survey, microplastic particles were widespread, with highest numbers recorded in the Rakhine area in the shallowest stations. Less particles were found in the Delta region, despite the fact that usually highest concentrations are found in the proximity of river outlets. This could be explained by the higher amount of freshwater during the monsoon season.

Names of actions:

“Litter on the seafloor along the African coast and in the Bay of Bengal based on trawl bycatches from 2011 to 2020” (L. Buhl- Mortensen et al., 2022),

Brief description:

=According to research paper “Litter on the seafloor along the African coast and in the Bay of Bengal based on trawl bycatches from 2011 to 2020” (L. Buhl- Mortensen et al., 2022), in the countries of the Bay of Bengal such as Myanmar and Thailand were relatively high litters related to fishing gears. Fishing gears dominated records of weight for Morocco, Mauritania, Ivory Coast, Myanmar and Sri Lanka.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Brief description:

The Ministry of Environment Japan supported Myanmar in training of monitoring methods for floating litter and floating microplastics training based on the 3rd Myanmar-Japan Policy Dialogue on Environmental issues.

Others

6.22.3. Challenges

Recycling system improvement

Proper waste management system (including lack of local capacity)

Data collection related to waste in general

Data collection related to marine plastic litter

Lack of awareness among citizens, business, local governments

Lack of financial incentives for waste treatment in general

Lack of financial incentives for technology development

Project delays due to COVID-19

Others (Please specify)

6.22.4. Best Practices

National level

Local level

Private sector

International cooperation

6.22.5. References and Reading Links

Zero Plastic

Zero Plastic is a small business that aims to reduce plastic pollution by offering alternative products made from recycled materials. They offer reusable household products like wooden plates, wooden coasters, wooden boxes, and more for commercial and household uses.

www.zeroplastic.com.mm

6.22.6. Contact Details: *(Please specify name and email address)*

Mr. Thein Toe

Director-General

Environmental Conservation Department

Myanmar

dg.ecd@moecaf.gov.mm

ecd.nr48@gmail.com

6.23. The Netherlands

Key Highlights

- Monitoring & Assessing Marine Litter | OSPAR Commission
- Implementation of the EU SUP directive Single-use plastics (europa.eu)
- REACH Restriction on intentionally added microplastics at EU level
- National waste management plan (Landelijk Afvalbeheerplan, LAP3), in compliance with the European Waste Framework directive
- Programme Fisheries for a Clean Sea
- Yearly National Beach Cleanup organized by the North Sea Foundation (initiated in 2013)
- Rotterdam Taskforce Clean Sweep
- Action 53: Fishing for Litter | OSPAR Commission
- Sustainability education programmes for fishermen

6.23.1. Policy and Frameworks

National Action Plan

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

(Plastic) litter in the sea is a growing problem with negative consequences for the marine ecosystem, while also involving social, safety, economic and possibly human health issues. The Netherlands is dedicated to achieve the marine litter policy goals of the European Marine Strategy Framework Directive which states: “**properties and quantities of marine litter do not cause harm to the coastal and marine environment**”.

In the reduction of litter, The Netherlands focuses on prevention through an integrated source approach, awareness and closing product chains. The Dutch efforts for addressing marine litter take place in different contexts: on a local, national, regional and global level and includes i.e.:

- European Marine Strategy Framework Directive
 - Dutch Programme of Measures- specific measures to reduce marine litter
- OSPAR Marine Litter Regional Action Plan
- Various European policies focused on reducing marine litter e.g. implementation of the Single Use Plastics and fishing gear Directive and EU Port Reception Facilities Directive
- Various national policies focused on prevention of litter (macro- and micro plastics) and developing a circular economy

Brief description:

National, European and OSPAR level

In 2015, The Netherlands adopted the national Programme of Measures, as part of the implementation of the Marine Strategy Framework Directive (MSFD). Based on top 10 beach

litter items and taking into account existing waste management measures, three so-called Green Deals were adopted to tackle litter from beach-recreation, shipping and fishing. In these Green Deals actions and obligations for government authorities, entrepreneurs, civil society organisations and private individuals are brought together. In addition, attention was given to education programs, awareness-raising, specific plastic items like balloons and microplastics in cosmetics and measures to deal with riverine litter (Clean Rivers Initiatives).

The second MSFD Programme of Measures was adopted in March 2022. The program contains measures necessary to achieve the environmental targets set for the Dutch part of the North Sea, including measure combating marine- and river litter. In addition, the document contains a knowledge agenda.

The Netherlands is complying with EU legislation contributing to reducing marine litter, such as the EU Single Use Plastics and fishing gear directive and the EU Port Reception Facilities directive. We support all EU legislation to combat and prevent marine litter such as the European Zero Pollution Action Plan. This plan is focused on the reduction of air, water and soil pollution to levels that are no longer considered harmful to health and natural ecosystems and that respect the boundaries our planet can cope with, thus creating a toxic-free environment.

The Netherlands is a dedicated contracting party of the Convention for the Protection of the Marine Environment of the North-East Atlantic and is closely involved in the execution of the 2nd OSPAR Regional Action Plan on Marine litter (2022-2030) that was updated and adopted in June 2022. The OSPAR strategic marine litter objective is to *“prevent inputs of and significantly reduce marine litter, including microplastics, in the marine environment to reach levels that do not cause adverse impacts to the marine and coastal environment with the ultimate aim of eliminating inputs of litter.*

Microplastics

The NL is concerned about the microplastics pollution. Microplastics do not belong in the environment. In addition, there are indications that microplastics can be harmful to human health and ecosystems. The urgency to address microplastics pollution is becoming increasingly apparent. That is why The Netherlands embraces the EU Commission’s ambition to reduce emissions of microplastics in the environment by 30% in 2030. The NL is advocating for ambitious measures to tackle microplastics pollution, focusing on:

- bridging the data gap: it is important to have uniform measuring methods in place for measuring the volume of microplastics in the environment, taking into account compartments such as water, soil and air, and for identifying the main sources.
- harmonization of measuring methods is needed for introducing EU monitoring mechanisms and for enforcement mechanisms.
- binding measures to prevent and reduce microplastics in the environment, for example:
 - banning deliberate additions of microplastics in products at the European level;
 - tackling the emissions of microplastics as a consequence of the breakdown of plastic litter;
 - implementation of monitoring programs for microplastics in the environment;
 - cutting down on emissions of microplastics as the result of wear and tear on products such as car tyres, paint and clothing.

Circular economy

In 2018 The Netherlands has adopted a circular economy transition agenda for plastics. The aim is to close the loop for plastics by using them more intelligently and more economically

and by utilizing more high-quality secondary raw materials and biomass. To accelerate the transition to a closed-loop plastics chain and reduce emissions of CO₂, the Plastics Transition Agenda has detailed four courses of action:

- prevention: more with less and reduced leakage;
- greater supply and demand for renewable plastics;
- better quality and better environmental returns;
- strategic cooperation, across the value chain.

The implementation program for this agenda includes seven projects that are intended to put these four developmental aspects into practice. Together with all the actors, both public and private, efforts and investments will be made over the coming years with the aim of creating a fully circular plastics value chain by 2050.

Finally, the Dutch and European plastic pacts were launched in 2019 respectively 2020. Goal is to bring together frontrunner companies and governments in the NL and EU to accelerate the plastics economy. The 2025 goals are to use:

- 20% less plastics (EUR PP 20% less virgin of which 10% absolute reduction),
- Use at least 30% (in NL plastic pact 35%) of recycled plastics in new plastics,
- Design 100% recyclable and reusable products where possible
- Increase the recycling rate by 25% (EUR PP), or achieve 70% recycling of all plastics used (NL PP)

International level

In addition, The Netherlands is dedicated to contribute to the UN SDG goals – in relation to reducing marine plastic litter - especially SDG 14 – Life below water. In February 2022, at the resumed fifth session of the United Nations Environment Assembly (UNEA-5.2), a historic resolution (5/14) was adopted to develop an international legally binding instrument on plastic pollution. The Netherlands is committed to contribute to the development of an ambitious international legally binding instrument on plastic pollution, including in the marine environment with the ambition to complete the negotiations by end of 2024.

A global agreement can provide a framework for coordinated action on plastic pollution, setting binding targets for plastic reduction, provide binding eco-design criteria, and provide financial incentives for innovation and investment in sustainable and circular plastics. Voluntary measures are not sufficient to tackle plastic pollution. More stringent and globally binding rules are key. We need to:

- narrow the loop, for instance by reducing single use plastics and placing a ban on intentionally added microplastics;
- slow the loop, for instance by agreeing on global design criteria for circularity which can extend the lifecycle of plastics;
- close the loop by fostering reuse and recycling, for instance by introducing Extended Producer Responsibility schemes to ensure producers are held responsible for the whole life cycle – also the waste part;
- substitute plastics, additives, and chemicals which are harmful to the environment and to human health with more sustainable alternatives;
- In working out these elements we need to build on best practices with the transition to a circular plastics economy within and outside the EU, in order to help also all countries on the globe to realise this transition.

With this ambition, The Netherlands also contributes to the UN SDG 12 goal to ensure sustainable consumption and production patterns.

At IMO level, The Netherlands supports the IMO strategy to address marine plastic litter from ships to reduce marine plastic litter generated from, and retrieved by, fishing vessels; reduce shipping's contribution to marine plastic litter; and improve the effectiveness of port reception and facilities and treatment in reducing marine plastic litter. This strategy is focused to "strengthen the international framework and compliance with the relevant IMO instruments, endeavouring to achieve zero plastic waste discharges to sea from ships by 2025. Therein, The Netherlands is actively sharing information with regards to the sources and pathways of marine litter, especially pieces of fishing nets.

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

There are various legal frameworks that deal with reduction of (marine) plastics in the environment.

Brief description:

The EU Marine Strategy Framework Directive aims to protect more effectively the marine environment across Europe. This is the legal framework for the national Program of Measures.

Existing regulation focusses on effective waste management (EU Waste Framework Directive), packaging (EU packaging and packaging waste directive, national EPR schemes) and plastic bags (EU plastic bag directive). In 2021 the implementation of the Single Use Plastics and fishing gear directive was added to this.

Indicators

Yes

Please list your indicators here:

The regional sea convention for the North-East Atlantic, OSPAR, has developed several common indicators to monitor marine litter: a) beach litter; b) plastic particles in fulmars (this also gives an indication of the impact on biota) and seafloor litter. See: [Monitoring & Assessing Marine Litter | OSPAR Commission](#). The Netherlands is closely involved in the development of an OSPAR indicator on microplastics in sediments which is expected to ready in 2023.

For the plastic pacts and the transition agenda for plastics, The Netherlands looks at the entire supply chain of plastics: recyclability of plastics, reduction in usage (through reuse or refuse), the amount of recycling taking place and what form (chemical or mechanical) and the inputs used (recyclate, virgin, biobased).

6.23.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears See best practices –Programme Fisheries for a Clean Sea/ Fishing For Litter programme	<input type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Implementation of the EU SUP directive [Single-use plastics \(europa.eu\)](#)

Implementation of extension of deposit system with plastic bottles (July 2021) and metal drinking cans (April 2023)

Targeted products: small plastic bottles, cans, free plastic shopping bags, plastic plates, cutlery, cotton buds and balloon sticks.

Brief description:

Implementation of bans and deposit systems

We have seen a positive improvement over the last two years

Comments:

For the ban on free shopping bags a significant reduction can be seen both in the self-reported use of plastic shopping bags, but also in the litter.

Extension of deposit system with small plastic bottles shows significant reductions.

Too early to have robust data indicating a trend on the ban of plates, cutlery, cotton buds and balloon sticks, introduction of deposit system for metal cans (from 1st April 2023).

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Comments:

For the ban on free shopping bags a significant reduction can be seen both in the self-reported use of plastic shopping bags, but also in the litter.

Extension of deposit system with small plastic bottles shows significant reductions.

Too early to have robust data indicating a trend on the ban of plates, cutlery, cotton buds and balloon sticks, introduction of deposit system for metal cans (from 1st April 2023).

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Global demand for raw materials for things like food, electrical goods and clothes is increasing sharply. The Dutch government is therefore working with other public authorities, knowledge institutions and environmental organisations, industry, trade unions, financial institutions and other civil-society organisations to find smarter and more efficient ways of

using raw materials. The goal is for the Dutch economy to be completely circular by 2050. By 2030 the consumption of primary raw materials should have been reduced by half.

Brief description:

Various actions and programmes to develop a circular economy by 2050.

Regulations on microplastics

Yes

Names of regulations:

REACH Restriction on intentionally added microplastics at EU level and a national policy programme on micro plastics.

Brief description:

On 30 August 2022, the European Commission published its long-awaited proposal to restrict the placing on the market of microplastics, including where they are added to certain products. The restriction will be adopted under the REACH Regulation, which establishes the EU chemicals framework.

A follow-up of the policy programme on microplastics is under development. This programme will focus on tackling the biggest sources of micro plastics in The Netherlands (litter, tyres, paint, pellets/nurdles).

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

National waste management plan (Landelijk Afvalbeheerplan, LAP3), in compliance with the European Waste Framework directive.

Brief description:

The policy framework in LAP3 sets out the national waste prevention and management policies, the objective of waste policies and definitions. It also provides insight into scenarios, monitoring and enforcement. The sector plans in LAP3 elaborate the general policy from the policy framework for specific flows. The sector plans are the assessment framework for the authorisation of waste processing establishments. On march 2nd 2021 the 2nd modification of LAP3 came into force. LAP3 can be found on: <https://lap3.nl/>

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

National agreement on additional measures to tackle persistent floaters by asking for additional and stricter prewash procedures in the harbour of Rotterdam.

See 2.1

See under 3.2.1

Brief description:

In connection to these stricter additional measures, The Netherlands has initiated a new output in IMO regarding MARPOL Annex II framework (concerning preventing pollution by ships carrying noxious substances in bulk) in cooperation with Norway and EU Member States intending to improve the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity. The IMO environmental committee (MEPC) has agreed to bring this work further and thus a strengthening of MARPOL Annex II will be discussed in the coming years.

Others

Various bans on single use plastics have been implemented in the Dutch Caribbean on the islands Saba, Bonaire, St Eustatius, Curacao and Aruba.

On St. Maarten, one of the Dutch Caribbean Islands has started the project “St. Maarten Plastic Free” to aim to bring about institutional change through various methods, like implementing laws and framework for how St. Maarten interacts with harmful single-use materials; training for inspectors to increase understanding; and implementing the laws in businesses through proper education. The project also seeks to make behavioral change through researching how to make harmful single-use materials less desirable to use and replace them with sustainable alternatives.

We have seen a positive improvement over the last two years

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Beach cleanup initiatives

Brief description:

Municipalities in NL regularly clean the beaches, especially after busy beach days.

In addition, (as mentioned above – in section 2.1.), the Clean Beaches program focuses on knowledge exchange, support for collaboration projects and improvement of local collaboration between municipalities and entrepreneurs. A dedicated set of measures must lead to the structural maintenance of clean beaches in The Netherlands. This includes additional monitoring, custom advice to coastal communities, municipalities and beach pavilions, and innovative beach cleaning pilots.

We have seen a positive improvement over the last two years

Comments:

- Significant reduction of beach litter in period 2015-2020
- Significant reduction of litter in fulmar stomachs in period 2015-2020

Numerical data, if any:

- There is 27% less litter on Dutch beaches compared to ten years ago (2010). In the period 2011-2020 the trend is decreasing towards an average of 282 of pieces of debris per hundred-meter beach in NL.

Removal of plastic litter from the ocean

Yes

Names of actions:

Support of the The Ocean Cleanup with agreement. The agreement deals with matters such as safety of navigation, protection of the marine environment, and the rights of other users of the high seas with respect to the cleanup systems of The Ocean Cleanup.

Brief description:

An agreement with The Ocean Cleanup. This agreement will be renewed in 2023.

Others

Preventing riverine litter from entering the ocean. As part of the NL micro plastic programme we do behavioural change pilots focused on polluters along rivers (recreational users, yachts, sport fishermen, construction works).

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

See 3.1.2.

Brief description:

Various actions and programmes to develop a circular economy by 2050

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Programme Fisheries for a Clean Sea

Programme Clean Beaches

Brief description:

Based on top 10 beach litter items and taking into account existing waste management measures in 2015 three Green Deals were adopted in NL to tackle litter from beach-recreation, shipping and fishing, where actions and obligations for government authorities, entrepreneurs, civil society organisations and private individuals are brought together. As part of the programme of measures for the MSFD, the Green Deals are continued in the programmes “Fisheries for Clean Sea and Clean Beaches”.

See also information in 2.1 on the national and EU plastic pacts.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

VANG Buitenshuis, an educational programme to help office, shop and service sector to reduce waste and to conduct circular business operations.

Support of the development of marine awareness courses for fisheries – “Fishing with a Future” and maritime academies and shipping companies – “Marine Awareness”.

“Waste at School” programme. Co-funded by the European Maritime Fund and Fisheries (EMFF) 140 schools (primary and secondary education) are assisted in waste education, waste separation and waste prevention. A number of knowledge products and tools have also been developed (www.slimmetschoolafval.nl).

For communication and knowledge sharing with the target groups (nature & environmental education centers, municipalities, collectors and schools) is a project page (www.afvalopschool.nl) have been set up.

With funds from the Packaging Waste Fund, there are still a few carried out smaller educational projects. The focus was on sharing knowledge about waste separation and on a tailor-made approach by municipalities.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Communication initiatives to promote good waste disposal habits in consumers. E.g. national campaign “*Natuurlijk raap je ook iets op*”.

Development of platform of Organisations that work on reducing waste on the street and a clean The Netherlands through communication activities: <https://schouderonderschoon.nl/>

Brief description:

Communication initiatives with municipalities, companies and NGO’s to promote good waste disposal habits in consumers.

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

The development of a reliable, effective and efficient monitoring program for macro- and microplastics in rivers. This entails the monitoring of river litter on river banks, water surface and the water column.

The development of monitoring programs for meso- pellets on beaches and microplastics in the sentiment in the North Sea.

Active role in the improvement of the monitoring methods for seafloor litter.

Brief description:

The development of a reliable, effective and efficient monitoring program for macro- and microplastics in rivers.

The development of monitoring programs for meso- pellets on beaches and microplastics in the sentiment in the North Sea.

In progress

A project has started to use Artificial Intelligence and other advanced technologies to monitor river litter. Results are expected in the coming years.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Names of actions:

Brief description:

The Netherlands is actively involved in OSPAR's ICG Marine Litter (one of the co-convenors) and in the EU MSFD Technical Group on Marine litter. Within these groups common approaches are developed on monitoring, assessment and measures.

In addition The Netherlands is observer of the Arctic Council and has been involved in the development of the Marine Litter Action Plan under the wing of the Arctic Council/PAME working group.

The growing quantities of plastic waste in our oceans is a global problem, but the Arctic Ocean contains more of it than any other. This poses a direct threat to wildlife in the region, from plankton to polar bears, and to the inhabitants whose food and culture are almost entirely dependent on the marine ecosystem. The Netherlands will continue to support initiatives for further research into the problem, nationally and internationally, including in the framework of the implementation of the EU Marine Strategy Framework Directive, the Water Framework Directive and the EU Single-Use Plastics Directive.

We have seen a positive improvement over the last two years

6.23.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general

- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.23.4. Best Practices

National level

Various initiatives:

There is an active network of NGO's, governmental Organisations, research institutions, social enterprises, private citizens and companies that focus on awareness rising, research, Organisation of cleanup's, knowledge sharing, effective networks and innovations to combat marine litter examples are:

Yearly National Beach Cleanup organized by the North Sea Foundation (initiated in 2013)

Fishing For Litter Project (initiated in 2001 and involve from than 140 vessels that collect litter during fishing operations at sea)

Clean Beach Elections

Clean River Networks

Plastic Soup Surfer

Nederland Schoon

Collaboration projects with various stakeholders show that they can very effective.

In addition, The Netherlands is home to Organisations that have developed innovative catchment systems to collect waste from seas and rivers such as the Ocean Cleanup and The Great Bubble Barrier.

Local level

Various initiatives i.e.:

Plastic Free Wadden Islands

Rotterdam Waste Free

Amsterdam - Plastic Smart Cities

In the Dutch Caribbean:

CleanCoast Bonaire

Private sector

Initiatives to prevent pollution of plastic nurdles:

Operation Clean Sweep

Rotterdam Taskforce Clean Sweep

Initiatives to organize river cleanup's

The Meuse Cleanup

International cooperation

Best practices linked to the collaboration in OSPAR, such as:

Action 53: Fishing for Litter | OSPAR Commission

Sustainability education programmes for fishermen

At European level:

- The European Plastics Pact is the first regional Pact to join the Ellen MacArthur Foundation's global Plastics Pact Network. The pact has been initiated by the French Ministry of the Ecological and Solidary Transition, the Dutch Ministry of Infrastructure and Water Management, and the Danish Ministry of Environment and Food, in consultation with more than 80 organisations from across Europe. The targets of Pact include:
 - make all plastic packaging and single-use plastic products reusable where possible, and in all cases recyclable;
 - reduce the need for virgin plastic products and packaging by at least 20%;
 - increase the collection, sorting and recycling capacity of all plastics used in packaging and single-use products in participating countries by at least 25 percentage points;
 - boost the use of recycled plastics as much as possible, with an average of at least 30% recycled plastics across single-use plastic products and packaging.

The signatories of European Plastics Pact come from 19 countries in Europe and include: 7 National governments, 19 business signatories and 33 supporters, among which: 6 Packaging manufacturers, 2 Waste management businesses, 1 Plastics manufacturers, 9 Brands (non-food), 6 Brands (food), 4 Retailers.

6.23.5. References and Reading Links

6.23.6. Contact Details: *(Please specify name and email address)*

- Mr. Dylan Bos dylan.bos@minienw.nl
- Mrs. Marijke Boonstra marijke.boonstra@minienw.nl

6.24. Norway

Key Highlights

- Norwegian Plastics Strategy
- National action plan against plastic litter from fisheries and aquaculture
- New legislation on plastics to follow up initiatives under the European Economic Agreement
- Marine Resources Act and recovery actions of lost fishing gear
- Facilitation of volunteers clean-up actions, digital tools for registrations
- National center against marine litter, focus on clean-up and sea-based sources
- OSPAR Monitoring and development of national monitoring programs for macro- and microplastic
- Promoting global binding instrument against plastic pollution and stronger regulations under IMO

6.24.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name: Norwegian Plastics Strategy (in Norwegian: Noregs plaststrategi). An English version of the strategy can be found [here](#).

Brief description:

Launched in August 2021. The Norwegian Plastics Strategy/ action plan describes actions taken and actions under implementation to reduce plastic litter and plastic pollution across the entire life-cycle of plastics, in Norway as well as Norwegian priorities internationally. It addresses measures to reduce plastic pollution across various value-chains and sectors, both from land-based and sea-based sources. The strategy also includes measures on clean-up of marine litter.

The plan includes measures to promote more sustainable value chains for plastics, as well as measures to reduce discharges of plastic waste to the environment from sectors such as fisheries and aquaculture, agriculture, transport, building, as well as household waste.

It also describes measures to reduce use of single-use plastic products and measures to phase out hazardous substances in plastic products in order to increase the amount of plastic waste that can be safely recycled.

Norway is part to the EEA-agreement and an integral part of the European internal market, and many measures described in the plan will be further developed in close cooperation with the European Union.

On clean-up, it includes measures to strengthen knowledge and coordination of clean-up efforts in Norway, including between volunteers and private sector.

We have made good progress in the following up of the strategy that was launched a year ago. Further details are described below.

This includes implementation and preparation for implementation of the relevant EU-directives and international regulations including under the Basel convention. In addition, Norway has a specific action plan against plastic litter from commercial and recreational fisheries and aquaculture. The Directorate of fisheries publishes regularly updates on its implementation. The action plan is under translation to English.

The new centre against marine litter (Marfo), which from 1.1.2022 was established as an administrative body under the Ministry of Climate and Environment, contributes significantly to strengthen and disseminate knowledge on clean-up, and on marine litter from fisheries and aquaculture.

A national strategy for a Green, Circular Economy was launched in 2021 (In Norwegian: Nasjonal strategi for ein grøn, sirkulær økonomi [Nasjonal strategi for ein grøn, sirkulær økonomi - regjeringen.no](#)) The strategy includes measures to promote a circular economy for plastics, and thus contribute to the reduction on marine plastic litter and plastics pollution.

Norway has also a national action plan for reducing marine litter from commercial and recreational fisheries and aquaculture. A summary of this report in English is submitted to the IMO MEPC 80 (INF. 8).

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name: The Pollution Control Act

[Pollution Control Act - regjeringen.no](#)

Norway has a very comprehensive policy framework regulating waste through the Pollution Control Act and the detailed Waste Regulations (<https://www.regjeringen.no/en/dokumenter/waste-regulations/id512073/>). Littering is illegal according to the Pollution Control Act. As part of the European Economic Area Norway is bound by European rules and regulations, including targets relevant to this issue. The EU Regulation on Delivery and receipt of waste and cargo residues from ships/PRF Directive (2002/59/EC), is implemented/incorporated into the Norwegian pollution regulation, chapter 20. Public consultations on the implementation of the revised EU PRF Directive (2019/883) has been conducted, and the revised regulation is now under consideration in the Ministry.

Name: The Product Regulations chapter 2b regulates single-use plastics. The regulation bans certain single-use plastic items. There is also marking requirements for some products. This implements important parts of the EU Plastics Directive in Norwegian law.

The purpose of the regulation is to reduce the environmental impact of single use plastic products.

Name: The Marine Resources Act

[Marine Resources Act - regjeringen.no](#)

The Marine Resources Act which regulates fisheries, forbids dumping of fishing gear. If fishing gear is lost or has to be cut, it is an obligation to try to recover it and if this is unsuccessful, to report the loss.

Name: The Product Control Act

<https://www.regjeringen.no/en/dokumenter/product-control-act/id172150/>

The Product Control Act regulates products from causing environmental disturbance, and damage to health, as well as national provisions for eco-design. Further regulations pertaining to different sources of microplastics emissions will be considered into the existing Norwegian legal framework

Name: The Ship Safety and Security Act [Ship Safety and Security Act - Norwegian Maritime Authority \(sdir.no\)](#)

The Ship Safety and Security Act shall safeguard life, health, property and the environment by facilitating a high level of ship safety and safety management, including preventing pollution from ships.

Name: The Harbour and Fairways Act

Vessels provide the Norwegian authorities and ports with the information required to enhance safety, the environment and efficient maritime transport. Authority to demand removal of shipwrecks. The Act was updated/revised in 2019, but the translation available reflects the Act prior to revision: [regulation-on-vessels-notification-obligations-under-the-harbour-and-fairways-act-1.pdf \(kystverket.no\)](#)

Name: Waste Regulation (<https://www.regjeringen.no/en/dokumenter/waste-regulations/id512073/>)

The Waste Regulation implement among others of the EU Waste framework directive in Norwegian Law. The regulation includes provisions on waste management that are relevant for preventing discharge of plastic litter into the environment.

Norway adopted in May 2022 a new chapter 10A in the Waste regulations chapter 10A establishes mandatory sorting of biological waste and plastic waste (including plastic packaging and agricultural plastics) from municipal waste. The regulations will enter into force 1 January 2023. This regulation requires municipalities to sort at least 70 % of plastic waste from households by 2035.

Norway has also adopted new regulations to implement the targets for recycling in the EU directive on packaging and packaging waste in the waste regulations chapter 6 and 7, that entered into force in May 2022. These changes mean that the amount of plastic packaging waste recycled must increase to 50 % by 2025 and to 55 % by 2030.

Name: The regulations relating to pollution control [Pollution Regulations - regjeringen.no](#)

The regulations relating to pollution control chapter 32A establishes requirements for the design and operation of sports pitches that use loose microplastic as infill materials. These regulations entered into force on 1 July 2021. When all regulation measures are implemented, microplastic emissions from artificial turf pitches will be reduced by up to 90 %.

Indicators

Yes

Please list your indicators here:

We do not have specific national-only indicators that are targeting marine plastic litter.

But as part of the OSPAR, Norway assesses [beach litter](#), [seabed litter](#) and [plastic particles in fulmar stomachs](#) as common indicators for the OSPAR Maritime Area; the North-East Atlantic. Further indicators are under development under OSPAR. Norway maps marine litter through different activities including Mareano- mapping of the seafloor, and registration during fish stock monitoring including in the Barents Sea. Norway has recently started

systematic monitoring of microplastic in the marine environment, according to indicators recommended in GESAMP-guidelines and the work program AMAP under Arctic Council. The plan is to further develop this first stage monitoring. Further, we are preparing the start of a systematic national monitoring of macroplastic including using data from OSPAR-monitoring, reporting of lost fishing gear etc.

We support international processes on the issue, in several arenas, including under Nordic Council of Climate and Environment Ministers, Arctic Council and UNEP.

Norway believes also upstream, close to source-monitoring is important nationally as well as at international level. Norway is a.o. supporting a study under the Nordic Council of Ministers on relevant indicators for plastic pollution including plastic leaks along the plastic value chain to be finalized in 2023. Norway believes that monitoring, where such indicators is needed, should be an important part of the international legally binding agreement on plastic pollution that is to be developed.

6.24.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Norway uses several measures to reduce use the environmental impact of single-use plastic products to the environment, most importantly through implementation of relevant EU-directives. This includes obligations through the EU directive to reduce the use of plastic carrier bags. We are assessing a possible tax on plastic packaging.

The largest actors in the Norwegian grocery, retail and trade sectors have agreed to meet the national obligations in the directive through the establishment of the Norwegian Retailers' Environment Fund (HMF) owned and operated by the relevant private actors. Members of the fund are required to place a fee on all plastic carrier bags they sell. The fund finances both national and international initiatives aimed at reducing and preventing plastic pollution e.g. through clean-up projects and support for technology and innovation.

The fund's stated goals are threefold:

- 1) Reduce plastic pollution
- 2) Increase plastic recycling
- 3) Reduce consumption of plastic bags

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Norway has implemented in national law measures in line with the EU Directive on the reduction of the impact of certain plastic products on the environment (SUP-directive) such as bans on placing on the market certain plastic products and requirements on the marking of some single-use plastic products that are frequently inappropriately disposed of.

Banned single-use products:

- cotton bud sticks,
- cutlery, plates,

- straws and stirrers,
- balloon sticks and attachment mechanisms for such sticks,
- food containers made of expanded polystyrene (EPS), with or without a lid, for food products that are intended to be eaten from the container without further preparation either at the point of sale or as take away
- beverage packaging made of expanded polystyrene (EPS) and corks and lids for these
- beverage cups made of expanded polystyrene (EPS) and lids for these.

Actions for encouraging sustainable / circular product design

Yes

Actively involved in EU-processes on product design.

Establishing a Plastic Pact.

Norway, in close cooperation with the EU, will promote more sustainable plastics use and design of products that will stay longer in the plastics value chain – striving towards a more circular economy for plastics.

The Ministry of Climate and Environment is also establishing a plastic pact with relevant business and industry actors that provide single-use plastic items/plastic packaging.

Norway is also promoting this issue in the Basel Convention global partnership on plastic waste.

Regulations on microplastics

Yes

-National regulation on granular infill for artificial turfs

The regulations relating to pollution control chapter 32A establishes requirements for the design and operation of sports pitches that use loose microplastic as infill materials. These regulations entered into force on 1 July 2021. When all regulation measures are implemented, it is estimated that microplastic emissions from artificial turf pitches will be reduced by up to 90 %.

From July 2021 we have a new national regulation to reduce microplastics emissions from artificial turfs. Norway has also advocated regulations to reduce microplastic emissions from textiles in relation to washing machines under the EUs Eco-design Directive

Government actions on microplastics

In preparation

EU REACH restriction on intentionally added microplastics:

A proposal for restriction of placing on the market products containing intentionally added microplastics under EU chemical regulation (REACH). Expected final decision in 2023, will then be implemented in Norwegian law.

EU process on unintentionally released microplastics:

The EU Commission will publish their suggestion for measures to reduce the unintentionally release of microplastics from sources such as car tyres, synthetic textiles, plastic pellets, paint, geotextiles and detergent capsules for washing machines.

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

A national microplastics monitoring program is established to provide information on levels and types of microplastics in the environment; <https://www.miljodirektoratet.no/publikasjoner/2023/januar-2023/microplastics-in-norwegian-coastal-areas-rivers-lakes-and-air-mikronor1/>

Norway with cosponsors has presented a proposal for decision under IMO MEPC on listing plastic pellets in the same category as environmental toxicants, which a.o. will result in stricter preventive measure during transport of plastic pellets by ships.

Norway has submitted to IMO MEPC 80 (INF. 9) - a report on microplastic release and other pollution from ship hull coatings/paints during docking and in sea, which shows that self-polishing paint is the type of hull coating contributing most to microplastic release.

We have also conducted a pilot study on methods to clean the hulls of leisure boats in marinas instead of using paint. Measures on pollution from leisure boat marinas is under consideration.

Norway also works to increase and approve knowledge about microplastics more generally, and two reports have recently been launched: Norwegian land-based sources to microplastics and sea-based sources to microplastics to the marine environments [Sea-based sources of microplastics to the Norwegian marine environment - Miljødirektoratet \(miljodirektoratet.no\)](#)

Others (please specify)

Norway has together with South Africa, ITOPF and P&I Clubs, submitted a proposal till OME MEPC – PPR 10 – on Guidelined on clean-up of plastic pellets from ship-source spills

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Further developments and refinement of the waste management system.

In general, Norway has a well-functioning and environmentally sound waste collection and management system. Clean-up of legacy waste has increased in years.

As of 2021, Norway has a national goal that recycling should increase and that waste generation should be lower than the economic growth.

Norway adopted in May 2022 a new chapter 10A in the Waste regulations. Chapter 10A establishes mandatory sorting of biological waste and plastic waste (including plastic packaging and agricultural plastics) from municipal waste. The regulations entered into force 1 January 2023. This regulation requires municipalities to sort at least 70 % of plastic waste from households by 2035. It may also be necessary to strengthen the infrastructure for secondary raw materials.

