

# 2023 G7 Hiroshima Summit Final Compliance Report

22 May 2023 to 15 May 2024

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# 5. Climate Change: Emission Reduction Policies

"We support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions, and note that these could vary reflecting country-specific circumstances."

G7 Hiroshima Leaders' Communiqué

#### **Assessment**

	No Compliance	Partial Compliance	Full Compliance
Canada			+1
France			+1
Germany			+1
Italy			+1
Japan			+1
United Kingdom			+1
United States			+1
European Union			+1
Average		+1.00 (100%)	

# **Background**

The 1994 United Nations Framework Convention on Climate Change (UNFCCC) radically changed the discourse surrounding climate action.<sup>665</sup> It set the foundations for G7 members to commit to and engage in tackling the climate crisis, with a focus on reducing greenhouse emissions. By 2016, the need for strengthened emission reduction policies was reinforced as the 2016 Paris Agreement aimed to limit global warming to 1.5°C.<sup>666</sup> Since then, G7 members have reaffirmed their commitment to past climate accords and set ambitious goals for achieving net-zero gas emissions by 2050, emphasizing the urgent need to transition to sustainable energy systems.

At the 1990 Houston Summit, G7 leaders underscored the vital role of international cooperation in developing novel technologies and approaches to complement energy conservation in the endeavour to reduce carbon emissions.<sup>667</sup> Their endorsement extended to expediting scientific and economic research to identify viable responses to climate change, fostering this pursuit across developing and developed nations.

At the 2001 Genoa Summit, G8 leaders underscored the urgency of addressing climate change and greenhouse gas (GHG) emissions. They collectively pledged to support the reduction of GHG emissions by strengthening and implementing national programs, as well as by actively promoting the adoption of renewable energy sources.

At the 2002 Kananaskis Summit, G8 leaders did not discuss policy mixes to reduce emissions, but at the Environment Ministerial Meeting in Banff, G8 Environment Ministers committed to collaborating with governments and various partners to implement impactful measures in the energy sector.<sup>669</sup> These measures

<sup>665</sup> What is the United Nations Framework Convention on Climate Change?, United Nations (New York) n.d. Access Date: 30 September 2023. https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change 666 The Paris Agreement, United Nations (New York) n.d. Access Date: 30 September 2023.

https://www.un.org/en/climatechange/paris-agreement

<sup>&</sup>lt;sup>667</sup> Houston Economic Declaration, G7 Information Centre (Toronto) 11 July 1990. Access Date: 30 September 2023.

 $http://www.g7.utoronto.ca/summit/1990 houston/declaration.html \verb|#environment| \\$ 

<sup>&</sup>lt;sup>668</sup> Communiqué, G7 Information Centre (Toronto) 22 July 2001. Access Date: 27 December 2023.

http://www.g7.utoronto.ca/summit/2001genoa/finalcommunique.html

<sup>&</sup>lt;sup>669</sup> Banff Ministerial Statement on the World Summit on Sustainable Development, Information Centre (Toronto) 14 April 2002.

Access Date: 30 September 2023. http://www.g7.utoronto.ca/environment/020415.html

encompassed enhancing energy efficiency, refining energy resources, advancing new technologies, and advocating for the widespread adoption of renewable energy sources.

At the 2005 Gleneagles Summit, the G8 committed to addressing climate change and pushing for clean energy.<sup>670</sup> They also pledged to implement policies which would stimulate the growth of markets for clean energy technologies, making them more accessible in developing countries. Additionally, these leaders affirmed their support for vulnerable communities in adapting to the climate crisis.

At the 2014 Brussels Summit, G7 leaders committed to advocating for the adoption of low-carbon technologies, including renewable energy sources.<sup>671</sup> Additionally, these leaders committed to collaborating with organizations such as the International Energy Agency and international financial institutions to provide technical support for the deployment of renewable energy solutions in Ukraine and various European countries.

At the 2015 Schloss Elmau Summit, G7 leaders pledged their support for the adoption of renewable energy sources. 672 They emphasized that their aim in embracing renewables was to decrease greenhouse gas emissions within their energy systems.

At the 2016 Ise-Shima Summit, G7 leaders pledged to allocate investments in energy sectors, notably renewable energy sources and other low-carbon technologies, with the aim of fostering economic growth while minimizing carbon emissions.<sup>673</sup> Leaders reiterated their commitment to bolstering collaboration in energy technology innovation, research, development, and implementation, all geared towards expediting advancements in clean energy, including the adoption of renewable energy sources.

At the 2018 Charlevoix Summit, G7 leaders emphasized their advancements in the field of renewable energy, encompassing technologies such as solar and wind power.<sup>674</sup> They underscored these achievements in light of the imperative to diminish greenhouse gas emissions and enhance the sustainability of energy systems.

At the 2019 Biarritz Summit, G7 leaders did not discuss policy mixes to reduce emissions but at their meeting in Metz, G7 Energy Ministers committed to promoting efficient technologies, including renewable energy sources, and upholding the highest standard policies aimed at boosting energy efficiency.<sup>675</sup> These ministers stressed the significance of energy efficiency as a crucial component for building a global economy with low emissions that makes sustainable use of natural resources.

At the 2021 Cornwall Summit, G7 leaders pledged to expedite the adoption of zero-emission energy sources and to curtail wasteful consumption.<sup>676</sup> The promotion of renewable energy alternatives was framed as the Build Back Better World strategy to bounce back from the Covid-19 pandemic, aligning with the blueprint outlined by the International Energy Agency and the commitments set forth in the Paris Agreement.

<sup>&</sup>lt;sup>670</sup> Chairs' Summary, G7 Information Centre (Toronto) 8 July 2005. Access Date: 9 October 2022.

http://www.g7.utoronto.ca/summit/2005gleneagles/summary.html

<sup>&</sup>lt;sup>671</sup> G7 Brussels Summit Declaration, G7 Information Centre (Toronto) 5 June 2014. Access Date: 27 December 2023.

http://www.g7.utoronto.ca/summit/2014brussels/declaration.html

<sup>672</sup> Leaders' Declaration: G7 Summit, G7 Information Centre (Toronto) 8 June 2015. Access Date: 27 December 2023.

http://www.g7.utoronto.ca/summit/2015elmau/2015-G7-declaration-en.html

<sup>&</sup>lt;sup>673</sup> G7 Ise-Shima Leaders' Declaration, G7 Information Centre (Toronto) 27 May 2016. Access Date: 27 December 2023.

http://www.g7.utoronto.ca/summit/2016shima/ise-shima-declaration-en.html

<sup>&</sup>lt;sup>674</sup> The Charlevoix G7 Summit Communiqué, G7 Information Centre (Toronto) 9 June 2018. Access Date: 27 December 2023. http://www.g7.utoronto.ca/summit/2018charlevoix/communique.html

<sup>&</sup>lt;sup>675</sup> Communiqué, G7 Information Centre (Toronto) 6 May 2019. Access Date: 30 September. 2023.

http://www.g7.utoronto.ca/environment/2019-environment.html

<sup>&</sup>lt;sup>676</sup> Carbis Bay G7 Summit Communiqué, The White House (Washington D.C.) 13 June 2021. Access Date: 30 September 2023. https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/13/carbis-bay-g7-summit-communique/

At the 2023 Hiroshima Summit, the G7 committed to accelerating the Sustainable Development Goals (SDGs), recognizing the interconnected nature of poverty and the climate crisis.<sup>677</sup> As such, member states stated that they will engage with emerging and developing nations to accelerate emission reduction targets by supporting the transition to green, circular, and resilient economies.

### **Commitment Features**

At the 2023 Hiroshima Summit, G7 leaders made the following commitment: "We support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions, and note that these could vary reflecting country-specific circumstances." There are three dimensions of this commitment that must be fulfilled to achieve full compliance, supporting policy mixes that include: 1) carbon pricing, 2) non-pricing mechanisms, and 3) incentives that effectively reduce emissions.

# **Definitions and Concepts**

"Policy mixes" can be defined as "aligning monetary policy and adopting fiscal policies" to manage a country's economy. In the context of this commitment, policy mixes refer to policies that "enable reduction of greenhouse gas (GHG) emissions but also ensure that the transition to a low-carbon and climate resilient future is affordable, inclusive, and politically feasible."

"Carbon pricing" is understood to mean an instrument to curb production of GHG emissions by "placing a fee on emitting and/or offering an incentive for emitting less."681

"Non-pricing mechanisms" refers to measures that do not involve significant financial costs or engage with monetary aspects of policy. 682 In the context of the commitment, it refers to actions that are taken to effectively reduce GHG emissions without significant costs. These measures may be more effective and favored as alternatives for member states, as well as complementary and supportive to carbon pricing measures.

"Effectively" should be interpreted to mean operating in a way that produces the intended result. It does not mean any effort, especially thoughtless ones.<sup>683</sup>

"Emissions" refers to the "act of producing or sending out something (such as energy or gas) from a source." 684 Carbon dioxide (CO2) makes up most greenhouse gas emissions from the sector, but smaller amounts of

<sup>&</sup>lt;sup>677</sup> G7 Communiqué Hiroshima 2023, G7 Information Centre (Toronto) 20 May 2023. Access Date: 30 September 2023. http://www.g7.utoronto.ca/summit/2023hiroshima/230520-communique.html

<sup>&</sup>lt;sup>678</sup> G7 Leaders' Communiqué, G7 Information Centre (Toronto) 20 May 2023. Access Date: 23 September 2023. http://www.g7.utoronto.ca/summit/2023hiroshima/230520-communique.html

<sup>&</sup>lt;sup>679</sup> Time to act now: It's all about the right policy mix, International Monetary Fund (Washington D.C.) 19 October 2017. Access Date: 7 October 2023. https://www.imf.org/en/Blogs/Articles/2017/10/19/time-to-act-now-its-all-about-the-right-policy-mix <sup>680</sup> Promoting Climate Action Through Non-Pricing, Asian Development Bank (Mandaluyong.) 23 March 2023. Access Date: 11 October 2023. https://g20sfwg.org/wp-content/uploads/2023/03/Promoting-Climate-Action-Through-Non-Pricing-Policy-Measures-ADB.pdf

<sup>&</sup>lt;sup>681</sup> About carbon pricing, United Nations Climate Change (Bonn) n.d. Access Date: 22 September 2023. https://unfccc.int/about-us/regional-collaboration-centres/the-ciaca/about-carbon-pricing#What-is-Carbon-Pricing?-

<sup>&</sup>lt;sup>682</sup> Promoting Climate Action Through Non-Pricing, Asian Development Bank (Mandaluyong.) 23 March 2023. Access Date: 24 September 2023. https://g20sfwg.org/wp-content/uploads/2023/03/Promoting-Climate-Action-Through-Non-Pricing-Policy-Measures-ADB.pdf

<sup>&</sup>lt;sup>683</sup> Compliance Coding Manual, G7 Information Centre (Toronto) 12 November 2020. Access Date 24 September 2023. http://www.g7.utoronto.ca/compliance/Compliance Coding Manual 2020.pdf

<sup>&</sup>lt;sup>684</sup> Emissions, Britannica (Chicago) n.d. Access Date: 22 September 2023. https://www.britannica.com/dictionary/emission

methane (CH4) and nitrous oxide (N2O) are also emitted.<sup>685</sup> These gasses are released during the "combustion of fossil fuels, such as coal, oil, and natural gas" which contribute to climate change.<sup>686</sup>

"Circumstances" can be defined as a condition, fact, or event accompanying, conditioning, or determining another.<sup>687</sup>

# **General Interpretive Guidelines**

Full compliance, or a score of +1, is awarded to G7 members who demonstrate strong action towards reducing emissions through relevant policy action in all three pillars. The three pillars of emission reduction involve: carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. Examples of strong actions regarding emissions reduction policy include, but are not limited to, investment subsidies, supporting or introducing climate funds, decarbonizing research, funding the implementation of clean and renewable energy systems, investing in zero emissions buildings and infrastructure, implementing carbon taxes, and supporting the transition to climate-smart policies.