Norway has also adopted new regulations to implement the targets for recycling in the EU directive on packaging and packaging waste in the waste regulations chapter 6 and 7, that

entered into force in May 2022. These changes mean that the amount of plastic packaging waste recycled must increase to 50 % by 2025 and to 55 % by 2030.

Norway introduced as early as the 1990s extended producer responsibility schemes for packaging and other categories. New extended producer responsibility schemes are in progress for certain single-use plastic products and for plastic gear in fisheries and aquaculture. The main feature of the extended producer responsibility scheme for certain single-use plastic products will be an obligation for producers to cover the costs of waste collection and cleaning up litter.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

We have many measures, and most of them are described in the national plastics strategy which can be found. [here](#)

One example is that we have introduced a scrap value for leisure boats (below 49 feet, including canoes, kayaks etc.)

The dumping of leisure boats were identified as a problem and a scrap value system was established, when a boat is handed in to a dedicated waste management facility a reward of Norwegian Kroner 1000 can be claimed.

Littering and dumping of waste is illegal in Norway according to the Norwegian Pollution Control Act.

Others

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions: facilitation of clean-up

A national centre against marine litter (Marfo) was established 1 January 2022 as an administrative body under the Norwegian Ministry of Climate and Environment. The centre is located in Lofoten, Norway. A main task for Marfo is to contribute to improve and to spread knowledge on clean-up and on prevention of marine litter from seabased sources. The centre is amongst others also responsible for map-based data platforms (Rydde/Rent hav) where clean up actions, needs, amounts and types of litter removed etc. is registered.

Names of actions: funding of clean-up actions

There is a lot of clean-up activities in Norway. We have a scheme where volunteers can apply for funding to cover costs related to transport and delivery of collected waste.

Names of actions: Support of the NGO Keep Norway Beautiful

The Organisation Keep Norway Beautiful has for many years organized clean-up campaigns in Norway. They are at the time also leading the Clean Europe network, and has together with Keep Sweden Clean a leading role in Nordic and arctic clean-up campaigns and projects. More than 100 000 volunteers register participation in clean-up actions, but the real number is considered to be significantly larger. The Organisation is supported by the Government.

The Norwegian Retailers' Environment Fund (HMF) is a large, private contributor to clean-up in Norway. In the period 2021-2023 they run a program called Clean Norway – "Rydd Norge", with the goal of cleaning 40% of outer coastline and selected waterways in Norway. The program is run region by region. They are now preparing similar clean-up programs for the coastal sea bottom and for land areas.

In addition, they provide funding after application to selected clean-up projects including on methods and technology.

Removal of plastic litter from the ocean

Yes

Names of actions: Annual retrieval surveys of abandoned, lost, or otherwise discarded fishing gear run by the Fisheries Authorities. Fishing for litter.

Since the 1980s, the Norwegian Directorate of Fisheries has organized annual clean-up surveys for lost or abandoned fishing gear. The fishers are obligated to report lost gear, and the authorities can target retrieval accordingly.

In addition, a "Fishing for Litter" scheme is run in ten harbours in Norway. The scheme is based on that the fishers involved in the scheme deliver waste they get on board during fishing to the participating harbour for free and that the waste is registered and reused or recycled where possible. The environmental authorities have been paying for the arrangement, but many actors including fishers participate by own capacity. Fishing for litter is a scheme run in several European countries.

A new "indirect fee" system is planned for implementation during 2022. This fee will apply to all ships calling at a port and will also cover the costs of passively fished waste collected by fishing vessels

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions: Through the EU (Norway as part of the EEA agreement) a new target is set on incorporating 25% of recycled plastic in PET beverage bottles from 2025, and 30% in all plastic beverage bottles from 2030.

Initiatives for better product design supported by Innovation Norway.

Regarding biodegradable plastics, there are ongoing assessments on the suitability of biodegradable plastics. There are issues related to recycling, as it is difficult at household level to sort correctly. In addition, in a cold climate the biodegradable plastics do not degrade

at the same level/the process is slow. Other materials (wood, paper etc.) as alternatives to plastics are more commonly introduced. The EU will propose a policy framework for biobased plastics and biodegradable or compostable plastics.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions: In the process of establishing a Plastic Pact with the industry in order to reduce consumption of certain plastic products, especially single-use.

Support to research and innovation coupling industry with research institutions.

The Norwegian Retailers' Environment Fund and the Research Council of Norway (RCN) have a joint project on supporting research on circular solutions for plastics including reuse and recycling.

The Research Council of Norway (RCN) and Innovation Norway supports projects aimed at coupling industry with research and innovation for a more circular economy. This includes several projects on plastics.

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Blue Responsibility (Blått ansvar) educational videos and material.

Several initiatives make educational material available for free, such as the non-profit Loop and Rusken. The Norwegian Broadcasting Company also has available programs for children often used in schools on waste management/plastics. Waste Management Companies (both public and private) provide videos on sorting of waste, plastics etc.

In higher education there are several courses on circular economy.

The Norwegian Directorate for Fisheries adopted in 2021 a dedicated action plan on marine litter. This action plan includes compulsory educational modules on marine litter for professional fishers.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions: The Directorate of Fisheries has launched an Action Plan on Marine Litter which includes measures on awareness raising.

Keep Norway Beautiful has extensive awareness raising campaigns.

Several active NGOs in the field, such as Friends of the Earth Norway (Naturvernforbundet) and World Wildlife Fund (WWF) Norway.

School children are for example included in beach clean-up actions run by various voluntary local and national organisations. Centre against marine litter (Marfo) and The Norwegian Retailers' Environment Fund (HMF) also contribute with awareness building campaigns.

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Several municipalities, have such campaigns, including the campaign “Rusken” in Oslo. Clean-up actions all around the country contributes to awareness building.

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Norway is involved in or supports such campaigns in many fora. Some examples are: The Regional Action Plans on Marine Litter in the Arctic under PAME and for the North-East Atlantic under OSPAR includes actions on awareness raising. Norway has since 2016 been part of and a contributor to the UNEP Clean Seas Campaign. Projects under the Nordic Council of Climate and Environment Ministers includes elements of awareness building.

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

The National Monitoring Program for Microplastics was established in 2021. The monitoring program measures levels and types of microplastic particles in Norwegian water bodies according to guidelines given by international expert groups such as GESAMP (The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection) that provide advice to the UN and AMAP (Arctic Monitoring and Assessment Programme) a working group of the Arctic Council. Data will be made available through IECES (International Education and Credential Evaluation Services) Dome.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Norway is actively engaged in a number of relevant processes including cooperation at the European level on research and innovation – ERA and Horizon Europe, under UNEP, International Maritime Organisation (IMO), the Basel Convention, the Global Partnership on

Marine Litter (GPML), OSPAR, Nordic Council of Climate and Environment Ministers, and the working groups PAME and AMAP under the Arctic Council.

Others

6.24.3. Challenges

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.24.4. Best Practices

National level

Norway has an environmental tax on plastic bottles and drinking cans. Bottles and cans get a lower tax depending on the return percentage. This gives the industry a good reason to establish return systems for bottles. The plastic bottles are subject to a deposit fee, which the consumers get back when they return the bottles. Around 90 % of plastic bottles are returned in Norway today.

Norway has targets for recycling of plastic waste in line with EUs Waste Framework Directive and other relevant EU legislation. We have introduced measures to reach these targets.

In 2021 a new action plan for climate- and environmentally friendly Public Procurement was launched. The plan includes measures to avoid undesirable chemical additives in plastics and prescribes the waste hierarchy as a guiding principle for procurement (e.g. strive to avoid unnecessary products, measures to reduce consumption, demand products for re-use and/or more recycled material in products).

Knowledge hub on beach clean ups and sea-based sources through the national centre against marine litter (Marfo).

Long experience with preventive and clean-up measures on marine litter from fisheries and aquaculture, and the Directorate of Fisheries' new action plan against marine litter from commercial and recreational fisheries and aquaculture.

Local level

The Polluter Control Act states that the municipalities have a duty to collect and ensure proper treatment of municipal waste. The municipalities charge each household a fee that fully covers all costs of waste management, including collection, transport, reception, storage, treatment and control. More than 80% of the waste is either recycled or used as energy. Where landfills still have to be used, they have to be designed and monitored to prevent run-off, discharges to air and spreading of litter.

Private sector

Several initiatives initiated and lead by the industry themselves. The Producer Responsibility Organisation Green Dot Norway (Grønt Punkt Norge) has launched a Plastic Pledge. Businesses pledge to use more recycled plastic material, avoid unnecessary use of plastic, and design for recycling.

According to the provisions in the Pollution Control Act, the industry has the responsibility to ensure environmentally sound treatment of their own plastic waste.

Norway has EPR systems on plastic packaging, drinking bottles and beverage cans, on e-waste. New EPR systems will be introduced for other plastic single use products in line with the EU SUP-directive, such as plastic equipment used in fisheries and aquaculture.

International cooperation

Norway has signed on to the G7 Plastics Charter, the G20 Action Plan and has been a strong promoter of the four relevant resolutions passed by the UNEA, as well as measures taken by IMO and Basel Convention.

The Norwegian Development Program to Combat Marine Litter and Microplastics was launched in 2018. The programme is intended to contribute to Sustainable Development Goal (SDG) 14.1 which states that by 2025, the world should prevent and significantly reduce marine pollution of all kinds and the UNEA-3 agreed vision to eliminate the discharge of litter and microplastics to the oceans over time. The main objective of the Norwegian development program to combat marine litter and microplastics is to prevent and greatly reduce the extent of marine litter from large sources in developing countries.

To achieve this, funding is set to focus on four outcomes:

1. Management of plastic waste in partner countries is improved
2. Selected coastal areas and rivers are cleared of waste and the waste is sustainably managed.
3. Private sector performance regarding sustainable production and use, and responsible waste management, is improved
4. Global commitments and national and regional instruments to prevent marine litter are strengthened.

Projects are being implemented through multilateral Organisations such as the UN and the World Bank, NGOs and research institutes. Geographic focus is on fast-growing economies in South East Asia and Africa, as well as small island developing states to improve waste management systems and clean-up along the shore. Some 40 projects worldwide are funded by the programme.

Norway has for a long time been advocating a global agreement on plastic pollution. At UNEA-5 it was decided to start negotiation of such a global agreement. Norway is actively engaging in the negotiations, particularly as Co-Chair of the High Ambition Coalition to end plastic pollution.

6.24.5. References and Reading Links

6.24.6. Contact Details: *(Please specify name and email address)*

Mona Aarhus

Section for Waste Management and Marine Litter

Ministry of Climate and Environment Norway

6.25. Peru

Key Highlights

- Legislative Decree N°1278 “Solid Waste Management Law” (2017)
- Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers” (2018)
- Supreme Decree N°003-2020-PRODUCE “Roadmap towards a circular economy in the industrial sector”.
- Clean Production Agreement: agreement between the government and private companies to encourage alternatives to single-use plastics.
- Campaign “SaveBeaches” to reduce plastic litter

6.25.1. Policy and Frameworks

National Action Plan

No

Legal Framework

Yes

Please list your country’s legislation including name and brief description here: Name:

Legislative Decree N°1278 “Solid Waste Management Law” This legislative Decree was approved in 2017 by the Peruvian president.

Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers”, approved in 2018 by the Peruvian President.

Supreme Decree N°003-2020-PRODUCE “Roadmap towards a circular economy in the industrial sector”. This Legal instrument was approved in 2020.

Brief description:

Legislative Decree N°1278 “Solid Waste Management Law” (hereinafter, LGIRS) was approved in December 2016. In December 2017, its Regulations were approved through Supreme Decree No. 014-2017-MINAM, and modified through Supreme Decree No. 001-2022-MINAM. The LGIRS recognizes the circular economy, extended producer responsibility and the recovery of solid waste, as principles in the comprehensive management of solid waste. Likewise, it indicates that MINAM is in charge of promoting public and private, municipal, and non-municipal initiatives that contribute to the reduction of the generation and danger, valorization and proper management of solid waste, including plastic waste. It should be noted that under the current framework, the primary purpose of waste management is to prevent or minimize their generation at source. Secondly, the material and energy recovery and recovery of waste is preferred.

Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers”

Law No. 30884 was approved on December 19, 2018. The Regulation of Law No. 30884 was approved on August 23, 2019 through Supreme Decree No. 006-2019-MINAM. Both regulatory instruments are intended for the consumption and production of single-use plastic goods to migrate to reusable, recyclable or biodegradable plastic goods in order

guidelines established in the LGIRS, especially in relation to the minimization, valorization, and promotion of the circular economy, which will finally contribute to reduce the adverse impact on health and the environment due to the superfluous use of single-use plastic.

Supreme Decree N°003-2020-PRODUCE “Roadmap towards a circular economy in the industrial sector”. This Legal instrument was approved in 2020 by the Peruvian president as well. The roadmaps are instruments that seek to promote and facilitate the development and incorporation of circular economy models in value chains, and allow: 1) to include the issue on the sector’s agenda and promote a transversal view of the circular economy approach, 2) identify the needs of the sector to promote circular businesses, and 3) prioritize and execute actions to facilitate the development of value chains with a circular economy approach. The process of preparing the roadmaps includes the active participation of business associations, companies themselves, public institutions at the national and regional levels, academia, organized civil society and cooperation.

In preparation

Please list your country’s legislation including name and brief description here:

Name:

Ministerial Resolution N° 000142-2023-PRODUCE “Roadmap towards a Circular Economy in the Fishing and Aquaculture Subsectors”. Project publication.

Brief description:

Ministerial Resolution N° 000142-2023-PRODUCE “Roadmap towards a Circular Economy in the Fishing and Aquaculture Subsectors”. Project publication. The project was published in April 2023 in order to receive opinions, comments and/or suggestions from public and private entities and the general public. The roadmap seeks to establish the actions, deadlines, responsible entities and participants, and indicators for the fishing and aquaculture subsectors to advance in a fair transition towards a circular economy by 2030.

Indicators

No

6.25.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Clean Production Agreement, is a voluntary agreement between the government and private companies that encourages the use of alternatives to single-use plastics.

Supreme Decree N°003-2020- PRODUCE Roadmap towards a Circular Economy in the Industry Sector”

Brief description:

The Clean Production Agreement is an instrument that promotes the efficient use of materials and solid waste management. These voluntary agreements aim to introduce a set of actions that go beyond compliance with current legislation, hoping that the companies would carry out activities that reduce their impact on the environment, as well as their waste production.

The Ministry is developing an additional policy framework to better manage single-use plastic. The new framework will establish provisions to better identify the products by introducing common terminology, symbols, packaging, marking or labeling applicable to a product, process or production method, or others

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Ban of some single-use plastics (bags, straws, disposable utensils)

Targeted products:

Single-use plastic bags, single-use plastic straws and expanded polystyrene containers for food and drinks.

Brief description:

The Law N°30884 does not seek to ban all types of plastic. The Law and its regulations seek that the consumption and production of single-use plastic goods migrate to reusable, recyclable or biodegradable plastic goods in order to move towards a circular economy of plastic.

The Law N°30884, and other legislative framework prohibits the use of single- use plastic items such as single-use plastic bags, single-use plastic straws and expanded polystyrene food and drink containers. Single-use plastic bags, single-use plastic straws and expanded polystyrene containers for food and drinks.

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Clean Production Agreement, is a voluntary agreement between the government and private companies that encourages the use of alternatives to single-use plastics.

Brief description:

The Clean Production Agreement is an instrument that promotes the efficient use of materials and solid waste management. These voluntary agreements aim to introduce a set of actions that go beyond compliance with current legislation, hoping that the companies would carry out activities that reduce their impact on the environment, as well as their waste production.

The Ministry is developing an additional policy framework to better manage single-use plastic. The new framework will establish provisions to better identify the products by

introducing common terminology, symbols, packaging, marking or labeling applicable to a product, process or production method, or others.

Supreme Decree N°003-2020- PRODUCE Roadmap towards a Circular Economy in the Industry Sector

In progress

Publication of the draft R.M. N° 142- 2023-PRODUCE "Supreme Decree that approves the Roadmap towards a Circular Economy in the Fishing and Aquaculture Subsectors".

The Ministry of Production has approved a circular economy roadmap for the industry sector, and has published one as a draft for the Fishing and Aquaculture Subsectors, that should be approved soon.

Regulations on microplastics

Yes

Names of regulations:

Law N°30884 "Law that Regulates Single-Use Plastic and Disposable Containers or Containers"

Brief description:

The Law, and related legislation prohibit single-use plastic items including plastic bags, plastic straws, and plastic and expanded polystyrene food and drink containers, and those which cause contamination by microplastics or dangerous substances and are not recyclable.

Government actions on microplastics

Yes

Names of actions:

Law N°30884 "Law that Regulates Single-Use Plastic and Disposable Containers or Containers"

Brief description:

The Law, and all other legislation prohibit single-use plastic items including plastic bags, plastic straws, and plastic and expanded polystyrene food and drink containers, and those which cause contamination by microplastics or dangerous substances and are not recyclable.

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

Yes

Names of regulations:

Law N°30884 "Law that Regulates Single-Use Plastic and Disposable Containers or Containers"

Others (please specify)

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Legislative Decree N°1278 “Solid Waste Management Law”.

Brief description:

The Ministry is working with the private sector to develop a comprehensive response to solid waste management. Some of the projects that are currently being financed through Public/private partnership to reduce the infrastructure gap that exist in the country. The way the partnership works is that the private sector pays their taxes out-front and the government uses the funds to build required public infrastructure to support waste management facilities in priority areas in the country.

In addition, the Solid Waste Management Law 1501, including its updates, establishes a program in which everyone must sort-out the different materials at the source which is supported by a waste collection program for the different products.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Legislative Decree N°1278 “Solid Waste Management Law”.

Law N°30884 “Law that Regulates Single-Use Plastic and Disposable Containers or Containers”.

Brief description:

The Solid Waste Management Law provides the policy framework to support an efficient solid waste management program that regulates the process from production to final discharge.

At the same time, guidelines have been developed to help municipalities to complete local waste management plans as they are responsible for the municipal waste management programs. The non-municipal solid waste management is the responsibility of the entity that generates it. In both cases there are special entities that oversee that the requirements are being fulfilled.

The Law also establishes the responsibilities of those whose products become part of the solid waste.

In the other hand, Law 30884 prohibit the commercialization and use of single-use plastic such as plastic bags, plastic straws, plastic and expanded polystyrene food and drink containers in the following:

- (a) Natural Protected Areas
- (b) National Historical and Heritage Sites
- (c) Museums
- (d) Pacific Ocean beaches
- (e) Amazon basin beaches

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Name : Campaign "SaveBeaches"

The objective of this campaign was to promote among citizens the proper management of waste in coastal marine areas in order to avoid contamination of beaches with single-use plastic waste such as disposable containers or containers. Environmental education sessions were held with the support of environmental promoters from MINAM, who provided messages using resources such as posters, games and flipcharts.

Removal of plastic litter from the ocean

No

Others

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Technical Regulation on Biodegradable Plastic Bags (Supreme Decree No. 025-2021-PRODUCE)

Clean Production Programs between the government of Peru and private companies

National Competitiveness and Productivity Plan, Supreme Decree N° 237-2019-EF)

Brief description:

On November 30, 2021, through Supreme Decree No. 025-2021- PRODUCE endorsed by MINAM, the Technical Regulation on Biodegradable Plastic Bags was approved, which establishes the technical and labeling requirements that such plastic goods must meet to be designated as biodegradable. This instrument is part of the implementation of Law 30884, which has established the exemption from the Tax on the consumption of plastic bags for those plastic bags that prove to be effectively biodegradable in accordance with the previously mentioned Technical Regulation.

Law 30884 has also established the obligation to incorporate 15% recycled material in the composition of PET bottles for beverages for human consumption, cleaning and personal care, which came into force as of December 2021.

The Clean Production Programs are instruments for the efficient use of materials and solid waste management, they are voluntary promotional instruments that aim to introduce in

productive activities a set of actions that go beyond compliance with current legislation, of so that the conditions in which the owner carries out his activities are improved, in order to achieve the prevention or minimization of the generation of solid waste.

The National Competitiveness and Productivity Policy was approved on 2018 (Supreme Decree N° 345-2018- EF). It aims to achieve the well-being of all Peruvians based on sustainable economic growth with a territorial approach through the implementation of cross-cutting measures. In this context, the inclusion of the Circular Economy approach is promoted within Priority Objective N ° 9 called “Promote environmental sustainability in the operation of economic activities”

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Clean production Programs between the government and private companies

Brief description:

The Clean Production Programs are instruments for the efficient use of materials and solid waste management, they are voluntary promotional instruments that aim to introduce in productive activities a set of actions that go beyond compliance with current legislation, of so that the conditions in which the owner carries out his activities are improved, in order to achieve the prevention or minimization of the generation of solid waste.

Others

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Program "The Environmental Hour"

The Environmental Hour is a virtual space promoted by MINAM and the Ministry of Education (Minedu) and seeks to provide specialized information to the educational community (environmental education and pedagogical specialists from DRE/GRE and UGEL, teachers, managers, and students) as well as citizens on various environmental issues, in order to promote dialogue around the challenges we face in the framework of remote education. During 2020 and 2021, 05 sessions or broadcasts of the Environmental Hour were held, in which information was provided on the importance of regulating single-use plastic and disposable containers or packaging, as well as using other more environmentally friendly alternatives. the environment.

Programa Educca

MINAM, through the promotion and assistance actions that it has been carrying out within the framework of the EDUCCA Municipal Program, has achieved that to date 382 municipalities of 480 local governments nationwide, incorporate the promotion of responsible consumption of plastic within their activities. To carry out these actions, 74,385 environmental promoters were accredited and managed to benefit approximately 12,842 citizens.

<https://lookerstudio.google.com/reporting/ba782ebc-1b04-48d4-9203-c3ff267bd36b/page/Yv2nC>

Awareness-raising campaigns related to MPL - National

Yes

If yes, give a brief description of your efforts related to education:

Campaign "Less plastic, more life"

"Peru Limpio" Strategy

Brief description:

Campaign "Less plastic, more life"

The #LessPlasticMoreLife initiative was launched on June 5, 2018, in order to promote the responsible consumption of single-use plastics such as plastic bags, straws and Styrofoam among citizens. Environmental education and information actions were carried out to raise awareness among citizens, market traders and supermarket chains about the importance of responsible consumption of plastic. It had the support of environmental promoters, municipal promoters and/or environmental leaders. This campaign has a space on the MINAM website.

"Peru Limpio" Strategy

"Peru Limpio" is the environmental educational strategy of the Peruvian State that seeks to improve citizen practices for proper management of solid waste in the country. Since September 10, 2019, Peru Clean is considered a multisectoral and decentralized strategy and is made up of 4 communication axes that promote the active participation of the entire society: responsible consumption, cleaning, recycling, and payment of taxes. To reinforce the axis of responsible consumption, within the framework of the Clean Peru strategy, messages on responsible consumption of single-use plastics were developed in campaigns and massive events. The strategy has a website with educational resources.

Awareness-raising campaigns related to MPL – Local

No

Awareness-raising campaigns related to MPL - International/Regional

No

Others

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Brief description:

Some scientific papers have been published such as:

Report of microplastics in fish of importance for popular food in the Peruvian Amazon: IIAP, 2017. Fuente: CHOTA-MACUYAMA, W.;

CHONG, J. 2017. Primer registro de ingestión de microplásticos por un pez de importancia comercial en la ciudad de Iquitos, Amazonía peruana. Instituto de Investigaciones de la Amazonía Peruana - IIAP. Folia Amazónica. Revista del Instituto de Investigaciones de la Amazonía Peruana.

Report of microplastics: Weeds, Umbrellas, Fresh Water and Fishermen. Microplastics were found in all cases. In the second case, 78.3% was "technopor". Research group, 2020. De-la-Torre, G. E., et al. (2020). Abundance and distribution of microplastics on sandy beaches of Lima, Peru. Marine Pollution Bulletin, 151.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Name of the action:

We have the Peruvian Sea Institute(IMARPE)

Brief description:

Peru participates in the voluntary nonprofit network REMARCO "Research Network on Marine-Coastal Stressors in Latin America and the Caribbean," which has the support of the International Atomic Energy Agency (IAEA), and which uses nuclear and isotopic techniques for peaceful use, to address the environmental problems of the marine-coastal ecosystems of Latin America and the Caribbean, thus contributing to the fulfillment of Sustainable Development Goal 14: Life Underwater. In March 2022, Peru became part of the Executive Committee of the Network, under the theme of contamination by microplastics.

Currently, the Peruvian Sea Institute (IMARPE) is participating in the research project "Reducing the impacts of plastic waste in the Eastern Pacific"

Others

6.25.3. Challenges

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19

6.25.4. Best Practices

National level

MINAM has been promoting various instruments for the efficient use of materials and solid waste management, among which are the Clean Production Agreements on solid waste, which aim to introduce economic activities a set of actions that go beyond compliance with current legislation, in order to achieve the prevention, minimization and recovery of solid waste. Likewise, it promotes the efficiency and recovery of materials.

In this sense, there are currently 9 agreements signed between the Ministry of the Environment, the Ministry of Production, and different companies (productive, extractive, or service activities), with goals related to plastics:

1. Sistema Coca Cola Perú (Coca Cola and Arca Continental Lindley),
2. Unión de Cervecerías Peruanas Backus y Johnston S.A.
3. Koplast industrial S.A.C.
4. Peruana de Moldeados S.A.C. (Pamolosa),
5. Natura Cosméticos S.A.
6. CENCOSUD S.A.
7. Embotelladora San Miguel del Sur S.A.
8. Textil el Amazonas S.A
9. VITAPRO S.A.

All of companies have managed to achieve 100% of their goals, and have the recognition given by the Ministry of the Environment.

On February 17, 2020, the Roadmap towards a Circular Economy in the Industry Sector was approved, which incorporates actions to promote circularity in the plastic industry and the implementation of Law No. 30884.

In 2016, the Law of Comprehensive Solid Waste Management (LGIRS) was approved by Legislative Decree No. 1278, which introduces, among other principles, the recovery of solid waste, as well as the extended producer responsibility (REP) through the "Special Regime for prioritized goods wastes management"

In this sense, the Ministry of the Environment promoted two regulations: Supreme Decree No. 009-2019-MINAM which approved the Special Regime for Electronic and Electrical Waste Management (2019); and Supreme Decree No. 024-2021- MINAM, which approve the Special Regime for end-of-life tires Management (2021). Currently, a diagnostic for packaging and containers is being elaborated with the financing of international cooperation, in order to propose an EPR scheme for this kind of wastes.

On October 30, 2020, in compliance with the Eighth Final Complementary Provision of Law No. 30884, through Supreme Resolution No. 003-2020-MINAM, the Multisectoral Commission was created, of a temporary nature, called the "Technical Multisectoral Commission of the Comprehensive Management of Single-Use Plastic". The purpose of the Commission is to propose mechanisms for the comprehensive management of single-use plastic and the transition towards the circular economy of plastic.

On July 15, 2021, through Ministerial Resolution No. 122-2021-MINAM, the Document "Clean Peru: Education and communication strategy on responsible consumption, recovery and integrated management of solid waste" was approved, whose objective is to promote and strengthen good environmental practices among citizens for responsible consumption, minimization, segregation and recovery of solid waste, including plastic waste.

MINAM developed the platform: "Registry of manufacturers, importers, and distributors of regulated goods in Law No. 30884 - "REGIPLAST", being available through the link <https://app.minam.gob.pe/regiplast/> so that manufacturers, importers and distributors of single-use plastic goods can register and make the corresponding annual report.

From 2018 to 2022, MINAM implemented the "Model Eco-efficient Public Institutions Initiative" – EcoIP. In this framework, the capacities of 202 public administration entities were strengthened for the implementation of eco-efficiency measures and about measures for compliance of the provisions of Law No. 30884. 110 public institutions carried out/participated in training on responsible consumption of plastic, 102 disseminated communication material about this matter and 86 developed a directive or guideline that encourages the reduction of plastic.

On July 24, 2021, by Supreme Decree No. 016-2021-MINAM, the Provisions for the Management of Eco-efficiency in Public Administration Entities were approved, incorporating the concept of circular economy and the responsible consumption of plastic for its application. in the public sector nationwide.

October 18, 2021, by Ministerial Resolution No. 195-2021-MINAM, the Ministry of the Environment approved Four (4) "Approval Forms of execution conditions for food services with alternative household items to single-use plastic", whose purpose is the incorporation of sustainability and circular economy criteria in the execution of food services in the public sector at the national level, promoting the responsible consumption of plastic and the proper management of waste for its recovery.

Development and adoption of Peruvian technical standards through the exercise of the Secretariat of the Regulatory Technical Subcommittee (SCTN) of Eco-efficiency of the National Institute of Quality (INACAL) in charge of the General Directorate of Environmental Quality of MINAM. To date, 11 Peruvian technical standards have been developed related to plastics packaging and the environment, biodegradability, among others

Local level

"Source segregation Program" It is a technical instrument that must be prepared, approved and implemented by the provincial and district municipalities, through which, among other aspects, strategies are formulated to facilitate source segregation by generators of their jurisdictions and the design of the selective collection of usable solid waste (organic and inorganic), considering the results obtained from the Municipal Solid Waste Characterization Study (EC-RSM), as well as the definition of actions to guarantee the use of the solid waste generated in your jurisdiction.

Private sector

- There are currently 9 agreements signed between the Ministry of the Environment, the Ministry of Production, and different companies (productive, extractive or service activities), with goals related to plastics:
 - Sistema Coca Cola Perú (Coca Cola and Arca Continental Lindley),
 - Unión de Cervecerías Peruanas Backus y Johnston S.A.
 - Koplast industrial S.A.C.
 - Peruana de Moldeados S.A.C. (Pamolsa),
 - Natura Cosméticos S.A.
 - CENCOSUD S.A.
 - Embotelladora San Miguel del Sur S.A.
 - Textil el Amazonas S.A.
 - VITAPRO S.A.
- All these companies have managed to achieve 100% of their goals, and have the recognition given by the Ministry of the Environment.

International cooperation

Projects to improve and expand the integral management of solid waste in 31 municipalities.

Electronic Waste Project Latin America PREAL (GEF)

Sustainable recycling industries project phase II

Diagnostic about the Special Regime for the Management of containers and packaging is being made with the financing of international cooperation.

Project: "Support Peru in the Transition to a Circular Economy" (European Union)

Project: Circular Solutions to Plastic Pollution in Perú GEF – 08.

Project: National project to promote the minimization of plastic waste in Peru and guarantee its environmentally sound management in accordance with the Basel Convention.

- Project: United Nations Environment Program (UNEP) Inventory of Plastic Pollution Sources and National Planning

6.25.5. References and Reading Links

Ley de Gestión Integral de Residuos Sólidos, Decreto Legislativo 1278: <https://busquedas.elperuano.pe/normaslegales/decreto-legislativo-que-modifica-el-decreto-legislativo-n-1-decreto-legislativo-n-1501-1866220-2/>

Reglamento de la Ley de Gestión Integral de Residuos Sólidos: <https://busquedas.elperuano.pe/normaslegales/aprueban-reglamento-del-decreto-legislativo-n-1278-decreto-decreto-supremo-n-014-2017-minam-1599663-10/>

Ley N° 30884, <https://busquedas.elperuano.pe/normaslegales/ley-que-regula-el-plastico-de-un-solo-uso-y-los-recipientes-ley-n-30884-1724734-1/>

Proyecto de "Decreto Supremo que aprueba la Hoja de Ruta hacia una Economía Circular en los Subsectores Pesca y Acuicultura: <https://www.gob.pe/institucion/produce/normas-legales/4138213-142-2023-produce>.

Hoja de Ruta hacia una Economía Circular en el

Sector Industria: <https://busquedas.elperuano.pe/normaslegales/decreto-supremo-que-aprueba-la-hoja-de-ruta-hacia-una-econom-decreto-supremo-n-003-2020-produce-1856966-1/>

6.25.6. Contact Details: *(Please specify name and email address)*

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6.26. Solomon Islands

Key Highlights

- Environment Act 1998 & Environment Regulation 2008
- Current Review of Environment Bill 2022
- Fisheries Management Act 2017
- Shipping (Marine Pollution) Regulation 2011
- Solomon Islands Ports Act
- Solomon Islands Maritime Authority Act No.9 of 2018.
- Environmental Health Act 1980(version as at 1996)
- Forest Resources and Timber Utilization Act 1990 (version as at 1996)
- Mines and Minerals (Amendment) Act 2014
- Provincial Government Act 1997 (as at 1997)
- Customs & Excise (Import Duties) (Amendment No.2/Order 2021) RT
- National Waste Management & Pollution Control Strategy 2017-2026
- Draft National Marine Litter Action Plan developed under CLIP (Commonwealth Litter Program) in 2019
- National Ocean Policy
- National Implementation Plan on Persistent Organic Pollutants (SINIPs)_
- National Biodiversity Strategic Action Plan (NBSAP)
- National Tourism Policy
- Solomon Islands Recycling & Waste Management Association Strategic Plan 2021- 2031

6.26.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name:

National Waste Management & Pollution Control Strategy 2017-2026

Draft National Marine Litter Action Plan developed under CLIP (Commonwealth Litter Program) in 2019

National Ocean Policy

National Implementation Plan on Persistent Organic Pollutants (SINIPs)_

National Biodiversity Strategic Action Plan (NBSAP)

National Tourism Policy

Solomon Islands Recycling & Waste Management Association Strategic Plan 2021-2031

Brief description:

National Waste Management & Pollution Control Strategy 2017-2026 aligned with the Clean Pacific 2025. This Strategy addresses five main waste streams: Solid Waste, Liquid Waste, Hazardous and Chemical Waste, Health-care Waste and E-waste. The Strategy serves as a

blueprint for waste management and pollution control that captures the national priorities and targets and identifies the relevant strategies to realize the priority targets in the next decade. Under Strategic action 10.1 focus on waste and pollution in the aquatic and marine environment.

Draft National Marine Litter Action Plan developed under CLIP (Commonwealth Litter Program) was developed in 2019 but not yet finalized due to not enough funding to finalize the national document after the completion of the CLIP program. The Government through the Ministry need to review the draft document and have it aligned with the Pacific regional Marine Litter Action plan 2025

National Ocean Policy. The Solomon Islands National Ocean Policy aims to protect and increase the value of ocean resources & also the inherent value of the marine ecosystems and species upon which that wealth relies on. It recognizes the Polluter Pays Principle which states that “Those who intent to or incur harm to the ocean environment needs to be hold responsible in the full based on the calculated and intrinsic value of the ocean environment and its environmental services. There are five themes – one of the themes is “Ocean Threats” which includes marine pollution. Plastic is major contributor to marine pollution. One of the strategic actions is to develop proper sanitation and waste management systems throughout the country’s coastal catchments and shipping industry.

National Implementation Plan for Persistent Organic Pollutants under the Stockholm Convention 2018. The National Implementation Plan (NIP) is a fulfillment of the country’s obligation as stipulated under Article 7 of the Convention, which requires a party to transmit a National Implementation Plan (NIP) within two

years of the Convention entering into force. The production of the report including the plan couldn’t have been more appropriate given the country’s delayed response as obliged under Article 7. It provides baseline data for the POPs, highlights the challenges, outlines the national priorities, and establishes strategies to address them, as determined by current gaps. As a platform for sound chemical management including POPs, the NIP provides a useful tool for an integrated national chemical management framework in Solomon Islands. The NIP represents a step forward to ensuring sound chemical management and the protection of the human health and environment.

National Biodiversity Strategic Action Plan

Solomon Islands National Tourism Policy. This policy identifies 8 key policy areas One of the key policy area is transport and Infrastructure with a particular sub-section on Social Infrastructure is relevant to our discussion. Under the social Infrastructure section has five components. Two of the components of mention is “waste management” and “cleanliness” supports our proposal of single use plastic ban.

Solomon Islands Recycling & Waste Management Association Strategic Plan 2021-2031. The association is a recognized body with the following objectives under its Constitution (1) to promote appropriate and best waste management practices for the protection of Solomon Island’s Environment, (2) to work towards a ‘Clean , Green and healthy ‘ Solomon Islands by promoting and implementing Reduce, Reuse, Recycle and Return (4Rs) principles, (3) to represent the voice of Waste Management and Recycling advocates in Solomon Islands for a cleaner environment, (4) to support research and investigation for the collection and provision of waste management and recycling information and data in Solomon Islands, & (5) for the Government, development partners and other key stakeholders to fully support and recognize the association in terms of financial or political will to help promote recycling industry.

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name: Environment Act 1998

Environment Act 1998 & Environment Regulation 2008

Current Review of Environment Bill 2022

Fisheries Management Act 2017

Shipping (Marine Pollution) Regulation 2011

Solomon Islands Ports Act

Solomon Islands Maritime Authority Act No.9 of 2018.

Environmental Health Act 1980(version as at 1996)

Forest Resources and Timber Utilization Act 1990 (version as at 1996)

Mines and Minerals (Amendment) Act 2014

Provincial Government Act 1997 (as at 1997)

Customs & Excise (Import Duties) (Amendment No.2/Order 2021) RT

Brief description:

Environment Act 1998 & Environment Regulation 2008. Under Part IV of the Environment Act focuses on control of pollution which includes waste management. The current regulation does not specifically mention plastic waste management. Section 55 of the Environment Act makes provision for the Minister to make regulations, prescribing all matters that are required or permitted to be prescribed or as the Minister may consider necessary or desirable to be prescribed for generally carrying out or giving effect to this Act.

Environment Bill 2022. Currently under review and anticipated to be presented for parliament debate by end of the year (2022). This Environment Bill if passed in Parliament will repeal the current Environment Act 1998.

Fisheries Management Act 2017. This is an act to make provisions for the conservation, management, development and sustainable use of fisheries and marine resources of Solomon Islands, to repeal the Fisheries Act 1998 and to make consequential amendments to the Provincial Government Act 1997 and the Town and Country Planning Act (Cap.154). Under Section 32 of the act focuses on pollution of the fishery waters.

Shipping (Marine Pollution) Regulation 2011. The responsibility of preventing and responding to marine pollution from vessels is covered under this act under the mandate of the Solomon Islands Maritime Authority (SIMA).

Solomon Islands Ports Act. Under the jurisdiction of the Solomon Islands Ports Authority, the management of wastes at the ports is regulated by the SI Ports Authority.

Solomon Islands Maritime Authority Act No.9 of 2018. This act lays down rules for the establishment of the SI Maritime Authority as a financially self-sufficient Organisation with sufficient resources to carry out its functions, the implementation of international and regional maritime agreements and the implementation of applicable maritime laws. It also gives power to SIMA for the prevention of maritime pollution originating from vessels.

Environmental Health Act 1980(version as at 1996. Under Section 24 states wastewater flow into streets or similar areas constitutes a nuisance. Section 80 states waste discharge into a public sewer or drain is an offence. Section 94 prohibits depositing waste in water sources of urban sanitary districts.

Forest Resources and Timber Utilization Act 1990 (version as at 1996). Forest Resources and Timber Utilization (Amendment) Act 2000 Section 13(g) allows the Minister to make regulations for the disposal of waste products and the protection of the environment.

Mines and Minerals (Amendment) Act 2014. Under s 31(h)(i), applications for mining must include an environmental assessment with a detailed programme for waste disposal. Under s 80(j) the Minister may make regulations for the disposal of waste products and the protection of the environment

Provincial Government Act 1997 (as at 1997). Schedule 3, made under s 26(3), identifies waste disposal as a function of Provincial Assemblies.

Customs & Excise (Import Duties) (Amendment No.2/Order 2021). Under the Amendment of import duty rates of plastics and articles thereof. In this section VII of the First Schedule the import duty rates of tariff items listed in the Schedule are amended with a \$0.50 charged for the tax.

In preparation

Please list your country's legislation including name and brief description here:

Name:

Plastic Regulation on single-use plastic ban for Solomon Islands

Brief description:

This regulation will consider a list of single-use plastic items that are problematic wastes such as shopping bags, plastic straws, PET (<1L), Polystyrofoam takeaway containers and cups, plastic cutleries and other items to be added to the list later

Indicators

No

6.26.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Introduction of a plastic levy on imports in January 2022.

Targeted products:

The Plastics that attracts the tax are; single use plastics (shopping bags, cups, spoons plates and takeaways, Styrofoam's (cups, takeaways), PET (expansible-use for water bottles), Plastics containing PVCs, Plastics use for packaging & Drinking straws

Brief description:

Under the Customs & Excise (Import Duties) (Amendment No.2/Order

No particular change observed

Comments:

The plastic levy was recently introduced in January 2022 and a fee of \$0.50 is applied initially but they are looking at increasing the fees to \$1.00/kg on the targeted plastic products covered under this amendment no.2, Order 2021 under the customs & excise (import duties) act.

This measure does not fully address the plastic pollution

Numerical data, if any:

Customs Department have the data on the revenue collections from this plastic levy

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Development of a Plastic Regulation on single-use plastic ban to be enforced by 1st September 2023

Targeted products:

shopping bags, polystyrafoams, PET, Plastic straws, plastic disposables & cutleries, others to be later added to the list

Brief description:

The Plastic Regulation will cover plastic shopping bags, polystyrafoams, PET, Plastic straws, plastic disposables & cutleries, others to be later added to the list

In preparation

Plastic Regulation on Single-use plastic ban (e..g shopping bags, straws, PET, Polystyrafoams, cutleries)

The Plastic Regulation is still under development

No particular change observed

Comments:

The regulation is yet to be developed and expected to be in place by 1st September 2023

Actions for encouraging sustainable / circular product design

No

Regulations on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Tipping fees introduced Licensing of prescribed business

Waste Discharged license from prescribed premises

Brief description:

Tipping fees introduced. In Honiara City, the Honiara City Council have applied tipping fee for different types of wastes. This is covered under the Honiara City Council tipping fee ordinance for the landfill.

Licensing of prescribed premises. Under the Environment Act 1998, prescribed premises are required to pay for waste discharge license for disposal of waste from their prescribed premises. Compliance and enforcement is carried out by the Environment & Conservation Division and there are penalties for non-compliance.

Business License under HCC. All business in Honiara City are required to have a business license to operate in Honiara. In terms of waste management, monitoring and enforcement is carried out by the Waste Management & Control Division in collaboration with the Law enforcement department within the Honiara City Council.

We have seen a positive improvement over the last two years

Comments:

It is a requirement that all prescribed premises applied for licenses for waste discharge and must have an EMP in place. The same applies for all business in the city or provinces to have a business license for operation.

Numerical data, if any:

Honiara City Council have record of Business License and Environment & Conservation Division have record of all waste discharge license issued. Ministry of Finance also has records of revenue collection from the waste discharge license fees.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Waste discharge license from prescribed premises under the Environment Act 1998

Awareness & Education (including billboard installations in various locations, community and school programmes, radio programmes, social media platforms)

Installation of Litter Boom in Mataniko Sea front by SIPA

Provision of waste bins for domestic shipping industry

Brief description:

Waste discharge license from prescribed premises

Awareness & Education. This is conducted in schools, communities & Organisations using various media of communication such as radio programs, brochure/pamphlets, social media, etc. Corporate groups, NGOs and other stakeholders are also conducting awareness and education on proper waste management.

Installation of Litter Boom in Mataniko Sea front by Solomon Islands Ports Authority. This initiative is part of their green ports initiative and this helps to prevent waste from being washed out into the ocean.

Provision of waste bins for domestic shipping industry. The CleanOp initiative sponsored by Chengs Company previously provided waste bins for some local shipping industries for proper waste disposal.

We have seen a positive improvement over the last two years

Comments:

The waste discharge license under the Environment Act 1998 is a core program under the Environment & Conservation Division which prevents prescribed premises from illegal dumping and littering of wastes into the environment. Awareness and education on proper waste management is important to change mindset and behavioral change in the general population and businesses.

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

Yes

Names of actions:

Ocean Policy

No particular change observed

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

International Coastal Cleanup Day events

Marine Litter Training & cleanups under SWAP Project

Coastal beach-up during WED and by small organized youth groups & Organisations in Honiara and Provinces

Brief description:

ICC Day events undertaken by several community and groups in Temotu Province, Honiara, Guadalcanal, Central and Western Province and data collected during the cleanups

Sustainable Coastlines conducted the training for Solomon Islands under the support of the Sustainable Waste Actions in the Pacific Project and three major cleanups and litter audits will be undertaken under this pilot program in 3 communities in Solomon Islands

Coastal beach-up during WED and by small organized youth groups & Organisations in Honiara and Provinces. Adhoc coastal and general clean-up are often done to mark the World Environment Day, World Oceans Day & Coral Triangle Day over the past years. These clean-ups are usually organized by Government, private sector or local groups within the Honiara City or in the provinces which often sees different people from various Organisations taking part or leading out in these clean-up events.

No particular change observed

Comments:

Beach cleanup organized by government and other groups no specific data collected during the clean-up except for the volume of waste collected after the clean-up which are often recorded in event reports.

Beach clean up during the ICC day and by the SWAP Project is expected to provide data collection

Removal of plastic litter from the ocean

Yes

Names of actions:

- Installation of litter boom in front of Honiara Sea front by SIPA

Brief description:

This initiative is part of their green ports initiative and this helps to prevent waste from being washed out into the ocean

No particular change observed

Comments:

More efforts need to be done

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Pyrolysis system by Design Technology

Brief description:

With the support from Nufuel in New Zealand, the pyrolysis system was piloted and currently through the Small grants project funding from the UNDP, Design Technology centre is working with 3 Rural Training centres to install and train staff on how to operate the system.

No particular change observed

Comments:

This initiative is an opportunity and a solution for communities to venture into to properly manage wastes in their communities as most of the students enrolled in the Rural training centers comes from various communities and provinces.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Establishment of SIRWMA

Plastic Wise Gizo women's group

Strongim bisnis Gizo

Positive change for marine life

Clean Op

Extended Producer Responsibility by Solbrew

Positive Change for Marine Life doing separate household of recyclables (plastics, aluminum cans, PET)

Brief description:

Establishment of SIRWMA

The Solomon Islands Recycling & Waste Management Association was established in 2019 and launched in 2020. The association was formally established with the mission to strengthen the Private Sector's Engagement and Support in implementing appropriate and applicable waste management practices in partnership with the government and development partners.

Plastic Wise Gizo women's group

A local organized women's group based in Gizo, Western Province which aims to educate communities on waste management including turning plastic waste into creative handicrafts. Through this initiative, it has enabled the women to advocate for empowering of women to build their capacity not only on waste management but also to look at women's leadership, etc.

Strongim bisnis Gizo. Under the partnership, Strongim Bisnis aims to help Gizo Plastic Wise increase the amount of plastic collected,

6.Positive Change for Marine Life is a Non-Profit Organisation based in Gizo, Western Province of Solomon Islands. One of their proposed initiatives is to conduct a feasibility study on micro factory

No particular change observed

Comments:

This work by Positive Change for Marine Life for the micro factory is not yet implemented. Funding is sought from the Pacific Ocean Litter Project.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Inclusion of waste management in School curriculum. Waste management have been included in primary, secondary and tertiary level curriculum.

We have seen a positive improvement over the last two years

Comments:

Education and awareness covers waste management in general not specific to marine litter issue but covers improper waste disposal, its impacts, plastic pollution, etc

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Community Waste Management Workshop

Radio Awareness

Social Media posts

Training of staff from different departments

WED/WOD/CTD

Brief description:

Community Waste Management Workshop. These workshops target communities representatives to be trained and educated on waste management and other information that can be disseminated back to the community.

Radio Awareness Program. Ministry of Fisheries under the Cchange program also raised awareness on impacts of waste on marine environment and fisheries resources. Ministry of Environment also has a radio awareness program that is utilized for awareness on different environmental topics.

Social Media posts. Various groups and government departments and Organisations often disseminate and share information of events or programs through Facebook and website on activities related to waste management.

Training of staff from different departments. Staff from relevant government, communities been trained on waste management aspects that are often in the country, regionally or internationally through webinars, workshops, short and long-term trainings.

Commemoration of the annual World Environment Day /World Oceans Day/Coral Triangle Day is a platform that the ministry often utilize to raise concerns and issues related to environment in the country and global.

No particular change observed

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

Commemoration of the annual WED/WOD/CTD celebration in have been adopted in provinces

Brief description:

Commemoration of the annual WED/WOD/CTD celebration in have been adopted in provinces and some communities in the provinces as a time to raise concerns and issues.

No particular change observed

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

- Side event at UN Ocean Conference in Lisbon, Portugal

Brief description:

- Side event at UN Ocean Conference in Portugal
 - Under the UN Ocean Voluntary commitment on marine plastic pollution – SI commits to support the finalization and adoption of a legally binding document on marine plastic pollution

No particular change observed

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

- Under the R2R Project & CEFAS program, a report on microplastics was published.

Brief description:

Under the R2R Project & CEFAS, a report on microplastics published. The title of the publication is “Occurrence and abundance of *meso* and microplastics in sediment, surface waters, and marine biota from the South Pacific region”

No particular change observed

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Under the R2R project & CEFAS

Brief description:

Under the R2R project & CEFAS a monitoring of the water quality of Honiara coastal seafront was undertaken.

No particular change observed

6.26.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)
 - Limited human capacity in relevant agencies to implement and support the waste management work in the country
 - Lack of Political Will

6.26.4. Best Practices

National level

Coordination between government and other Organisations

Good communication strategy

Networking with partners

Establishment of good data/information management system on WM & PC

Local level

Western Province Environment Network collaboration between different partners at local level to achieve a common goal

Private sector

Strong partnership between different partners, government & private sector is established

Pyrolysis System piloted in 3 Rural Training Centres. The system uses PET and LDPE plastics to be incinerated to produce butane cooking gas.

International cooperation

Sharing of information between Regional Organisations and national government, vice versa.

6.26.5. References and Reading Links

Website

www.mecdm.gov.sb

www.solomonislands-data.sprep.org

<https://www.sprep.org/j-prism-2/home>

<https://www.sprep.org/pacwaste-plus>

Reports:

Occurrence and abundance of *meso* and microplastics in sediment, surface waters, and marine biota from the South Pacific region, <https://doi.org/10.1016/j.marpolbul.2020.111572>

Solomon Islands State of Environment Report 2019, <https://solomonislands-data.sprep.org/dataset/state-environment-report-2019>

Data on marine litter audits:

<https://litterintelligence.org/data/>

6.26.6. Contact Details: *(Please specify name and email address)*

- Debra Kereseke, Deputy Director Environment, Environment & Conservation Division, Ministry of Environment, Climate Change, Disaster Management & Meteorology, Email: DKereseke@mecdm.gov.sb
- Wendy Beti, Chief Environment Officer, Pollution Control and Waste Management Section, Environment and Conservation Division, Ministry of Environment, Climate Change, Disaster Management & Meteorology, Email: WBeti@mecdm.gov.sb

6.27. Spain

Key Highlights

- Marine Strategies Program of Measures on Marine Litter (2022-2027)
- Law 41/2010, 29th December, on protection of the marine environment
- Royal Decree 293/2018 on reducing the consumption of plastic bags.
- Law 7/2022 of April 8, on waste and contaminated soils for a circular economy.
- Royal Decree 646/2020 on landfill disposal of waste.
- Royal Decree 553/2020 on waste shipment within Spain.
- Law 5/2013 on integrated pollution prevention and control (incineration)
- Royal Decree 293/2018 on reducing the consumption of plastic bags
- Establishment of a technical group on marine litter (national hub) and stimulation of national discussion
- Creation of "Guardians of the Beach" program, aimed at associations, environmental Organisations, fishermen, fishing associations and other groups

6.27.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name:

Marine Strategies Program of Measures on Marine Litter (2022-2027)

Brief description:

Spain has developed 5 Marine Strategies (1 per marine subdivision) which contains a specific program of measures to address marine litter. These programmes include measures focused on land-based sources, sea-based sources, microplastics, marine litter removal and raise-awareness.

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

Law 41/2010, 29th December, on protection of the marine environment

Brief description:

This Law includes marine litter has one of the descriptors of the environmental status of our marine waters. It includes the obligation to achieve and maintain a good environmental status, which implies an assessment based on robust monitoring programmes and a program of measures each 6 years.

Indicators

Yes

Please list your indicators here:

Beach litter

Seafloor litter

Floating litter

Microplastics on beaches

Microplastics on the water surface

Microplastics on sediments

Citizen Science

Marine litter in biota (ingestion and entanglement on marine turtles)

6.27.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Law 7/2022 on waste and contaminated soils for a circular economy.

Royal Decree 293/2018 on reducing the consumption of plastic bags.

Future Royal Decree on packaging and packaging waste

Targeted products:

Beverage and food containers, cotton swabs, cutlery, plates, straws, drink stirrers, sticks destined to hold balloons, feminine hygiene products, wet wipes, tobacco products with filter, fishing gear,

Plastic bags.

Brief description:

Both laws establish a calendar to banish, reduce the use, recycle, mark, and raise awareness about these products.

We have seen a positive improvement over the last two years

Ban on use of single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

The placing on the market of the following products is prohibited:

Plastic products mentioned in section B of Annex IV.

Any plastic product made of oxo-degradable plastic.

Plastic microspheres of less than 5 millimeters added intentionally.

Targeted products:

Section B of Annex IV: Single-use plastic products subject to market introduction restrictions:

Cotton swabs, except if they fall within the scope of Royal Decree 1591/2009, of October 16, which regulates medical devices.

Cutlery (forks, knives, spoons, chopsticks).

Plates.

Straws, except if they fall within the scope of Royal Decree 1591/2009 of 16 October.

Drink stirrers.

Sticks intended to hold and be attached to balloons, with the exception of balloons for industrial and professional uses and applications that are not distributed to consumers, including the mechanisms of those sticks.

Food containers referred to in A.2 made of expanded polystyrene.

Beverage containers made of expanded polystyrene, including their lids and caps.

Beverage cups made of expanded polystyrene, including their lids and stoppers.

Comments:

In process of implementation

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

From 3 July 2024, only single-use plastic products listed in Annex IV, Part C, whose caps and closures remain attached to the container during the intended use phase of that product, may be placed on the market. For these purposes, metal caps and closures with plastic seals shall not be considered to be plastic.

The above products shall be deemed to comply with the provisions of this paragraph if they are manufactured in accordance with harmonized standards adopted at European Union level for this purpose.

From 1 January 2025, only polyethylene terephthalate bottles (hereinafter "PET bottles") referred to in section E of Annex IV, containing at least 25% recycled plastic, calculated as an average of all PET bottles placed on the market, may be placed on the market.

As from 1 January 2030, only bottles referred to in paragraph E of Annex IV containing at least 30% recycled plastic, calculated as an average of all such bottles placed on the market, may be placed on the market.

The systems set up to comply with the obligations established in the framework of extended producer responsibility for packaging and packaging waste shall establish measures to ensure compliance with these objectives, facilitating the availability of materials of sufficient quality and quantity.

Among other measures, part of the PET recovered shall be destined to the manufacture of recycled PET, in order to comply with the objectives established in this article and others that could be established in regulatory development for other packaging.

The plastic bottles referred to in paragraphs 2 and 3 may contain information on the percentage of recycled plastic contained therein.

The Commission of coordination in the matter of residues will be able to approach in the bosom of the corresponding work group, the establishment of the necessary measures for the attainment of the objectives foreseen in this article and will value to impel the development of a secondary market of recycled PET in Spain

Regulations on microplastics

Yes

Names of regulations:

Law 7/2022 of April 8, on waste and contaminated soils for a circular economy.

Brief description:

The placing on the market of the following products is prohibited:

Plastic microspheres of less than 5 millimeters added intentionally.

Government actions on microplastics

Yes

Names of actions:

Promotion of a certification scheme on preventing pellet loss in the plastic supply chan.

Brief description:

The implementation of OCS certification in Spain started in 2020, with a pilot phase during 2019. Spain is pioneer in OCS certification by an independent auditing entity (Asociación Española de Normalización y Certificación, AENOR). 28 companies are actually certified (4 raw materials and compounders + 7 transport and logistics + 17 transformers), representing 8% of the total number of companies adhering to the OCS programme in Spain (currently 350 companies). This is a voluntary initiative by the plastic industry.

The Spanish Government is promoting OCS certification through its participation in specific webinars for companies, where impacts on the marine environment and link to marine strategies is clearly explained.

Spanish Government, as part of the supervisory board of the OCS certification scheme development at the European level, in contributing to promote a homogeneous development of this scheme throughout the plastics sector.

We have seen a positive improvement over the last two years

Comments:

In 2022, the collaboration agreement between Plastics Europe Iberia and ANAIP (Spanish Association of Plastic Transformers) was renewed in order to promote the implementation of the OCS throughout the plastics value chain in Spain.

Numerical data, if any:

New 11 Spanish companies are going to obtain the OCS certificate in the first half of 2023.

100% of the Spanish companies manufacturing raw materials as members of Plastics Europe have committed to certify all their plants before the end of 2024.

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Law 7/2022 on waste and contaminated soils for a circular economy.

Several Royal Decrees for EPR:

Royal Decree 646/2020 on landfill disposal of waste.

Royal Decree 553/2020 on waste shipment within Spain.

Law 5/2013 on integrated pollution prevention and control (incineration)

Brief description:

Each of these laws establishes measures to ensure environmentally sound waste management at each step of the waste hierarchy

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Marine strategies.

Law 7/2022 on waste and contaminated soils for a circular economy.

Royal Decree 293/2018 on reducing the consumption of plastic bags

Circular Economy Plan & Strategy

Future RD on packaging and packaging waste

Brief description:

All these measures contain legal provisions to prevent that waste can eventually reach the ocean, including litter produced in both land and offshore.

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Financing of clean-up activities

Brief description:

Financing of clean-up activities (rivers, beaches, floating litter and shallow seabeds) and encourage participation in organised clean-up campaigns (linked to a harmonised citizen science data collection).

Removal of plastic litter from the ocean

Yes

Names of actions:

- Fishing for litter
- ALDFG

Brief description:

Implementation of a fishing for litter national plan. The measure includes preparatory actions such as a technical document to ensure consistency of methodologies and data collection, a national database, and demonstration pilot actions as part of LIFE INTEMARES European project. Funds are available in the framework of European Maritime and Fisheries Fund Spanish Operative Programme.

Technical guidelines for inventory, classification, assessment and controlled removal of “ghost nets”, national database (<https://www.artesperdidos.es/>) and demonstration pilot actions (<https://www.artesperdidos.es/recursos>) as part of LIFE INTEMARES European project.

We have seen a positive improvement over the last two years

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Guide of Circular Economy Best Practices

Circular Strategy and Plan

Law 7/2022 on waste and contaminated soils for a circular economy.

Royal Decree 293/2018 on reducing the consumption of plastic bags

Brief description:

Identifies examples of good practices carried out in Spain, which can be transferable and scalable to other agents. Also, RD 293/2018 states that all plastic bags given to consumers must be compostable.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Guide of Circular Economy Best Practices

Brief description:

Identifies examples of good practices carried out in Spain, which can be transferable and scalable to other agents.

Education and awareness raising

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Preparation of awareness/ communication materials

Establishment of a technical group on marine litter (national hub) and stimulation of national discussion in the form of periodic roundtables with stakeholder participation.

Creation of "Guardians of the Beach" program, aimed at associations, environmental Organisations, fishermen, fishing associations and other groups and a network of "guardians" Organisations to ensure environmental preservation of rivers and beaches and awareness to this problem at local, regional and national levels.

Additionally, some horizontal measures in the Marine Strategies may include marine litter as a subject among other marine aspects:

Awareness programs for beach tourists, nautical tourism companies, as well as fishermen and civil society in general, including schools.

Training programs for fishermen, observers on board, stranding networks personnel, and training for Public Administration managers.

Development and implementation of a curriculum related to the respect and protection of cetaceans, marine turtles and seabirds as well as marine litter in the ship's masters official courses (yacht and fishing).

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Marine Strategies monitoring programs and Monitoring programs on marine litter

Brief description:

Use of indicators (stated before) to measure and monitor marine plastic litter and microplastics amongst other type of waste

6.27.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.27.4. Best Practices

National level

Monitoring (macrolitter and microplastics) on beaches, floating litter, seabed litter, and also biota (target species differ in each marine region: in Spanish water: marine turtles + other options such as fish or mussels in study). Also citizen science protocol may be of interest.

Implementation of a non-special fee cost recovery system for waste collection from vessels in national ports (implemented since 2011).

Fishing for litter initiatives. These are being harmonised into a national umbrella (technical guidelines + national database). There are relevant individual initiatives (some of them private) with good coverage in terms of number of ports and experience, that could be shared.

ALDFG. Technical guidelines and a national database for inventory and assessment of ALDFG have been developed.

6.27.5. References and Reading Links

<https://www.miteco.gob.es/es/costas/temas/proteccion-medio-marino/basuras-marinas/default.aspx>

https://www.miteco.gob.es/es/costas/temas/proteccion-medio-marino/estrategias-marinas/eemm_2dociclo.aspx

6.27.6. Contact Details: *(Please specify name and email address)*

- **Marine Litter within Marine Strategies:** Ms. Marta Martínez-Gil Pardo de Vera. Subdirección General para la Protección del Mar. Ministry for the Ecological Transition.

buzon-proteccionmar@mapama.es; mmgil@miteco.es

- **Circular Economy national policy:** Mr. José Luis González Serrano. Sudirección General de Residuos. Ministry for the Ecological Transition.

jlgonza@miteco.es

6.28. Sri Lanka

Key Highlights

- National Action Plan on Plastic Waste Management 2021-2030
- Marine Pollution prevention Act no 35 of 2008
- Regulations No. 2034/33 effective from 01st September 2017
- Gazette No 2211/50 and dated 21 January 2021 – Plastic Material Identification standards (Codes)
- National Policy on Waste Management

6.28.1. Policy and Frameworks

National Action Plan

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

National Action Plan on Plastic Waste Management 2021-2030

Brief description:

Overall objective of the policy is enabling a healthy life and Cleaner Environment for all. National Action Plan on Plastic Waste Management 2021-2030 consists of 15 goals and Goal 05 represents focuses on Reduction of marine plastic pollution comprising macro and micro plastics flowing into ocean through land-based activities by 80% by 2030.

Preparation of Integrated Marine Litter management sectoral policy, strategy and action plan under the National Policy on Waste Management is being scheduled. This will be able to tackle the marine litter issue.

Legal Framework

Yes

If yes, list your country's legislation including name and brief description here:

Marine Pollution prevention Act no 35 of 2008 is being amended to incorporate necessary provisions to manage plastic litter and litter related issues

As 80-90% of the marine litter is generated from land based activities. All regulations related to waste management applies to this.

Regulations are available on plastic waste management.

Prohibit the manufacture of polythene or any polythene product of twenty (20) microns or below in thickness for in country use ; or (ii) the sale, offer for sale, offer free of charge, exhibition or use of polythene or any polythene product which is twenty (20) microns or below in thickness within the country : Provided that polythene or any polythene product of

twenty (20) microns or below in thickness may be permitted to be used with the prior written approval of the Authority for the purposes specified in the Schedule hereto

Regulations No. 2034/33 effective from 01st September 2017

Prohibit the manufacture of food wrappers from polythene as a raw material for in country use; and (ii) the sale, offer for sale, offer free of charge, exhibition or use of food wrappers manufactured from polythene as a raw material within the country.

Prohibit the manufacture of any bag of high density polyethylene as a raw material for in country use; and (ii) sale, offer for sale, offer free of charge, exhibition or use of any bag manufactured from high density polyethylene as a raw material within the country.

No person shall burn openly or cause to, allow or permit the open burning of refuse or other combustible matters inclusive of plastics. 3. Any person who fails to comply with the regulations above shall be liable to an offence and punishable under Section 31 of the National Environmental Act, No. 47 of 1980.

Prohibit the use of all forms of polyethylene, polypropylene, polyethylene products or polypropylene products as decoration in political, social, religious, national, cultural or any other event or occasion.

Prohibit the manufacture of food containers, plates, cups and spoons from expanded polystyrene for in country use; and (ii) the sale, offer for sale, offer free of charge, exhibition or use of food containers, plates, cups and spoons manufactured from expanded polystyrene within the country






















Regulations of 2021 On Single Use Plastics

Gazette No 2211/50 and dated 21 January 2021 – Plastic Material Identification standards (Codes)

- These Regulations may be cited as the National Environmental (Plastic Material Identification Standards) Regulations No. 01 of 2021.
 - Any manufactured plastic item shall be marked clearly in accordance with the Plastic Material Identification Standards specified in the Schedule hereto.
 - A plastic item manufactured using the material specified in Column I in the Schedule hereto, which is abbreviated in Column II, shall bear either one of the three symbol options specified in the corresponding entry in Column III of that Schedule.
 - In these regulations - “Plastic Item” means a product manufactured using polyethylene, terephthalate, high density polyethylene, low density polyethylene, polyvinyl chloride, polypropylene, polystyrene, any other similar raw material or any mixture thereof.

PLASTIC MATERIAL IDENTIFICATION STANDARDS

<i>Column I</i>	<i>Column II</i>	<i>Column III</i>		
<i>Material</i>	<i>Abbreviation of the material</i>	<i>Symbol options</i>		
		1	2	3

(1) Polyethylene terephthalate	PET or PETE			
(2) High-density polyethylene	HDPE or PE- HD			
(3) Polyvinyl chloride	PVC or V			
(4) Low-density polyethylene, Linear low-density polyethylene	LDPE or PE - LD			
(5) Polypropylene	PP			
(6) Polystyrene, expanded polystyrene, Styrofoam	PS			
(7) Other plastics, such as acrylic, nylon, polycarbonate, and multilayer combinations of different plastics	OTHER or O			

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- Gazette No 2211/51 and dated 21 January 2021 –
- with effect from March 31st, 2021, prohibit the use of- (a) Polyethylene terephthalate (PET) or polyvinyl chloride (PVC) material for packing agrochemicals used for any process, trade or industry; and
- any plastic item specified herein for any process, trade or industry:- (i) Sachets having less than or equal to a net volume of 20ml/ net weight of 20g (except for packing food and medicines).
- Inflatable toys (except balloons, balls, water floating/pool toys and water sports gear).
- Cotton buds with plastic stems (except plastic cotton buds used for medical/clinical treatment)

Indicators Yes

If yes, list your indicators here

The main indicator as per the National Action Plan is

Percentage reduction of plastics entering oceans from land

Other Indicators:

The amount plastic waste in selected shoreline stretches

Plastic waste distance ration kg/ km

Introducing indicator for floating plastic litter km / Square meter and Micro gramme/ square meter is in progress

No of beach Clean up Programmes

No of plastic traps established

No of beach caretakers recruited.

Quantity Plastic raw material imported

% of violators of the regulations and rectification of that

% of Increase in a recycling facilities

6.28.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Restrict microplastics for cosmetics etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities for rivers and coasts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Take action on fishing gear	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Target region supported by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

Yes

Names of actions:

Charge for shopping bags

Targeted products:

Shopping Bags

Brief description:

A joint Cabinet signed by Ministry of Trade and Ministry of Environment was submitted for pricing the shopping bags. But the Cabinet paper was not approved since issuing of shopping bags free was imposed for a settlement of a court case submitted by an individual based on consumer right. Consequently, The Attorney Generals Department sent their observations and agreed to solve this issue positively while addressing related legal issues arose due to another court case submitted by one of the NGOs.

Name of the Action 2

Paper straws have been introduced for certain products.