Partial compliance, or a score of 0, is awarded to G7 members who demonstrate weaker action towards reducing emissions through relevant policy mixes by taking less than strong action in at least two of the three pillars of cooperation, or strong action in one pillar and less than strong in another. Examples of weak action include actions that are less substantial, like verbal reaffirmations of existing policies, only implementing either fiscal or monetary policies, etc. Partial compliance is also awarded when a member only takes strong action in one pillar of cooperation but fails to fulfill the two needed to achieve full compliance.

Non-compliance, or a score of -1, is awarded to those members who demonstrate little or no action towards supporting policy mixes through carbon pricing, non-pricing mechanisms, or incentives that effectively reduce emissions.

# **Scoring Guidelines**

-1	The G7 member has taken little, none or directly antithetical action towards supporting appropriate
	policy mixes in any of the following: 1) carbon pricing, 2) non-pricing mechanisms, or 3) incentives
	that effectively reduce emissions within country-specific circumstances.
0	The G7 member has taken less than strong action towards supporting appropriate policy mixes in at
	least two of the following: 1) carbon pricing, 2) non-pricing mechanisms, or 3) incentives that
	effectively reduce emissions within country-specific circumstances or has taken strong action in one
	pillar and less than strong action in another
+1	The G7 member has taken strong action towards supporting appropriate policy mixes in all three of
	the following: 1) carbon pricing, 2) non-pricing mechanisms, or 3) incentives that effectively reduce
	emissions within country-specific circumstances.

Compliance Director: Eisha Khan Lead Analyst: Spencer Lambert

#### Canada: +1

Canada has fully complied with its commitment to support appropriate policy mixes including, carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

<sup>&</sup>lt;sup>685</sup> Overview of Greenhouse Gas, Environmental Protection Agency (Washington D.C.) n.d. Access Date: 28 September 2023. https://www.epa.gov/ghgemissions/overview-greenhouse-gases

<sup>&</sup>lt;sup>686</sup> Overview of Greenhouse Gas, Environmental Protection Agency (Washington D.C.) n.d. Access Date: 28 September 2023. https://www.epa.gov/ghgemissions/overview-greenhouse-gases

<sup>&</sup>lt;sup>687</sup> Circumstance, Merriam-Webster (Springfield) n.d. Access Date: 1 October 2023. https://www.merriam-webster.com/dictionary/circumstance

On 30 June 2023, the Government of Canada invested of up to CAD62.7 million to transition to cleaner energy in New Brunswick, promoting cleaner energy solutions.<sup>688</sup> This shows support towards effective policy mixes to reduce emissions.

On 30 June 2023, the Government of Canada committed CAD101.7 million to switch to cleaner energy in Nova Scotia, aligning with its goals to reduce pollution and improve affordability.<sup>689</sup> The funds allow for infrastructure development and the integration of renewable energy technologies.

On 7 July 2023, Canada, as a member of the International Maritime Organization (IMO), adopted the 2023 IMO Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships, which sets new targets in order to achieve net-zero GHG emissions from international shipping by approximately 2050.<sup>690</sup>

On 12 July 2023, the Government of Canada announced a CAD450 million contribution to the Green Climate Fund in support of global climate action.<sup>691</sup> This investment demonstrates Canada's commitment to international climate efforts related to clean energy transitions.

On 13 July 2023, the Government of Canada declared a CAD9 million investment collected from carbon pricing towards three Ontario universities to reduce localized carbon emissions.<sup>692</sup> These projects are estimated to reduce emissions by 35,000 tonnes by 2030.

On 8 August 2023, the Government of Canada introduced draft clean electricity regulations to promote clean, affordable, and reliable electricity, furthering Canada's green energy initiatives.<sup>693</sup> These regulations move Canada toward achieving the targets of the Paris Agreement and represent Canada's commitment to using policy mixes to effectively reduce emissions.

On 24 August 2023, the Government of Canada began to provide funding to Indigenous communities in accordance with the 2022 Budget for the 2030 Emissions Reduction Plan.<sup>694</sup> Over the next three years, the Government will distribute CAD29.6 million to First Nations, Métis and Inuit communities.

<sup>&</sup>lt;sup>688</sup> Cutting pollution and making life more affordable: Government of Canada investing up to \$62.7 million to switch to cleaner energy in New Brunswick, Government of Canada (Ottawa) 30 June 2023. Access Date: 1 November 2023.

https://www.canada.ca/en/environment-climate-change/news/2023/06/cutting-pollution-and-making-life-more-affordable-government-of-canada-investing-up-to-627-million-to-switch-to-cleaner-energy-in-new-brunswick.html

<sup>&</sup>lt;sup>689</sup> Cutting pollution and making life more affordable: Government of Canada announces \$101.7 million to switch to cleaner energy in Nova Scotia, Government of Canada (Ottawa) 30 June 2023. Access Date: 01 November 2023.

https://www.canada.ca/en/environment-climate-change/news/2023/06/cutting-pollution-and-making-life-more-affordable-government-of-canada-announces-1017-million-to-switch-to-cleaner-energy-in-nova-scotia.html

<sup>&</sup>lt;sup>690</sup> Revised GHG reduction strategy for global shipping adopted, International Maritime Organization (London) 7 July 2023. Access Date: 16 February 2024. https://www.imo.org/en/MediaCentre/PressBriefings/pages/Revised-GHG-reduction-strategy-for-global-shipping-adopted-.aspx

<sup>&</sup>lt;sup>691</sup> Canada announces \$450 million for the Green Climate Fund, the world's largest dedicated climate change fund, Government of Canada (Ottawa) 12 July 2023. Access Date: 1 November 2023. https://www.canada.ca/en/environment-climate-change/news/2023/07/canada-announces-450-million-for-the-green-climate-fund-the-worlds-largest-dedicated-climate-change-fund.html

<sup>&</sup>lt;sup>692</sup> Government of Canada supporting Ontario universities with funding to reduce pollution to achieve environmental success, Government of Canada (Hamilton) 13 July 2023. Access Date: 27 December 2023. https://www.canada.ca/en/environment-climate-change/news/2023/07/government-of-canada-supporting-ontario-universities-with-funding-to-reduce-pollution-to-achieve-environmental-success.html

 <sup>&</sup>lt;sup>693</sup> Draft Clean Electricity, Government of Canada (Ottawa) 8 August 2023. Access Date: 1 November 2023.
 https://www.canada.ca/en/environment-climate-change/news/2023/08/draft-clean-electricity-regulations.html
 <sup>694</sup> Canada's Partnership with Indigenous Peoples on Climate, Government of Canada (Ottawa) 24 August 2023. Access Date: 27
 December 2023. https://www.canada.ca/en/environment-climate-change/services/climate-change/indigenous-partnership.html

On 11 September 2023, the Government of Canada invested in initiatives aimed at reducing landfill emissions, contributing to cleaner air and a healthier environment.<sup>695</sup> Thus, contributing to its commitment to reduction in greenhouse gas emissions.

On 27 September 2023, Minister of Energy and Natural Resources Jonathan Wilkinson released Canada's Carbon Management Strategy, outlining the country's approach to managing carbon emissions and promoting a sustainable future.<sup>696</sup>

On 4 October 2023, the Government of Canada committed CAD12.5 million in funding to support environmental literacy projects, furthering environmental awareness and sustainability.<sup>697</sup> This investment reflects a dedication to enhancing public awareness and knowledge about environmental issues, demonstrating Canada's use of policy mixes to reduce emissions.

On 25 October 2023, the Government of Canada announced a CAD2.5 million investment to enhance the Lac Mégantic microgrid capacity, contributing to reliable and clean energy solutions.<sup>698</sup> The aim of this investment is to facilitate a carbon neutral transition for Canada's energy sector.

On 14 November 2023, Parliamentary Secretary to the Minister of Agriculture and Agri-Food Francis Drouin launched the Agricultural Methane Reduction Challenge, which provides CAD12 million in funding to projects dealing with procedures and technologies from innovators that will reduce methane emissions from cattle.<sup>699</sup>

On 22 November 2023, the Government of Canada amended the "Output-Based Pricing System and the Environmental Violations Administrative Monetary Penalties Regulations." These regulations ensure continued emissions reductions and improve the implementation of other Output-Based Pricing System Regulations. Some of these amendments will become effective on 1 January 2024.

On 4 December 2023, the Minister of Environment and Climate Change Steven Guilbeault announced a published draft that will strengthen oil and gas methane regulations at the Global Methane Pledge Ministerial in Dubai.<sup>701</sup> The aim of these regulations is to cut greenhouse gas emissions, aligned with global pledges to cut oil and gas methane emissions by 2030.

<sup>&</sup>lt;sup>695</sup> The Government of Canada invests in cleaning up Canada's landfill emissions, Government of Canada (Ottawa) 11 September 2023. Access Date: 1 November 2023. https://www.canada.ca/en/environment-climate-change/news/2023/09/the-government-of-canada-invests-in-cleaning-up-canadas-landfill-emissions.html

<sup>&</sup>lt;sup>696</sup> Minister Wilkinson Releases Canada's Carbon Management Strategy, Government of Canada (Ottawa) 27 September 2023. Access Date: 1 November 2023. https://www.canada.ca/en/natural-resources-canada/news/2023/09/minister-wilkinson-releases-canadas-carbon-management-strategy.html

<sup>&</sup>lt;sup>697</sup> Government of Canada commits \$12.5 million in funding in new collaboration with philanthropic organizations to support environmental literacy projects across Canada, Government of Canada (Ottawa) 4 October 2023. Access Date: 1 November 2023. https://www.canada.ca/en/environment-climate-change/news/2023/10/government-of-canada-commits-125-million-in-funding-in-new-collaboration-with-philanthropic-organizations-to-support-environmental-literacy-project.html

<sup>&</sup>lt;sup>698</sup> Government of Canada Announces \$2.5 Million for Lac-Mégantic Microgrid Capacity Building, Government of Canada (Ottawa) 25 October 2023. Access Date: 1 November 2023. https://www.canada.ca/en/natural-resources-

canada/news/2023/10/government-of-canada-announces-25-million-for-lac-megantic-microgrid-capacity-building.html

<sup>&</sup>lt;sup>699</sup> Agriculture and Agri-Food Canada launches new Agricultural Methane Reduction Challenge, Agriculture and Agri-Food Canada (Sainte-Clotilde) 14 November 2023. Access Date: 27 December 2023. https://www.canada.ca/en/agriculture-agri-

food/news/2023/11/agriculture-and-agri-food-canada-launches-new-agricultural-methane-reduction-challenge.html <sup>700</sup> Out-based Pricing System, Government of Canada (Ottawa) 22 November 2023. Access Date: 14 May 2024.

https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system.html

<sup>&</sup>lt;sup>701</sup> Minister Guilbeault announces Canada's draft methane regulations to support cleaner energy and climate action, Government of Canada (Ottawa) 4 December 2023. Access Date: 16 December 2023. https://www.canada.ca/en/environment-climate-change/news/2023/

<sup>12/</sup>minister-guil beault-announces-canadas-draft-methane-regulations-to-support-cleaner-energy-and-climate-action. html

On 7 December 2023, the Government of Canada introduced a framework to cap greenhouse gas pollution from the oil and gas sector.<sup>702</sup> This initiative aims to contribute to Canada's 2030 climate goals and achieve netzero emissions by 2050 by reducing the country's largest source of greenhouse gas emissions and enabling the sector to compete in the emerging net-zero global economy.

On 1 April 2024, the Government of Canada raised the carbon tax from CAD65 per ton of carbon emitted to CAD80 per ton.<sup>703</sup> Furthermore, the carbon tax will increase to CAD170 per ton in 2030 to meet Canada's 2030 and 2050 climate targets.