Action 3:

Prevention of small water bottle use in fishing boats(less than 1 litter) and fishery harbors

We have seen a positive improvement over the last two years

Comments:

Cabinet has directed for the observation of Attorney Generals Department.

Discussions held to withdraw the legislation that related to issuing shopping bags free of charge as a settlement for a court case submitted by one of the NGOs on waste management that includes many related actions too.

There is a positive movement in the society as some shops inform two prices for the customers in which the price of the shopping bag is higher.

With the new intervention of preventing use of small water bottles We have used this mechanism in selected fishing harbour. Significantly reduce amount of plastic water bottle litter in fishery habroure basin

Numerical data, if any:

National Plastic Waste Inventory is pending.

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Alternative products are promoted. (eg. Paper straws, Products made of reed, bamboo, etc)

Brief description:

Action has been taken to promote alternative products.

Suggested to reduce the quantity of plastics used in products

Certain products are re- designed to changed to facilitate recycling

We have seen a positive improvement over the last two years

Comments:

Cabinet decision on banning the following plastic products was made.

Straws

Cutleries including knife and fork and also spoons

Cups

Plastic garlands

String hopper trays

Accordingly, preparation of the regulations to prohibit their usage is progressing.

Importations which is the main source of the said product/materials is already banned.

Regulations on microplastics

No

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

National Policy on Waste Management

Brief description:

This is an umbrella Policy covering all types of Waste categories. Some have developed national action plans for management of certain types of waste categories.

Provision of waste reception facility at Commercial harbors and introduce regulation

Improve the facilities at fishery harbour to manage fishing vessel generated waste and introduce waste management plan requirement

We have seen a positive improvement over the last two years

Comments:

New state of the art waste disposal facilities established.

Waste to energy plant 10MW- Kerawalapitiya

Sanitary land fill – capacity 1200 Tons per day- Aravakkalu

Waste recycling improved

Material Recovery Facilities (MRF) established

Integrated Institutional setup is for implementing the waste policy is yet to be established.

Numerical data, if any:

There are around 335 waste collectors and recyclers registered under the Central Environmental Authority.

More than 30000 tons of waste oil collected. More than 500 ton of plastic waste collected after establishing the waste reception facility.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Introduce sea dumping regulation under this regulation dumping plastic waste and other materials are prohibited

Established litter traps at selected chanals to prevent litter enter to sea

Beach caretakers appointed to clean the beach daily.

Beach clean up programmes conducted.

Some stretches of the beach is being maintained by the Sri Lankan Navy & Some by private sector.

River clean up programme initiated and implemented as waste is brought to the sea by the rivers (" Surakimu Ganga Programme)

We have seen a positive improvement over the last two years

Comments:

Sea dumping regulated. Through this regulation we managed reduce the dumping waste from selected sources such hotels, and other type of industries.

Litter traps established at more than 54 small drainage and 5 middle size canals already established

- Activities on going, Private sector sponsor Beach Caretakers.

Numerical data, if any:

Beach cleanup programmes affected due to the economic crisis in the country.

Others (Please specify)

Boats: Dumping waste from boats is being controlled.

22 companies have registered under the Central Environmental Authority to collect recyclable waste items from ships

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Carry out International coastal cleanup day programme in third week of September and carry out beach cleaning in more than 100 sites

Establish beach caretakers programme to clean selected beach areas in daily basis more than 120 km were cleaned

Carry out fishing harbour cleaning program time to time

Beach caretakers clean the beach twice daily

We have seen a positive improvement over the last two years

Comments:

Last 5 years period successfully conducted ICC programme with participation of more than 100000 people each year.

120 km of beach stretch cleaned daily basis

Beach caretakers are sponsored by private sector etc.

Removal of plastic litter from the ocean

Yes

Names of actions:

Underwater cleaning programme at selected sensitive ecosystem area such coral reef

We have seen a positive improvement over the last two years

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Brief description:

Alternatives for plastics promoted.

Recycling of plastics promoted.

Biodegradable plastic & polythene not much promoted due to non adequacy of testing facilities.

Recycled products are promoted.

We have seen a positive improvement over the last two years

Comments:

Promoting low cost alternatives is challenging.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Beach caretaker programme- this programme as conducted as public private programme- required funds are provided by private companies

Establishment of litter traps- this programme also conducted as public private partnership project and private companies provided required fund

Beach cleaning programme- private companies provided fund and manpower and other support to carry out beach cleaning programme

Yarn for clothes is produced by private sector using waste plastics.

Non usable residual plastic waste used as a fuel in cement kiln

Ornaments, bricks, etc are made from recycled plastics by the private sector,

We have seen a positive improvement over the last two years

Comments:

USAID

Objective is to introduce technologies to promote alternative products for SUP

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

We have carry out sector based awareness programme to educate the relevant sectors related marine litter issues solution and their contribution

Waste management is included in the school curriculum

Environment Brigade, Environment Clubs, Environment Societies in schools conduct waste management programmes.

Many schools do not allow students to bring in single use plastic bags to school and establish plastic waste free zones

Many projects operate within the school to manage plastics, encourage recycling of plastics

Some schools do have card or bank deposit systems for providing cash for students for waste plastics through recyclers.

We have seen a positive improvement over the last two years

Comments:

Two small projects are being carried out with the financial assistance from NORAD. One of the projects focused on awareness of school children in several ways eg. Booklets, leaflets and video competetions

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

Coastal and marine environment conservation week programme

This week allocated to educate and carry out beach cleaning programme and awareness programme for different sectos

Comprehensive Communication strategy is developed for plastic waste management including MPL

Visuals developed on plastic waste management for telecasting

Awareness is created through mass media

Awareness is created through government channels , private sector, NGOs

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Yes

Names of actions:

School Marine Group Programme

Brief description:

The School marine groups were established at selected school and guidebook has been introduced including programme should be conducted in each level. School children participate class room activities and filed activities related to marine environment and marine environment protection

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL - International/Regional

Yes

Names of actions:

Development regional marine litter action plan

Brief description:

Action plan for the south Asian region seas countries has been formulated with assistance of SACEP- but not yet implemented.

We have seen a positive improvement over the last two years

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Establish marine microplastic laboratory with support of CEFAS UK

Coastal litter monitoring programme initiated in selected locations covering all coastal district.

Marine Floating plastic monitoring programme was formulated and will be implemented shortly

Project on **Marine Litter and Microplastics: Promoting the Environmentally Sound Management of Plastic Wastes and Achieving the Prevention and Minimization of the Generation of Plastic Wastes** is implemented.

Under this project plastic flows will be calculated.

We have seen a positive improvement over the last two years

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Planning initiated for programme with support of CEFA's to monitor plastic litter using OSPAR protocol

6.28.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify here:)

6.28.4. Best Practices

National level

National Action Plan Developed and implemented in collaboration with all relevant stakeholders.

Local level

Material Recovery Facilities (MRF) are established to collect plastic waste for recycling.

Private sector

Private sector has established plastic waste collection centres and recycling centres.

International cooperation

NORAD and BRSM China is supporting with two projects on plastic waste management

Project on Marine Litter and Microplastics: Promoting the Environmentally Sound Management of Plastic Wastes and Achieving the Prevention and Minimization of the Generation of Plastic Wastes

Capacity Building on Environmentally Sound Management of Single-use-Plastic and its Waste in Asia-pacific Countries

6.28.5. References and Reading Links

Published reports:

- National Policy on Waste Management
- National Action Plan on Plastic Waste Management (2021 -2030)
- Micro Plastics

As per the UN Report

The Sri Lanka authorities describe the MV X-Press Pearl as the “worst catastrophe in its maritime history” 1. It is evident that this is a complex and multi-dimensional incident encompassing a spectrum of environmental issues with potentially serious consequences over both the short and longer term. The key risks arise from:

- Bunker fuel oil spill (348 tonnes);
- Hazardous and noxious substances (of the vessels 1,486 containers, 81 were carrying dangerous goods including 25 tonnes of nitric acid, caustic sodic, methanol. In addition, there was 9,700 tonnes of potentially toxic epoxy resins on board2);
- Recovery and decommissioning of the shipwreck wreck and lost containers;
- Microplastics (nurdles or plastic pellets < 5mm). In total, there were 87 containers carrying several types of plastic pellets aboard the ship. The overall quantity of plastic pellets is estimated at around 1,680 tonnes;
- Macro plastics (5-50 mm);
- Fire residues (micro to macro);
- Assorted bulk debris (cargo, pieces of damaged containers);

6.28.6. Contact Details: *(Please specify name and email address)*

- Dr Anil Jasinghe (Secretary) / Ministry of Environment
Tel: +94 112 034 121, Fax: +94 112 879 944
- S M Werahera (Director) Environment Pollution Control & Chemicals Management –
Tel: +94 112 034 163, Fax: +94 112 879 959
- A J M Gunasekara, General Manager, Marine Environment Protection
Authority of Sri Lanka
Ajm12_2000@yahoo.com
Tel/Fax: +94 11 2554263

6.29. Singapore

Key Highlights

- National Action Strategy for Marine Litter (NASML)
- Environmental Protection and Management Act (EPMA)
- Environmental Public Health Act (EPHA) and subsidiary legislation
- Sewerage and Drainage Act
- Sewerage and Drainage (Trade Effluent) Regulations
- Prevention of Pollution of the Sea Act (PPSA)
- Resource Sustainability Act (RSA)
- Mandatory Packaging Reporting (MPR) Scheme/ Resource Sustainability Act
- Packaging Partnership Programme (PPP)
- Singapore Green Labelling Scheme (SGLS)
- Party to all six Annexes of the International Maritime Organisations's (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL)
- Chemical Recycling of Plastic Waste

6.29.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name:

National Action Strategy for Marine Litter (NASML)

Brief description:

Singapore has launched its National Action Strategy on Marine Litter in June 2022. The Strategy outlines Singapore's actions and measures to combat marine litter across six priority areas tailored to our local context:

- Reduction of land-based sources of litter
- Reduction of sea-based sources of litter
- Circular Economy approach
- Research & Development
- Maintaining and Strengthening Outreach and Stakeholder Engagement
- International Engagement and Collaboration.

The Strategy demonstrates Singapore's commitment to address marine litter domestically and contribute to international efforts to tackle this transboundary challenge. It also seeks to invigorate further efforts from all sectors of society to play their part, thus enabling a Whole-of-Nation approach to tackle marine litter.

A copy of the National Action Strategy on Marine Litter can be found at the following URL: www.mse.gov.sg/nasml

Legal Framework Yes**Please list your country's legislation including name and brief description here:**

Singapore addresses marine litter as part of a holistic approach to tackling pollution and waste. This includes legislation and regulations on pollution control and waste management, as well as an integrated solid waste management and collection system to minimise waste at source. The applicable legislation and regulations, as of October 2019, include:

- Environmental Protection and Management Act (EPMA)
- Environmental Public Health Act (EPA) and subsidiary legislation
- Sewerage and Drainage Act
- Sewerage and Drainage (Trade Effluent) Regulations
- Prevention of Pollution of the Sea Act (PPSA)
- Resource Sustainability Act (RSA)

Indicators No**6.29.2. Measures and Achievements****Please choose one to indicate whether your country implements the following measures**

Introduce Extended Producer Responsibility (EPR)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Africa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prevention and reduction of plastic waste generation

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws)

In progress

Comments:

A charge for disposable carrier bags at supermarkets will come into effect from 3 July 2023. The bag charge framework was developed after more than a year of extensive engagement and consultations with the industry and the public. This arose from a recommendation made by the Citizens' Workgroup on Reducing Excessive Consumption of Disposables, which was convened by the government from Sep 2020 to Jan 2021.

Ban on use of single-use plastic products (e.g. shopping bags, straws)

No

Comments:

We are mindful that blanket bans could have the effect of shifting consumer behaviour to other single use disposables made of other materials e.g. paper or biodegradable plastics, which have their own, or sometimes greater, environmental impact.

Shifting to alternative materials such as biodegradables also has limited benefit in Singapore's context, as we do not directly landfill our waste.

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

Mandatory Packaging Reporting (MPR) Scheme/ Resource Sustainability Act

Packaging Partnership Programme (PPP)

Singapore Green Labelling Scheme (SGLS)

Brief description:

To encourage businesses to minimise their contribution to plastic waste, Singapore's National Environment Agency (NEA) will require businesses to submit packaging data on specified packaging imported or used, and plans to reduce, reuse and/or recycle packaging under the MPR Scheme. The first reports were submitted in 1Q 2022. The MPR Scheme raises companies' awareness of the environmental impact of packaging that they supply to the market and spurs them to reduce packaging and packaging waste.

The Resource Sustainability Act also provides legislative effect to the EPR scheme for e-waste, which was implemented on 1 Jul 2021. Under the scheme, producers of electrical and electronic products are made responsible for the collection and proper treatment of their products supplied, at their end-of-life. A Producer Responsibility Scheme Operator was appointed to manage the collection and proper treatment of e-waste on behalf of the producers. Under the EPR scheme, e-waste must be sent to licensed e-waste recycling facilities for proper treatment and materials recovery. Products such as ICT equipment, large home appliances, batteries, bulbs/lamps, electric mobility devices and solar panels are regulated under the scheme.

Since 2021, the Singapore Manufacturing Federation (SMF) has partnered the NEA to implement the industry-led Packaging Partnership Programme (PPP). The PPP is a capability development programme that supports companies in their journeys towards adopting sustainable packaging waste management practices. Efforts include supporting companies in fulfilling their regulatory requirements starting with the MPR Scheme, as well as enabling the exchange of best practices in sustainable packaging waste management.

The SGLS is an environmental standard and certification mark administered by a non-governmental organisation, the Singapore Environment Council. The Scheme helps the public to identify environmentally preferred products that meet certain standards. SGLS categories that contribute to sustainable/circular product design include "Products with Recycled/Sustainable Content".

Comments:

Monitoring in progress as PPP is recently implemented

No existing data. Companies obligated under the mandatory packaging reporting will only be required to make their first submission in Q1 2022.

Regulations on microplastics

No

Government actions on microplastics

No

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

No

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

Control of waste disposal.

Anti-littering and waterways clean-up measures,

Integrated and comprehensive solid waste management and collection system

Brief description:

To address the issue of marine plastic litter and microplastics, Singapore has in place stringent legislation and regulations on pollution control and waste management and a comprehensive waste and water management system to minimise waste at source and prevent discharge of litter into the sea. The prevention and reduction of marine pollution is achieved through (i) management of pollution from land-based sources; and (ii) management of water pollution and quality in inland water bodies and coastal areas.

Singapore's approach is detailed below:

- Comprehensive waste management system
 - Control of waste disposal. Through the Environmental Protection and Management Act (EPMA) and the Environmental Public Health Act (EPHA), Singapore's National Environment Agency regulates the disposal of all types of waste in Singapore and administers strict anti-littering regulations. This includes the discharge of trade effluent, oil, chemical, sewage or other polluting matters into drains, as well as hazardous substances into inland waters and conducting regular water quality monitoring of inland water bodies and coastal areas to meet international standards
 - Anti-littering as well as waterways clean-up measures, which ensure that land-based litter, including plastic waste, that might otherwise wash into the ocean is prevented from doing so

Integrated and comprehensive solid waste management and collection system to minimise waste at source and collect all waste for proper disposal. Recyclables, which are segregated and collected separately at source, including plastics, are sorted, baled and sent for recycling. Remaining waste are all sent to Waste-to-Energy (WtE) plants for proper treatment before disposal of inert residual waste at Semakau Landfill, which is designed with impermeable geomembrane to prevent marine pollution.

We have seen a positive improvement over the last two years

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

Damming up tidal rivers to form reservoirs

Collect and treat all used water

Party to all six Annexes of the International Maritime Organisations's (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL)

Brief description:

Damming up of tidal rivers to form reservoirs as source of water supply to minimise litter from flowing out into the sea. Vertical gratings, litter traps and float booms installed where appropriate as part of the drainage network to trap debris and litter

All used water collected through sewerage network are treated at water reclamation plants (WRPs). Most plastic materials, including microplastics, are removed through current treatment processes at the WRPs.

All used water collected and treated at water reclamation plants (WRPs) to international discharge standards. Most plastic materials, including microplastics, removed through current treatment processes at the WRPs

Singapore is party to all six Annexes of the International Maritime Organisation (IMO)'s International Convention for the Prevention of Pollution from Ships (MARPOL), the main international convention covering prevention of pollution of the marine environment by ships. MARPOL Annex V in particular prohibits the discharge of garbage, including all types of plastics, into the sea

Singapore's Maritime and Port Authority (MPA)'s port inspectors patrol Singapore's port waters to ensure that ships in the Port of Singapore do not illegally discharge waste, oil, garbage and sewage

Singapore conducts inspections on both Singapore-registered and foreign-registered ships in our port to ensure that they comply with the regulations on garbage disposal into the sea and that anti-pollution measures are in place. Ships are also required (by IMO requirements) to maintain a record of their garbage and management plans for verification by Flag State Control and Port State Control inspectors

Singapore's MPA deploys five garbage collection crafts daily at scheduled timings to collect garbage from ships at the anchorages

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

No

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Beach clean-ups.

Brief description:

Recreational beaches under Singapore's National Environment Agency's purview are cleaned throughout the year with frequencies ranging from four times a week to once in two weeks depending on the public usage and accessibility of the beach. The cleaning frequency has been increased to twice a day for selected beaches during monsoon periods as more marine litter is washed ashore.

Singapore's Public Hygiene Council (PHC) also coordinates and facilitates public clean-up activities at the recreational beaches. Clean-ups are also regularly conducted by non-profit or interest groups such as, but not limited to, International Coastal Cleanup Singapore

(ICCS), Our Singapore Reefs, Little Green Men Singapore, Green Nudge, Seastainable, SG Beach Warriors, Nature Society (Singapore), Restore Ubin Mangroves and Seven Clean Seas.

PHC also has dedicated “CleanPods”, which are community-based resources equipped with metal tongs for litter picking, buckets for litter as well as garden carts for transportation of tools and disposal of trash at selected beach locations. Using the CleanPod shared resources allow organisations, schools and communities to reinforce the value of ownership for Corporate Social Responsibility (CSR) and educational opportunities. It also helped to reduce wastage of litter picking tools.

Comments:

Due to the limited number of data points for amount of flotsam, we are unable to confidently deduce a trend. More data points are required before we can see a trend. Further monitoring is in progress.

Removal of plastic litter from the ocean

Yes

Names of actions:

Dive clean-ups

Brief description:

Dive clean-ups are conducted by groups such as Our Singapore Reefs, Our Singapore Reefs is a community initiative that promotes awareness about Singapore's marine biodiversity and the impacts of marine debris through dive clean-ups and educational outreach activities.

We have seen a positive improvement over the last two years

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Zero Waste Masterplan

Chemical Recycling of Plastic Waste

Brief description:

Singapore is working towards becoming a Zero Waste Nation and has launched a Zero Waste Masterplan. The Masterplan outlines Singapore's strategies to reuse and recycle resources, turn trash into treasure, as well as produce and consume sustainably. To support our circular economy approach, we are investing in research and development and collaborating with the industry to develop and promote innovative solutions to turn our waste into resources. As part of efforts under the Zero Waste Masterplan, Singapore introduced the Mandatory Packaging Reporting (MPR) Scheme in 2021. Producers of packaged products, such as brand owners, manufacturers and importers, as well as retailers such as supermarkets, with an annual turnover of more than \$10 million will have to submit

packaging data and plans to reduce, reuse or recycle packaging. This will make companies more aware of their packaging use and encourage them to minimise waste and reduce business costs.

NEA is also studying the feasibility of both mechanical recycling and chemical recycling of plastics. In the latter, NEA is studying the development of a Plastic Recovery Facility (PRF) to sort and recover plastics from domestic waste, to be used as feedstock for downstream chemical recycling or pyrolysis plants. The output of chemical recycling plants can be used by the petrochemical sector to manufacture new chemicals and plastics as secondary material. This will help us to close the loop for plastics and bring us closer to achieving a circular economy for plastics.

We have seen a positive improvement over the last two years

Comments:

Since the launch of the Zero Waste Masterplan in 2019, policies have been further developed.

In Singapore's context, replacing conventional non-degradable single-use plastics with biodegradable alternatives is not necessarily better for the environment, as all incinerable waste, including biodegradables, are not directly landfilled but disposed of at waste-to-energy plants. A life-cycle assessment study on carrier bags and food packaging commissioned by the National Environment Agency (NEA) also found that each type of packaging material results in different environmental impact such as global warming, high water consumption or land use change. Hence, a more sustainable approach is to reduce the use of all types of disposables and promote the use of reusables where possible.

Public-private partnerships for creating and implementing innovative solution

Yes

Names of actions:

Engage domestic stakeholders to reduce the amount of solid waste, generated and disposed of, including plastics.

Brief description:

Singapore's initiatives to engage domestic stakeholders include:

- Partnering with the People, Private and Public (3P) sectors on initiatives that reduce the generation of water and land-based solid waste, including plastic waste and co-delivering these solutions with the 3P sectors where feasible. These initiatives include:
 - Convening Citizens' Workgroups on recycling right and reducing the excessive consumption of disposables, where citizens come together to learn and brainstorm innovative and contextually relevant solutions to these issues;
 - Partnering the People's Association PAssion Wave to promote Project Blue Wave in support of NEA's Clean and Green Singapore campaign. The Project aimed to bring together Singaporeans to build a sense of ownership of our environment through public education and sea- and land-based litter picking activities. The Project was also done in collaboration with The Plastic Project, a social enterprise which upcycles marine litter into useful daily products.
- Since 2021, the Singapore Manufacturing Federation (SMF) has partnered the NEA to implement the industry-led Packaging Partnership Programme (PPP). The PPP is a capability development programme that supports companies in their journeys

towards adopting sustainable packaging waste management practices. Efforts include supporting companies in fulfilling their regulatory requirements starting with the MPR Scheme, as well as enabling the exchange of best practices in sustainable packaging waste management. Prior to the PPP, there was the Singapore Packaging Agreement, a voluntary agreement undertaken by government, industry and non-governmental organisations to reduce packaging waste from 2007 to 2020.

- National Recycling Programme, in which recycling bins are provided at every HDB block, landed property, opt-in condominium, and various trade premises all over Singapore to serve as convenient means for households to recycle, thereby reducing the amount of plastic waste being sent for disposal. To encourage households to build a habit of recycling at home, NEA also commenced a nationwide distribution of recycling boxes (Bloobox) to all households starting from March 2023.

No particular change observed

Comments:

The PPP has been positively received by industry since its inception, with over 1100 distinct companies participating in its capability development activities to date.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

Nationwide “Say YES to Waste Less” campaign which is aimed at influencing the public to reduce the use of disposables

Working with environment groups such as Zero Waste SG, the Public Hygiene Council (PHC), International Coastal Cleanup Singapore (ICCS) and the Waterways Watch Society (WWS) to foster shared ownership in keeping the environment clean and minimising waste. For example, ICCS organises clean-up initiatives to engender ownership among youths and other members of the public, and Zero Waste SG launched a Bring Your Own (BYO) campaign that provides educational tips and engage retails partners to provide incentives to encourage consumers to use their own reusable containers, bottles and bags leading to reduction in plastic waste

Singapore’s MPA had organised maritime environmental outreach programmes from 2019 to 2021, including talks on marine conservation, underwater clean-up, and online content such as quizzes, animation videos and tutorials, to raise awareness on the importance of protecting the marine environment.

NEA works with the Ministry of Education to include sustainability knowledge and activities in the school curriculum, covering topics such as anti-littering and solid waste management.

We have seen a positive improvement over the last two years

Comments:

Since the “Say YES to Waste Less” campaign was launched in 2019, the number of retail partners have increased from 59 to 169 organisations in 2021. Collectively, they cover nearly 3,000 retail outlets in Singapore. They have put in place different measures to encourage consumers to reduce their consumption of single-use products particularly carrier bags,

bottles and containers, such as through incentivization or reminding customers to opt out of disposables.

To educate and encourage the public to reduce waste and BYO, educational content was shared on out of home, social and digital media channels. Outreach and engagement activities was also conducted amongst the community and in schools.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

See 3.4.2 and 3.5.1 above for more details.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL - International/Regional

No

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Extension of additional membrane bioreactor technology systems at water reclamation plans planned to further reduce the amount of microplastics discharged into the sea

Marine debris research was done to establish a baseline for marine debris on Singapore's shores, and set the stage for an integrated, citizen-science programme to collect and share information for use by stakeholders and the public

A marine litter and microplastics consultancy study is currently ongoing to provide a better understanding of the levels of marine litter and microplastics in Singapore's inland waterways, coastal waters, and recreational beaches.

Brief description:

On (b), the marine debris research project was done by Singapore's National Parks Board (NParks) and the National University of Singapore (NUS). The study, which started in 2016, provided baseline data on marine debris on Singapore's shores. The project concluded successfully on 15 Jan 2021.

On (c), the marine litter and microplastics consultancy study conducted by Singapore's National Environment Agency (NEA) commenced in 2021 and is expected to be completed in end 2023.

No particular change observed

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

Regional Training Programmes

Capacity Building Assistance

Adoption of regional instruments addressing marine debris

Active participation at regional marine litter initiatives.

Brief description:

Specifically, under SDG14.1, Singapore conducted the following technical assistance training programmes and initiatives to enhance the capabilities:

Oct 2017 and Mar 2019 - Regional Training Programme on Waste Management and Reduction of Marine Litter as part of the Singapore-Norway Third Country Training Programme (TCTP).

Jan 2019 - Singapore's National Environment Agency (NEA) conducted the Singapore-UAE capacity building workshops on integrated waste management as a means to reduce marine litter.

Nov 2020 - NEA organised a Virtual Urban Solid Waste Management Training Programme for ASEAN Member States and provided senior government officials with a holistic understanding and overview of the conceptual frameworks in urban solid waste management.

Mar 2021 – NEA partnered Japan under the Japan-Singapore Partnership Programme for the 21st Century (JSPP21) to conduct a Management of Waste and Reduction of Marine Litter for government officials from Southeast Asia, South Asia and the Pacific.

Sep 2021 – NEA and the United States jointly organised a workshop on 'Addressing Plastic Pollution through Integrated Waste Management Strategies and Circular Economy' under the auspices of the Singapore - United States TCTP for ASEAN government officials.

Jan 2021, Feb 2022, Mar 2023 – NEA conducted the SCPTA training programme on "Sustainable Waste Management and Smart Urbanisation" under MSE's Climate Action Package (CAP) initiative. The course shares Singapore's multi-agency engagement in formulating and implementing nature-based solutions (NBS) and closing the waste loop to enhance urban resilience in the face of climate change challenges.

Feb 2022 – NEA co-organised the East Asia Summit (EAS) Workshop on Marine Plastic Debris with Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) and India's National Centre for Coastal Research (NCCR). The Workshop shared the latest research, best practices, and technology in addressing marine plastic debris. As a follow-up, an EAS Hackathon on Combatting Marine Plastic was held in Indonesia in Dec 2022. The Hackathon was also co-organised by Australia, India, and Singapore with support from the Asia Foundation, ASEAN Foundation, and CSIRO.

Jan 2023, Mar 2023 – NEA organised the training programme on "Sustainable Waste Management and Smart Urbanisation" under MFA's Initiative for ASEAN Integration (IAI) framework for Cambodia, Myanmar and Vietnam.

Organising capacity building and sharing with other countries on the implementation of relevant international instruments for the prevention of pollution from ships, such as the IMO's MARPOL. Through the Singapore-IMO TCTP, Singapore's MPA provided trainers to support IMO's training for the National Workshop on MARPOL Annex V and Port Reception Facilities in the Philippines from 23 – 25 October 2019. Since the onset of the Singapore-

IMO TCTP, Singapore has provided technical sharing with over 2,100 participants from over 90 countries, from Africa, the Americas, Asia, Caribbean, Eastern Europe, Middle-East and the Pacific Islands.

Adoption of the Bangkok Declaration on Combating Marine Debris and the ASEAN Framework of Action on Marine Debris, alongside other ASEAN member states, to protect the marine environment and strengthen regional cooperation on marine debris issues.

Adoption of the ASEAN Regional Action Plan (RAP) on Combating Marine Debris, alongside other ASEAN member states, outlining regional initiatives that will enhance the region's capacities to address marine debris pollution through both upstream and downstream measures.

Active participation in regional marine litter initiatives and workshops organised by the Coordinating Body on the Seas of East Asia (COBSEA) and Partnerships in Environmental Management of the Seas of East Asia (PEMSEA).

6.29.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development
- Project delays due to COVID-19
- Others (Please specify)

6.29.4. Best Practices

National level

Comprehensive waste management system:

Having a comprehensive and integrated solid waste management and collection system helps to minimise waste at source, reuse and recycle waste, and regulate waste collection and disposal so that waste will not be washed into the marine environment. With a National Recycling Programme and regulations, recycling bins and a collection system are provided for all residents.

The Zero Waste Masterplan and the Singapore Green Plan 2030 will guide Singapore's efforts towards becoming a Zero Waste Nation.

Related URL:

<https://towardszerowaste.sg/zero-waste-masterplan/> and <https://greenplan.gov.sg/>

To manage the increase in waste, Singapore will continue with its ongoing campaigns and initiatives e.g. Extended Producer Responsibility (EPR) scheme for e-waste (implemented on 1 Jul 2021) and the Mandatory Packaging Reporting (MPR) scheme for packaging waste management. Singapore will also be rolling out new initiatives such as the beverage container return scheme which will lay the foundation for an EPR framework for packaging waste management.

More details can be found at: [https://www.nea.gov.sg/our-services/waste-management/3r-programmes-and-resources/e-waste-management/extended-producer-responsibility-\(epr\)-system-for-e-waste-management-system](https://www.nea.gov.sg/our-services/waste-management/3r-programmes-and-resources/e-waste-management/extended-producer-responsibility-(epr)-system-for-e-waste-management-system)

Prevention of littering, illegal dumping, release of waste into the ocean:

Singapore has a routine cleaning regime put in place for all inland waterways to trap and remove land-based litter and flotsam. Damming up of tidal rivers to form reservoirs as source of water supply has also minimised litter from flowing out into the sea. Singapore also has a strict anti-littering enforcement regime aimed at deterring littering.

Local level

As above.

Private sector

Cooperation with stakeholders:

Singapore works with consumers, food and beverage establishments, supermarkets, and hotels to reduce the use of disposables and encourage consumers to bring reusables and decline disposables such as single-use bags or takeaway containers and cups.

International cooperation

Singapore actively participates in regional and global marine litter platforms under ASEAN and the UN. An example is our participation in the intergovernmental negotiating committee at the United Nations Environment Assembly (UNEA) to develop a legally binding instrument on plastic pollution, including the marine environment. We also continue to actively participate in regional marine litter initiatives organized by the Coordinating Body on the Seas of East Asia (COBSEA) and Partnerships in Environmental Management of the Seas of East Asia (PEMSEA).

6.29.5. References and Reading Links

Singapore's Zero Waste Masterplan: <https://towardszerowaste.sg/zero-waste-masterplan/>

Singapore Green Plan 2030: <https://greenplan.gov.sg/>

Singapore's NASML: <https://mse.gov.sg/nasml>

6.29.6. Contact Details: *(Please specify name and email address)*

6.30. United Arab Emirates

Key Highlights

- The UAE Federal Law No. 24 of 1999 on the Protection and Development of the Environment
- Clean up UAE (by Emirates Environmental Group)
- Clean-Up Arabia campaign (by Emirates Diving Association)
- Clean-Up the Gulf (by Borouj)
- Clean-up Campaigns organized by federal government, local governments, environmental entities, NGOs, private sectors, and public volunteers
- Advanced and Innovative Clean up Campaign (drone, marine scraper, etc.)
- Abu Dhabi Emirate Single Use Plastic Policy
- Federal Law (No. 24 /1999)
- Ministry of Climate Change and Environment, Coalition Circle Pledge to Transform Plastic Recycling Model in Abu Dhabi
- UAE's engagement in international/regional level actions on Marine Plastic Litter
- Federal Law (No. 12/2018) for the Integrated Waste Management
- Cabinet Resolution No. 18 of 2012 regarding the application of administrative penalties on the violators of living aquatic resources and fisheries
- Executive Council Resolution No. (52) of 2022 Concerning Reduction of the Use of Single-use Bags in the Emirate of Dubai
- Ministerial Resolution No.380 of 2022 regarding regulation of the use of single-use products in the country's markets

6.30.1. Policy and Frameworks

National Action Plan

Yes

Please provide the name of your action plan or strategy with a brief description here:

Name:

The national agenda for the integrated waste management

Brief description:

The national agenda for the integrated waste management has been prepared to reflect the commitment of all partners in the UAE to protect the environment from the effects of waste management activities, improve waste services according to the waste management hierarchy, and promote the circular economy, through a vision which is (Integrated waste management for a sustainable quality of life) and mission which is (toward adopting circular economy approach to protect the environment and enhance economic value of implementing the integrated waste management programs).

Legal Framework

Yes

Please list your country's legislation including name and brief description here:

Name:

- Federal Law (No. 24 /1999)
- Federal Law (No. 12/2018) for the Integrated Waste Management
- Cabinet Resolution No. 18 of 2012

Brief description:

Federal Law (No. 24 /1999) on the Protection and Development of the Environment: The Federal Law No. 24 of 1999 prohibits any intentional disposal of pollutants or wastes from ships, aircraft, or any other means into the marine environment and any deliberate dumping from ships or industrial installations or other means into the marine environment.

Federal Law (No. 12/2018) on Integrated waste management: Promotes the reduction of waste generation and encourages the exchange and reuse of waste to achieve a circular economy. Organizes waste management across the emirates to foster the use of best practices and most suitable technologies.

Cabinet Resolution No. 18 of 2012 regarding the application of administrative penalties on the violators of living aquatic resources and fisheries: The Cabinet Resolution No. 18-2012, covers the administrative sanctions, penalties, and fines that regulate activities related to the fishing industry. The Ministry of Climate Change and Environment sends a notification to the fishermen caught polluting the Marine environment (by disposing of plastic bags, fishing gear, and fish waste (dead fish, sharks, and whales). If this offense is repeated, the Ministry is imposing a fine of 1000 AED. If this offense is again repeated, the ministry has the right to suspend the issued boat license for a month.