On 6 May 2024, the Government of Canada published the Improved Forest Management on Private Land protocol, which supports sustainable forest management to offset carbon emissions.<sup>704</sup> As part of the Greenhouse Gas Offset Credit System, this protocol provides a series of financial incentives to encourage projects aimed at increasing carbon storage in forestlands. Developers can earn credits by preventing and reducing environmental degradation on site and implementing sustainable practices such as increasing rotation age, enhancing carbon storage capability.

On 10 May 2024, the Parliamentary Secretary to the Minister of Energy and Natural Resources and to the Minister of Official Languages Marc G. Serré and Member of Parliament for Sudbury Viviane Lapointe announced CAD11 million in funding for Glencore Canada Corporation to phase out fossil fuels at the Craig Mine Onaping Depth Project in Ontario by implementing more sustainable machinery such as battery electric-powered equipment.<sup>705</sup> The funding is made available through the Decarbonization Incentive Program, which reutilizes the revenue from the Federal pollution pricing system to support clean technology and sustainable solution projects across Canada. The Craig Mine Onaping Depth Project is expected to reduce over 5500 tonnes of greenhouse gas emissions in 2030.

Canada has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. Canada has taken strong actions to reduce emissions by investing in several funds and projects that support the transition to clean energy alternatives and the development of emission reduction technology. Furthermore, it presented draft clean energy regulations and draft plans to cap pollution and hosted discussions regarding carbon pricing, demonstrating its commitment to support policy mixes and incentives that effectively reduce emissions.

Thus, Canada receives a score of +1.

Analyst: Arnav Tandon

#### France: +1

France has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

On 22 June 2023, France announced its partnership with the International Partners Group to launch the Just Energy Transition Partnership to support Senegal's efforts to achieve universal access to energy and consolidate

<sup>&</sup>lt;sup>702</sup> Oil and Gas Emissions Cap, Government of Canada (Ottawa) 7 December 2023. Access Date: 27 April 2024. https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/oil-gas-emissions-cap.html

<sup>&</sup>lt;sup>703</sup> Canada's Carbon Tax Increase: What You Need To Know, Forbes Advisor (Jersey City) 3 April 2024. Access Date: 14 May 2024. https://www.forbes.com/advisor/ca/personal-finance/canada-carbon-tax-increase

<sup>&</sup>lt;sup>704</sup> Canada cultivates climate solutions with financial incentive for sustainable forest management, Environment and Climate Change Canada (Gatineau) 6 May 2024. Access Date: 14 May 2024. https://www.canada.ca/en/environment-climate-change/news/2024/05/canada-cultivates-climate-solutions-with-financial-incentive-for-sustainable-forest-management.html <sup>705</sup> Canada cuts carbon pollution with funding for Glencore Canada Corporation project, Environment and Climate Change Canada (Gatineau) 10 May 2024. Access Date: 14 May 2024. https://www.canada.ca/en/environment-climate-change/news/2024/05/canada-cuts-carbon-pollution-with-funding-for-glencore-canada-corporation-project.html

a low-carbon, resilient and sustainable energy system.<sup>706</sup> Through this collaboration, France will provide financial support to Senegal with the aim of facilitating the expansion of renewable and lower sector emissions in the country.

On 7 July 2023, France, as a member of the International Maritime Organization (IMO), adopted the 2023 IMO Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships, which sets new targets in order to achieve net-zero GHG emissions from international shipping by approximately 2050.<sup>707</sup>

On 20 July 2023, the National Biodiversity Committee presented its National Biodiversity Strategy in conjunction with the Government of France.<sup>708</sup> The strategy is composed of four goals which are to "reduce pressure, restore degraded ecosystems, mobilize all stakeholders, and have the means to achieve these ambitions." Within each of the four goals are a variety of projects that address environmental issues such as addressing the fight against plastic pollution and accelerating agroecological transition. These projects will help to reduce emissions by transitioning certain sectors towards green energy.

On 11 October 2023, France passed the Green Industry Bill with the aim to make France the leader in green technologies necessary for decarbonization.<sup>709</sup> The creation of green industries consists of establishing new industries that allow for the decarbonization of the economy. This will be accomplished by using carbon capture technologies to produce green hydrogen and bio-methane, which are suitable alternative to carbon production. The decarbonization plan will work to transform industries in various sectors and sizes, supporting France's commitment to effectively reduce emissions through non-pricing mechanisms.

On 12 October 2023, the Government of France strengthened its MaPrimeRénov' aid to encourage energy renovation projects for homes by individuals.<sup>710</sup> This aid is intended to help France to meet its national climate objectives by 2030.

On 13 October 2023, France unveiled the fourth edition of its Green Budget 2024. The Green Budget is a finance bill that provides government expenditures for environmental targets.<sup>711</sup> The 2024 budget includes an increase to the annual budget by EUR7 billion for ecological planning purposes. Additionally, it allows for the increased reporting on ecological planning such as identifying areas of expenditure that are harmful to the environment.

On 23 October 2023, France enacted the Green Industry Law to align industrial activities with environmental objectives, targeting a significant reduction in emissions and reindustrialization.<sup>712</sup> The Green Industry law also helps increase funding for the acceleration of deployment of green technology to support the energy transition.

<sup>&</sup>lt;sup>706</sup> Launch of a Just Energy Transition Partnership, Elysée Palace (Paris) 22 June 2023. Access Date: 10 November 2023. https://www.elysee.fr/en/emmanuel-macron/2023/06/22/launch-of-a-just-energy-transition-partnership

<sup>&</sup>lt;sup>707</sup> Revised GHG reduction strategy for global shipping adopted, International Maritime Organization (London) 7 July 2023. Access Date: 16 February 2024. https://www.imo.org/en/MediaCentre/PressBriefings/pages/Revised-GHG-reduction-strategy-for-global-shipping-adopted-.aspx

<sup>&</sup>lt;sup>708</sup> Une stratégie nationale pour préserver et restaurer la biodiversité, Government of France (Paris) 24 September 2023. Translation provided by Google Translate. Access Date:10 November 2023. https://www.gouvernement.fr/actualite/une-strategie-nationale-pour-preserver-et-restaurer-la-biodiversite

<sup>&</sup>lt;sup>709</sup> Industrie verte: présentation du projet de loi, Ministère de l'Économie, des Finances et de la Relance (Paris) 11 October 2023. Translation provided by Google Translate. Access Date: 10 November 2023. https://www.economie.gouv.fr/industrie-verte-presentation-projet-loi#

<sup>&</sup>lt;sup>710</sup> 1.6 milliard d'euros supplémentaires pour la rénovation énergétique, Government of France (Paris) 12 October 2023. Translation provided by Google Translate. Access Date: 10 November 2023. https://www.gouvernement.fr/actualite/1-6-milliard-deuros-supplementaires-pour-la-renovation-energetique

<sup>&</sup>lt;sup>711</sup> Le budget vert 2024 en hausse de 7 milliards d'euros, Government of France (Paris) 13 October 2023. Translation provided by Google Translate. Access Date: 10 November 2023. https://www.gouvernement.fr/actualite/le-budget-vert-2024-en-hausse-de-7-milliards-deuros

<sup>&</sup>lt;sup>712</sup> Que contient la loi industrie verte?, Government of France (Paris) 25 October 2023. Translation provided by Google Translate. Access Date: 19 March 2024. https://www.economie.gouv.fr/que-contient-la-loi-industrie-verte#

This move underscores a broader commitment to decarbonization and energy water efficiency, reflecting France's proactive stance on sustainable industrial transformation.

On 24 October 2023, France launched the "Every Gesture Counts" campaign. The aim of this campaign is to encourage daily energy saving and promote effective ecological actions.<sup>713</sup> It promotes eco-friendly actions for households to adopt such as running the washing machine at night, turning off all devices when they are not in use, and carpooling.

On 31 October 2023, France announced EUR200 million to implement new charging stations in line with its plan to establish a new charging infrastructure across the country. The program plans to have 400,000 terminals operating by 2030 as part of its commitment to ecological planning.

On 29 November 2023, France furthered its commitment to global ecological efforts by contributing up to EUR200,000 to the Environment Fund of the International Civil Aviation Organization.<sup>715</sup> This funding is part of a broader initiative to support the adoption of sustainable aviation fuel worldwide, aligning with France's aim to enhance carbon neutrality in aviation by 2050. This monetary support underlines France's role in fostering international collaboration towards sustainable development and climate change mitigation.

On 6 December 2023, France announced a EUR173 million financial package at the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change, specifically designed to support countries who are most susceptible to the impacts of climate change. This investment is meant to highlight France's commitment to global ecological leadership. It aligns with broader EU efforts to mitigate climate risks and supports the collective ambition of decarbonizing the economy, and highlights France's role in fostering international collaboration on climate adaptation and resilience.

On 1 January 2024, France launched a long-term electric vehicle leasing program to facilitate access to electric cars for low-income households.<sup>717</sup> This initiative, dubbed "social leasing" for electric vehicles, aims to accelerate the country's ecological transition. This acts as an incentive for households to accelerate emission reduction efforts through transportation.

On 12 February 2024, the Ministry of Ecological Transition and Territorial Cohesion and the Ministry of the Economy, Finance and Industrial and Digital Sovereignty jointly announced a new subsidy program for green vehicles.<sup>718</sup> This program will implement a conversion and ecological bonus to incentivize the French to buy

<sup>&</sup>lt;sup>713</sup> Une campagne pour promouvoir la sobriété énergétique, Government of France (Paris) 25 October 2023. Translation provided by Google Translate. Access Date: 10 November 2023. https://www.gouvernement.fr/actualite/une-campagne-pour-promouvoir-la-sobriete-energetique

<sup>&</sup>lt;sup>714</sup> Accélération du déploiement des bornes de recharge électriques, Government of France (Paris) 31 October 2023. Translation provided by Google Translate. Access Date: 10 November 2023. https://www.gouvernement.fr/actualite/acceleration-du-deploiement-des-bornes-de-recharge-electriques

<sup>&</sup>lt;sup>715</sup> Climat - La France salue l'adoption d'un cadre mondial pour les carburants d'aviation durables, Government of France (Paris) 29 November 2023. Translation provided by Google Translate. Access Date: 8 March 2024.

https://www.diplomatie.gouv.fr/fr/politique-etrangere-de-la-france/climat-et-environnement/actualites-et-evenements/2023/article/climat-la-france-salue-l-adoption-d-un-cadre-mondial-pour-les-carburants-d

<sup>&</sup>lt;sup>716</sup> France consolidates its support for the countries most vulnerable to climate change and announces a 173-million financial package at COP28, Government of France (Paris) 6 December 2023. Access Date: 8 March 2024.

https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate-and-environment/news/article/france-consolidates-its-support-for-the-countries-most-vulnerable-to-climate

<sup>&</sup>lt;sup>717</sup> L'État lance la voiture électrique à 100 euros par mois, Government of France (Paris) 14 December 2023. Translation provided by Google Translate. Access Date: 10 March 2024. https://www.gouvernement.fr/actualite/letat-lance-la-voiture-electrique-a-100-euros-par-mois

<sup>&</sup>lt;sup>718</sup> Brief presse: Bonus écologique et prime à la conversion, Government of France (Paris) 12 February 2023. Translation provided by Google Translate. Access Date: 19 March 2024. https://www.ecologie.gouv.fr/brief-presse-bonus-ecologique-et-prime-conversion-mardi-13-fevrier-10h00

green cars. These incentives will help to tackle the emissions generated by cars which will in turn help France achieve its NDCs.

On 14 March 2024, the French government officially implemented the Green Industry Tax Credit, designed to stimulate investments in key sectors of the green transition such as solar panels, wind energy, batteries, and heat pumps.<sup>719</sup> This initiative, part of the Green Industry Law, aims to foster the development of clean energy technologies and reduce carbon emissions. The tax credit is expected to generate EUR23 billion in investments, significantly contributing to the country's energy independence and economic future.

On 5 April 2024, France announced a comprehensive plan aimed at rapidly expanding the solar energy sector.<sup>720</sup> These initiatives aim to boost solar power production by establishing acceleration zones for photovoltaic installations. The measures build on the government's commitment under the green industry law to increase France's solar capacity to meet energy goals.

France has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. France has taken strong actions to reduce emissions such as changing its ecological bonus criteria for electric vehicles purchasers to better consider the production criteria of the vehicle and the environmental impact caused. Furthermore, France provided additional funding for deployment of charging stations, passed the Green Industry Bill that establishes and expands new industries that provide goods and services allowing the decarbonization of the economy.

Thus, France receives a score of +1.

Analyst: Divvy Gupta

# Germany: +1

Germany has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

On 7 July 2023, Germany, as a member of the International Maritime Organization (IMO), adopted the 2023 IMO Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships, which sets new targets in order to achieve net-zero GHG emissions from international shipping by approximately 2050.<sup>721</sup>

On 26 July 2023, the Federal Government updated its National Hydrogen Strategy, originally adopted in June 2020.<sup>722</sup> This revision aims to harness hydrogen technology as a means of reducing carbon dioxide emissions across the transportation and energy sector while also exploring new green markets. The strategy outlines key action areas such as increasing the availability and accessibility of low-carbon hydrogen, promoting clean hydrogen imports, and developing financial incentives.

<sup>&</sup>lt;sup>719</sup> Le crédit d'impôt au titre des investissements dans l'industrie verte (C3IV) entre en vigueur, Government of France (Paris) 15 March 2024. Translation provided by Google Translate. Access Date: 14 May 2024.

https://www.economie.gouv.fr/actualites/credit-impot-investissements-industrie-verte-C3IV

<sup>&</sup>lt;sup>720</sup> Industrie verte: de nouvelles mesures pour soutenir la filière photovoltaïque en France, Government of France (Paris) 18 April 2024. Translation provided by Google Translate. Access Date: 14 May 2024. https://www.economie.gouv.fr/actualites/annoncessoutien-filiere-industrie-panneaux-photovoltaiques

<sup>&</sup>lt;sup>721</sup> Revised GHG reduction strategy for global shipping adopted, International Maritime Organization (London) 7 July 2023. Access Date: 16 February 2024. https://www.imo.org/en/MediaCentre/PressBriefings/pages/Revised-GHG-reduction-strategy-forglobal-shipping-adopted-.aspx

<sup>&</sup>lt;sup>722</sup> Energy from climate-friendly gas, Federal Government (Berlin) n.d. Access Date: 1 November 2023. https://www.bundesregierung.de/breg-en/search/hydrogen-technology-2204238

On 10 August 2023, Germany received EUR6.5 billion from the European Commission to support its strategy to provide partial compensation to energy-intensive companies in order to address carbon leakage from higher fuel prices as a result of the German fuel emission trading system.<sup>723</sup>

On 4 October 2023, the Federal Cabinet adopted Germany's 2023 Climate Action Programme in efforts to put the country on track to reach 2030 greenhouse gas reduction targets as mandated by the Climate Action Law.<sup>724</sup> Under the Climate Action Programme 2030 and the Climate Change Act, the Federal Government has committed to a binding reduction of 55 per cent in greenhouse gas emissions by 2030. It also aims to increase the share of renewable energies in gross German electricity consumption to 65 per cent by 2030.

On 5 October 2023, the Federal Ministry for Economic Cooperation and Development and the Federal Foreign Office committed EUR2 billion to replenish the Green Climate Fund.<sup>725</sup> The Fund accelerates transformation towards greater climate resilience and finances renewable energy expansion and climate change adaptation. The Fund aids developing countries and emerging economies in achieving their Nationally Determined Contributions by offering grants, loans, guarantees, and equity for low-carbon economic development programs.

On 20 October 2023, the Bundestag adopted new toll regulations on trucks using federal highways to include a new carbon pricing element.<sup>726</sup> This regulation will be implemented from 1 December 2023 as an amendment to the Federal Highways Toll Act.<sup>727</sup> The toll will charge EUR200 for every tonne of carbon that is additionally emitted.

On 23 October 2023, the Federal Ministry for Economic Affairs and Climate Action (BMWK) co-hosted the Eighth Strategic Dialogue of the Carbon Market Platform with the Japanese Ministry of the Environment to discuss the potential for carbon markets as a method of reducing carbon emissions.<sup>728</sup>

On 6 December 2023, the German Government announced the first Strategy on Climate Foreign Policy.<sup>729</sup> The strategy defines six fields of climate policy action, including the reduction of GHG emissions by 2030 to maintain a 1.5°C increase limit and promotion of an economy based on sustainable energy. This highlights Germany's commitment to ensure strategic progress in climate mitigation efforts.

On 1 December 2023, the German Government and Chilean Government jointly co-hosted the launch of the Climate Club.<sup>730</sup> Comprising 36 nation members, the club works to develop strategies and standards for a carbon-free industry and coordinate efforts efficiently. It also aims to support the implementation of the Paris Agreement to limit global warming to 1.5°C.

<sup>&</sup>lt;sup>723</sup> State aid: Commission approves €6.5 billion German scheme to address carbon leakage risk for energy-intensive companies resulting from national fuel emission trading system, European Commission (Brussels) 10 August 2023. Access Date: 27 December 2023. https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_4105

<sup>&</sup>lt;sup>724</sup> Federal Cabinet adopts comprehensive 2023 Climate Action Programme, Ministry for Economic Affairs and Climate Action (Berlin) 4 October 2023. Access Date: 1 November 2023. https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2023/10/20231004-federal-cabinet-adopts-comprehensive-2023-climate-action-programme.html

<sup>&</sup>lt;sup>725</sup> Green Climate Fund pledging conference in Bonn: Signal of solidarity in climate action, Federal Foreign Office (Berlin) 5 October 2024. Access Date: 27 February 2024. https://www.auswaertiges-amt.de/en/newsroom/news/-/2620926

<sup>&</sup>lt;sup>726</sup> Bundestag beschließt Ausweitung der Mautpflicht für Lkw, Bundestag (Berlin) 20 October 2023. Access Date: 18 December 2023. https://www.bundestag.de/dokumente/textarchiv/2023/kw42-de-maut-971416

<sup>&</sup>lt;sup>727</sup> For better climate protection in freight transport, Office of the Federal Government (Berlin) 14 June 2023. Access Date: 18 December 2023. https://www.bundesregierung.de/breg-en/search/lorry-toll-co2-2196348

<sup>&</sup>lt;sup>728</sup> Results of Eighth Strategic Dialogue of the Carbon Market Platform, Ministry of the Environment (Tokyo) 30 October 2023. Access Date: 18 December 2023. https://www.env.go.jp/en/press/press\_02084.html

<sup>&</sup>lt;sup>729</sup> Germany adopts Strategy on Climate Foreign Policy, Federal Foreign Office (Berlin) 6 December 2023. Access Date: 28 February 2024. https://www.auswaertiges-amt.de/en/aussenpolitik/-/2634736

<sup>&</sup>lt;sup>730</sup> The beginning of the end of the fossil fuel era, The Federal Government (Berlin) 13 December 2023. Access Date: 29 February 2024. https://www.bundesregierung.de/breg-en/news/cop-28-2247402

On 26 February 2024, Germany presented the key points of the federal Carbon Management Strategy.<sup>731</sup> The strategy increases state funding for Carbon Capture and Storage in Germany, focusing on renewable energy expansion by transitioning from gas power plants to hydrogen. The expansion aligns with the greenhouse gas reduction targets outlined in the German Climate Protection Act and the goal of achieving climate neutrality by 2045.

On 12 March 2024, BMWK launched the bidding for the Climate Protection Contracts, an industry decarbonization subsidy scheme aiming to aid energy-intensive industrial sectors in adopting sustainable production methods.<sup>732</sup> By incentivising companies to develop the necessary technologies to sustain climate-friendly manufacturing processes, 350 million tons of carbon is expected to be prevented by the end of the funding program in 2045.

On 9 April 2024, BMWK launched a new application phase for the Renewable Energy Solutions program, which allows small and medium-sized enterprises to apply for marketing funding to advance and promote German climate-friendly technologies in foreign markets. Companies can receive up to EUR100,000 in funding for training, information exchange and public relations work to demonstrate the performance of their climate-friendly technologies abroad. The Renewable Energy Solutions program is part of Germany's Energy Exports, which aims to support companies in various fields, including green hydrogen, expanding the global hydrogen market.

Germany has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. By incorporating measures such as promoting clean hydrogen, developing financial incentives, and committing to a binding reduction of 55 per cent in greenhouse gas emissions by 2030, Germany has taken various steps to accelerate the clean energy transition and reduce emissions. Furthermore, Germany has implemented toll regulations on trucks and hosted discussions on possible market-orientated policy solutions, demonstrating its commitment to support policy mixes to reduce emissions.

Thus, Germany receives a score of +1.

Analyst: Ananya Gaur

## Italy: +1

Italy has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

On 25 May 2023, the Council of Ministers issued a press release approving the bill for reducing black carbon.<sup>734</sup> They approved the ratification and execution of the 1979 Protocol to the Convention on Long-Range Transboundary Air Pollution for the Reduction of Acidification, Eutrophication and Ground-level Ozone. This demonstrates the implementation of effective policy mixes to reduce emissions of volatile organic compounds to meet national emission reduction targets.

<sup>&</sup>lt;sup>731</sup> Bundesminister Habeck will den Einsatz von CCS ermöglichen: Ohne CCS können wir unmöglich die Klimaziele erreichen, Bundesministerium für Wirtschaft und Klimaschutz (Berlin) 26 February 2024. Access Date: 29 February 2024.

https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2024/02/20240226-habeck-will-den-einsatz-von-ccs-ermoeglichen.html <sup>732</sup> Klimaschutzverträge gehen in die erste Runde, Bundesministerium für Wirtschaft und Klimaschutz (Berlin) 12 March 2024. Access Date: 29 April 2024. https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2024/03/20240312-erste-runde-klimaschutzvertraege.html

<sup>&</sup>lt;sup>733</sup> Exportförderung für klimafreundliche Energietechnologie, Bundesministerium für Wirtschaft und Klimaschutz (Berlin) 9 April 2024. Translation provided by Google Translate. Access Date: 28 April 2024.

https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2024/04/20240409-exportfoerderung-fuer-klimafreundliche-energietechnologie.html

<sup>&</sup>lt;sup>734</sup> Comunicato stampa del Consiglio dei Ministri n. 36, Presidency of the Council of Ministers (Rome) 25 May 2023. Translation provided by Google Translate. Access Date: 1 November 2023. https://www.governo.it/en/node/22709

In June 2023, Italy proposed the National Integrated Plan for Energy and Climate to the European Commission, with plans to achieve varying climate targets, including support for green investments and renewable energies for small- and medium-sized enterprises, support for transitioning supply chains to net-zero technologies and developing low-emission infrastructure.<sup>735</sup>

On 7 July 2023, Italy, as a member of the International Maritime Organization (IMO), adopted the 2023 IMO Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships, which sets new targets in order to achieve net-zero GHG emissions from international shipping by approximately 2050.<sup>736</sup>

On 13 July 2023, the Ministry of the Environment and Energy Security established the Steering Committee for the Italian Climate Fund, which finances both public and private sectors in favour of climate and environmental protection.<sup>737</sup> The Italian Climate Fund provides EUR840 million per year until 2026 to help achieve climate objectives.<sup>738</sup> The steering committee is responsible for managing funding by outlining investment strategies and activity plans to contribute to Italy's efforts in mitigation and adaptation.

On 7 August 2023, Italy submitted a modified version of its national Recovery and Resilience Plan to the European Commission with five new reforms, including new procedures for renewable energy, addressing subsidies that harm the environment and promoting green skills.<sup>739</sup> Investments outlined including transitioning production processes to be environmentally friendly, incentives to promote investments in green transitions and a financial instrument to renovate energy systems in public and social housing.

On 12 September 2023, the Minister of the Environment and Energy Security Gilberto Pichetto Fratin debated on a panel for climate prospects urging to reallocate funds to the Forest Stewardship Council.<sup>740</sup> He recalled the government's previous commitment to decarbonize and extend Special Economic Zones, urging to move funds from the National Recovery and Resilience Plan towards decarbonization to support non-pricing mechanisms in budgetary policy.