Indicators

Under Development

Please list your indicators here:

The UAE is part of different programs, which provide resources and guidance on monitoring and managing marine debris. These programs include a data collection framework for assessing the impacts of marine debris on the environment, wildlife, and human health. Such as UAE-IAEA Regional Technical Cooperation Programmes 2022-2024, project "Monitoring the Marine Environment for Enhanced Understanding of the Abundance and Impact of Marine Plastic Pollution"

6.30.2. Measures and Achievements

Please choose one to indicate whether your country implements the following measures

Prevention and reduction of plastic waste generation

Introduce Extended Producer Responsibility (EPR)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reduce single-use plastic (shopping bags, straws etc.) by regulations or voluntary measures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Steps taken/ to be taken towards restricting microplastics in personal care products	<input type="checkbox"/> Yes <input type="checkbox"/> No
Improve waste management recycling system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any human-centric, collective efforts/ actions/ practices for sustainable MPL management	<input type="checkbox"/> Yes <input type="checkbox"/> No
Conduct clean-up activities in rivers/ wetlands/ beaches/ coasts/ coral reefs/ sea floor, involving local communities involving local communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Taken/to be taken National Level Action and/or Community Level Action on Clean sea initiatives including ghost net retrieval, ocean-bound plastics etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Created/creating a value Chain opportunity for abandoned, lost and discarded fishing gear (ALDFG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Financial incentives for fishers to promote the collection of end-of-life fishing gears	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Encourage/ Incentivize action by private sector companies to reduce/ sustainably manage their plastic waste (e.g., Fishing Gear) through policies/ regulations (e.g., Extended Producer Responsibility)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you have/are you building/ are you promoting technology based plastic waste re-use, recycling and recovery opportunities	<input type="checkbox"/> Yes <input type="checkbox"/> No
Install capturing trap/filter on drainage/river	<input type="checkbox"/> Yes <input type="checkbox"/> No
Promote innovative solutions (e.g., upcycling fishing equipment, Creating plastic circular economy etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Boost multi-stakeholder involvement and awareness-raising	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Share scientific information and knowledge: R&D and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Participate in international cooperation through international Organisations, multi-national groups, etc.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: South, Central and Southeast Asia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Support target region by your international cooperation initiatives/projects: Africa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Support target region by your international cooperation initiatives/projects: Latin America	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Levy of charges/ taxes for single-use plastic products (e.g. shopping bags, straws) YesNames of actions:

Executive Council Resolution No. (52) of 2022 Concerning Reduction of the Use of Single-use Bags in the Emirate of Dubai

Targeted products:

Single-use bags

Brief description:

The resolution is imposing a tariff of 25 files (AED 0.25) on single-use bags at purchase. The policy came into effect on July 1, 2022, in all stores operating in Dubai including restaurants, pharmacies, and e-commerce deliveries.

This Resolution aims to: 1. protect the local natural environment and biological and animal wealth; 2. encourage community members to adopt sustainable and environment-friendly behaviours; and 3. encourage the private sector and the local market to provide sustainable alternatives to

Single-use Bags, in line with the principles of circular economy aimed at reusing materials and products in the local economy in a sustainable manner.

Ban on use of single-use plastic products (e.g. shopping bags, straws) YesNames of actions:

Ministerial Resolution No.380 of 2022 regarding regulation of the use of single-use products in the country's markets

Targeted products:

Single-use plastic shopping bags

single plastic products, such as soft drink cups and caps, cutlery (spoons, forks, knives, chopsticks, plates, straws, stirrers, food containers and boxes made of Styrofoam)

Brief description:

The Resolution seeks to curb the consumption of plastic bags and regulate the production, circulation and use of single-use products. It prohibits the import, production or circulation of single-use plastic shopping bags as of January 1, 2024 across the country.

This includes biodegradable plastic bags. Furthermore, it prohibits the import, production or circulation of single-use bags, regardless of the material used in their manufacturing as of January 1, 2024.

In accordance with the Resolution, import, production, or circulation of single plastic products, such as soft drink cups and caps, cutlery (spoons, forks, knives, chopsticks,

plates, straws, stirrers, food containers and boxes made of Styrofoam) will be banned in the UAE as of January 1, 2026

Actions for encouraging sustainable / circular product design

Yes

Names of actions:

The UAE has taken several actions to encourage sustainable and circular product design, which aims to reduce waste and minimize the environmental impact of products throughout their lifecycle.

Regulations on microplastics

In preparation

Government actions on microplastics

In preparation

Community actions on microplastics including individual and wider stakeholder involvement (e.g. businesses, coastal community etc.)

In preparation

Environmentally sound waste management

Enforcement of proper waste management system

Yes

Names of actions:

The Ministry of Climate Change and Environment is working with its partners through the National Agenda for waste management to reduce the circulation of single-use items.

Brief description:

Prepare, enforce and measure a federal system (legislation, guides, and awareness programs) to reduce the circulation of specific single-use products, including plastic, through mechanisms for banning use, promoting alternatives and imposing fees in the country.

Prevention of littering, illegal dumping and unintentional leakage of waste into the ocean

Yes

Names of actions:

The UAE Federal Law No. 24 of 1999 on the Protection and Development of the Environment

Brief description:

The UAE Federal Law No. 24 of 1999 on the Protection and Development of the Environment prohibits the following:

Any intentional disposal of pollutants or wastes from ships, aircraft or any other means into the marine environment

Any deliberate dumping from ships or industrial installations or other means into the marine environment.

Names of actions:

Cabinet Resolution No. 18 of 2012 regarding the application of administrative penalties on the violators of living aquatic resources and fisheries

Brief description:

The Cabinet Resolution No. 18-2012, covers the administrative sanctions, penalties and fines that regulate activities related to the fishing industry. The Ministry of Climate Change and Environment send a notification to the fishermen caught polluting the Marine environment (by disposing plastic bags, fishing gears, fish waste (dead fish, sharks and whales). If this offense is repeated, the Ministry is imposing the fine of 1000 AED. If this offense is again repeated, the ministry has the right to suspend the issued boat license for a month.

**Are linkages between marine litter and blue economy being studied by your country?
Has your country taken any policy/ legal measures to address these linkages?**

In progress

Others (Please specify)

Cleanup of marine plastic litter

Collection of scattered waste on beach

Yes

Names of actions:

Clean-up Campaigns organized by federal, local entities, NGOs, private sectors, and public volunteers

Clean-Up Arabia campaign (by Emirates Diving Association)

Clean-Up the Gulf (by Borouj)

And many others.

Brief description:

Clean Up Campaigns (beach, ports, islands, coastal habitats, etc.)

We have seen a positive improvement over the last two years

Removal of plastic litter from the ocean

Yes

Names of actions:

Clean-up Campaigns organized by the Ministry of Climate Change and Environment with federal, local entities, NGOs, private sectors, and public

Clean-Up Arabia campaign (by the EDA)

Advanced and Innovative Clean up Campaign (drone, marine scraper, etc.)

Brief description:

Clean-up campaigns (UAE's dive sites, sea surface, Marine Habitats, creeks, canals, etc.)

Promotion of innovative solutions

Policy actions for encouraging plastic alternatives (e.g. biodegradable plastics, circular product design – including use of recycled materials or closed-loop recycling)

Yes

Names of actions:

Abu Dhabi Emirate Single Use Plastic Policy

Ministry of Climate Change and Environment, Coalition Circle Pledge to Transform Plastic Recycling Model in Abu Dhabi

Brief description:

Abu Dhabi Emirate Single Use Plastic Policy: Policy to reduce the amount of single-use plastic material in Abu Dhabi and mitigate its harmful effects

At the national level, the Ministry of Climate Change and Environment signed a pledge with the Coalition of Innovation in Recycling towards a Closed Loop Economy comprising government, NGOs and global and local companies has been launched to tackle the issue of packaging waste pollution by improving the collection and recycling of packaging. The overall aim is to test the economic and environmental impact of a plastic circular economy and accelerate sustainability solutions for an optimized waste management infrastructure.

Education and awareness raising

Education system and/or curriculum for encouraging public awareness on MPL issues

Yes

If yes, give a brief description of your efforts related to education:

The UAE is taking significant steps to educate marine plastic litter issues and promote sustainable practices. By incorporating environmental education into the curriculum, organizing awareness campaigns, and promoting public engagement, through events such as workshops, seminars, and exhibitions. These events provide opportunities for the public to learn about plastic pollution and how to take action to reduce it.

Awareness-raising campaigns related to MPL – National

Yes

Names of actions:

The UAE government has launched several awareness campaigns to educate the public about the harmful effects of plastic pollution and how to reduce plastic consumption and organizes regular clean-up campaigns to remove plastic waste from beaches, sea, and other areas.

We have seen a positive improvement over the last two years

Awareness-raising campaigns related to MPL – Local

Yes

Awareness-raising campaigns related to MPL - International/Regional

Yes

Monitoring & Scientific research on marine plastic litter

Actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

A study program to qualitatively & quantitatively assess plastic in marine environment

Brief description:

A study program to qualitatively & quantitatively assess floating micro plastics from sea water and plastic litter on beaches and beach sediment.

Engagement in international/regional level actions for encouraging monitoring / scientific research on plastic flows and ocean surface microplastics

Yes

Names of actions:

UAE's engagement in international/regional level actions on Marine Plastic Litter

Brief description:

The UAE is engaged in many actions, through its membership with several international and regional environmental conventions and agreements such as UN, UNEP, UNESCO, G20, IMO, IORA ROPME, GCC, Global Ocean Alliance, and others

6.30.3. Challenges

Check the challenges that your country has faced:

- Recycling system improvement
- Proper waste management system (including lack of local capacity)
- Data collection related to waste in general
- Data collection related to marine plastic litter
- Lack of awareness among citizens, business, local governments
- Lack of financial incentives for waste treatment in general
- Lack of financial incentives for technology development

- Project delays due to COVID-19
- Others (Please specify)

6.30.4. Best Practices

National level

The UAE has developed a Federal Law (No. 24 /1999) on the Protection and Development of the Environment. This Law aims to achieve the protection and conservation of the quality and natural balance of the environment, control of all forms of pollution, and conservations of natural resources. The Federal Law No. 24 of 1999 prohibits any intentional disposal of pollutants or wastes from ships, aircraft, or any other means into the marine environment and any deliberate dumping from ships or industrial installations or other means into the marine environment. This Law contributes to the SDG target Marine Pollution 14.1, with the aim to prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution by 2025.

The Federal Law (No. 12/2018) aims to regulate the process of Waste Management (including marine waste) and unify the mechanisms and methods of safe disposal thereof, through the application of best practices and techniques available, to protect the Environment and minimize harm to human health.

At the national level, the Ministry of Climate Change and Environment signed a pledge with the Coalition of Innovation in Recycling towards a Closed Loop Economy comprising government, NGOs and global and local companies has been launched to tackle the issue of packaging waste pollution by improving the collection and recycling of packaging. The overall aim is to test the economic and environmental impact of a plastic circular economy and accelerate sustainability solutions for an optimized waste management infrastructure

Local level

Abu Dhabi Emirate Single Use Plastic Policy: Policy to reduce the amount of single-use plastic material in Abu Dhabi and mitigate its harmful effects

Private sector

CIRCULAR PACKAGING ASSOCIATION, a public-private partnership across the packaging value chain, members of the Circular Packaging Association come from leading companies across different sectors including BASF; Borouge; Dow; McDonalds UAE; Majid Al Futtaim; Nestle; PepsiCo.; Procter & Gamble; The Coca-Cola Company, Middle East; The Agthia Group; Tetra Pak and Unilever. Participating Not-for-Profit associations and NGOs include the Gulf Petrochemicals and Chemicals Association (GPCA) and Emirates Nature – WWF.

The Circular Packaging Association is the result of work initiated in 2019 by founding members of the CIRCLE Coalition for innovation in recycling towards a circular economy. CIRCLE was formalized under the sponsorship of the UAE Ministry of Climate Change and Environment via the signing of a Memorandum of Understanding to establish a circular economy for packaging across the GCC. In 2019, the members of CIRCLE funded a study to investigate the barriers and enablers of a circular economy for post-consumer packaging in the UAE.

International cooperation

As of part of the UAE's commitment to protect the coastal and marine environment from different threats such as the marine pollution and to address the global environmental challenges and issues, the UAE has signed and ratified many international and regional environmental conventions and agreements such as UN, UNEP, UNESCO, G20, IMO, IORA ROPME, GCC, Global Ocean Alliance, and many others.

6.30.5. References and Reading Links

6.30.6. Contact Details: *(Please specify name and email address)*

- Othaibah Saeed Alqaydi
- Email: osalqaydi@moccae.gov.ae



6.31. Asian Development bank (ADB)

Key Highlights

- [Healthy Oceans Action Plan includes ADB's](#)
- Tested the community-based SWM systems in Pakistan and Philippines
- ADB conducted the on-line SWM training with IGES in November 2022
- Awarded \$450,000 grant to Alner a Jakarta, Indonesia based startup, to develop a deposit-based reuse system for reusable packages for fast moving consumer goods. FMCG.

6.31.1. Action Framework

Action Plan

Do you have an action plan or strategy on MPL as an Organisation?

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

Action Plan on Healthy Oceans and Sustainable Blue Economies (Healthy Oceans Action Plan)

Brief description:

The Healthy Oceans Action Plan includes ADB's flagship program for addressing marine plastic litter, Circular Economy for Plastic-Free Oceans. The program aims to help developing member countries deliver their existing commitments to reduce marine plastic pollution and address future plastic reduction opportunities under the planned global plastics treaty. Key features of the program include support for: (i) policy development; (ii) national partnerships and forums; (iii) multistakeholder city action planning; (iv) community demonstration projects with a strong focus on high-level technology solutions, community and youth engagement, and behavior change; and (iv) awareness and capacity development programs.

Indicators

No

6.31.2. Measures & Achievements

Please indicate by checking the boxes below which marine plastic litter-related initiatives are implemented by your Organisation, and provide some information as to their progress and achievements.

Technology development for plastic alternatives (e.g. biodegradable plastics)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Regional TA on Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific - Prioritizing and Implementing Actions to Reduce Marine Plastic Pollution (Subproject 2) is supporting the preparation of a cost-benefit and market analysis study of Thailand's bioplastics value chain. The study looks at several different bioplastic polymers used in or with potential for scaleup in Thailand and ASEAN.

Sustainable and circular product design (e.g. use of recycled materials)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Regional TA on Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific - Prioritizing and Implementing Actions to Reduce Marine Plastic Pollution (Subproject 2) is supporting the development of a design guide for circular plastic packaging and recommendations for national policy and regulatory reform to improve plastic waste management in Viet Nam.

Sustainable and circular business model creation (e.g. servitization of products)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

In 2021, ADB awarded a \$450,000 grant to Alner (formerly Koinpack), a Jakarta, Indonesia based startup, to develop a deposit-based reuse system for reusable packages for fast moving consumer goods.

Proper waste management

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

ADB (UCCRTF) tested the community-based SWM systems in Pakistan and Philippines, and presented at the CLP Peer-to-Peer Learning Event in October 2022.

ADB had conducted an analytical study with budget of USD 150K summarized ADB's MSW commitment, Sri Lanka and Cambodia are selected for country assessment.

ADB had conducted the on-line SWM training with IGES in November 2022 for staff.

Awareness-raising

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Cluster TA on Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific supports regional and country-level knowledge-sharing and capacity-building on reducing marine plastic litter and promoting a circular plastics economy. Awareness-raising activities primarily target participating countries (Indonesia, Philippines, Sri Lanka, Thailand, Viet Nam) but also benefit Asia and the Pacific more broadly.

Technology development

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Regional TA on Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific - Prioritizing and Implementing Actions to Reduce Marine Plastic Pollution (Subproject 2) is supporting activities focusing on how to enhance the plastic waste value chain with digital solutions, including pilots of digital applications in Indonesia and Viet Nam and development of an open data platform.

6.31.3. Addressing common challenges for MPL:

Please see below the top eleven challenges in implementing MPL actions, reported by respondent countries in our report last year.

Does your Organisation have any activities to address these challenges? Or are you planning any actions in the future? If yes, please provide a brief description

Data collection related to marine plastic litter

Regional TA on Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific - Prioritizing and Implementing Actions to Reduce Marine Plastic Pollution (Subproject 2) is supporting data collection on solid waste management systems and infrastructure, plastic waste management and recycling systems, the informal sector, and community behavior as part of the development of city action plans in 3 cities in Indonesia, the Philippines, and Viet Nam.

Recycling system improvement

In 2020, ADB signed its first non-sovereign Blue Loan, with a \$100 million financing package for Indorama Ventures Limited to boost its PET recycling capacity in Indonesia, India, the Philippines, and Thailand.

Lack of viable circular economy business models

In 2021, ADB awarded a grant to Alner (formerly Koinpack), a Jakarta, Indonesia based startup, to develop a deposit-based reuse system for reusable packages for fast moving consumer goods.

Lack of financial incentives for waste treatment in general

ADB has developed innovative financing mechanisms to catalyze financing for blue investments, including investments to reduce marine plastic litter and enable circularity. To mobilize financing for future investment opportunities in Southeast Asia, ADB has launched a subregional initiative called the Blue Southeast Asia (SEA) Finance Hub, which aims to develop bankable blue projects across ASEAN and is hosted in Indonesia. Likewise, ADB also launched the Blue Pacific Finance Hub to develop blue projects benefit Pacific island countries.

Lack of financial/ tax incentives for technology development

Lack of awareness among citizen, business, local government

Proper waste management system (including lack of local capacity)

Sri Lanka and Cambodia are selected for country assessment, and findings and recommendation will be presented for the development of sector roadmap in the country.

ADB will organize F2F SWM training together with ADBI in Japan Sep 2023 for DMCs officers from 10 countries and ADB HQ/RM staff, include lecture and visit to SWM facility. The JFJCM team are invited to present the new program to support DMCs SWM sector.

Learning opportunities on GHG reduction from SWM and capacity building are being explored with USEPA, City of Fukuoka, IGES & JICA, with potential support from JFJCM.

- Project delays due to COVID-19
- Data collection related to waste in general
- Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter

6.31.4. Further information:

(Provide further information you wish to share in the report, such as the link to your website, name of recently published reports and online materials and their URLs, if any)

Webpage for Cluster TA on Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific - <https://www.adb.org/projects/53068-001/main>

6.31.5. Contact details:

(Specify the person in charge's name and email address: this information will not be published in the report)

James Baker, Senior Circular Economy Specialist (Plastic Wastes), Environment Thematic Group, Sustainable Development and Climate Change Department

6.32. Economic Research Institute for ASEAN and East Asia

Key Highlights

- Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD)
- Technical Guidelines for Prevention of Plastics and Resin Pellets Leakage from Factories
- Private Sector Platform (PSP) : An online information sharing platform hosted on the Regional Knowledge Centre

6.32.1. Action Framework

Action Plan / Strategy of Entire Organisation

Do you have an action plan or strategy on MPL as an Organisation?

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

- Name:
Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD)
- Brief description:

With main support from Government of Japan, ERIA established the Regional Knowledge Centre of Marine Plastic Debris in October 2019 to support the ASEAN+3 region in its fight against marine plastic pollution. The goals of the Regional Knowledge Centre are:

1. Regional network creation and awareness raising
2. Promotion of innovative actions in each member country
3. Facilitation of national and regional cooperation.

Capacity development and information sharing are the two chief pillars that underpin the Regional Knowledge Centre's work. More specifically, the Regional Knowledge Centre aims to undertake the following activities:

1. Capacity development of governments of ASEAN countries and support for policy formulation
2. Capacity development on information administration, research, and investigation that contribute to policy formulation
3. Information sharing of ASEAN countries' initiatives at international fora
4. Information sharing to raise awareness and to promote efforts taken by private sector and citizens.

The activities are aligned with the framework and regional actions under the ASEAN Regional Action Plan for Combating Marine Debris in the ASEAN Member States (2021-2025).

Website of the Centre: <https://rkcmpd-eria.org/>

Indicators

Does your Organisation support processes to develop MPL-specific indicators at local, national, regional or international levels?

Yes

If yes, state the names of projects/initiatives with a brief description here:

Name:

Technical Guidelines for Prevention of Plastics and Resin Pellets Leakage from Factories and Informal Recycling Sector in ASEAN in collaboration with the Regional Resource Centre for Asia and the Pacific (RRC.AP) of the Asian Institute of Technology (AIT)

Brief description:

The project will assess the current status of informal recycling groups in handling and pre-processing recovered plastic waste in Lao PDR, Thailand, the Philippines, and Viet Nam. It will identify the sources of leakage and examine pellet losses that occur during logistical handling and factory processing operations. To achieve this, the project will conduct situational and operational assessments of the recycling activities in the informal sector and selected factories across six hotspot cities in the above mentioned 4 ASEAN Member States. The result of the project will be in the form of indicators of plastic pellets leakage that should be achieved through applying the technical guidelines especially for factories and informal recycling sectors.

6.32.2. Measures & Achievements

Technology development for plastic alternatives (e.g. biodegradable plastics)

Details of initiative:

Information sharing on “Biodegradable and Compostable Plastics” in the ASEAN+3 context on the RKC-MPD website.

Related link:

<https://rkcmpd-eria.org/biodegradable-and-compostable-plastics/>

Sustainable and circular product design (e.g. use of recycled materials)

Details of initiative:

Information sharing on “Design for Recycling” and “Industrial Standards for Recycled Products” in the ASEAN+3 context on the RKC-MPD website.

Related link:

<https://rkcmpd-eria.org/design-for-recycling/>

<https://rkcmpd-eria.org/industrial-standards-for-recycled-products/>

Sustainable and circular business model creation (e.g. servitization of products)

Sustainable and circular business model creation (e.g. servitization of products)

Details of initiative:

Private Sector Initiatives to Reduce Plastic Waste and Marine Plastic Debris (hereafter referred to as the Private Sector Platform).

Private Sector Platform (PSP) is an online information sharing platform hosted on the Regional Knowledge Centre for Marine Plastic Debris' website. It has its objective to promote and encourage positive business initiatives that contribute to marine plastic pollution reduction. The online platform welcomes companies operating in ASEAN+3 region to showcase their products, services, or technologies in order to stimulate intra-regional information exchange and business expansion.

In addition to join this platform, we also invite private sectors to share their insights in seminars/webinars held under the name of "Private Sector Platform Event" to further promote their good practices and enable dialogues between private sectors and other stakeholders.

Related link:

<https://rkcmpd-eria.org/private-sector-platform/>

Numerical data, if any:

As of April 6th, 2023, 74 entries have been published, originating from 7 countries from the ASEAN+3 region (Cambodia, Indonesia, Japan, Malaysia, Singapore, Thailand and Viet Nam).

Proper waste management

Proper waste management

Details of initiative:

- **Preventing Mangroves from Plastic Pollution: Some Good Practices** is a research project that collects good practices of proper waste management to protect mangrove ecosystems from plastic pollution. The target country of the research is Indonesia. The research findings were presented in the 3R International Scientific Conference on Material Cycles and Waste Management (3RINCs) in Kyoto, Japan on March 2023.
- **Technical Guidelines for Prevention of Plastics and Resin Pellets Leakage from Factories and Informal Recycling Sector in ASEAN** is a research project in collaboration with the Regional Resource Centre for Asia and the Pacific (RRC.AP) at the Asian Institute of Technology (AIT). It aims to contribute to preventing plastics and resin leakage into marine environment through the promotion of proper best practices and guidelines at resin producing factories and recycling facilities/junk shops in ASEAN Member States. Activities are implemented in the target cities of Lao PDR, Thailand, the Philippines, and Viet Nam.
- Information sharing on "Proper Treatment and Disposal" and "Preventing Discharge from Specific Sources" in the ASEAN+3 context on the Regional Knowledge Centre for Marine Plastic Debris' website.

Related link:

<https://rkcmpd-eria.org/proper-treatment-and-disposal/>

<https://rkcmpd-eria.org/preventing-discharge-from-specific-sources/>

Prevention of littering, illegal dumping and unintentional waste into the ocean

- Prevention of littering, illegal dumping** and unintentional waste into the ocean

Details of initiative:

- **Technical Guidelines for Prevention of Plastics and Resin Pellets Leakage from Factories and Informal Recycling Sector in ASEAN** is a research project in collaboration with the Regional Resource Centre for Asia and the Pacific (RRC.AP) at the Asian Institute of Technology (AIT). It aims to contribute to preventing the plastics and resin leakage into marine environment through the promotion of proper best practices and guidelines at resin producing factories and recycling facilities/junk shops in ASEAN Member States. Activities are implemented in the target cities of Lao PDR, Thailand, the Philippines, and Viet Nam.
- Information sharing with regards to “Preventing Littering” and “Waste Reception Facility at Port” in the ASEAN+3 context on the RKC-MPD website.

Related links:

<https://rkcmpd-eria.org/eria-and-ait-launched-a-project-on-plastic-leakage-prevention-from-factories-and-informal-recycling-sector/>

<https://rkcmpd-eria.org/preventing-littering/>

- **Surveying and Piloting the Application of Behavioral Insights Approach for Plastic Production** (in collaboration with Institute for Global Environmental Strategies) aims to provide practical knowledge on applying behavioural insights in concrete settings and an easy-to-use toolkit for local governments, businesses, and schools. For this projects, four local partners have been selected:
 1. Chula Unisearch, Chulalongkorn University, Thailand
 2. Center for Southeast Asian Studies (CSEAS), Indonesia
 3. Southern Institute of Ecology (SIE), Vietnam
 4. University of the Philippines Diliman (UPD) Task Force on Environmental Sustainability (TFES), the Philippines

Related links:

<https://rkcmpd-eria.org/iges-eria-behavioural-insights-to-reduce-plastic-consumption-and-waste/>

<https://rkcmpd-eria.org/iges-eria-behavioural-insight-single-use-plastic-workshop/>

- Collection of scattered waste on beaches

Details of initiative:

- Clean Up Day with Youth was a youth engagement event within the ERIA’s framework of Cambodian ASEAN Chairmanship support held on 14-15 November 2022. Activities consisting of plastic waste clean-up and awareness raising on plastic pollution were conducted in Kampong Cham and Tboung Khmum Provinces, Cambodia.
- Information sharing on “Waste Collection from Rivers, Beaches, and Oceans” in the ASEAN+3 context on the Regional Knowledge Centre for Marine Plastic Debris’ website.

Related links:

<https://rkcmpd-eria.org/youth-engagement-to-prevent-marine-plastic-pollution-in-cambodia/>

<https://rkcmpd-eria.org/government-initiatives/waste-collection-from-rivers-beaches-and-oceans/>

Numerical data, if any:

The Clean Up Day with Youth event was joined by a total of 700 students.

Removal of plastic litter from the ocean

Details of initiative:

Information sharing on “Waste Collection from Rivers, Beaches, and Oceans” in the ASEAN+3 context on the Regional Knowledge Centre for Marine Plastic Debris’ website.

Related link:

<https://rkcmpd-eria.org/government-initiatives/waste-collection-from-rivers-beaches-and-oceans/>

Encouraging community participation in removal of plastic litter from the ocean

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

- Pilot project of floating and drifted marine plastics in mangrove is a project in collaboration with the JAPAN NUS CO., LTD. This project intervenes in two pilot sites among the nine prioritized provinces for mangrove rehabilitation in Indonesia. It has the following objectives:
 - (1) Investigate the amount and composition of marine litter in the target mangrove forests
 - (2) Assess the current plastic wastes impacts on the growth of the mangrove forests
 - (3) Engage with local community to conduct clean-up activities
 - (4) Establish guidelines for local clean-up activities and for the assessment of marine debris in mangrove forests
 - (5) Promote “good practices” of clean-up activities to be widely disseminated in Indonesia.

Education system creation

Details of initiative:

- ASEAN-Japan Eco School for Marine Plastic Waste Education (“Eco-School Project”) is an education program organized by the ASEAN-Japan Centre (AJC), in collaboration with the Regional Knowledge Centre for Marine Plastic Debris. The program aims to raise awareness among youth in the ASEAN region about marine plastic. Through the program, teaching marine plastic debris classes to students with lecturers consisting of PhD candidates from ASEAN countries who are currently studying in Japan, except for a few who study in their respective countries.
- Capacity development through workshops and webinars, in collaboration with various stakeholders, including government, international Organisation, research institute, and private sector.

Related link:

<https://rkcmpd-eria.org/eco-school-program-aims-to-raise-youths-awareness-on-marine-plastic-waste/>

<https://rkcmpd-eria.org/asean-japan-symposium-marine-plastic-waste-education-habits-for-cleaner-oceans/>

<https://rkcmpd-eria.org/updates/The-Way-Forward-for-a-Stronger-Regional-and-International-Cooperation-on-Marine-Plastic-Debris>

<https://rkcmpd-eria.org/updates/EPR-for-Plastics-in-Viet-Nam:-Challenges-and-Opportunities>

<https://rkcmpd-eria.org/updates/ASEAN-on-Point-Public-Forum:-How-Policies-can-Support-the-Private-Sector-in-Combatting-Marine-Plastic-Debris>

Education system creation

Details of initiative:

- ASEAN-Japan Eco School for Marine Plastic Waste Education (“Eco-School Project”) is an education program organized by the ASEAN-Japan Centre (AJC), in collaboration with the Regional Knowledge Centre for Marine Plastic Debris. The program aims to raise awareness among youth in the ASEAN region about marine plastic. Through the program, teaching marine plastic debris classes to students with lecturers consisting of PhD candidates from ASEAN countries who are currently studying in Japan, except for a few who study in their respective countries.
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Related link:

<https://rkcmpd-eria.org/eco-school-program-aims-to-raise-youths-awareness-on-marine-plastic-waste/>

<https://rkcmpd-eria.org/asean-japan-symposium-marine-plastic-waste-education-habits-for-cleaner-oceans/>

<https://rkcmpd-eria.org/updates/The-Way-Forward-for-a-Stronger-Regional-and-International-Cooperation-on-Marine-Plastic-Debris>

<https://rkcmpd-eria.org/updates/EPR-for-Plastics-in-Viet-Nam:-Challenges-and-Opportunities>

<https://rkcmpd-eria.org/updates/ASEAN-on-Point-Public-Forum:-How-Policies-can-Support-the-Private-Sector-in-Combatting-Marine-Plastic-Debris>

Numerical data, if any:

Since April 2022, about 7,000 elementary and high school students from Japan, Indonesia, Brunei, Malaysia, Lao PDR, Thailand, and the Philippines have participated in the Eco-school project.

The Regional Knowledge Centre for Marine Plastic Debris has contributed in mobilizing 2,089 students from 10 schools in Indonesia, Malaysia, Philippines, Thailand to take part in the Eco School program.

Awareness-raising

Details of initiative:

One of the awareness-raising activities of the Regional Knowledge Centre for Marine Plastic Debris is the youth Podcast series named “Living Chic with Plastic’ (2023 onward) which welcomes youth from the ASEAN+3 region involved in marine plastic litter research, prevention programs, clean-up activities, and other advocacies. Through this podcast, first-

hand accounts on different challenges and opportunities are shared with the public. The podcast can be found on Spotify and Apple Podcast.

Related links:

<https://rkcmpd-eria.org/rkc-mpd-podcast-living-chic-with-plastic-episode-1/>

The Regional Knowledge Centre owns different social media accounts (Twitter, Facebook, Instagram, LinkedIn), where marine plastic related information as well as news and activities of the Regional Knowledge Centre are actively shared. Social media tools are strategically employed on one hand to increase its online presence and on the other to direct some of the followers to the website.

Social media accounts:

Twitter	@rkcmpd_eria
Facebook	Regional Knowledge Centre for Marine Plastic Debris - ERIA
Instagram	@rkcmpd_eria
LinkedIn	Regional Knowledge Centre for Marine Plastic Debris
Podcast	Living Chic with Plastic' (Apple Podcast and Spotify)

Additionally, many of the online events organized by the Regional Knowledge Centre have its objective to educate citizens on marine plastic pollution and raise awareness of the issue. The Regional Knowledge Centre's Youth Engagement program (2022 onward) in particular has also its main goal to educate young generation of the ASEAN+3 region to learn science-driven information about MPD. The RKC-MPD has been collaborating with UNDP and ASEAN-Japan Centre for the Youth Engagement program.

Related links:

<https://www.eria.org/events/rainy-days-high-season-for-marine-plastic-litter/>

Initiatives for behavioral change

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Surveying and Piloting the Application of Behavioral Insights Approach for Plastic Production (in collaboration with Institute for Global Environmental Strategies) aims to provide practical knowledge on applying behavioural insights in concrete settings and an easy-to-use toolkit for local governments, businesses, and schools. For this projects, four local partners have been selected:

1. Chula Unisearch, Chulalongkorn University, Thailand
2. Center for Southeast Asian Studies (CSEAS), Indonesia
3. Southern Institute of Ecology (SIE), Vietnam
4. University of the Philippines Diliman (UPD) Task Force on Environmental Sustainability (TFES), the Philippines

Related links:

<https://rkcmpd-eria.org/iges-eria-behavioural-insights-to-reduce-plastic-consumption-and-waste/>

<https://rkcmpd-eria.org/iges-eria-behavioural-insight-single-use-plastic-workshop/>

Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies)

Details of initiative:

“Zero in on Plastics” interview series with Dr. Reza Cordova from Research Centre for Oceanography, National Research and Innovation Agency, Indonesia.