On 4 October 2023, the Ministry of the Environment and Energy Security announced the commencement of the first transitional phase of the Carbon Border Adjustment Mechanism (CBAM).<sup>741</sup> CBAM will set a price for producing carbon-intensive goods to reduce carbon leakage. The transition period is to collect data on greenhouse gas emissions and to refine the methodology.

<sup>&</sup>lt;sup>735</sup> PIANO NAZIONALE INTEGRATO PER L'ENERGIA E IL CLIMA, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) June 2023. Access Date: 15 February 2024. https://www.mase.gov.it/sites/default/files/PNIEC\_2023.pdf

<sup>&</sup>lt;sup>736</sup> Revised GHG reduction strategy for global shipping adopted, International Maritime Organization (London) 7 July 2023. Access Date: 16 February 2024. https://www.imo.org/en/MediaCentre/PressBriefings/pages/Revised-GHG-reduction-strategy-for-global-shipping-adopted-.aspx

 <sup>737</sup> Climate Fund: Steering Committee established, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 14 July 2023.
 Access Date: 29 April 2024. https://www.mase.gov.it/comunicati/climate-fund-steering-committee-established
 738 The Italian Climate Fund, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 3 November 2023. Access Date: 29 April

<sup>2024.</sup> https://www.mase.gov.it/pagina/italian-climate-fund
739 COMMISSION STAFF WORKING DOCUMENT: Analysis of the recovery and resilience plan of Italy, European Commission

<sup>(</sup>Brussels) 24 November 2023. Access Date: 16 February 2024. https://commission.europa.eu/system/files/2023-11/SWD 2023 392 1 EN autre document travail service part1 v4.pdf

 <sup>&</sup>lt;sup>740</sup> Ilva: Pichetto, soldi da PNRR a FSC nazionali, impegno decarbonizzazione non cambia, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 12 September 2023. Translation provided by Google Translate. Access Date: 2 November 2023. https://www.mase.gov.it/comunicati/ilva-pichetto-soldi-da-pnrr-fsc-nazionali-impegno-decarbonizzazione-non-cambia
 <sup>741</sup> Parte il meccanismo di adeguamento del carbonio alle frontiere (CBAM), avviata prima fase transitoria, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 4 October 2023. Translation provided by Google Translate. Access Date: 2 November 2023. https://www.mase.gov.it/notizie/parte-il-meccanismo-di-adeguamento-del-carbonio-alle-frontiere-cbamavviata-prima-fase

On 9 October 2023, Italy's Net Zero scheme was approved for funding by the European Commission, with the goal of reducing fuel dependency and increase decarbonization processes in industry production. The direct EUR100 million grants will allow Italy to diversify their energy sources, reduce energy prices, and decrease its carbon footprint under the aid of The Temporary Crisis and Transition Framework. The funding shows support for the decarbonization processes in industrial production, contributing to a decrease in Italy's carbon emissions.

On 16 October 2023, the Ministry of Economy and Finance submitted Italy's draft budget plan for 2024 which included the implementation of sustainable measures such as subsidizing renewable resources, investing in a green transition and reducing GHG emissions.<sup>743</sup> These actions include research and development plans for hydrogen projects and subsidizing loans to firms using renewable energy. This plan highlights Italy's role in climate mitigation efforts through policy.

On 22 November 2023, Italy's EUR5.7 billion scheme to support the production of renewable electricity was approved by the European Commission.<sup>744</sup> This scheme aims to support the construction of renewable power plants and expand existing facilities as a part of Italy's modified Recover and Resilience Plan.

On 27 November 2023, the Council of Ministers approved a fund to support the construction of renewable energy plants and to provide incentives to companies to encourage them to decarbonize their operations.<sup>745</sup>

On 23 January 2024, the Ministry of the Environment and Energy Security issued the Renewable Energy Community decree. Minister Pichetto stated that the decree marks a turning point for Italy's renewable energy industry, strengthening energy security and bringing Italy closer to reaching its climate objectives. To incentivise the production of renewable energy, the decree offers a non-repayable contribution of up to 40% of costs for eligible communities and an incentive tariff on renewable energy that is produced and shared nationally.

On 2 February 2024, Minister Pichetto approved a law promoting renewable energy, energy security and decarbonisation. The law, converted from the legislative Energy decree of 9 December 2023, will be regulated through various agreements signed by the Ministry of the Environment and Energy Security. The Energy Decree includes investments in renewable energy plants for the agricultural sector and amends the regulatory framework for the carbon capture and storage program regarding carbon permits.

<sup>&</sup>lt;sup>742</sup> State aid: Commission approves €100 million Italian scheme to support the production of electrolysers to foster the transition to a net-zero economy, The European Commission (Brussels) 9 October 2023. Access Date: 2 November 2023. https://ec.europa.eu/commission/presscorner/detail/en/ip 23 4730

<sup>&</sup>lt;sup>743</sup> Italy's Draft Budgetary Plan 2024, Ministero dell'economia e delle finanze (Rome) 16 October 2023. Access Date: 29 February 2024. https://economy-finance.ec.europa.eu/system/files/2023-11/2024\_dbp\_it\_en.pdf

<sup>&</sup>lt;sup>744</sup> Commission approves €5.7 billion Italian State aid scheme under the Recovery and Resilience Facility to support renewable energy communities and self-consumers, European Commission (Brussels) 22 November 2023. Access Date: 16 February 2024. https://ec.europa.eu/commission/presscorner/detail/en/ip 23 5787

<sup>&</sup>lt;sup>745</sup> DL Energia: nel decreto MASE investimenti su rinnovabili e sostegno a imprese gasivore-energivore, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 27 November 2023. Access Date: 27 December 2023. https://www.mase.gov.it/comunicati/dlenergia-nel-decreto-mase-investimenti-su-rinnovabili-e-sostegno-imprese-gasivore

<sup>&</sup>lt;sup>746</sup> Energia: MASE, pubblicato decreto CER, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 25 January 2024. Translation provided by Google Translate. Access date: 5 May 2024. https://www.mase.gov.it/comunicati/energia-mase-pubblicato-decreto-cer

<sup>&</sup>lt;sup>747</sup> LEGGE 2 febbraio 2024, n. 11, Normattiva Presidenza del Consiglio dei Ministri (Rome) 2 February 2024. Access Date: 29 February 2024. https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:legge:2024;11

<sup>&</sup>lt;sup>748</sup> DECRETO-LEGGE 9 dicembre 2023, n. 181, Normattiva Presidenza del Consiglio dei Ministri (Rome) 2 February 2024. Access Date: 29 February 2024. https://www.normattiva.it/esporta/attoCompleto?atto.dataPubblicazioneGazzetta=2023-12-09&atto.codiceRedazionale=23G00195

<sup>&</sup>lt;sup>749</sup> Italy Adopts a New Energy Decree to Boost Energy Security and Renewable Energy, Cleary Gottlieb (Rome) 1 March 2024. Access Date: 29 April 2024. https://www.clearygottlieb.com/news-and-insights/publication-listing/italy-adopts-a-new-energy-decree-to-boost-energy-security-and-renewable-energy#\_ftn4

On 18 April 2024, Minister Pichetto announced that the Ministry of Environment and Energy Security will allocate EUR150 million to fund the production of hydrogen in abandoned industrial areas as part of the Hydrogen Valley program.<sup>750</sup> Minister Pichetto stated that this funding is an important step for Italy to compete and play a leading role in the international market.

Italy has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. Italy has taken strong action to support policy mixes across all three pillars, including the promotion of the CBAM and the IMO GHG Reductions Strategy for carbon pricing, approving funds to provide incentives for decarbonization and proposing new legislation to the European Commission and passing new legislation of its own for the reduction of black carbon as non-pricing mechanisms.

Thus, Italy receives a score of +1.

Analyst: Preksha Khemka

# Japan: +1

Japan has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

On 26 May 2023, the Ministry of Economy, Trade and Industry and the Ministry of the Environment jointly unveiled a guide with the aim to assist companies in addressing and implementing carbon footprint-related initiatives.<sup>751</sup> This includes calculation, indication, and emission reduction. The guide stems from the results of the Product Carbon Footprint Calculations and Verification for Supply Chain-Wide Carbon Neutrality, a program that aims to reduce emissions across supply chains and achieve carbon neutrality by assessing current carbon pricing mechanisms.

On 6 June 2023, the Japanese Cabinet revised the Basic Hydrogen Strategy that was first established in 2017.<sup>752</sup> The updated strategy outlines a target to use 12 million tons of hydrogen per year by 2040 to increase clean energy supply. This investment in clean hydrogen will allow Japan to accelerate the transition toward a hydrogen/ammonia-based society, shifting away from carbon emissions.

On 7 July 2023, Japan, as a member of the International Maritime Organization (IMO), adopted the 2023 IMO Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships, which sets new targets in order to achieve net-zero GHG emissions from international shipping by approximately 2050.<sup>753</sup>

On 28 September 2023, the Ministry of the Environment and the Ministry of Economy, Trade and Industry held the Asia Zero Emissions Community International Conference to promote Japan's Joint Crediting

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<sup>&</sup>lt;sup>750</sup> Hydrogen Valleys: il MASE finanzia nuovi progetti per la produzione di idrogeno in aree industriali dismesse, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 18 April 2024. Translation Provided by Google Translate. Access Date: 5 May 2024. https://www.mase.gov.it/comunicati/hydrogen-valleys-il-mase-finanzia-nuovi-progetti-la-produzione-di-idrogeno-aree <sup>751</sup> Carbon Footprints Practical Guide, the Ministry of Economy, Trade and Industry (Tokyo) 26 May 2023. Access Date: 4 November 2023. https://www.meti.go.jp/english/press/2023/0526\_002.html

 <sup>&</sup>lt;sup>752</sup> Basic Hydrogen Strategy, The Ministerial Council on Renewable Energy, Hydrogen and Related Issues (Tokyo) 6 June 2023.
 Access Date: 4 November 2023. https://www.meti.go.jp/shingikai/enecho/shoene\_shinene/suiso\_seisaku/pdf/20230606\_5.pdf
 <sup>753</sup> Revised GHG reduction strategy for global shipping adopted, International Maritime Organization (London) 7 July 2023. Access Date: 16 February 2024. https://www.imo.org/en/MediaCentre/PressBriefings/pages/Revised-GHG-reduction-strategy-forglobal-shipping-adopted-.aspx

Mechanism (JCM) and the creation of carbon markets.<sup>754</sup> The JCM will help Japan achieve its targets for emissions reductions by promoting low-carbon measures through Japanese technologies and infrastructures.<sup>755</sup>

On 2 October 2023, the Ministry of the Environment announced a new financial framework to help businesses and industries successfully decarbonize their practice.<sup>756</sup>

On 3 October 2023, Prime Minister Fumio Kishida announced new Climate Transition Bonds to incentivize industries to switch to renewable energy sources, thereby reducing their emissions.<sup>757</sup>

On 11 October 2023, the Ministry of Economy, Trade and Industry and Tokyo Stock Exchange initiated the Pro-Growth Carbon Pricing Concept and carbon credit market. The aim of these programs is to reach carbon neutrality by 2050 with a 46% reduction in greenhouse gas emissions by 2030. The carbon credit market aims to incentivise greenhouse gas emissions reduction through the use of financial instruments, establishing a system which rewards companies that reduce their carbon emissions.

On 23 October 2023, the Ministry of the Environment co-hosted the Eighth Strategic Dialogue of the Carbon Market Platform with the German Federal Ministry for Economic Affairs and Climate Action to discuss the potential for carbon markets as a method of reducing carbon emissions.<sup>759</sup>

On 1 December 2023, Prime Minister Kishida attended the 28th Conference of the Parties meeting to the United Nations Framework Convention on Climate Change in Dubai, where he outlined several new initiatives that Japan will implement in the near future.<sup>760</sup> These include a carbon pricing scheme and ending the new construction of coal power plants.

On 1 February 2024, the Ministry of the Environment declared the period from February 26 to March 1, 2024, as "Climate Change and Zero Carbon City Week." During this week, three events related to climate change and the decarbonization of cities took place, including a seminar on City-to-City Collaboration for Zero Carbon Society, an International Symposium with the International Institute for Applied Systems Analysis on "Climate Change and Cities," and a Joint Carbon Mechanism Global Partnership Meeting. This showcases Japan's involvement in carbon reduction efforts both nationally and internationally.

On 2 February 2024, the Ministry of the Environment announced the selection of five new projects under the JCM Model Projects of the Joint Crediting Mechanism (JCM) Financing Support Programme.<sup>762</sup> It is anticipated that these projects will contribute to a cumulative reduction of GHG emissions of approximately 20 million tons of carbon by FY2030.

<sup>&</sup>lt;sup>754</sup> AZEC International Conference to Promote the JCM and Develop Carbon Markets, Ministry of the Environment (Tokyo) 29 September 2023. Access Date: 18 December 2023. https://www.env.go.jp/en/press/press\_02018.html

<sup>&</sup>lt;sup>755</sup> Joint Crediting Mechanism (JCM), Ministry of Foreign Affairs of Japan (Tokyo) 10 July 2023. Access Date: 18 December 2023. https://www.mofa.go.jp/ic/ch/page1we\_000105.html

<sup>&</sup>lt;sup>756</sup> Compilation of the Paper Titled "Addressing the Challenges of Financed Emissions", Ministry of the Environment (Tokyo) 2 October 2023. Access Date: 18 November 2023. https://www.env.go.jp/en/press/press\_02016.html

<sup>757</sup> Statement by Prime Minister Kishida at PRI in Person 2023, Office of the Prime Minister of Japan (Tokyo) 3 October 2023. Access Date: 15 December 2023. https://japan.kantei.go.jp/101\_kishida/statement/202310/03pri.html

<sup>&</sup>lt;sup>758</sup> Opening of the Carbon Credit Market and Start of Trading Today, Japan Exchange Group (Tokyo) 13 October 2023. Access Date: 4 December 2023 https://www.jpx.co.jp/english/corporate/news/news-releases/0060/20231013-01.html

<sup>&</sup>lt;sup>759</sup> Results of Eighth Strategic Dialogue of the Carbon Market Platform, Ministry of the Environment (Tokyo) 30 October 2023. Access Date: 18 December 2023. https://www.env.go.jp/en/press/press 02084.html

<sup>&</sup>lt;sup>760</sup> Statement by Prime Minister KISHIDA Fumio at COP28 World Climate Action Summit, Office of the Prime Minister of Japan (Dubai) 1 December 2023. Access Date: 15 December 2023.

 $https://japan.kantei.go.jp/101\_kishida/statement/202312/01statement.html$ 

<sup>&</sup>lt;sup>761</sup> Announcement of Climate Change and Zero Carbon City Week, Ministry of the Environment (Tokyo) 1 February 2024. Access Date: 29 February 2024. https://www.env.go.jp/en/press/press\_02423.html

<sup>&</sup>lt;sup>762</sup> MOE Japan Selects Five New JCM Model Projects of Joint Crediting Mechanism (JCM), Ministry of the Environment (Tokyo) 2 February 2024. Access Date: 29 February 2024. https://www.env.go.jp/en/press/press\_02398.html

On 19 February 2024, the Ministry of Environment and the Ministry of Environmental Protection and Natural Resources of Ukraine signed the Memorandum of Cooperation on the Joint Crediting Mechanism (JCM).<sup>763</sup> With this agreement, Ukraine becomes the twenty-ninth partner country to the JCM. Japan's involvement will advance global decarbonization by employing the JCM as a market mechanism in line with Article 6 of the Paris Agreement, facilitating greenhouse gas emission reductions and removals on a global scale while promoting sustainable development.

On 14 March 2024, the Ministry of Environment co-organized the "Small Island Developing States (SIDS) Decarbonization Forum" with the International Renewable Energy Agency and the Green Climate Fund.<sup>764</sup> During the forum, participants, including SIDS representatives, international agencies, Japanese local governments, and businesses, exchanged information on ongoing activities, innovative technologies and challenges in their decarbonization efforts. The Ministry of Environment shared its Ocean Thermal Energy Conversion in Kume Island and projects in Oki Islands, which aim to increase resilience against natural disasters through renewable energy and storage battery technologies.

On 25 March 2024, the Asia-Pacific Economic Cooperation (APEC) announced that the Japanese government pledged a contribution of JPY90 million to APEC's Energy Efficiency, Low Carbon and Energy Resiliency Measures Sub-Fund. The Japanese Sub-Fund. Japanese contribution serves to support the development of low and zero-emissions energy projects in the APEC region, promote sustainable growth and enhance energy security. The Japanese Senior Official for APEC and Deputy Director-General for Trade Policy at the Ministry of Economy, Trade and Industry Tsuyoshi Okuyama signed a memorandum of understanding with the Executive Director of the APEC Secretariat Rebecca Sta Maria confirming the funding.

On 29 March 2024, the Ministry of Environment announced the selection of 18 projects for the City-to-City Collaboration program, which assists decarbonization efforts in developing countries. The Japanese private companies and research institutions collaborate with Japanese subnational governments and partner cities in developing countries to implement decarbonization projects, aid legislative development and enhance capacity building. Through the program, Japan aims to promote the international expansion of Japanese decarbonization technologies and catalyze an international domino effect towards decarbonization.

On 10 April 2024, the Ministry of Education, Culture, Sports, Science and Technology and the United States' Department of Energy declared the formation of a strategic partnership to accelerate the development and commercialization of fusion energy. This collaboration aims to leverage both countries' capacities to tackle significant scientific and technical challenges in making fusion energy commercially viable. The initiative also emphasizes community engagement and workforce development to support a sustainable and equitable transition to clean energy. This partnership reflects a shared commitment to enhancing energy security and achieving net-zero carbon emissions through innovative energy solutions.

Japan has fully complied with its commitments to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. Japan has taken steps to address

<sup>&</sup>lt;sup>763</sup> Japan and Ukraine Sign the Memorandum of Cooperation for Establishing the JCM, Ministry of the Environment (Tokyo) 19 February 2024. Access Date: 29 February 2024. https://www.env.go.jp/en/press/press 02478.html

<sup>&</sup>lt;sup>764</sup> Results of Small Island Developing States (SIDS) Decarbonization Forum, Ministry of the Environment (Tokyo) 1 April 2024. Access Date: 29 April 2024. https://www.env.go.jp/en/press/press\_02602.html

<sup>&</sup>lt;sup>765</sup> Japan Contributes JPY 90 million to Boost Energy Efficiency and Low-Carbon Initiatives, Asia-Pacific Economic Cooperation (Singapore) 25 March 2024. Access Date: 14 May 2024. https://www.apec.org/press/news-releases/2024/japan-contributes-jpy-90-million-to-boost-energy-efficiency-and-low-carbon-initiatives

<sup>&</sup>lt;sup>766</sup> MOE Selects 18 Projects for the City-to-City Collaboration Program to Support the Decarbonization Efforts by Overseas Subnational Governments, Ministry of the Environment (Tokyo) 29 March 2024. Access Date: 29 April 2024. https://www.env.go.jp/en/press/press\_02653.html

<sup>&</sup>lt;sup>767</sup> Joint Statement between DOE and Japan Ministry of Education, Sports, Science, and Technology Concerning a Strategic Partnership to Accelerate Fusion Energy Demonstration and Commercialization, U.S. Department of Energy (Washington D.C.) 10 April 2024. Access Date: 1 May 2024. https://www.energy.gov/articles/joint-statement-between-doe-and-japan-ministry-education-sports-science-and-technology

carbon reduction efforts and encouraged shifts away from carbon through different non-pricing mechanisms and incentives. Japan announced new financial frameworks and systems such as the carbon credit market and introduced incentives for companies to reduce carbon emissions.

Thus, Japan receives a score of +1.

Analyst: Ananya Gaur

# United Kingdom: +1

The United Kingdom has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

On 7 July 2023, the United Kingdom, as a member of the International Maritime Organization (IMO), adopted the 2023 IMO Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships, which sets new targets in order to achieve net-zero GHG emissions from international shipping by approximately 2050.<sup>768</sup>

On 14 September 2023, Secretary of State for Energy Security and Net Zero Claire Coutinho publicly announced that the Great British Insulation Scheme would allow 300,000 families across the UK to upgrade critical insulation technologies at home.<sup>769</sup> This will reduce household emissions.

On 28 September 2023, the UK Government announced a new mandate regarding zero emission vehicles, requiring that 80 per cent of new cars and 70 per cent of new vans sold must be zero emission by 2030.<sup>770</sup> The UK required target for 2024 is 22 per cent of new vehicles sold, aiming to then reach 100 per cent of vehicles sold by 2035. To support the production of these vehicles, GBP6 billion has been invested into charging points.

On 26 October 2023, the Department for Environment, Food and Rural Affairs (DEFRA) committed to reducing methane emissions in livestock in England.<sup>771</sup> Under the guidelines of the Environment Improvement Plan and the Net Zero Growth Plan, DEFRA aims to find innovative solutions to reduce cattle emissions by 2030 which shows support towards emission-reducing policies.

On 26 October 2023, the Department for Energy Security and Net Zero announced new energy legislation to lower energy-efficient costs.<sup>772</sup> The Energy Act 2023 aims to increase competition in the electricity networks and protect consumers by incentivizing heating industry investments in low-carbon heat pumps. This shows support for non-pricing mechanisms and incentives to reduce emissions.

On 8 November 2023, the Department for Energy Security and Net Zero and the United States Department of Energy established a major new partnership to accelerate fusion energy development.<sup>773</sup> This collaboration focuses on addressing both nations' fusion strategies by aiming to deliver clean, sustainable, and reliable energy.

<sup>&</sup>lt;sup>768</sup> Revised GHG reduction strategy for global shipping adopted, International Maritime Organization (London) 7 July 2023. Access Date: 16 February 2024. https://www.imo.org/en/MediaCentre/PressBriefings/pages/Revised-GHG-reduction-strategy-forglobal-shipping-adopted-.aspx

<sup>&</sup>lt;sup>769</sup> Families to save hundreds through £1 billion insulation scheme, Department for Energy Security and Net Zero (London) 14 September 2023. Access Date: 27 December 2023. https://www.gov.uk/government/news/families-to-save-hundreds-through-1-billion-insulation-scheme

<sup>&</sup>lt;sup>770</sup> Government sets out path to zero emission vehicles by 2035, Government of UK (London) 28 September 2023. Access Date: 9 December 2023. https://www.gov.uk/government/news/government-sets-out-path-to-zero-emission-vehicles-by-2035

Further action to cut methane emissions from livestock, Government of UK (London) 26th October 2023. Access Date: 1
 November 2023. https://www.gov.uk/government/news/further-action-to-cut-methane-emissions-from-livestock
 New laws passed to bolster energy security and deliver net zero, Government of UK, Government of UK (London) 26th

October 2023. Access Date: 1 November 2023. https://www.gov.uk/government/news/new-laws-passed-to-bolster-energy-security-and-deliver-net-zero

<sup>&</sup>lt;sup>773</sup> Joint Statement Between DOE and UK Department of Energy Security and Net Zero Concerning, U.S. Department of Energy (Washington, D.C.) 8 November 2023. Access Date: 10 March 2024. https://www.energy.gov/articles/joint-statement-between-doe-and-uk-department-energy-security-and-net-zero-concerning

This partnership highlights the United Kingdom's commitment to achieving net-zero carbon emissions by exploring a potent source of low-carbon energy through global collaboration.