Related link:

<https://rkcmpd-eria.org/updates/Crossing-The-Border-Without-Passport:-Where-Our-Plastics-End-Up>

Scientific research

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

1. Technical Guidelines for Plastics and Resin Pellets Leakage Prevention from Factories and Informal Recycling Sector in ASEAN (in collaboration with Asian Institute of Technology)

Target country: Vietnam, Lao PDR, Philippines, and Thailand

2. Data-driven Policy Research Programme on Marine Plastic Debris (in collaboration with Institute for Global Environmental Strategies)

Target country: ASEAN

3. Surveying and Piloting the Application of Behavioral Insights Approach for Plastic Production (in collaboration with Institute for Global Environmental Strategies)

Target country: Indonesia, the Philippines Thailand, Viet Nam

4. Pilot Project of Floating and Drifted Marine Plastics in Mangrove (in collaboration with Japan NUS)

5. Protecting Mangroves from Plastic Pollution: Some Good Practices

Target country: Indonesia

6.32.3. Addressing common challenges for MPL

4. Addressing common challenges for MPL:

Please see below the top eleven challenges in implementing MPL actions, reported by respondent countries in our report last year.

Does your Organisation have any activities to address these challenges? Or are you planning any actions in the future? If yes, please provide a brief description:

Data collection related to marine plastic litter

We run a pilot project with Japan NUS (JANUS) to investigate the amount and composition of marine litter in mangrove forests in Indonesia.

Recycling system improvement

Lack of viable circular economy business models

- Lack of financial incentives for waste treatment in general
- Lack of financial/ tax incentives for technology development
- Lack of awareness among citizen, business, local government

We use social media (LinkedIn, Instagram, Twitter, and Facebook) to raise awareness on the topic of marine plastics. We are also in partnership with ASEAN Japan Center to conduct Eco-School project.

- Proper waste management system (including lack of local capacity)

We are conducting research on good practices to protect mangroves from plastic pollution. Furthermore, we collaborate with Asian Institute Technology (AIT) to assess the plastic leakage from informal recycling.

- Project delays due to COVID-19

- Data collection related to waste in general

We run a pilot project with Japan NUS (JANUS) to investigate the amount and composition of marine litter in mangrove forests in Indonesia.

- Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter

We conducted several webinars on different topics, such as private sector initiatives to reduce plastic waste and role of youth to address marine plastics

- Government support in initiatives of your Organisation

- Others (please specify)

6.32.4. Further Information:

- [Regional Knowledge Centre for Marine Plastic Debris \(RKC-MPD\)](https://rkcmpd-eria.org/)
- [Private Sector Initiatives to Reduce Plastic Waste and Marine Plastic Debris](https://rkcmpd-eria.org/private-sector-platform/)
- [Towards an International Agreement on Plastic Pollution: The Role of the G20](https://www.t20indonesia.org/wp-content/uploads/2022/09/PB-12-Layouted.pdf)

6.32.5. Contact Details: *(Please specify name and email address)*

Contact details: *(Specify the person in charge's name and email address: this information will not be published in the report)*

- Michikazu Kojima (Mr)

Senior Advisor to the President on Environmental Issues, ERIA

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6.33. Ellen MacArthur Foundation (EMF)

Key Highlights

- Launched the New Plastics Economy Global Commitment with UNEP in 2018
- The plan unites more than 500 organisations and representing companies

6.33.1. Action Framework

Action Plan / Strategy of Entire Organisation

Do you have an action plan or strategy on MPL as an Organisation?

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

The New Plastics Economy Global Commitment

Brief description:

Launched in 2018 in partnership with the United Nations Environment Programme (UNEP), the New Plastics Economy Global Commitment has brought together key stakeholders to rethink and redesign the future of plastics, starting with packaging. It now unites more than 500 organisations, representing companies producing more than 20% of all plastic packaging globally, who work towards ambitious 2025 targets to realise a circular economy for plastic where:

- All problematic or unnecessary plastic packaging are eliminated through redesign, innovation, and new delivery models as a priority.
- Reuse models are applied where relevant, reducing the need for single-use packaging.
- All plastic packaging is 100% reusable, recyclable, or compostable.
- All plastic packaging is reused, recycled, or composted in practice.
- The use of plastic is fully decoupled from the consumption of finite resources.
- All plastic packaging is free of hazardous chemicals, and the health, safety, and rights of all people involved are respected.

A growing [network of national and regional Plastic](#) Pacts spread across 5 continents, is working to put this vision into practice with solutions tailored to their local context. Signatories to the Global Commitment are reporting progress on an annual basis. All information and data from these progress reports can be accessed online [here](#).

The 2022 New Plastics Economy Global Commitment progress report pointed out three key findings:

- While strong progress is being made in some areas, key 2025 targets are expected to be missed. The prospect of not meeting all 2025 targets reinforces the urgency for businesses to accelerate action, particularly around reuse, flexible packaging, and decoupling business growth from packaging use.
- The Global Commitment will continue to drive progress, provide unprecedented transparency, and inform legislation.
- Governments need to take immediate action to accelerate progress and have the opportunity to promote a high ambition level in upcoming negotiations for a legally binding instrument on plastic pollution.

In 2022, 34 additional national and sub-national governments across different continents committed to join the Global Commitment. Together with existing signatories, they represent more than 1 billion people.

Last year saw the introduction of mandatory quantitative targets and reporting for government signatories.

- Ten government signatories have already set quantitative targets, notably on collection, sorting, and recycling rates of plastic packaging that will help inform better decision-making on investments and improve the recyclability and reuse of plastic packaging.
- Governments have taken a variety of actions to drive the elimination of problematic and unnecessary plastic packaging/products and foster reuse models to reduce the need for single-use plastic. This includes legal measures such as bans and restrictions but also the implementation of reuse pilots and minimum requirements for reuse solutions.
- Governments have also taken measures to improve the collection, sorting, and recycling infrastructure and ensure that 100% of the plastic packaging put on the market is reusable, recyclable, or compostable (RRC). This includes introducing mandatory design requirements for all plastic packaging placed on the market, rolling out of EPR legislations, expanding collection for recycling, and investing in recycling infrastructure.
- In parallel, governments have also been stimulating demand to ensure the development of an economic market for recycled plastic by establishing post-consumer recycled (PCR) content minimum thresholds and economic incentives (e.g. subsidies) or disincentives (e.g. taxes, charges).

The next progress report will be published in Q3-4 2023.

Indicators

Does your Organisation support processes to develop MPL-specific indicators at local, national, regional or international levels?

No

6.33.2. Measures & Achievements

The 2023 New Plastics Economy Global Commitment progress report will be published in Q3-4 2023

6.33.3. Addressing common challenges for MPL

Not Available

6.33.4. Further Information

1. The Global Commitment
2. Sector Insights
3. Signatory reports 2022 Global Commitment report on plastic packaging
4. Global Commitment signatories
5. Global Commitment resources
6. Government Workshops Series 2022-23

<https://ellenmacarthurfoundation.org/topics/plastics/overview>



6.34. Food and Agriculture Organisation (FAO)

Key Highlights

- The IMO/FAO implemented GloLitter Partnerships project
- GESAMP Working Group 43 on sea-based sources of marine plastic litter, phase II
- ICES/FAO WGFTFB topic group on ALDFG.
- Implementation of the FAO ALDFG Surveys
- Awarded \$450,000 grant to Alner a Jakarta, Indonesia based startup, to develop a deposit-based reuse system for FMCG.

6.34.1. Action Framework

National Action Plan

Do you have an action plan or strategy on MPL as an Organisation?

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

The Fisheries and Aquaculture division of the FAO has developed a work plan to support and promote responsible fishing practices that contribute to sustainable fisheries and the reduction of impacts of fishing operations. The work plan includes actions to prevent and reduce abandoned, lost and otherwise discarded fishing gear (ALDFG), the most targeting abandoned, lost and other

<https://www.fao.org/3/ne659en/ne659en.pdf>

Currently, the main ongoing activities contributing to the Responsible Fishing Operations Work Plan include the [IMO/FAO implemented GloLitter Partnerships project](#) and the development and implementation of ALDFG surveys, co-sponsoring the [GESAMP Working Group 43](#) on sea-based sources of marine plastic litter together with IMO and UNEP and facilitating a topic group on ALDFG under the [ICES/FAO Working Group on Fishing Technology and Fish Behaviour \(WGFTFB\)](#).

Indicators

Does your Organisation support processes to develop MPL-specific indicators at local, national, regional or international levels?

Yes

If yes, state the names of projects/initiatives with a brief description here:

Name:

- 1 [GESAMP Working Group 43](#) on sea-based sources of marine plastic litter, phase II
- 2 ICES/FAO WGFTFB topic group on ALDFG.

Brief description:

One of the TOR of Phase II of GESAMP WG43, includes the identification of elements that should be included in a monitoring programme for ALDFG.

The results of ICES/FAO WGFTFB topic group on ALDFG and GESAMP WG43 will facilitate the development of standardized ALDFG indicators.

6.34.2. Measures & Achievements

Prevention of littering, illegal dumping and unintentional waste into the ocean

Details of initiative:

The FAO component GloLitter Partnerships project includes a budget of 1.5 M USD to support the implementation of the IMO Work Plan to address marine plastic litter from ships and the Voluntary Guidelines on the Marking of Fishing Gear (VGMFG). Funding supporting the FAO component of the GloLitter Partnerships project comes from Norad (Norwegian Agency for Development Cooperation).

The project is developing knowledge products and guidance documents to address marine plastic litter from the shipping and fishing sectors. While waste management and remediation is also addressed in some project activities and knowledge products, the main focus of the project is supporting the prevention of littering, illegal dumping and unintentional waste into the ocean from ships.

Removal of plastic litter from the ocean

Details of initiative:

One of the knowledge products of the GloLitter Partnerships project includes Reporting and retrieval of lost fishing gear: recommendations for developing effective programmes. <https://doi.org/10.4060/cb8067en>

This publication is available in English, Spanish and French.

Others

Details of initiative:

GloLitter Partnerships project is also providing support to its 10 lead partnering countries to develop and implement National Action Plans to address marine plastic litter from the fishing and shipping sectors. All NAPs developed so far are publicly available in the following link, as well as the guidance documents prepared by the project to implement country status assessments and develop NAPs:

<https://www.imo.org/en/OurWork/PartnershipsProjects/Pages/GloLitter-Partnerships-Project-.aspx>

6.34.3. Addressing common challenges for MPL:

Please see below the top eleven challenges in implementing MPL actions, reported by respondent countries in our report last year.

Does your Organisation have any activities to address these challenges? Or are you planning any actions in the future? If yes, please provide a brief description:

Data collection related to marine plastic litter

Implementation of the FAO ALDFG Surveys. The aim of these surveys is to provide evidence-based and defensible global, regional, and national estimates of ALDFG amounts, temporal and spatial distribution, causes, trends of gear loss across fisheries, geographies and gear types, and prevention and reduction measures. Data is collected through surveys of fishers, and/or fisheries representatives with standardized survey forms and methodologies. Data collected is inputted and stored in a database for further analysis and synthesis of national, regional and global ALDFG estimates. The surveys are also implemented by other partners beyond the scope of GloLitter and are available for any country/Organisation willing to conduct ALDFG surveys. For more details please contact <mailto:responsible-fishing@fao.org>

Recycling system improvement

Lack of viable circular economy business models

Lack of financial incentives for waste treatment in general

Lack of financial/ tax incentives for technology development

Lack of awareness among citizen, business, local government

Proper waste management system (including lack of local capacity)

This is one of the components of the GloLitter Partnerships project led by IMO. The next phase of the project will include more work related to end-of-life fishing gear and recovered ALDFG management.

Project delays due to COVID-19

Data collection related to waste in general

Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter

Government support in initiatives of your Organisation

FAO in collaboration with IMO will continue their efforts to support Members in implementing/ developing action plans to address marine plastic litter from the fishing and shipping sectors with all relevant public and private stakeholders.

Others (please specify)

The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) is an independent scientific body that advises United Nations agencies on environmental threats to the global ocean. GESAMP Working Group 43 focuses on *Sea-based*

Sources of Marine Litter and is sponsored by the International Maritime Organisation (IMO), the Food and Agriculture Organisation (FAO), and the UN Environment Programme (UNEP). WG 43 conducted its first global assessment of fishing, shipping, ocean dumping and other ocean-based industries and activities as sources of plastic pollution and published Reports &

Studies 108 in October 2021. In September 2022, at the 49th annual session of GESAMP (London, United Kingdom), new Terms of Reference in two concurrent work streams were approved :

- Work-stream 1 will support information requests of the Scientific Groups of the London Convention/Protocol (LC/LP) Parties that will help identify priorities for addressing LC/LP waste streams, ship coatings and abandoned vessels as sources of plastic in the ocean.
- Work-stream 2 will support information requests of FAO to further understand abandoned, lost and otherwise discarded fishing gear (ALDFG) as a source of ocean plastic, with a particular focus on methodologies for remediation, monitoring

6.34.4. Further information:

(Provide further information you wish to share in the report, such as the link to your website, name of recently published reports and online materials and their URLs, if any)

All FAO publications related to ALDFG are available at <https://www.fao.org/responsible-fishing/resources/en/>

GloLitter publications are available at <https://www.imo.org/en/OurWork/PartnershipsProjects/Pages/GloLitter-Partnerships-Project.aspx>

6.34.5. Contact details:

(Specify the person in charge's name and email address: this information will not be published in the report)

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6.35. International Atomic Energy Agency (IAEA)

Key Highlights

- NUclear TEChnology for Controlling Plastic Pollution (NUTEC Plastics)

6.35.1. Action Framework

Action Plan / Strategy of Entire Organisation

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

NUclear TEChnology for Controlling Plastic Pollution (NUTEC Plastics)

Brief description:

Analysis and evidence show that nuclear applications can complement existing technologies and thus accelerate the transition towards a circular economy for plastics.

However, the potential contribution of nuclear science and technology for addressing the plastics waste problem has not been fully explored yet, and hence is rarely integrated into proposals for sustainable, scalable solutions. A change is needed to increase the knowledge and awareness of these techniques and technologies, but more importantly to apply them more broadly in practice, in order to use the full potential of nuclear techniques' role in reducing the global plastic waste burden.

To facilitate this the IAEA has developed NUTEC Plastics to assist its Member States in integrating nuclear techniques in their efforts to address challenges of plastic pollution. The IAEA supports research and application of nuclear techniques in two main areas: monitoring and assessment of marine plastics, and reduction of plastic/polymer waste volumes by enhancing plastic recycling and production of sustainable alternatives to petroleum-based plastics, both through the application of radiation techniques. Radiation technology for industrial purposes, such as gamma and electron beams, offers unique advantages for reducing plastic and polymer waste and therefore fill existing technological gaps in dealing with such waste. Irradiation can address sorting challenges experienced by mainstream mechanical recycling methods by enabling effective sorting of plastic wastes to feed into recycling streams, thus improving the quality and value of the recycled plastics. Radiation technologies can also be used to transform or recycle plastic waste into other products, such as fillers and binders for construction materials. They can also be used to break down or convert waste plastic polymers into fuel or smaller components to generate chemical feedstocks to produce consumer products, with or without the addition of virgin polymers. Reduction of plastic waste is also possible through replacing petroleum-based plastics with biodegradable bio-based products obtained by radiation-driven processes. Furthermore, radiation technology offers cleaner production and recycling processes thus reducing the use of potentially harmful additives and solvents as well as delivering energy savings.

NUTEC Plastics will integrate radiation technologies for plastic waste recycling into national, regional and global initiatives. Ongoing laboratory-scale activities are paving the way for pilot plastic recycling plants to establish the volume, energy and financial balances associated with using radiation technologies to recycling various plastic wastes.

Based on the proof of principle and experience gained from the piloting, a comprehensive guideline has been produced and will be disseminated to Member States to address how the technology should be scaled-up to a large-scale plastic waste recycling demonstration plant(s).

The Ocean is the final repository of mismanaged and unrecycled land-based plastics, and there is a lack of sufficient knowledge and understanding of the amount and impact of microplastics litter in the ocean. More accurate data are needed to assess the effect that microplastics and associated contaminants have on marine organisms that are part of the global food chain, such as food for human consumption, and therefore on seafood exports, food safety and human health. Isotopic techniques offer unparalleled precision and complement conventional techniques in tracking the concentration and distribution of nano- and microplastics in the marine environment. Isotopic tracers, radio-labelled plastic particles in experimental studies, imaging techniques and gamma and beta spectroscopy provide unique information that helps to assess the impacts of micro- and nano-plastics on marine biota. These techniques provide important tools for studying the fate of plastics in organisms, to reveal in detail the impacted organs and pathways in the food chain, and allow to trace the actual toxicological stress and their possible propagation in food chains that can ultimately impact humans through consumption of seafood.

NUTEC Plastics will strengthen and scale-up the development of reliable and costeffective techniques to assess the spatial and temporal distribution and character of marine microplastic litter to better understand their origin, transport mechanisms, as well as fate and impact. This includes the establishment of harmonized, standardized protocols to identify microplastics in environmental samples, analytical techniques that are in line with best practices and state-of-the-art science, and training for scientists and technicians in their use.

A holistic and sustainable solution to the global plastic pollution requires an integrated and comprehensive approach that can only be achieved in partnership with Organisations that have complementary roles and expertise. Working within existing national, regional and international initiatives, including private-public partnerships is essential. This includes collaboration with United Nation entities, including UNEP who is in charge of developing a legally binding Treaty on plastic pollution, multilateral development banks, philanthropies, existing large-scale initiatives and multistakeholder platforms, private sector, and scientific and research institutions. The private sector will be a critically important partner in making the transition to a circular plastic economy, underpinned by strong governmental action and ownership through enabling policies and supportive legal environment.

NUTEC Plastics' two main components – monitoring and assessment and plastic waste reduction via recycling and generation of bio-based polymers— are logically intertwined as both contribute to the solution of the global plastic pollution problem. However, their implementation is not contingent on each other and therefore NUTEC Plastics adopts a modular approach. This approach offers the advantage of facilitating the implementation of certain activities according to resource availability, while offering Member States and partners the opportunity to engage in activities linked to their profile, preferences and priorities.

Indicators

Yes

If yes, state the names of projects/initiatives with a brief description here:

Name:

Marine microplastic monitoring and assessment

Brief description:

The present common use of plastic must move away from “take-make-waste” towards a sustainable circular economy built on the 4R principles: reduce, reuse, recycle and renew. NUTEC Plastics is an initiative inherently contributing to the 2030 Agenda for Sustainable Development and SDG 12.5, which calls on countries to “...substantially reduce waste generation through prevention, reduction, recycling and reuse”. The positive effects on the marine environment, of improving recycling, will be assessed through application of nuclear techniques for understanding the abundance and impact of marine plastic pollution. Ultimately NUTEC Plastics benefit Member States through improved marine plastic management based on harmonized monitoring and projected plastic pollution assessments.

The IAEA provides support and assists Member States in developing the capabilities to use the aforementioned techniques to monitoring marine plastic pollution. It is worth noting that this contributes directly to the UN Sustainable Development Goals, including, Goal 14: life below water. More specifically IAEA’s capacity building effort related to marine plastic pollution helps IAEA Members states to be able to report indicator 14.1.1 (Plastic debris density).

6.35.2. Measures & Achievements

Technology development for plastic alternatives

Details of initiative:

NUTEC Plastics activity area “Single use Eco-alternatives and Advanced Packaging Materials”

(*Please specify the target country/region and budget size, if possible)

Numerical data, if any:

Radiation technologies is used for making plastics, in particular for generating crosslinks between polymer chains or compatibilizing immiscible polymers. When bio-based feedstocks are used, eco-friendly, sustainable alternatives to petroleum-based single use plastics, such as biodegradable polymers, can be generated. Radiation thus allows tailoring the plastic’s target properties and performance (e.g. heat resistance). Additionally, radiation processing can be used to render specific materials compatible to generate novel products, e.g. bio-based plastic and antibacterial packaging for safe food storage.

The IAEA is now collecting proposals for a new Coordinated Research Project (CRP) “Strengthening the Use of Biomass for Synthesis of Bioplastics and Other Compounds, Using Radiation Technology”, which focuses on application of radiation technologies to develop biodegradable polymers with task-specific functionalities from renewable feedstocks, thereby reducing petrol-based single use plastics. One regional project in Latin America and the Caribbean, supporting Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Cuba, Mexico, Panama, Uruguay, and Venezuela, aims to help build capacities in

these countries to address the reduction of the environmental impact of natural polymer wastes using irradiation techniques.

Sustainable and circular product design (e.g. use of recycled materials)

Details of initiative:

NUTEC Plastics activity area “Radiation-supported recycling” (*Please specify the target country/region and budget size, if possible)

Numerical data, if any:

Radiation technology, specifically gamma and electron beams, offer unique advantages to address the technological gaps that exist in plastic recycling. Innovation of plastic waste upcycling using radiation technologies enables better sorting of plastic, breaking down plastic waste into components, converting plastic into fuel and feedstocks, and treating plastic waste to create upscaled products, such as composite materials. Irradiation with an electron beam can also be used for high-fidelity sorting of mixed plastics, as a result of radiation induced charge that is dependent on plastic type, thus enabling electrostatic separation. Radiation technologies can break down plastic polymers into smaller fragments that can be used as feedstocks to produce new consumer products. By combining pyrolysis or cracking of plastics with radiation in chemical recycling of plastic waste to generate fuel or monomer feedstocks, the process is not only easier to control, but the required process temperature is also lower by one hundred degrees or more and thus more economical. This is a green technology, eliminating the need for solvents and catalyst additives; it also delivers a higher product purity and less by-products. Radiation processing also allows the properties of polymer waste to be tailored, creating new composites and enabling innovative repurposing of waste materials.

The IAEA began a Coordinated Research Project (CRP) in 2021 “Recycling of Polymer Waste for Structural and Non-Structural Materials by using Ionizing Radiation”, with participation of 20 countries: Algeria, Argentina, Brazil, China, Croatia, Egypt, Ghana, Hungary, India, Indonesia, Malaysia, Peru, Philippines, Poland, Russian Federation, Serbia, Thailand, Tunisia, Turkiye and Vietnam. National projects in Ghana and Argentina promote the use of nuclear technology for managing plastic waste by generating value-added products. One regional project in Asia and the Pacific provides support to Bangladesh, China, Indonesia, Malaysia, Myanmar, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam to strengthen regional capabilities in the application of radiation technology for reutilizing natural polymers for the production of industrial goods. A regional project in Latin America and the Caribbean, supporting Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Cuba, Mexico, Panama, Uruguay, and Venezuela, also helps to build capacities in these countries to address the plastic pollution using irradiation techniques. A regional project in Europe “Enhancing the Use of Radiation Technologies in Industry and Environment” is supporting countries to develop feasibility studies for the application of radiation technologies into the recycling process. Philippines, Indonesia, Malaysia, Thailand, Croatia, and Romania have already drafted their studies. A national project for Indonesia aims at supporting institutions to build capacity to reduce the amount of plastic waste through an integrated recycling system. Through the CRP and coordination of input from global experts, a guideline for integrating e-beam technology into the plastic waste recycling process has been developed. Its draft was presented to Member States in international workshops during October 2022. Two excel based tools were also developed to support Member States in the elaboration of economic studies and in implementation of the Technology, through the Technology Readiness Level (TRL) approach.

Awareness-raising

Details of initiative:

NUTEC Plastics Roundtables; National Stakeholder Meetings, NUTEC Portal, Partnership with GPAP, ASEAN, UNEP, ESCAP, ADB etc. (*Please specify the target country/region and budget size, if possible)

Numerical data, if any:

The IAEA brings added value to existing partnerships addressing the global plastic challenge by providing accurate assessment of the abundance and impact of marine microplastics, to inform environmental policy making and management decisions, and by offering novel plastic recycling options through radiation technologies to complement conventional methods. The IAEA has stepped up its engagement with relevant partners to increase the awareness of the unique advantages of nuclear technologies for addressing plastic pollution and to seek partnerships to accelerate the transition to a circular plastic economy. To this end, the IAEA held a series of virtual Roundtables on “Atoms Contributing to the Search for Solutions to Plastic Pollution” in 2021. The first was held for the Asia and Pacific Region on 18 May 2021. The second for North, Central and South America and the Caribbean on 26 August 2021, the third for African Region on 2 September 2021, and the fourth for European Region on 7 October 2021 were also held successfully. Presentations and discussions by experts and representatives from IAEA Member States focused on innovative nuclear solutions to plastic pollution.

In 2022, IAEA held a side event on marine plastic litter at the UN Ocean conference, Organized specific events at ICARST 2022, during the IAEA 66th General Conference, and at the PLaReNet Conference. The IAEA was present at COP27 with a nuclear-themed pavilion, the ‘#Atoms4Climate’ pavilion, to showcase the areas where nuclear technology offers distinct value in climate adaptation and mitigation solutions, including marine plastic pollution. Also during 2022, the first National Stakeholders meetings to show the proof of concept of the technology were conducted in Malaysia and Indonesia. The IAEA is actively seeking and establishing partnerships and formal collaborative agreements with relevant Organisations for synergies, cooperative and convergent work, particularly under the implementation framework of the Osaka Blue Ocean Vision, the ASEAN Bangkok Declaration on Combating Marine Debris in ASEAN Region, the Regional Seas Conventions and Programmes through IOC-UNESCO, UNEP and other Organisations. IAEA already became an affiliate member of the Global Plastic Action Partnership (GPAP).

Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies or a separate question)

Details of initiative:

NUTEC Plastics Monitoring Network applying Isotopic tracers and nuclear imaging techniques (*Please specify the target country/region and budget size, if possible) Countries in Latin America and the Caribbean, Asia and the Pacific, Africa and Europe

Numerical data, if any:

Isotopic tracers and nuclear imaging techniques offer several advantages in assessing the impact and stress caused by microplastics in the marine environment:

- They are analytically sensitive, allowing for more precise and therefore reliable projections;

- Cross contamination of samples is typically much less of an issue compared to working with organic or inorganic contaminants or with microplastics particles itself, which facilitates broad interlaboratory exchange;
- They permit nondestructive analyses, which allow for experimental work on live organisms and
- They provide an overview of the effects and movement of contaminants on and within the whole organism.
- This provides an important marker for the potential toxicity of microplastics on living organisms and reveals in great detail the impacted organs and systems, which in turn allows the tracing of actual toxicological stress and possible propagation in food chains that can ultimately affect humans through our consumption of seafood.

The first coordination meeting for a regional project in Asia and the Pacific was held on 30 – 31 March, 2022. The project aims to support capacity building in microplastics monitoring in Australia, Bangladesh, China, Indonesia, Iran, Iraq, Israel, Jordan, Japan, Kuwait, Lebanon, Malaysia, Pakistan, Palestine territories, Philippines, Qatar, Saudi Arabia, Sri Lanka, Syria, Thailand, United Arab Emirates and Vietnam. During the project an overview of the national facilities available and the current engagement in microplastics monitoring nationally or with international collaboration will be compiled. Additionally, 7 national projects and 2 regional projects in Latin America and the Caribbean are also aimed at building capacity for microplastics monitoring in the region to support the development of policies, regulations, standards as well as Sustainable Development Goal 14, Life Below Water. Within the NUTEC Plastics marine part, the IAEA is developing with its Member States a Global Marine Microplastics Monitoring Network. The objective is to enhance global understanding of the abundance and impact of marine plastic pollution. Regional Hub Laboratories shall be established to provide global information on microplastics pollution e.g., for decision makers. The outcome will be a Global NUTEC Plastics Monitoring Network of specialized laboratories in Member States able to assess risks posed by marine plastics to their ecosystems and livelihoods. The aim is for the participation of at least 50 NUTEC laboratories worldwide located in all 4 regions by 2026. As a result, Member States shall be able to report the SDG14.1b indicator “Microplastic Density” (5-0.3 mm) and polymer type in beach sand and seawater.

Scientific research

Details of initiative:

Launching Coordinated Research Projects on NUTEC Plastics

(*Please specify the target country/region and budget size, if possible)

Numerical data, if any:

The IAEA launched in 2023 a Coordinated Research Project (CRP) on Optimizing Nuclear Techniques to Assess Microplastic Pollution in Coastal Areas. The goal of this CRP is to improve the global understanding of the amount of microplastic pollution in marine sediment using nuclear techniques as marine sediment can serve as legacy sources of pollution. The design of harmonized monitoring protocols is necessary to establish a standard technique for the monitoring of concentrations and polymer composition of marine microplastics, especially with regards to comparing spatial and temporal variations.

The CRP “Recycling of Polymer Waste for Structural and Non-Structural Materials by using Ionizing Radiation” was started in 2021, to modify huge amounts of polymer wastes to be used in structural and non-structural materials such as concrete, asphalt, finish coatings, novel materials/products, etc., providing the benefits of encapsulating plastic waste, and/or

modifying the surface properties to obtain functionalized materials, enhancing material properties and reducing carbon emission. The CRP “Strengthening the use of Biomass for synthesis of bioplastics and other compounds” launched in January 2023, aims to enhance the use of radiation technology for natural and biodegradable polymer modification to obtain task-specific functionalities suitable for a variety of applications, reducing the petrol-based single use plastics and enhancing the biomass availability for energy purposes.

Technology development

(*Please specify the target country/region and budget size, if possible) IAEA through pertinent regional projects support innovative approach for assessing the feasibility of recycling using radiation and how to integrate the electron beam technology into existing recycling plants. In the Asia and the Pacific Region experimental work is advancing in pilot countries, including Philippines, Malaysia, Indonesia and Thailand the progress is guided through the framework of Technological Readiness Level (TRL). Nuclear Techniques are also promoted to assess Microplastic Pollution in the oceans to improve the global understanding of the amount of microplastic pollution in marine environment. The activity in this area aims development of Global NUTEC Plastics Monitoring Network of 50 specialized laboratories capable of assessing the risks that marine microplastics pose to their ecosystems and livelihoods, supporting the development of global policies and actions for the sustainability of the seas and oceans in all 4 regions, with the IAEA Marine Environment Laboratories in Monaco as a global reference laboratory, and regional laboratories providing the technical support. Using the 4 staged approach towards this goal, the IAEA to date has progressed towards Stage 3. Harmonized Protocols for sampling sediments and water have been developed, to be used during sampling campaign in 2023 by various laboratories.

Numerical data, if any:

This activity aims to develop an Electron Beam pyrolysis reactor prototype that combines chemical recycling with radiation technology to convert heterogeneous /contaminated plastic waste into secondary raw material, which is one of the promising practical solutions. Processing of such mixtures can be facilitated by the synergy effect of pyrolysis and radiolysis, which makes the process more efficient.

6.35.3. Addressing common challenges for MPL

Data collection related to marine plastic litter

There are difficulties for collecting marine microplastic litter, especially in Developing States when you are looking for smaller plastics (microplastic). Collection methods for nanoparticles of plastics are very limited. Through its Technical Cooperation Programme, the IAEA is contributing to help its Member States to overcome these difficulties through its global effort to train, equip and connect scientists. The efforts are not only focused on supporting data collection related to marine plastic litter, but also, to develop clear and harmonized protocols describing how to proceed and standardize data collection methods and measurements. This is a reason why the IAEA, with the help of partners, work on obtaining harmonized methods that can be widely shared with counterparts involved in monitoring of marine plastic pollution.

In 2022, the Technical Cooperation Programme supported Member States in the harmonization of these protocols and in the provision of monitoring equipment to 26 laboratories to enable these Member States to participate in this global effort. Overall NUTEC Plastics is working in 78 countries implementing 27 projects. 23 are supporting

Member States by transferring these innovative technologies and building capacities and 4 Research and Development Projects to support the progress of scientific knowledge in this field.

Recycling system improvement

NUTEK Plastics supports IAEA Member States' efforts to improve recycling systems. As part of these efforts, guidelines and tools have been developed to support assessing the feasibility of recycling innovation using radiation and how to integrate the electron beam technology into existing recycling plants. In 2022, the Initiative promoted the dissemination of this innovative technology in 40 countries worldwide through the Organisation of an international workshop, regional meetings and training courses.

The consolidation of experimental work of the pilot countries in the Asia and the Pacific Region demonstrated strong progress. Malaysia, Indonesia and Thailand are now conducting the final series of experiments with the expectation to achieve Technological Readiness Level (TRL3) by late March-April 2023 depending on the advances on particular experiments. Philippines is expected achieve TRL3 by June 2023 (though some TRL4 activities are expected to start in April 2023).

Lack of viable circular economy business models

Lack of financial incentives for waste treatment in general

Lack of financial/ tax incentives for technology development

The IAEA is exploring concerted efforts, including synergy and partnership among various initiatives for the establishment collaborative frameworks and, eventually, joint resource mobilization, to ensure effective intervention in addressing both the mitigation and monitoring aspects of plastic pollution. Partnerships are being sought for complementary or supplementary support to relevant programmes undertaken by the IAEA, particularly for strengthening Member States' associated capacity building and laboratories and infrastructure through the TC Programmes, so that their national capabilities to tackle plastic pollution using nuclear technologies for monitoring and for recycling are significantly strengthened.

Lack of awareness among citizen, business, local government

Global awareness on the application of isotopic techniques for marine plastic monitoring and irradiation technologies in plastic irradiation is raised via dedicated campaigns, such as webinars, Member State briefings, and liaising with decision makers, public, and scientific community in global, regional, or national fora. For example, the IAEA held a series of virtual Roundtables on "Atoms Contributing to the Search for Solutions to Plastic Pollution" in 2021, which had more than 1,600 participants from more than 180 countries in 4 Roundtables. The IAEA held a side event at the UN Ocean Conference 2022 to highlight actions addressing marine plastic pollution and organized in cooperation with the Circulate Initiative and the Incubation Network. An international Workshop was conducted in Republic of Korea in October 2022, to disseminate the guideline document to understand how to integrate the Electron Beam technology into the recycling process. This well attended event, with representation from 40 countries, aimed to provide Member States with the comprehensive roadmap in the guidelines that should be followed to integrate the technology into existing plastic waste streams, including practical examples.

In October 2022 IAEA participated on the Asian Development Bank (ADB) Innovation Fair in Manila and among others showcased the activities conducted under the NUTEC Plastic initiative and provided the overview of principles, approaches and updates on the progress achieved and the plans for the next steps in Asia and the Pacific Region. For promoting broader awareness IAEA and ADB planned to conduct a Webinar NUTEC Plastic in March 2023 in the framework of the ADB Circular Economy Webinar Series.