On 29 November 2023, the Emissions Trading Scheme updated the carbon prices set for civil penalties in 2024.<sup>774</sup> Calculated as the average end-of-day settlement price over the relevant period, the carbon price for 2024 is GBP64.90. Additionally, the scheme will limit the cap on carbon allowance for companies to buy to 12.4 per cent below 2023 levels in 2024.<sup>775</sup> These carbon pricing policies aim to incentivise decarbonisation on the path to net zero emissions.

On 30 November 2023, the UK Government announced that GBP960 million will be provided for green industries through the Green Industries Growth Accelerator (GIGA).<sup>776</sup> GIGA supports investments in developing clean energy sectors such as hydrogen, offshore wind, electricity networks and carbon capture technology. GIGA aims to generate jobs, enlarge the clean energy supply chain, promote green investment, and accelerate the clean energy transition.

On 5 December 2023, the Department for Energy Security and Net Zero Minister Graham Stuart announced a GBP140 million aid for developing countries to reach net zero emissions. This aid is predicted to open over 25,000 jobs in the clean energy sector and reduce carbon emissions by 800,000 tonnes.

On 18 December 2023, Chancellor of the Exchequer Jeremy Hunt announced the creation of a new carbon pricing mechanism to be instituted domestically in 2027 against imported goods that face no comparable tax.<sup>778</sup> Foreign carbon intensive products will be subject to this tax to support domestic decarbonization measures and negate 'carbon leakage.'

On 20 December 2023, the Department for Energy Security and Net Zero published a report outlining a plan to establish a competitive UK Carbon Capture, usage and storage (CCUS) market by 2025.<sup>779</sup> To support this goal, GBP20 billion in funding will be allocated to advancing CCUS technologies. This initiative aids the United Kingdom in achieving its target of net zero emissions by 2050 by reducing carbon emissions and opening 50,000 jobs, contributing to its broader goal of creating a sustainable economy.<sup>780</sup>

<sup>&</sup>lt;sup>774</sup> UK ETS: Carbon prices for use in civil penalties, 2024, Government of UK (London) 29 November 2023. Access Date: 10 December 2023. https://www.gov.uk/government/publications/determinations-of-the-uk-ets-carbon-price/uk-ets-carbon-prices-for-use-in-civil-penalties-2024

<sup>&</sup>lt;sup>775</sup> Emissions scheme to reduce sale of carbon allowances on path to net zero, Government of UK (London) 5 October 2023. Access Date: 10 December 2023. https://www.gov.uk/government/news/emissions-scheme-to-reduce-sale-of-carbon-allowances-on-path-to-net-zero

<sup>&</sup>lt;sup>776</sup> Autumn Statement 2023, Government of UK (London) 30 November 2023. Access Date: 14 May 2024.

https://www.gov.uk/government/publications/autumn-statement-2023/autumn-statement-2023-html#executive-summary 777 UK dedicates £140 million to help countries switch to cleaner energy, Government of UK (London) 5 December 2023. Access Date: 10 December 2023. https://www.gov.uk/government/news/uk-dedicates-140m-to-help-countries-switch-to-cleaner-energy 778 The long-term pathway for the UK Emissions Trading Scheme, Department for Energy Security and Net Zero (London) 18 December 2023. Access Date: 20 March 2024. https://www.gov.uk/government/publications/uk-emissions-trading-scheme-long-term-pathway/the-long-term-pathway-for-the-uk-emissions-trading-scheme#contents

<sup>779</sup> New Vision to create competitive carbon capture market follows unprecedented £20 billion investment, Department for Energy Security and Net Zero (London) 20 December 2023. Access Date: 14 May 2024.

https://www.gov.uk/government/news/new-vision-to-create-competitive-carbon-capture-market-follows-unprecedented-20-billion-investment

<sup>&</sup>lt;sup>780</sup> Carbon Capture, Usage and Storage: a vision to establish a competitive market, Department for Energy Security and Net Zero (London) 20 December 2023. tAccess Date: 14 May 2024. https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-a-vision-to-establish-a-competitive-market/carbon-capture-usage-and-storage-a-vision-to-establish-a-competitive-market

On 22 February 2024, the United Kingdom withdrew from the Energy Charter Treaty to comply with Net Zero targets urging for its reform towards sustainability.<sup>781</sup> The UK government reaffirmed its goal towards shifting to clean energy, leaving the Energy Charter Treaty in the process.

On 27 February 2024, the Department for Energy Security and Net Zero proposed to fund hydrogen production projects.<sup>782</sup> The department offered GBP21 million in aid the creation of seven projects across the UK to further develop hydrogen as a cleaner fuel alternative, aiming to extend the industry investment up to GBP11 billion by 2030.

On 29 February 2024, the Department for Energy Security and Net Zero updated the "Public Sector Decarbonisation Scheme" which aims to reduce public sector building emissions by 75 per cent by 2037.783 The updated "Phase 4" confirms funding of GBP1.17 billion targeting carbon emission reduction across all the public estate sectors.

On 22 April 2024, the Ministry of Justice published its climate change adaptation strategy for 2024.<sup>784</sup> The updated action plan aims to enhance the ministry's capability to adapt to climate change by conducting risk assessments and implementing a series of resilience strategies for the period of 2024-2028. In line with the Climate Change Act, the Ministry of Justice also aims to assess Scope 3 emissions and address their carbon footprint to prioritize decarbonisation strategies.<sup>785</sup>

On 23 April 2024, the UK government and the Republic of Colombia put the Energy Transition Action Plan into effect with the goal of reducing GHG emissions. Building upon the UK-Colombia Partnership for Sustainable Growth, they aim to advance the Partnering for Accelerated Climate Transitions which includes transitioning to renewable energy production, producing green hydrogen, and focusing on carbon capture and storage.

On 25 April 2024, the Department of Transport published the Sustainable Aviation Fuel mandate, which commits to decarbonising air travel by pledging to generate 10 per cent of all jet fuel through sustainable sources by 2030.<sup>787</sup> The mandate will result in a reduction of 2.7 metric tons of carbon dioxide equivalent in 2030. Furthermore, it outlines price mechanisms to regulate airfare fluctuations and ensure that the public does not bear the burden of decarbonisation. The mandate also includes incentives to supply sustainable aviation fuel, establishing a buy-out mechanism and a maximum price, thus making decarbonisation feasible at a reasonable cost.

The United Kingdom has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. Through a variety of efforts to address emission reduction targets, there is clear support towards both policy mixes and non-pricing

<sup>&</sup>lt;sup>781</sup> UK departs Energy Charter Treaty, Government of UK (London) 22 February 2024. Access Date: 29 February 2024. https://www.gov.uk/government/news/uk-departs-energy-charter-treaty

Rebruary 2024. Access Date: 29
 Pebruary 2024. https://www.gov.uk/government/news/boost-for-uk-hydrogen-as-government-backs-world-leading-industry
 Public Sector Decarbonisation Scheme, Government of UK (London) 29 February 2024. Access Date: 29 February 2024.

https://www.gov.uk/government/collections/public-sector-decarbonisation-scheme

<sup>&</sup>lt;sup>784</sup> Climate change adaptation strategy 2024: MOJ, Government of UK (London) 22 April 2024. Access Date: 1 May 2024. https://www.gov.uk/government/publications/climate-change-adaptation-strategy-moj/climate-change-adaptation-strategy-2024-moj#our-vision

<sup>&</sup>lt;sup>785</sup> Net Zero carbon strategy: MOJ, Government of UK (London) 22 April 2024. Access Date: 1 May 2024.

https://www.gov.uk/government/publications/net-zero-carbon-strategy-moj/net-zero-carbon-strategy-moj#scope-3-emissions <sup>786</sup> Energy Transition action plan (ETAP) between the UK and the Republic of Colombia, Government of UK (London) 23 April 2024. Access Date: 1 May 2024. https://www.gov.uk/government/publications/energy-transition-uk-and-colombia-joint-action-plan/energy-transition-action-plan-etap-between-the-uk-and-republic-of-colombia

<sup>&</sup>lt;sup>787</sup> Aviation fuel plan, Government of UK (London) 25 April 2024. Access Date: 1 May 2024. https://www.gov.uk/government/speeches/aviation-fuel-plan

mechanisms. Clarity in their carbon pricing policies alongside initiatives to decarbonise in every sector demonstrates full compliance.

Thus, the United Kingdom receives a score of +1.

Analyst: Preksha Khemka

#### United States: +1

The United States has fully complied with commitments to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

On 5 June 2023, the United States released the National Clean Hydrogen Strategy and Roadmap, a framework for accelerating the production and effective use of clean hydrogen.<sup>788</sup> This will allow for the productive and economically efficient shift away from carbon emissions, in line with the US aim to transition into a fully green economy.

On 22 June 2023, the Department of Energy's Office of Technology Transitions announced more than USD21 million in funding 30 projects across 16 National Laboratories to propel clean energy solutions.<sup>789</sup> This will support the implementation of alternative energy which will help to reduce carbon emissions.

On 7 July 2023, the United States, as a member of the International Maritime Organization (IMO), adopted the 2023 IMO Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships, which sets new targets in order to achieve net-zero GHG emissions from international shipping by approximately 2050.<sup>790</sup>

On 10 July 2023, the Department of Energy announced the funding of various projects to create and expand effective carbon management technologies.<sup>791</sup> The aim of these projects is to provide locally tailored assistance with carbon management industries to foster the advancement of carbon capture across the United States. These projects are set to receive over USD23.4 million in financial support.

On 24 July 2023, the Department of Energy announced USD100 million to support local governments and public companies in purchasing products that come from converted carbon emissions.<sup>792</sup> The goal of this funding is to incentivize the adaptation of carbon management technologies and expand a sustainable fuel market that does not rely on carbon production.

On 16 August 2023, the United States passed the Inflation Reduction Act, a guide which consists of a variety of tax provisions enforcing clean energy mechanisms.<sup>793</sup> These provisions will save families money on energy

<sup>&</sup>lt;sup>788</sup> Biden-Harris Administration Releases First-Ever National Clean Hydrogen Strategy, U.S. Department of Energy (Washington D.C.) 5 June 2023. Access Date: 11 November 2023. https://www.energy.gov/articles/biden-harris-administration-releases-first-ever-national-clean-hydrogen-strategy-and

<sup>&</sup>lt;sup>789</sup> DOE Announces Over \$21 Million to Advance Commercialization of Clean Energy Solutions, U.S. Department of Energy (Washington D.C.) 22 June 2023. Access Date: 11 November 2023. https://www.energy.gov/articles/doe-announces-over-21-million-advance-commercialization-clean-energy-solutions

<sup>&</sup>lt;sup>790</sup> Revised GHG reduction strategy for global shipping adopted, International Maritime Organization (London) 7 July 2023. Access Date: 16 February 2024. https://www.imo.org/en/MediaCentre/PressBriefings/pages/Revised-GHG-reduction-strategy-for-global-shipping-adopted-.aspx

<sup>&</sup>lt;sup>791</sup> DOE Invests Over \$23 Million to Reduce Carbon Emissions Across the United States, U.S. Department of Energy (Washington D.C.) 10 July 2023. Access Date: 11 November 2023. https://www.energy.gov/articles/doe-invests-over-23-million-reduce-carbon-emissions-across-united-states

<sup>&</sup>lt;sup>792</sup> Biden-Harris Administration Announces \$100 Million to Transform Climate Pollution into Sustainable Products, U.S. Department of Energy (Washington D.C.) 24 July 2023., Access Date: 11 November 2023. https://www.energy.gov/articles/biden-harris-administration-announces-100-million-transform-climate-pollution-sustainable

<sup>&</sup>lt;sup>793</sup> Inflation Reduction Act Guidebook, The White House (Washington D.C.) 16 August 2023. Access Date: 12 November 2023. https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/

bills as well as accelerate the deployment of clean energy. This acts as an incentive to shift households and public utilities towards green energy infrastructure.

On 17 August 2023, the Department of Energy announced nearly USD34 million in funding to various industry and university-led projects. 794 These projects will advance research to make clean hydrogen a more accessible fuel for electricity production and industrial decarbonization.