- Proper waste management system (including lack of local capacity)
- Project delays due to COVID-19
- Data collection related to waste in general
- Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter
- Government support in initiatives of your Organisation
- Others (please specify)

6.35.4. Further Information:

- NUTEC Plastics website: <https://www.iaea.org/services/key-programmes/nutec-plastics>
- NUTEC Plastics Flyer: <https://www.iaea.org/sites/default/files/21/05/nutec-plastics.pdf>
- NUTEC Plastics Brochure: <https://www.iaea.org/sites/default/files/21/05/nuclear-technology-for-controlling-plastic-pollution.pdf>

Regional Roundtables:

- NUTEC ASIA: https://www.iaea.org/sites/default/files/21/08/nutec_rt_asiapacific.pdf
- NUTEC AFRICA: https://www.iaea.org/sites/default/files/22/09/tc_nutec_africa_final-web.pdf
- Videos: <https://www.iaea.org/newscenter/multimedia/videos/nutec-a-nuclear-solution-to-plastic-pollution>
- <https://www.iaea.org/newscenter/multimedia/videos/nutec-a-nuclear-solution-to-plastic-pollution>

6.35.5. Contact Details: *(Please specify name and email address)*

- Melissa Denecke, Director- Division of Physical and Chemical Sciences (M.Denecke@iaea.org)
- Florence Descroix-Comanducci, Director- IAEA Environment Laboratories (F.Descroix-Comanducci@iaea.org)
- Jane Gerardo-Abaya, Director, Technical Cooperation for Asia and the Pacific (J.Gerardo-Abaya@iaea.org)

6.36. Organisation for Economic Co-operation and Development (OECD)

Key Highlights

- The 2021 OECD publication “[A Chemicals Perspective on Designing with Sustainable Plastics: Goals, Considerations and Trade-offs](#)”
- The OECD “[Monitoring trade in plastic waste and scrap](#)” reports monitor flows in global trade in plastic waste and scrap between OECD and non-OECD countries
- **OECD [Global Plastics Outlook reports](#)** constitute a key tool to support decision-makers
- OECD **[Environment at a Glance Indicators](#)** Platform provides interactive access to the latest comparable
- Project “Driving a sustainable ocean economy in Southeast Asia”

6.36.1. Action Framework

Action Plan / Strategy of Entire Organisation

No

Indicators

No

6.36.2. Measures & Achievements

Sustainable and circular business model creation (e.g. servitization of products)

Sustainable and circular product design (e.g. use of recycled materials)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

The 2021 OECD publication “[A Chemicals Perspective on Designing with Sustainable Plastics: Goals, Considerations and Trade-offs](#)” seeks to enable the creation of inherently sustainable plastic products by integrating sustainable chemistry thinking in the design process. It provides an integrated approach to sustainable plastic selection from a chemicals perspective, and identifies a set of generalizable sustainable design goals, life cycle considerations and trade-offs. The report also considers trade-offs that will need to be carefully balanced in the design phase and reflection on implications of design choices.

Proper waste management

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Global Plastics Outlook publications (see below).

This [interactive data dashboard](#) provides a snapshot on the full lifecycle of plastics across the world: production, use, waste generation, waste management, waste generation and waste management, including waste that is mismanaged or leaked to the environment.

Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

The OECD "[Monitoring trade in plastic waste and scrap](#)" reports monitor flows in global trade in plastic waste and scrap between OECD and non-OECD countries.

Monitoring of country policy status related to MPL (e.g. regional knowledge platform)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Project "Driving a sustainable ocean economy in Southeast Asia" (see below)

6.36.3. Addressing common challenges for MPL

Data collection related to marine plastic litter

OECD project Driving a sustainable ocean economy in Southeast Asia (see below)

Recycling system improvement

Lack of viable circular economy business models

Lack of financial incentives for waste treatment in general

OECD Global Plastics Outlook and related reports (see below)

Lack of financial/ tax incentives for technology development

Lack of awareness among citizen, business, local government

Proper waste management system (including lack of local capacity)

OECD Global Plastics Outlook and related reports (see below)

Project delays due to COVID-19

Data collection related to waste in general

The OECD [Environment at a Glance Indicators](#) Platform provides interactive access to the latest comparable OECD-country data on the environment from the OECD Core Set of Environmental Indicators – a tool to evaluate environmental performance in countries and to track the course towards sustainable development. These indicators provide key messages on major environmental trends, including on waste, the circular economy and ocean resources. They are accompanied by a short **Environment at a Glance report** that presents

a digest of the key messages stemming from the indicators. For each group of indicators, the **Environment at a Glance: Country Profiles** feature selected environmental indicators and show the progress that countries have made in addressing selected environmental issues.

All available OECD environmental data are accessible on [OECD.stat](#). This includes also data and projections contained in the Global Plastics Outlook publications (see below).

- Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter
- Government support in initiatives of your Organisation
- Others (please specify)

6.36.4. Further Information:

The OECD has a longstanding line of work on resource efficiency and the circular economy, which includes issues related to plastics and plastic pollution. In recent years, Work led by the Working Party on Resource Productivity and Waste has focused on land-based sources of marine plastic pollution, in particular from the point of view of the **management of plastic waste, upstream measures**, closing the loop on resource use and enhance **plastic recycling**, and reducing the incidence of **single-use plastic waste** and **microplastics**.

The **OECD [Global Plastics Outlook](#) reports** constitute a key tool to support decision-makers. Policy scenarios for the evolution of plastics use, waste and environmental impacts contained in the reports can help policy makers understand the scale of the challenge to transition to a more sustainable and circular use of plastics, as well as to grasp the environmental benefits and economic consequences of adopting more stringent policies. Modelling results find that, thanks to a combination of fiscal instruments and other policy measures, the Global Ambition policy package could reduce plastics use and waste by a third below the Baseline, and almost completely eliminate plastic leakage to the environment by 2060.

Additionally, a recent [synthesis paper](#) prepared for INC2 highlights the costs of eliminating plastic leakage and the currently available official development aid to achieve that role. The paper examines: (i) trends in plastics use, waste generation and the related environmental impacts in developing countries, (ii) the scope and nature of Official Development Assistance (ODA) in support of reducing plastic pollution, and (iii) effective and innovative development cooperation approaches that could be scaled up and further developed.

Following up on the Global Plastics Outlook publications, the Environment Directorate is now working on two other related projects:

- a **Regional Plastics Outlook** focusing on **ASEAN, Japan, Korea and China**. This region is particularly affected by high levels of plastic leakage, most of which ends up in the ocean.
- A report that looks into the **implications of increasing the ambition of plastics policies** with an aim of **eliminating plastic leakage by 2040**. This work will look at how different policy instruments of the GPO can be scaled up and accelerated to deliver earlier results and prevent the build-up of plastics in the environment.

Since 2019, the OECD project **Driving a sustainable ocean economy in Southeast Asia** has focused on addressing ocean pollution from plastics in the SEA region, by convening policymakers and relevant stakeholders at the regional, national, and local levels to discuss

co-ordinated and coherent policy approaches to curb marine plastic pollution, how finance may be mobilised to address the problem of plastic pollution at the source, as well as clarifying what are the data and information gaps that need to be filled, and how work from the OECD, COBSEA and other international organisations and bilateral donors can support governments in the SEA region to fill those gaps.

Our work on plastics is available at the following link:
<https://www.oecd.org/environment/plastics/>

Flagship Global Plastics Outlook publications:

OECD (2022), *Global Plastics Outlook: Policy Scenarios to 2060*, OECD Publishing, Paris, <https://doi.org/10.1787/aa1edf33-en>.

OECD (2022), *Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options*, OECD Publishing, Paris, <https://doi.org/10.1787/de747aef-en>

6.36.5. Contact Information

- Peter Börkey, Circular Economy Lead, OECD Environment Directorate
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6.37. United Nations Environment Programme (UNEP)

Key Highlights

- UNEP Medium Term Strategy (MTS) 2022-2025 : contribution to the 2030, with a 2050 outlook
- UNEP Programme of Work : will drive the transformational shift outlined in the MTS
- One-UNEP Plastics Initiative
- “My Sustainable Living Challenge” - Game
- Resolution 5/14 entitled “End plastic pollution: Towards an international legally binding instrument”
- In collaboration with CCET developed the guidelines on Safe Closure and Rehabilitation of Municipal Solid Waste Dumpsites

6.37.1. Action Framework

Action Plan / Strategy of Entire Organisation

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

- UNEP Medium Term Strategy 2022-2025
- UNEP Programme of Work 2022-2025
- One-UNEP Plastics Initiative
- Follow-up to UNEA resolutions, including UNEA 5/14

Brief description:

UNEP Medium-Term Strategy 2022-2025:

The Medium-Term Strategy (MTS) outlines the contribution of UNEP to the 2030 Agenda and the decade of action during the period 2022–2025, with a 2050 outlook on planetary sustainability for people, prosperity and equity. It focuses on three strategic objectives targeting the three interconnected planetary crises (climate change, biodiversity and nature loss and pollution and waste) which are delivered by three thematic subprogrammes (Climate Action, Nature Action and Chemicals and Pollutions Action), underpinned by two foundational subprogrammes (Science Policy and Environmental Governance) and facilitated by two enabling subprogrammes (Finance and Economic Transformations and Digital Transformations). The challenges of plastic pollution and marine plastic litter are directly addressed in Outcome 3 under the Chemicals and Pollution Action (*Releases of pollutants to air, water, soil and the ocean are reduced*).

UNEP Programme of Work 2022-2025:

The Programme of Work (PoW) shows how the thematic subprogrammes (supported by the enabling and foundational subprogrammes) will drive the transformational shifts targeted by the MTS. It also outlines the means of measuring the effectiveness of UNEP in its direct,

enabling and influencing roles and defines a timebound trajectory that aligns the Organisation with the 2030 Agenda. Based on the PoW, the three thematic subprogrammes work towards a set of 2025 outcomes, supported by relevant indicators for measuring the results achieved. Out of the three strategic objectives, the component related to pollution reduction (*Towards a pollution-free planet*) sets out the following three 2025 outcomes which are also related to marine plastic litter reduction.

Outcome 3A:

Human health and environmental outcomes are optimized through enhanced capacity and leadership in the sound management of chemicals and waste.

Outcome 3B:

Waste management is improved, including through circular processes, safe recovery of secondary raw materials and progressive reduction of open burning and dump sites.

Outcome 3C:

Releases of pollutants to air, water, soil and the ocean are reduced.

One UNEP Plastics Initiative

- This Initiative aims to trigger a systems change to accelerate the transition towards a circular economy of plastics, thereby reducing plastic pollution and its impacts. It applies a programmatic approach to implement systems and circular solutions with governments, businesses, financial institutions, and individuals, with a long-term vision to end plastic pollution by 2040. The initiative is expected to support more than 45 governments, 530 impactful businesses and financial institutions to activate systems changes.
- It has 4 strategic goals: Goal 1: REDUCE THE SIZE OF THE PROBLEM: Eliminating and substituting unnecessary or problematic plastics and hazardous chemicals. Goal 2: DESIGN FOR CIRCULARITY: Ensuring plastic products are designed to be circular (reusable, recyclable, or compostable). Goal 3: ENSURE CIRCULARITY IN PRACTICE: Closing the loop of plastic in the economy by ensuring plastic products are circulated in practice (reused, recycled, or composted). Goal 4: DEAL WITH THE LEGACY: Managing plastic waste that cannot be reused or recycled in an environmentally sound manner.
- The initiative will tackle plastic pollution using a circular economy approach, and focus on six areas of activities in national, regional and global projects:
 - Inspiring and supporting industry action
 - Enabling national and local regulatory frameworks;
 - Providing baseline assessment and guidance on systems actions
 - Supporting fiscal policies and finance action
 - Activating behaviour change and social action
 - Knowledge, capacity, reporting activities.

UNEA resolutions:

Resolution 5/14 entitled “End plastic pollution: Towards an international legally binding instrument” (UNEP/EA.5/Res.14) was adopted by Member States at the resumed fifth session of the UN Environment Assembly (UNEA) in February 2022, to forge an international legally binding instrument by 2024 on plastic pollution, including in the marine environment. Prior to this, four UNEA resolutions were adopted on the issue of marine litter and plastic pollution: UNEP/EA.1/Res.6: Marine plastic debris and microplastics (2014); UNEP/EA.2/Res.11: Marine plastic litter and microplastics (2016); UNEP/EA.3/Res.7: Marine

litter and microplastics (2017); and UNEP/EA.4/Res.6: Marine plastic litter and microplastics and UNEP/EA.4/Res.9: Addressing single-use plastic products pollution (2019).

Indicators

Yes

If yes, state the names of projects/initiatives with a brief description here:

Name:

UNEP, in collaboration with UNITAR, is developing to develop a statistical technical guideline on measuring flows of plastic along the lifecycle

Brief description:

Purpose: To provide policy-makers with high-quality statistics on plastics that are comparable at the national, regional and global levels to inform policies on responsible consumption and production, the circular economy and others.

Target users: National statistical offices and other relevant Organisations responsible for production of statistics on plastics

6.37.2. Measures & Achievements

Sustainable and circular product design (e.g. use of recycled materials)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UNEP Life Cycle Initiative's series study "Single-Use Plastic Products (SUPP) and their alternatives: Recommendations from Life Cycle Assessments"

UNEP Life Cycle Initiative has developed a series of meta-analyses of LCA studies on single-use plastic products and their alternatives. Each meta-analysis highlights the key advantages and disadvantages of alternatives to the single-use plastic products and summarizes key messages for policymakers. These include reports on single-use supermarket food packaging, nappies, face masks, menstrual products, bottles, tableware, take-away food packaging, bags and beverage cups. See more information:

<https://www.lifecycleinitiative.org/activities/key-programme-areas/technical-policy-advice/single-use-plastic-products-studies/>

Sustainable and circular business model creation (e.g. *servitization of products*)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

- **Global Environment Facility 8 – Integrated Program on: Circular Solutions to Single Use Plastic Packaging Pollution from the Food and Beverage Sector**

The Program is led by UNEP, and co-led by WWF, with the funding of ca. 107 million USD. It aims to address the root causes of plastic pollution: ever-growing unsustainable consumption and production of single-use and problematic plastic products and packaging with low circularity. The Program will demonstrate and scale up upstream solutions in the food and beverage sector, including the elimination of single-use plastic products/packaging and reduction of using crude oil as the primary feedstock; circular design of materials, products and business models; as well as ensuring materials and products are actually circulated in practice through reuse and recovery systems. This specific focus on upstream interventions will be transformative as there is a lack of critical support to address the plastic pollution from source, and it will strategically complement existing funding, projects and actions on plastic pollution which have a dominant emphasis on downstream actions (waste management and clean-ups). This Program will provide an innovative and transformative stimulation to trigger a system change to accelerate the transition towards a circular economy of plastics, and prevent plastic pollution at national, regional and global levels.

The Program will be delivered through 15 national pilot projects and one global platform project. Project activities will focus on five interlinked intervention areas throughout the whole Program: 1) regulation and policy development; 2) finance; 3) private sector; 4) communication and public advocacy for behavior and social change; and 5) knowledge management and capacity development for program-level coordination.

The Program is expected to achieve sizable environmental benefits in the areas of international waters, chemicals and waste, climate change and gender, with substantial co-benefits on biodiversity, social and economic values.

- **UNEP- Norwegian Retailers' Environment Fund partnership on Reducing Plastic Pollution through the Extended Producer Responsibility (mentioned on page 163 in the 4th G20 report)**

The United Nations Environment Programme (UNEP) has partnered with the Norwegian Retailers' Environment Fund to increase global and national capacity to develop, implement and mainstream Extended Producer Responsibility (EPR) approaches for plastic products.

This collaboration aims to develop global EPR guidelines, operational manuals and supporting toolkits to harmonize EPR approaches, provide tailored technical support to selected pilot countries, and organize capacity building and dissemination events towards more countries through an EPR helpdesk, to increase their capacity to implement EPR. Under this Initiative, UNEP has been providing technical support to Nigeria and Indonesia on their EPR system development. See <https://www.unep.org/reducing-plastic-pollution-through-extended-producer-responsibility>

- **EPR One-Stop-Shop**

UNEP has been collaborating with the Prevent Waste Alliance, WWF, OECD and EMF to develop an EPR One-Stop-Shop, which aims to create a common understanding on EPR, provide coordinated technical support to a large number of countries and EPR systems by requests, and build an EPR community to share best practices and lessons learned. The One-Stop-Shop is expected to be officially launched in late 2023.

- **Reuse Portal (<https://www.reuseportal.org/home>)**

The Reuse Portal is an open collaborative platform providing users – whether innovators, businesses, policymakers, activists, consumers or citizens – convenient access to practical guidance, tools and networks to take action and drive momentum for reuse

solutions. It is championed by the United Nations Environment Programme, World Wildlife Fund and the World Economic Forum.

UNEP SEA circular project – for less plastic wasted in South- East Asia region aims to reduce plastic pollution and its impact through a multi-sectoral approach, working with actors across the value chain – from policy makers to communities. The project strives to promote market-based solutions and enable policies to end plastic pollution at source – ensuring impact that is sustainable and scalable.

Proper waste management

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UNEP-IETC (International Environmental Technology Centre) in collaboration with the IGES Centre Collaborating with UNEP on Environmental Technologies (CCET) continued implementing the project on development and implementation of national and city waste management strategies funded by the Ministry of the Environment, Government of Japan. UNEP IETC with CCET completed developing waste management strategies with special focus on plastic waste management in Indonesia, Vietnam and Sri Lanka as well as the regional strategy, Strategies to Reduce Marine Plastic Pollution from Land-based Sources in Low and Middle - Income Countries. These strategies and relevant publications are used as reference documents not only for them to implement their strategies also as basic technical information on environmentally sound management and technologies for plastic waste as part of entire waste generation.

Furthermore, UNEP IETC completed the project Safe and Environmentally Sound Managed Treatment and Technology on the COVID-19 related healthcare and plastic waste funded by the Ministry of Foreign Affairs, Government of Japan. As one of relevant output, Healthcare Waste Management and Treatment Technologies: A Handbook Incorporating the Impacts of Pandemics and Plastic Waste was developed and will be further improved in the coming year.

Prevention of littering, illegal dumping and unintentional waste into the ocean

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

As part of the project on development and implementation of national and city waste management strategies, UNEP-IETC in collaboration with CCET developed the guidelines on Safe Closure and Rehabilitation of Municipal Solid Waste Dumpsites. The guidelines aim at providing simple guidelines for dumpsite closure and rehabilitation for local authorities. The guideline is a technical report which aims to provide: i) a risk assessment procedure to determine the level of pollution caused by a dump and its rehabilitation potential; ii) implementable rehabilitation and closure plans; iii) appropriate technical intervention to minimize leachate contamination, uncontrolled gaseous emissions, waste burning, and risk of dumpsite collapse; and iv) an appropriate operation and maintenance procedure that ensures sustainability of technical improvement measures.

Education system creation

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

1. Sustainable Living Learning Module

The Sustainable Lifestyles Learning Module is a free online self-paced course that dives into the science behind Sustainable Lifestyles for anybody with an interest to learn more on lifestyles or use it as a guide for their work as educators on sustainability. The module can be completed in an average of 3 hours and is available for free for anyone with an internet connection.

The Sustainable Lifestyles Online Learning Module explores the context of the 2030 Agenda, advancing the understanding of how our lifestyle choices impact the world around us and how we can find ways for everyone to live better and with a lighter impact.

The central premise of the 2030 Agenda for Sustainable Development is to take transformative steps to shift the world on a sustainable and resilient path. However, this is only possible if we collectively rethink how we live and consume, making conscious choices toward more Sustainable Lifestyles. To better understand the result of our choices, it is important to assess the impacts that our current behaviors and consumption patterns have on the planet and make lifestyle choices that contribute to sustainability.

It is anticipated that upon the completion of the Sustainable Lifestyle learning module, participants can learn about the key lifestyle "hotspots" and be invited to replicate sustainable initiatives in their communities.

The module is available [here](#).

2. My Sustainable Living Challenge (GAME)

"My Sustainable Living Challenge" initiative, developed by the UN System Staff College and the UN Environment Programme, is an interactive online gamified learning platform that enables people to learn about Sustainable Lifestyles and create an online community in which they have to apply what they learn and turn it into action. The initiative takes learners on a six-week journey in an immersive environment, in which they learn about sustainability, system change, and the impact of their lifestyles across the domains of food, housing, mobility, consumption and leisure by participating in engaging weekly challenges.

Every week a new challenge presents thought-provoking content prepared in collaboration with experts from UNEP, in an accessible and fun way.

The weekly activities nudge participants to put their learning into practice through real-life actions. By enabling participants to share expertise and ideas with peers, the activities solidify commitments and accountability.

'My Sustainable Living Challenge' will start on 5 June, the World Environment Day, and end on 16 July 2023. This edition of the Challenge will be available in English, French, Spanish and Russian. Registration is now open [here](#) and participants from the UN system and beyond.

3. The Massive open online course (MOOC)

On marine litter is currently being updated for re-launch in 2023. Various MOOC master classes, e-courses and training materials including on monitoring and assessment and on unnecessary, avoidable, and problematic (UAP) plastic products and polymers are under development for release in 2023.

Numerical data, if any:

The Sustainable Lifestyles Learning Module was well received and accounted for 2,425 registrations on the day of its launch.

Participants for the 2023 Global Edition of the Challenge are currently being recruited, after a very successful first run of the English version held last year. UNSSC funded 500 participants for the 2022 edition and this year GO4SDGS is sponsoring 1000 sustainability enthusiasts in every region of the planet to join the Challenge. New versions are expected to be funded every year, as well as new language versions that allow wider dissemination of this product.

MOOC on marine litter: Since the first time the MOOC was offered in 2015, over 32,000 people have registered to the course. It is now available in 10 languages.

Awareness-raising

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

New Plastics Economy Global Commitment

Launched in October 2018 by the Ellen MacArthur Foundation UNEP, the New Plastics Economy Global Commitment (NPEGC) unites businesses, governments, and other Organisations from around the world behind a common vision of a circular economy for plastic, in which it never becomes waste or pollution. The Global Commitment brings together over 500 signatories that are determined to start building a circular economy for plastics. In 2022, 34 governments committed to join the Global Commitment. Signatory businesses representing 20% of all plastic packaging produced globally have committed to ambitious 2025 targets to help realize that common vision. Signatory governments represent 1 billion people around the globe. In November 2022, the 4th Global Commitment annual progress report was released. The report's key messages include: 1) While strong progress is being made in some areas, key 2025 targets are expected to be missed. 2) The prospect of not meeting all 2025 targets reinforces the urgency for businesses to accelerate action, particularly around reuse, flexible packaging, and decoupling business growth from packaging use. 3) Governments need to take immediate action to accelerate progress and have the opportunity to promote a high ambition level in upcoming negotiations for a legally binding instrument on plastic pollution.

Global Tourism Plastics Initiative

Global Tourism Plastics Initiative (GTPI), led by UNEP and the World Tourism Organisation (UNWTO) with technical support of Ellen MacArthur Foundation, mobilizes tourism industry stakeholders including suppliers and waste management platforms, accommodation tour operators, cruise lines, and online booking platforms around implementation of circular solutions to tackle the issue of plastic pollution and more specifically, marine litter. With 80% of all tourism activities taking place in coastal areas, plastic pollution from tourism can easily end up in oceans and waterways. In the Mediterranean region alone, tourism is responsible for a 40% increase in levels of marine litter. The shift to circularity in the plastic economy is particularly needed in tourism destinations, where growing amounts of single use plastic products, particularly in the post-pandemic context, could produce an increase of 251 per cent in solid waste through 2050. Since its launch in 2020, the Global Tourism Plastics Initiative gained recognition as a framework to transition to a circular economy of plastics and acts as a sectoral interface of the New Plastics Economy Global Commitment (NPEGC).

In line with the work of the NPEGC, the Global Tourism Plastics Initiative works by gathering concrete and actionable commitments and targets from Member States (destinations) and tourism businesses, implementation progress is then annually tracked and reported.

Anatomy of Action

The Anatomy of Action (AoA), developed by the UN Environment Programme and the UNSchool of Disruptive Design, is an evidence-based social media toolkit and a set of guidelines that motivates people to contribute to Sustainable Development Goal 12 (SDG 12) on Responsible Consumption and Production. It has key action messages and examples of social media assets that can be used by anyone to show how they are supporting a transition to global sustainability. The toolkit outlines the top-level changes any individual can make in 5 main domains of lifestyles (i.e., Food, Stuff, Move, Money, and Fun) to support the growing shift to global sustainability. It strives for effective communication methods that foster behaviour change and align to campaigns that have worked to reduce plastics consumption.

The World Environment Day 2023 will take place in Cote d'Ivoire with the theme "Solutions to Plastic Pollution." There will be a series of global campaigns, awareness raising activities, media coverage, and featuring on best practices and case studies on reducing plastics pollution.

The Clean Seas Campaign

aims to rally governments, companies and individuals in the fight against plastic pollution and marine litter. Since the campaign was launched in 2017, the campaign has signed on 69 Member States, composing 76 per cent of the world's coastline, 22 civil society Organisations as Clean Seas supporters, and amassed more than 115,000 individual pledges, committing to reducing their personal plastic consumption and encouraging others to do so as well. The Clean Seas campaign helped raise the profile on the environmental, social, economic, and health impacts from plastic pollution globally. This eventually led to the historic resolution passed at the UN Environment Assembly in 2022, in which Member States agreed to end plastic pollution.

Initiatives for behavioral change (add a sub-question)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

The One Planet network Sustainable Lifestyles and Education programme, has developed, with UNEP support, guidance on developing effective campaigns for influencing individual choice and behaviour. The guidance Reducing plastic pollution: campaigns that work. Insights and examples to maximize the effectiveness of campaigns for sustainable plastic consumption identifies which strategies can be effective and provides recommendations that can be used by anyone creating a campaign concerned with plastic use.

Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies or a separate question)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

The Global Partnership on Plastic Pollution and Marine Litter (GPML) has fostered the establishment of a Community of Practice (CoP) for the harmonization of methodologies and models on plastic pollution monitoring. The purpose of this CoP is to explore interlinkages and interoperability among different methodologies and models on plastic flow monitoring in the economy and the environment, and to seek potential harmonization among them. This is one of four CoPs that are currently hosted in the 'Communities' section of the GPML Digital Platform mentioned further below. The other three ongoing CoPs are on ontology, on data

harmonization, and on harmonizing approaches for informing and enabling action on plastic pollution and marine litter.

Monitoring of country policy status related to MPL (e.g. regional knowledge platform)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

The GPML Digital Platform is a multi-stakeholder, mostly open-source platform that compiles and crowdsources different resources, integrates data and connects stakeholders to guide action around the issue of marine litter and plastic pollution.

Regional Nodes of the GPML provide knowledge management and networking services at regional levels through Regional Seas programmes. The East Asian Seas Regional Node web platform was launched in November 2022 with links to the Global Digital Platform, to curate resources and good practices at regional level, including access to a Regional Research Database.

Numerical data, if any:

The GPML Digital Platform currently includes a network of over 2400 users (1457 Organisations and 1073 individuals), 300+ data layers and 2,400+ resources, including 750 technical resources, 570 initiatives, 599 policies, 115 financing resources, 77 technologies and 70 action strategies/roadmaps/plans on plastic pollution and marine litter.

The East Asian Seas Regional Node web platform curates resources and data layers for 9 nine COBSEA participating countries, including a Research Database of over 700 peer reviewed publications from the wider ASEAN+3 region.

Scientific research

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

State of Knowledge – “From Pollution to Solution: a global assessment of marine litter and plastic pollution” and “Drowning in Plastics: marine litter and plastic waste vital graphics”.

Numerical data, if any:

The development of the *From Pollution to Solution* assessment was supported by a Scientific Advisory Group of 70 experts around the world and includes a comprehensive overview of existing literature on the topic (34 pages of references).

Others

Details of initiative:

UNEP Finance Initiative (UNEP FI) is convening a core group of leading financial institutions who will play an important role in supporting the development of the international legally binding instrument on plastic pollution and its future implementation across the global finance sector.

The **Finance Leadership Group on Plastics**, announced in January 2023 by ING at the World Economic Forum in Davos, will provide input and suggestions to the Intergovernmental Negotiating Committee (INC) on the desired outcomes for banks, insurers and investors. It will also build readiness in the finance sector to act on plastic pollution through awareness raising, capacity building, and target-setting support.

Convened by UNEP FI and sponsored by the Minderoo Foundation, the group already comprises financial institutions such as Allianz, ING, ProCredit Group, and Woori Financial Group and will grow to around ten banks and insurers who will collaborate with the Principles for Responsible Investment (PRI), with the objective of mobilizing a wider community of financial institutions in the medium-term on this agenda. The group will also receive strategic support from the World Economic Forum's Global Plastic Action Partnership and ensure consistency through collaborating with other initiatives such as the Business Coalition for a Global Plastic Treaty led by Ellen MacArthur Foundation and the World Wildlife Fund (WWF).

6.37.3. Addressing common challenges for MPL

Data collection related to marine plastic litter

GPML: In response to this challenge, the GPML is facilitating the convening Communities of Practice to encourage the harmonization of ontology, data, and methodologies and models for monitoring plastic pollution and marine litter.

SEA circular:

To strengthen data collection and build a harmonized national monitoring programme, UNEP conducts trainings to further harmonize monitoring methods and strengthen capacity on monitoring and data analysis to inform decision making. This work is in line with COBSEA's Regional Action Plan on Marine Litter (RAPMALI)

Recycling system improvement

Develop in-country projects to better collect, sort, recycle and dispose of plastic waste, and avoid open burning, dumping and littering of plastic waste.

Lack of viable circular economy business models

Through the GEF 8 Plastics Integrated Program, 15 national projects and 1 global project will explore innovative and scalable solutions to reduce plastic pollution from upstream interventions and activate circular economy of plastics at the global level.

Lack of financial incentives for waste treatment in general

Lack of financial/ tax incentives for technology development

UNEP will work on both fiscal policies, as well as private finance with financing institutions to support sustainable and circular solutions

Lack of awareness among citizen, business, local government

Within the framework of the One Planet Consumer Information programme, UNEP and Consumers International developed recommendations to improve communication on plastic packaging through labels, claims, and standards.

The report [Can I Recycle This? A Global Mapping and Assessment of Standards, Labels and Claims on Plastic Packaging](#)

- Provides a global mapping of standards and on-package labels and claims related to plastic packaging,

- Identifies opportunities to use standards, labels and claims to tackle plastic pollution more effectively.

In addition to this work, the programmes issued *3 Key Message Papers for [Businesses](#), [Governments](#) and [Standard-setters and labelling Organisations](#)* to effectively implement the recommendations of the report, complemented by a set of [five case studies](#).

UNEP is convening World Environment Day 2023 with the theme of Solutions to Plastic Pollution.

UNEP organizes the annual [SEA of Solutions](#) (SoS) event that brings together local and national governments, value chain stakeholders, investors, civil societies, youth, thought leaders, academia, and development Organisations under one roof to exchange knowledge, enable collaboration and enact change in addressing plastic pollution in the South-East Asia region.

- Proper waste management system (including lack of local capacity)
- Project delays due to COVID-19
- Data collection related to waste in general
- Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter

UNEP will design and implement series of campaigns and activities to raise awareness of sustainable lifestyle to tackle plastic pollution, towards consumers, youth, women and other vulnerable groups.

- Government support in initiatives of your Organisation

UNEP is supporting Member States to develop a legally binding instrument to end plastics pollution by end 2024. In the meantime, UNEP is providing technical support to countries to implement concrete projects and activities to reducing plastic pollution through policy and regulatory development, private sector engagement, financing, awareness raising and capacity development.

- Others (please specify)

6.37.4. Further Information:

6.37.5. Contact Details: *(Please specify name and email address)*

- Feng Wang, Coordinator for Plastics
feng.wang@un.org
United Nations Environment Programme

6.38. United Nations Industrial Development Organisation (UNIDO)

Key Highlights

- “Addressing the challenge of Marine Plastic Litter using Circular Economy methods”
- “Support for transitioning from conventional plastics to more environmentally sustainable alternatives” in South Africa
- “Supporting the promotion of circular economy practices on single-use plastic value chain”
- Global project “SWITCH to circular economy value chains”
- In collaboration with UNIDO, UNEP and EU, the Global Alliance on Circular Economy, and Resource Efficiency (GACERE) has been established in February 2021

6.38.1. Action Framework

Action Plan / Strategy of Entire Organisation

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

“Addressing the challenge of Marine Plastic Litter using Circular Economy methods”

Brief description:

UNIDO's approach to address the challenge of marine plastic litter focuses on supporting Member States to promote circular economy practices in industry and society through policy recommendations, strengthening capacity in industry, including technical cooperation and technology transfer, and awareness development.

Circular economy practices in the plastics value chain can aim at

- Designing out waste to retain plastics within the economy;
- Regaining the value embodied in plastics that leaked out of the economy as waste; and
- Continuing efforts for recovering plastics already in oceans, in particular in services, on beaches, ports and coastal waters to end global marine plastic litter.

Especially, in the product design stage, the following might be considered: a) scrutinizing the necessity of packaging altogether, including of plastics, b) selection of renewable, biodegradable and compostable materials and additives that are not or less toxic for essential plastic packaging or single-use plastic products; c) designing for less material use to decrease waste generation; d) designing packaging and products that use a single or small number of polymers that are easy to separate during recycling.

Policy measures to incentivize circular economy practices in design could consist of supporting implementation of innovations in design of existing and new products, and support to innovations and start-ups, in particular, those related to new, biodegradable and compostable plastics. A number of initiatives could trigger both supply side motivation for circular product designs and preference for such products on the demand side, such as; (i) measures for creating markets for recycled plastics and improving markets for bio-based plastics; (ii) differentiated taxes on virgin and recycled plastics; (iii) introduction of standards for recycled content; and (iv) improving information on recycled content in products in combination with educational campaigns for consumers. Furthermore, support for the development of relevant infrastructure for collection and separation of waste streams and empowering local authorities with sufficient financial and technical resources could induce eco-design of products in order to ease recyclability. In developing countries, taking measures to include informal collection, separation and recycling operations and improving working conditions for the informal workforce could be one of the objectives to safeguard livelihoods and ensure a just transition.

For more information, please check:

[https://www.unido.org/sites/default/files/files/2019-06/UNIDO Addressing the challenge of Marine Plastic Litter Using Circular Economy 0.pdf](https://www.unido.org/sites/default/files/files/2019-06/UNIDO%20Addressing%20the%20challenge%20of%20Marine%20Plastic%20Litter%20Using%20Circular%20Economy%200.pdf)

Indicators

No

No specific MPL indicators. Some projects use the amount of plastic collected for recycling as an indicator.

6.38.2. Measures & Achievements

Technology development for plastic alternatives

Technology development for plastic alternatives (e.g. biodegradable plastics)

UNIDO project “Support for transitioning from conventional plastics to more environmentally sustainable alternatives” in South Africa

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UNIDO project in South Africa supported pilot production of single-use food containers with alternative material from sugar bagasse composites, of which sustainability is confirmed by life cycle sustainability assessment conducted by the Council of Science and Industrial Research (CSIR).

Sustainable and circular product design (e.g. use of recycled materials)

Details of initiative:

UNIDO project “Supporting the promotion of circular economy practices on single-use plastic value chain” in Egypt supports capacity building of product design and new business model development, targeting SMEs in the plastic value chain. The project promotes eco-design practices in industry and encourages adoption of greener material, products, and production

process or greener technology as well as greener business models, with support of enabling policy, regulations or economic tools, while minimizing any adverse impact on the industry.

Sustainable and circular business model creation (e.g. servitization of products)

Details of initiative:

UNIDO's global project "SWITCH to circular economy value chains" supports creation of circular business models in the plastic packaging value chain.

The project supports the creation of circular business models in the plastic packaging value chain by providing technical assistance to EU multinationals' suppliers located in developing countries. The project will select a plastics packaging pilot and foster an enabling environment for the pilot and circular value chain transitions more generally by 1) enabling policy and value chain research & public-private dialogues in the target country; 2) conduct capacity building for businesses and service providers; 3) provide circular economy financing solutions in pilot country finance institutions, and in collaboration with the European Investment Bank (EIB), and 4) conduct communication activities to promote consumer/stakeholder awareness and knowledge exchange on circular value chain approaches.

Proper waste management

Details of initiative:

UNIDO project "Support for transitioning from conventional plastics to more environmentally sustainable alternatives" supports strengthening the plastic recycling capacity of South Africa by encouraging implementation of the national guidelines of waste picker integration through trainings, and promoting EPR schemes by collaborating with industry, in order to increase collection of higher-quality recyclables.

UNIDO's other project "Promoting sustainable plastic value chains through circular economy practices" supports the Federal Ministry of Environment of Nigeria, and State governments and pilot local municipalities. The project has three lines of activities, which interact with each other: 1) Support development of implementation guidelines of the national policy on plastic waste management; 2) Support to strengthening recycling capacity at target municipalities through reinforcing the value chain system, including provision of necessary equipment and pilot implementation of the guidelines on plastic waste management; and 3) demonstration of circular economy and resource efficiency practices, including recycling system and innovative technology, at pilot companies or institutions to showcase their benefits.

The project "Integrated approach towards sustainable plastics use and (marine) litter prevention in Bangladesh" supports the Government of Bangladesh on improving waste management through baseline assessments, policy drafting and implementation to reduce littering and reduction in use of plastics by citizens. The project also targets short-lived consumer products that generate microplastics (e.g. cosmetics and garments) via a combination of Design for Environment and Resource Efficient and Cleaner Production practices.

Education system creation

Details of initiative:

UNIDO supports to establish the "Ghana Circular Economy Centre":

The project will enhance circular economy-based inclusive economic prosperity, particularly for women and youth small-scale entrepreneurs in Ghana by providing beneficiaries with improved access to financial and/or business and technology development services. The

project will also support the adoption of circular economy technologies and practices in the private and informal sectors by providing pilot project support services and technical capacity building. A Centre will be set-up within a tertiary education institute to be a focal point for the circular economy within the country and support innovations in different sectors including plastic packaging and plastic waste management.

Awareness-raising

Details of initiative:

All UNIDO projects promoting plastic circular economy have awareness raising components. UNIDO has published reports and brochures to raise awareness on the issue of plastic pollution and UNIDO's initiative to handle it. These reports are accessible through marine plastic website: <https://www.unido.org/Marine-plastic-litter>

Initiatives for behavioral change (add a sub-question)

Details of initiative:

Some UNIDO projects have communication campaigns targeting consumers. For example, UNIDO has a project to organize campaigns to encourage behavioural change of consumers in Egypt.

Other

Details of initiative:

In collaboration with UNIDO, UNEP and EU, the Global Alliance on Circular Economy and Resource Efficiency (GACERE) has been established in February 2021. Bringing together governments and relevant networks and Organisations, the GACERE aims to provide a global impetus to initiatives related to the circular economy transition, resource efficiency, sustainable consumption and production patterns, and inclusive and sustainable industrialization.

Sixteen countries (Canada, Chile, Colombia, Ecuador, India, Japan, Kenya, Morocco, New Zealand, Nigeria, Norway, Peru, Republic of Korea, Rwanda, South Africa, and Switzerland) and the European Commission on behalf of the European Union have joined the Alliance to date. Mexico and Singapore maintain observer status.

6.38.3. Addressing common challenges for MPL

Data collection related to marine plastic litter

Recycling system improvement

In Nigeria, UNIDO supports the development of the implementation guideline of the Policy of Plastic Waste Management, which includes demonstration of the guideline in some municipalities to improve their local plastic recycling value chains.

Lack of viable circular economy business models

UNIDO supports creation of circular business models in the plastic packaging value chain in global trade, and also supports Ghana's development of circular economy framework, which includes encouraging circular business models.

Lack of financial incentives for waste treatment in general

- Lack of financial/ tax incentives for technology development
- Lack of awareness among citizen, business, local government
- Proper waste management system (including lack of local capacity)
- Project delays due to COVID-19
- Data collection related to waste in general

Nigeria's project supports development of data collection system through pilot implementation of the policy guideline.

- Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter
- Government support in initiatives of your Organisation
- Others (please specify)

6.38.4. Further Information:

UNIDO is implementing projects with funding from the Government of Japan under the MARINE initiative to support G20 Osaka Blue Ocean Vision, which aims to reduce additional pollution to zero by 2050.

- Africa regional project “Study on available sustainable alternative materials to plastics, and innovative packaging and recycling technologies that meet market needs in Africa to reduce plastics leakages to the environment”: <https://open.unido.org/projects/M2/projects/190137> (Egypt, Kenya, and Nigeria)
- South Africa “Support for transitioning from conventional plastics to more environmentally sustainable alternatives”: <https://open.unido.org/projects/ZA/projects/190110>
- Egypt “Supporting the promotion of circular economy practices on single-use plastic value chain”: <https://open.unido.org/projects/EG/projects/190152>
- Nigeria “Promoting sustainable plastic value chains through circular economy practices ”: <https://open.unido.org/projects/NG/projects/210184>
- Other plastic and circular economy projects funded by EU, GEF, Canada, Finland, and Norway
- Ghana, “Establishing a circular economy framework for the plastics sector in Ghana”: <https://open.unido.org/projects/GH/projects/190244>
- Ghana: “Ghana Circular Economy Centre”: <https://open.unido.org/projects/GH/projects/210154>
- Bangladesh “Integrated approach towards sustainable plastics use and (marine) litter prevention in Bangladesh”: <https://open.unido.org/projects/BD/projects/190230>
- Global: “Switch to circular economy value chains”: <https://open.unido.org/projects/M0/projects/190161>

UNIDO publication: “Addressing the challenge of Marine Plastic Litter using Circular Economy methods”

- https://www.unido.org/sites/default/files/files/2019-06/UNIDO_Addressing_the_challenge_of_Marine_Plastic_Litter_Using_Circular_Economy_0.pdf

6.38.5. Contact Details: *(Please specify name and email address)*

- Nahomi Nishio, Industrial Development Expert
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6.39.  **United Nations Human Settlements Programme
(UN -Habitat)**

Key Highlights

- Uses SDG Indicator 11.6.1: Proportion of municipal solid waste collected and managed in controlled facilities
- Study on SDG indicator 11.6.1 monitoring and its global estimate together with marine litter
- Provides technical assistance and capacity-building support to governments and local authorities
- Waste Wise Cities programme (WWC)
- African Clean Cities Platform (ACCP)

6.39.1. Action Framework

Action Plan / Strategy of Entire Organisation

No

Indicators

Yes

If yes, state the names of projects/initiatives with a brief description here:

Name:

SDG Indicator 11.6.1: Proportion of municipal solid waste collected and managed in controlled facilities with regards to total municipal solid waste generated, by cities.

Brief description:

UN-Habitat launched Waste Wise Cities Tool (WaCT): Step by Step Guide to Assess a City's Municipal Solid Waste Management Performance through SDG indicator 11.6.1 Monitoring in 2021, and this has been applied in more than 40 cities across the world. The indicator measures municipal solid waste (MSW) generated, collected, and managed in controlled facilities. Monitoring this indicator provides plastic waste generated, recovered/recycled and disposed in a controlled manner as well as mismanaged plastic waste, in addition to plastic waste types currently being recovered in the subject city. The methodology is closely linked to Waste Flow Diagram (WFD), which uses WaCT data to estimate plastic leakage into the water system from the municipal solid waste management system. WaCT and WFD results are typically used to inform a strategic plan for improved solid waste management in cities, identifying policy interventions and infrastructure investment gaps. An online course "Data to Tangible Impacts: Achieving Waste SDGs by

2030” is also developed to guide WaCT applications and participatory action planning for the capacity development.

The collected data are entered in SPOT (Spatio-temporal Quantification of Plastic Pollution Origins and Transportation) model developed by University of Leeds to produce global estimate for SDG indicator 11.6.1 at regional, national and local level. The modeling results also identified “marine litter hotspot cities” where large quantity of plastic leakage estimated, therefore urgent action is needed.

6.39.2. Measures & Achievements

Proper waste management

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UN-Habitat launched the Waste Wise Cities programme (WWC) on World Habitat Day in 2018 with a call to action to tackle the global challenge of waste management. As of March 2023, more than 400 cities across the world have become members of WWC. The programme has four key action areas namely: 1) knowledge and best practice sharing; 2) waste data and monitoring; 3) education and advocacy and 4) finance and bankability support. WWC aims to support cities and local governments in achieving SDGs related to waste as well as in implementing the New Urban Agenda.

In addition, the African Clean Cities Platform (ACCP) was established in 2017 in Maputo, Mozambique, by representatives from 24 African countries together with the Ministry of Environment of Japan, the Japan International Cooperation Agency (JICA), the City of Yokohama, the United Nations Environment Programme (UNEP) and UN-Habitat with the aim to support cities in Africa in improving their solid waste management. As of March 2023, 165 cities from 45 countries in the continent have become members of ACCP and various activities are carried out in three key action areas namely: 1) knowledge sharing and networking; 2) promoting the achievement of waste SDGs targets; 3) supporting project development in waste management.

Numerical data, if any:

The world generated 2.3 billion tons of municipal solid waste (MSW) in 2018, of which 18% is uncollected and 45% is managed in uncontrolled facilities. Mismanaged waste is a source of GHG emission and plastic pollution, threatening public and human health. Urgent action should be taken to address the global waste crisis. More detail is found here.

Prevention of littering, illegal dumping and unintentional waste into the ocean

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UN-Habitat conducts various activities for the prevention of littering, illegal dumping and unintentional waste into the ocean through the Waste Wise Cities programme (WWC) and African Clean Cities Platform (ACCP) such as 1) education, 2) awareness-raising, 3) capacity-building and 4) research and data collection.

- Education: UN-Habitat provides a variety of capacity development resources for improved solid waste management at the Waste Wise Academy consisting of online courses, toolkits & guides, training and webinars and good practices. The Waste Wise Cities’ Website also provides various publications & technical Material on

waste-related topics such as just transition, municipal solid waste management (MSWM) on COVID-19 and environmental sustainability and climate action.

- Awareness-raising: UN-Habitat and United Nations Environment Programme (UNEP) jointly facilitate the first observance of [International Day of Zero Waste](#) on 30 March, 2023, according to the UN General Assembly Resolution on “Promoting zero-waste initiatives to advance the 2030 Agenda for Sustainable Development” to raise awareness and disseminate good practices on zero waste initiatives at national and local level. UN-Habitat also collaborates with an NGO Let’s Do It World in organizing [World Cleanup Day](#).
- Capacity building: UN-Habitat provides technical assistance and capacity-building support to governments, local authorities, and civil society Organisations to help them develop and implement effective waste management policies and practices based on the WaCT. The online course [From Data to Tangible Impact: Achieving Waste SDGs by 2030](#) guides how to apply WaCT and use the data for strategic planning to improve municipal solid waste management. UN-Habitat also published the ["City Action Plan on Plastic" template](#), co-developed by WWF, to guide cities in developing an interventions’ plan to tackle plastic waste in the short term.
- Research and data collection: UN-Habitat conducts research and collects data on the solid waste management system in cities through the WaCT and WFD implementation to better understand the nature and extent of the problem and to inform policy development and decision-making.

Education system creation

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UN-Habitat created [Waste Wise Academy](#), which offers a variety of possibilities to improve your knowledge of solid waste management. It consists of online courses, toolkits & guides, training and webinars and good practices, which provide knowledge products from members of the Waste Wise Partnership, as well as links to additional relevant information from others. In particular, [Waste Wise Education Factsheets](#), collected from the members and a set of educational resources available on the good practices, provide educators with information and guidance on integrating waste management and sustainability topics into their teaching. Each factsheet includes key concepts, learning objectives, suggested activities, and additional resources that educators can use to develop lesson plans or educational materials. UN-Habitat and its partners have also published [Publications & Technical Material](#) on various waste-related topics such as just transition, municipal solid waste management (MSWM) on COVID-19 and environmental sustainability and climate action.

Awareness-raising

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UN-Habitat and United Nations Environment Programme (UNEP) jointly facilitate the observance of [International Day of Zero Waste](#) on 30 March, which was proclaimed based on a resolution put forward by Türkiye with 105 other countries at its seventy-seventh session adopted by the UN General Assembly in December 2022. During International Day of Zero Waste, Member States, Organisations of the UN system, civil society, the private sector, academia, youth and other stakeholders are invited to engage in activities aimed at raising awareness of national, subnational, regional and local zero-waste initiatives and their

contribution to achieving sustainable development. On the first International Day of Zero Waste in 2023, more than 50 events related to zero waste were successfully organized around the world.

UN-Habitat collaborates with Let's Do It World in organizing [World Cleanup Day](#), which is an international social action programme that aims to combat the problem of solid waste pollution and promote sustainable living, and annually takes place on the third Saturday of September each year. UN-Habitat supports World Cleanup Day by providing technical assistance, promoting the event through its networks, and engaging with governments and other stakeholders to promote sustainable waste management practices.

Furthermore, UN-Habitat publishes a [Newsletter](#) every two months to keep you posted on the work UN-Habitat does with them.

Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies or a separate question)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

UN-Habitat measures the SDG Indicator 11.6.1 using the [Waste Wise Cities Tool](#) (WaCT) and the [Waste Flow Diagram](#) (WFD) to inform on the performance of a city solid waste management system, which have been applied in more than 40 cities across the world. WFD aims to the five points for aiding in solving the critical solid waste issue: 1) provides a rapid assessment of a cities or municipalities municipal solid waste management system and visualize the flows of waste including informing the SDG Indicator 11.6.1; 2) uses observational based assessments to quantify the sources of plastic leakage into the environment such as land, water system, burnt and drains and determine the fate of this uncontrolled waste; 3) identify high-priority sources of plastic pollution; 4) allow benchmarking and comparison between cities, 5) run scenarios to gain insights into how proposed interventions may impact the solid waste management system and plastic pollution, and 6) quantify the effectiveness of applied interventions. All waste flows are summarized in easy to visualize Sankey diagrams.

Scientific research

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Study on SDG indicator 11.6.1 monitoring and its global estimate together with marine litter hotspot identification will be published by University of Leeds, with the support of UN-Habitat's Waste Wise Cities programme and African Clean Cities Platform.

6.39.3. Addressing common challenges for MPL

Data collection related to marine plastic litter

UN-Habitat measures the SDG Indicator 11.6.1 as well as plastic leakage into the water systems from municipal solid waste management system, using the [Waste Wise Cities Tool](#) (WaCT) and the [Waste Flow Diagram](#) (WFD). Collected data so far from more than 40 cities across the world is used to identify marine litter hotspot cities and plastic emission map measuring each country's plastic emissions through GIS modelling.

Recycling system improvement

UN-Habitat launched Waste Wise Cities Tool (WaCT): Step by Step Guide to Assess a City's Municipal Solid Waste Management Performance through SDG indicator 11.6.1 Monitoring. Based on the WaCT and WFD results, UN-Habitat proposes a strategic plan for improved solid waste management including recycling systems in cities, identifying policy interventions and infrastructure investment gaps.

Lack of viable circular economy business models

Lack of financial incentives for waste treatment in general

Lack of financial/ tax incentives for technology development

Lack of awareness among citizen, business, local government

UN-Habitat jointly facilitates the observance of International Day of Zero Waste on 30 March with UNEP and organizes World Cleanup Day led by Let's Do It World by engaging with governments and other stakeholders to promote sustainable waste management practices.

UN-Habitat Also publishes Videos of projects, webinars and films related to solid waste management and plastic waste management and a Newsletter every two months.

Proper waste management system (including lack of local capacity)

UN-Habitat's supports cities in the world to improve their municipal solid waste management through Waste Wise Cities programme and African Clean Cities Platform using the Waste Wise Cities Tool (WaCT) as a central tool to advance the efforts through evidence-based policy approach.

Project delays due to COVID-19

UN-Habitat published Strategy Guidance: Solid Waste Management Response to COVID-19, which provides 10 point strategy for solid waste management operations in the context of COVID-19.

Data collection related to waste in general

UN-Habitat conducts research and collects data on the solid waste management system in cities through the WaCT and WFD implementation to better understand the nature and extent of the problem and to inform policy development and decision-making.

Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter

Government support in initiatives of your Organisation

UN-Habitat provides technical assistance and capacity-building support to governments and local authorities to help them develop and implement effective waste management policies and practices based on the WaCT results typically used to inform a strategic plan for improved solid waste management in cities, identifying policy interventions and infrastructure investment gaps.

Others (please specify)

6.39.4. Further Information:

6.39.5. Contact Details: *(Please specify name and email address)*

- Andre Dzikus, Chief, Urban Basic Services Section (andre.dzikus@un.org)
- Cecilia Andersson, Head, Waste Management Unit (cecilia.andersson@un.org)
- Nao Takeuchi, Waste Management Specialist, Waste Management Unit (nao.takeuchi@un.org)

6.40. GLOBAL PLASTIC ACTION PARTNERSHIP **World Economic Forum - Global Plastic Action Partnership (WEF-GPAP)**

Key Highlights

- GPAP along with SYSTEMIQ, developed the National Analysis and Modelling (NAM)
- GPAP published additional case studies as part of the second edition of “Unlocking the Plastics Circular Economy: Case Studies on Investment”.
- Sustainable and circular product design : key focus areas of the GPAP’s Global Plastic Innovation Network (GPIN)

6.40.1. Action Framework

Action Plan / Strategy of Entire Organisation

Yes

If yes, state the name of your action plan or strategy with a brief description here:

Name:

Global Plastic Action Partnership (GPAP)

Brief description:

The Global Plastic Action Partnership, hosted at the World Economic Forum, is a multistakeholder platform dedicated to translating commitments to reduce plastic pollution and waste into concrete action. It was created by a coalition of public and private sector actors and aims to shape a more sustainable and inclusive world through the eradication of plastic pollution. Through its inclusive multistakeholder platforms, GPAP is uniquely equipped to bring public, private, and civil society leaders together to develop joint solutions to the plastic pollution crisis that are both pragmatic and ambitious. GPAP operates in three main ways:

- Convening communities and curating conversations
- Generating new insights and action roadmaps
- Catalysing coordinated action to scale-up solutions

Since its inception in 2019, nearly a dozen national and local partners have committed to a transformative shift in the circular economy (Cambodia, Ecuador, Ghana, Indonesia, Maharashtra (India), Mexico City, Nigeria, Pakistan, South Africa, Panama, and Viet Nam). Several others are in the pipeline to join this year.

GPAP prioritizes six cross-cutting impact areas: boosting innovation; transforming behavior; harmonizing metrics; informing policy; unlocking financing; and promoting inclusivity.

Indicators

Yes

If yes, state the names of projects/initiatives with a brief description here:

Name:

Global Plastic Action Partnership

Brief description:

Building consensus on consistent approaches to measure plastic waste and pollution is essential for monitoring progress. The negotiation of a global treaty on plastic pollution has the potential to unleash unprecedented demand for country-level baseline assessments, target-setting, progress monitoring and reporting.

GPAP, with the support of SYSTEMIQ, has developed an online analytics tool called the National Analysis and Modelling (NAM) tool, which allows countries to establish a practical, science-based baseline and roadmap to accelerate their transition to a circular, low carbon plastics system.

Indonesia, Ghana, and Viet Nam were the first to run analyses utilizing a pilot version of the NAM tool. Based on these successes, an increasing number of local partners have undertaken baseline analysis: Mexico City and Pakistan have already finalised theirs, while for Ecuador and Maharashtra the analysis is ongoing. The tool allows national and local stakeholders to pioneer their transitions to a circular plastics economy and to quantify their contributions to the goals of a global treaty on plastic pollution as it comes into effect.

The local partnerships also set up metrics / measurement task forces to advance country-level or subnational efforts related to plastic flow data collection, harmonization, and analysis.

6.40.2. Measures & Achievements

Sustainable and circular product design (e.g. use of recycled materials)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

The Reuse Portal is an open collaborative platform providing global users – whether innovators, businesses, policymakers, activists, consumers or citizens – convenient access to practical guidance, tools and networks to take action and drive momentum for reusable packaging solutions and scale alternatives to single-use formats. A vanguard community of core users has recently been onboarded, with the aim to pilot the platform. GPAP has partnered with other Organisations to develop the Reuse Portal, including the United Nations Environment Programme and the World Wildlife Fund.

Sustainable and circular product design is also one of the focus areas of the GPAP's Global Plastic Innovation Network (GPIN), an open collaboration platform designed to harness the power of innovation and accelerate high-impact solutions that can help eradicate plastic pollution. It is supported by the GPAP and hosted by UpLink, the World Economic Forum's open innovation crowdsourcing platform.

Sustainable and circular business model creation (e.g. servitization of products)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Stemming the tide of plastic pollution requires testing and scaling new business models, including reuse and refill systems, which prevent waste from being generated in the first place. Waste prevention is one of the five focus areas of GPAP's Global Plastic Innovation

Network (GPIN), an open collaboration platform designed to harness the power of innovation and accelerate high-impact solutions that can help eradicate plastic pollution.

The promotion of circular business models is also a key component of our in-country partnerships' action roadmaps and task forces. Additionally, GPAP partnered with SecondMuse and the Alliance to End Plastic Waste to launch a "Plastic Waste to Value" Innovation Challenge in Southeast Asia on UpLink with a focus on identifying relevant solutions in Indonesia, Vietnam, the Philippines, and Thailand. The Incubation Network ran a mentorship programme and a series of workshops to support the winning cohort to scale their businesses in the region. In addition, the five top innovators also received financial rewards as part of The Incubation Network programme.

The awardees received the following amounts:

- PT: Ktita Bumi Global (US\$ 11,500)
- Plastic People (US\$ 24,000),
- Bank Sampah Bersinar (US\$ 16,500),
- Envirotch Waste Recycling (US\$ 12,000) and
- Terracycle Global Foundation (US\$ 15,000).

Proper waste management

Prevention of littering, illegal dumping and unintentional waste into the ocean

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Country analyses on trade and plastics circularity:

GPAP and the World Economic Forum's Centre for Regions, Trade and Geopolitics have worked with government stakeholders in Ghana and South Africa to develop trade policy analyses to bolster plastic action at national-level. Among the suite of policy options proposed, special focus was accorded to strengthening customs capacities and leveraging regional economic agreements to curb illegal plastic waste flows, which often end up as MPL. Additional studies are being scoped in Latin America, Southeast Asia, and Sub-Saharan Africa.

Initiatives for behavioral change (add a sub-question)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

Leveraging the World Economic Forum's public engagement platforms, as well as its multistakeholder approach, GPAP raises awareness among governments, businesses and other decision-makers on plastic pollution and key solutions areas as a first step to the changes needed.

All stakeholders in the plastics ecosystem have a role to play in communicating the relevant information needed for the public and businesses to make informed decisions. GPAP's multistakeholder approach means we can raise awareness among governments, businesses and other decision-makers about proven behaviour change methods. We take a comprehensive approach to behaviour change, focusing on actions both upstream to prevent waste, and downstream to better manage it. The country-level partnerships in e.g., Indonesia and Ghana both convened Behaviour Change Task Forces in 2021 and 2022. In

Indonesia, a *Behaviour Change Roadmap to radically reduce plastic pollution in Indonesia* was also launched. In Ghana, task forces made up of actors across the value chain have been creating citizen engagement strategies and targeted campaigns.

Encouraging behaviour that directly contributes to preventing plastic waste leakage requires efforts from actors across the entire plastic value chain: individuals, families, communities, businesses, innovators, and the public sector that all directly contribute to preventing plastic waste and improving how waste is managed and recovered. The template for a Behaviour Change Roadmap lays out the goals and practical next steps to guide the Behaviour Change Task Force in turning strategy into results. Campaigns are grounded in scientific and audience insights led approaches for a measurable desired effect, rather than solely awareness raising which can have unintended adverse consequences.

Monitoring of plastic flows (e.g. using Artificial Intelligence and other advanced technologies or a separate question)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

GPAP has helped to improve the accessibility and quality of data analysis related

to plastic pollution by **establishing a national baseline tool based on a groundbreaking model** first developed by the Pew Charitable Trusts and SYSTEMIQ (NAM tool). GPAP also establishes expert committees and metrics task forces in its local and country-level partnerships to ensure unbiased, evidence-based data collection and evaluation, as well as multistakeholder consultation on the national baselines, including representatives from government, academia, industry, and civil society. Beyond the baseline assessment, GPAP has also built a scenario modelling tool that allows countries to identify the right set of actions (e.g., policies, regulations, financing models, solution support) needed to achieve national targets.

In Indonesia, for example, by conducting a thorough baseline analysis through a participatory process with over thirty experts, NPAP Indonesia identified the country's municipal solid waste and plastic waste flows and quickly gained agreement on its data and potential future scenarios to inform plastic action at the national level.

Monitoring of country policy status related to MPL (e.g. regional knowledge platform)

Details of initiative:

(*Please specify the target country/region and budget size, if possible)

All country-level partnerships conduct a detailed assessment of the current local plastics situation and estimate potential future plastic flows. Sector experts review the data and develop policy options to address the challenges raised. From these insights, the local multistakeholder platforms publish an evidence-based action roadmap towards the country's plastic pollution targets. Our partnerships have also contributed to national policies and legislation on the circular economy, plastic waste management and extended producer responsibility schemes in Viet Nam, influenced national plastics management policy in Ghana and fostered agreement on targets in Indonesia.

6.40.3. Addressing common challenges for MPL

Data collection related to marine plastic litter

Lack of quality data is a challenge we encounter in several countries. The NPAP metrics taskforces have the goal to collaborate with experts to identify data gaps and discuss ways to improve the data collection.

- Recycling system improvement
- Lack of viable circular economy business models
- Lack of financial incentives for waste treatment in general

Solving the plastic waste problem requires a significant redirection of funds towards reuse and refill; substitution and reduction; as well as collection, sorting and recycling. At GPAP, we are proactively building interest in such investment. We have engaged partners through a task force focused on financing plastic waste and pollution solutions. In the past year, our achievements include:

- In December 2022, GPAP published additional case studies as part of the second edition of “Unlocking the Plastics Circular Economy: Case Studies on Investment”. This comprehensive edition illustrates how capital from a variety of sources is enabling circularity across the plastics value chain and builds on an earlier publication launched in February 2022. To support the launch of the publication, GPAP also hosted an online seminar, attended by over 150 participants, the majority from the private sector. The second edition also includes a dedicated supplement for policymakers, intended to support negotiators involved in the INC process.
- In 2023 learnings from the case studies are being further disseminated at country, regional and global (INC) levels, to promote awareness around policy as an enabler to catalyse investment in circular plastics.
- The launch of e.g., Ghana’s Financing Roadmap and implementing policy options and actions through the Financing Task Force in Ghana.
- \$2.1 billion committed by our partners to initiatives targeting plastic waste and pollution reduction.
- Securing sixteen financial institutions as GPAP partners or collaborators.
- In 2022, in Indonesia, an NPAP Financing Taskforce Dialogue was organized as part of the Road to G20 events on “Unlocking the financing gap to meet Indonesia’s marine plastic reduction target”. During the “Road to G20”, forty-six commitments were pledged by thirty-nine institutions to tackle plastic waste in Indonesia, for a total of 17.49 trillion IDR until 2030, 866 thousand tons of plastic waste to be reduced and diverted from the ocean.

- Lack of financial/ tax incentives for technology development

The Indonesia NPAP successfully supported cooperation between the Financing Taskforce and the Innovation Taskforce, thus facilitating meaningful exchange between innovative entrepreneurs and investors and financing institutions. Through a project showcase, the Indonesia partnership connected innovators with potential funders and additionally released a behaviour change roadmap.

Furthermore, the Organisation of “Innovation Challenges” at national or regional level stimulate interest, knowledge exchange and increase opportunities of funding for valuable initiatives, opening avenues to scale promising pilot initiatives.

- Lack of awareness among citizen, business, local government
- Proper waste management system (including lack of local capacity)

Through our studies on trade policy for plastics circularity we explore the potential in facilitation of foreign direct investment and services liberalisation to strengthen waste management systems.

- Project delays due to COVID-19
- Data collection related to waste in general
- Actions/ Policies promoting sustainable lifestyles/ community-based action to tackle marine litter
- Government support in initiatives of your Organisation

Our National Plastic Action Partnerships (NPAPs) are embedded into government ministries and coordination structures to create local ownership and to drive greater impact. For example, our trade studies we have worked closely with the ministries of both trade and environment and have had their support in our initiatives. Several other ministries (e.g., finance, science and technology, innovation etc.) have also supported us.

- Others (please specify)

6.40.4. Further Information:

Global resources

- GPAP website <https://globalplasticaction.org/>
- GPAP Annual Impact Report 2020 <https://globalplasticaction.org/wp-content/uploads/GPAP-Annual-Impact-Report.pdf>
- GPAP Annual Impact Report 2021 <https://globalplasticaction.org/wp-content/uploads/GPAP-Impact-Report-2021.pdf>
- GPAP Annual Impact Report 2022 <https://weforum.ent.box.com/file/1019499749710?s=qd0xjqplbykjcvc5ktfigpt75lfeoyq3>
- Guide to Ensure Gender-Responsive Action in Eliminating Plastic Pollution <https://globalplasticaction.org/wp-content/uploads/GPAP-Global-Gender-Guidance-May-2021.pdf>
- Global Plastic Innovation Network (in collaboration with UpLink) <https://uplink.weforum.org/uplink/s/>
- GPAP Global Plastic Champions community <https://www.weforum.org/agenda/2021/01/young-people-turning-the-tide-on-plastic-pollution/>
- GPAP Case Studies on Investment <https://www.globalplasticaction.org/resources/case-studies/aJY680000008OLiGAM#query=unlo>

NPAP Indonesia

- NPAP Indonesia website <https://globalplasticaction.org/countries/indonesia/>
- NPAP Indonesia Action Roadmap https://globalplasticaction.org/wp-content/uploads/NPAP-Indonesia-Multistakeholder-Action-Plan_April-2020.pdf
- NPAP Indonesia Financing Roadmap <https://globalplasticaction.org/wp-content/uploads/NPAP-Indonesia-Financing-Roadmap.pdf>

- NPAP Indonesia Innovation Roadmap https://globalplasticaction.org/wp-content/uploads/NPAP_InnovationTF_Roadmap_VF.pdf
- NPAP Behavioral Change Roadmap <https://globalplasticaction.org/wp-content/uploads/NPAP-Behaviour-Change-Roadmap.pdf>
- NPAP Indonesia Metrics Roadmap <https://globalplasticaction.org/wp-content/uploads/NPAP-Indonesia-Metrics-Roadmap.pdf>
- NPAP Indonesia Policy Roadmap <https://weforum.ent.box.com/file/1034065256229?s=nurh338urb01wj2ygrjdu7xc893fuxou>

NPAP Ghana

- Gender Analysis of the Plastics and Plastic Waste Sectors in Ghana (Baseline analysis report) <https://globalplasticaction.org/wp-content/uploads/NPAP-Ghana-Gender-Baseline-May-2021.pdf>
- An Intersectional Gender Equality Strategy for the Ghana National Plastic Action Partnership <https://globalplasticaction.org/wp-content/uploads/NPAP-Ghana-Intersectional-Gender-Equality-Strategy.pdf>

NPAP Viet Nam

- NPAP Vietnam Action Roadmap <https://www.globalplasticaction.org/resources/case-studies/aJY68000000PAv2GAG#query=VIET>

6.40.5. Contact Details: *(Please specify name and email address)*

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