On 20 September 2023, the United States announced USD4.6 billion in grants to fund a variety of state programs that will cut climate pollution, advance environmental justice, and deploy clean energy solutions across the country.<sup>795</sup> This grant is a part of President Joe Biden's Climate Pollution Reduction Grants, which aim to move forward on America's clean energy transition through state-focused actions.

On 21 September 2023, the United States launched the American Climate Corps, a workforce training initiative that aims to address the impact of a clean energy transition on the labour force.<sup>796</sup> It will provide training for careers in the clean energy economy within the public and private sector, including "the conservation of lands and waters, implementing energy efficient technologies, and advancing environmental justice." This will create a variety of incentives for climate resilient employment and energy efficient economies.

On 21 September 2023, President Biden endorsed recommendations from the Interagency Working Group on identifying the Social Cost of Greenhouse Gases (SC-GHG), which measures the known damages that greenhouse gas emissions cause in society.<sup>797</sup> The SC-GHG allows for improved assessments of the financial implications of greenhouse gasses and thus, can inform policy that effectively reduces carbon emissions.

On 28 September 2023, the Department of Energy announced USD47.7 million in funding for 16 research projects that assist in the development and demonstration of clean hydrogen technologies.<sup>798</sup> This includes lowering technology costs and improving infrastructure to ensure that the implementation of clean hydrogen fuel is cost-effective for commercial-scale businesses.

On 12 October 2023, the United States announced the launch of the Affordable Home Energy Shot.<sup>799</sup> The goal of this plan is to improve on the research and implementation of cleaner energy solutions, with the aim to decarbonize and deliver energy to American households in a cost-effective manner.

<sup>&</sup>lt;sup>794</sup> DOE Awards \$34 Million to Advance Clean Hydrogen, U.S. Department of Energy (Washington D.C.) 17 August 2023. Access Date: 12 November 2023. https://www.energy.gov/articles/doe-awards-34-million-advance-clean-hydrogen

<sup>&</sup>lt;sup>795</sup> Biden-Harris Administration Announces Availability of \$4.6 Billion in Competitive Grants to Cut Emissions, U.S. Environmental Protection Agency (EPA) (Washington D.C.) 20 September 2023. Access Date: 12 November 2023.

https://www.epa.gov/newsreleases/biden-harris-administration-announces-availability-46-billion-competitive-grants-cut-0 
<sup>796</sup> What They Are Saying: Biden-Harris Administration Launches American Climate Corps, The White House (Washington D.C.) 21 
September 2023. Access Date: 12 November 2023. https://www.whitehouse.gov/briefing-room/statements-

<sup>&</sup>lt;sup>797</sup> Fact Sheet: Biden-Harris Administration Announces New Actions to Reduce Greenhouse Gas Emissions and Combat the Climate Crisis, The White House (Washington D.C.) 21 September 2023. Access Date: 8 December 2023.

https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/21/fact-sheet-biden-harris-administration-announces-new-actions-to-reduce-greenhouse-gas-emissions-and-combat-the-climate-crisis/

<sup>&</sup>lt;sup>798</sup> DOE Announces Nearly \$48 Million to Advance Clean Hydrogen Technologies, U.S. Department of Energy (Washington D.C.) 28 September 2023. Access Date: 11 November 2023. https://www.energy.gov/articles/doe-announces-nearly-48-million-advance-clean-hydrogen-technologies

<sup>&</sup>lt;sup>799</sup> Biden-Harris Administration Launches New Energy Earthshot to Lower Energy Bills for Affordable, U.S. Department of Energy (Washington D.C.) 12 October 2023., Access Date: 11 November 2023. https://www.energy.gov/articles/biden-harris-administration-launches-new-energy-earthshot-lower-energy-bills-affordable

On 26 October 2023, the Department of Energy announced USD36 million for 11 projects that will accelerate the production and research of marine carbon dioxide removal technologies.<sup>800</sup> These projects will support efforts to make marine carbon removal solutions cost-effective and energy efficient.

On 8 November 2023, the Department of Energy and the United Kingdom's Department for Energy Security and Net Zero established a major new partnership to accelerate fusion energy development.<sup>801</sup> This collaboration focuses on addressing both nations' fusion strategies by aiming to deliver clean, sustainable, and reliable energy. This partnership highlights the United States' commitment to achieving net-zero carbon emissions by exploring a potent source of low-carbon energy through global collaboration.

On 14 November 2023, the United States released the Fifth National Climate Assessment, which aims to identify areas of progress and challenges in the U.S. climate action. 802 Additionally, they announced over USD6 billion in investments to enhance climate resilience nationwide. This funding will support a variety of initiatives aimed at mitigating climate change impacts and building resilient communities. These actions contribute to the fight against climate change by enhancing the country's ability to adapt to and mitigate its effects.

On 14 November 2023, the Department of Energy announced more than USD31 million in clean energy funding for 19 states and local communities.<sup>803</sup> This second round of Energy Efficiency and Conservation Block Grants will support solar-powered streetlights and zero-carbon community building retrofits. It aims to incentivize energy efficiency and support the clean energy transition.

On 14 November 2023, the Department of Energy announced over USD444 million in funding to support 16 projects aimed at enhancing the U.S.'s carbon management industry.<sup>804</sup> This funding will expand CO2 storage infrastructure to reduce emissions from industrial and power plant operations, and from legacy emissions in the atmosphere.

On 15 November 2023, the Department of Energy announced a USD3.5 billion investment to strengthen domestic battery manufacturing and processing.<sup>805</sup> This initiative, aimed at bolstering the production of critical battery components and materials, is crucial for supporting clean energy sectors like renewable energy and electric vehicles. Improving battery manufacturing aids climate change mitigation by supporting the transition of a clean energy economy.

On 27 November 2023, the Department of Energy announced a USD275 million investment in seven projects to strengthen clean energy supply chains and boost domestic manufacturing in energy and industrial

<sup>&</sup>lt;sup>800</sup> DOE Announces \$36 Million to Advance Marine Carbon Dioxide Removal Techniques, U.S. Department of Energy (Washington D.C.) 26 October 2023. Access Date: 11 November 2023. https://www.energy.gov/articles/doe-announces-36-million-advance-marine-carbon-dioxide-removal-techniques-and-slash

<sup>&</sup>lt;sup>801</sup> Joint Statement Between DOE and UK Department of Energy Security and Net Zero Concerning, U.S. Department of Energy (Washington D.C.) 8 November 2023. Access Date: 10 March 2024. https://www.energy.gov/articles/joint-statement-between-doe-and-uk-department-energy-security-and-net-zero-concerning

<sup>&</sup>lt;sup>802</sup> FACT SHEET: Biden-Harris Administration Releases Fifth National Climate Assessment and Announces More Than \$6 Billion to Strengthen Climate Resilience Across the Country, The White House (Washington D.C.) 14 November 2023. Access Date: 10 March 2024. https://www.whitehouse.gov/briefing-room/statements-releases/2023/11/14/fact-sheet-biden-harris-administration-releases-fifth-national-climate-assessment-and-announces-more-than-6-billion-to-strengthen-climate-resilience-across-the-country/.

<sup>&</sup>lt;sup>803</sup> Biden-Harris Administration Announces More Than \$31 Million Clean Energy Funding for 19 States and, U.S. Department of Energy (Washington D.C.) 14 November 2023. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-more-31-million-clean-energy-funding-19-states-and

<sup>&</sup>lt;sup>804</sup> Biden-Harris Administration Invests \$444 Million to Strengthen America's Infrastructure, U.S. Department of Energy (Washington D.C.) 14 November 2023. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-invests-444-million-strengthen-americas-infrastructure

<sup>&</sup>lt;sup>805</sup> Biden-Harris Administration Announces \$3.5 Billion to Strengthen Domestic Battery Manufacturing, U.S. Department of Energy (Washington D.C.) 15 November 2023. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-35-billion-strengthen-domestic-battery-manufacturing

communities across seven states.<sup>806</sup> This initiative leverages over USD600 million in private sector investments, aiming to create high-quality jobs and address clean energy supply chain vulnerabilities.

On 2 December 2023, the United States pledged USD3 billion to the Green Climate Fund's second replenishment (2024-2027), to aid emerging markets and developing economies in mitigating greenhouse gas emissions and adapting to climate change.<sup>807</sup> This initiative will enhance global efforts to combat climate change by mobilizing finance towards sustainable energy transitions and resilience projects.

On 4 December 2023, the United States, alongside the Bezos Earth Fund and the Rockefeller Foundation, introduced the Energy Transition Accelerator (ETA) framework.<sup>808</sup> This initiative seeks to mobilize private capital for energy transition through high-integrity carbon crediting. By promoting a shift from fossil fuels to clean power, the ETA aims to accelerate reduce GHG emissions, contributing significantly to tackling the climate change problem through carbon pricing.

On 7 December 2023, the Department of Energy announced a USD42 million investment to establish three multi-institutional and multi-disciplinary hubs focused on inertial fusion energy (IFE) science and technology.<sup>809</sup> These hubs aim to advance foundational IFE science and technology, a crucial step towards harnessing fusion energy for abundant, reliable, and non-carbon-emitting power.

On 8 December 2023, United States announced USD8.2 billion in funding for 10 major passenger rail projects across the US, including high-speed rail initiatives.<sup>810</sup> These investments aim to enhance transportation infrastructure, reduce greenhouse gas emissions by offering a cleaner alternative to car and air travel, and support the goal of a net-zero emissions economy by 2050. This move aligns with efforts to combat climate change by promoting sustainable, efficient transportation methods.

On 17 January 2024, the Department of Energy announced more than USD104 million in funding for energy conservation and clean energy projects at 31 federal facilities.<sup>811</sup> This funding supports various projects, including building electrification and solar generation, aiming to drastically reduce the federal carbon footprint.

On 18 January 2024, the Department of Energy announced USD20.5 million funding through the Energy Efficiency and Conservation Block Grant Program to 32 states, territories, and communities.<sup>812</sup> This investment supports transportation upgrades, home energy retrofits, and public electrification projects, addressing placebased energy needs. The funding will aid various projects, including electric bicycle incentive programs, free

<sup>&</sup>lt;sup>806</sup> Biden-Harris Administration Announces Actions to Strengthen Clean Energy Supply Chains and, U.S. Department of Energy (Washington D.C.) 27 November 2023. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-actions-strengthen-clean-energy-supply-chains-and

<sup>&</sup>lt;sup>807</sup> Announcement of Pledge to Second Replenishment of the Green Climate Fund, U.S. Department of State (Washington D.C.) 2 December 2023, Access Date: 8 March 2024. https://www.state.gov/announcement-of-pledge-to-second-replenishment-of-the-green-climate-fund/

<sup>&</sup>lt;sup>808</sup> United States and Partners Announce Energy Transition Accelerator Framework, U.S. Department of State (Washington D.C.) 4 December 2023. Access Date: 10 March 2024. https://www.state.gov/united-states-and-partners-announce-energy-transition-accelerator-framework/

<sup>&</sup>lt;sup>809</sup> DOE Announces \$42 Million for Inertial Fusion Energy Hubs, U.S. Department of Energy (Washington D.C.) 7 December 2023. Access Date: 10 March 2024. https://www.energy.gov/articles/doe-announces-42-million-inertial-fusion-energy-hubs <sup>810</sup> FACT SHEET: President Biden Announces Billions to Deliver World-Class High-Speed Rail and Launch New Passenger Rail Corridors Across the Country, The White House (Washington D.C.) 8 December 2023. Access Date: 10 March 2024. https://www.whitehouse.gov/briefing-room/statements-releases/2023/12/08/fact-sheet-president-biden-announces-billions-to-deliver-world-class-high-speed-rail-and-launch-new-passenger-rail-corridors-across-the-country/

<sup>&</sup>lt;sup>811</sup> Biden-Harris Administration Announces More Than \$104 Million to Advance Net Zero Projects Federal, U.S. Department of Energy (Washington D.C.) 17 January 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-more-104-million-advance-net-zero-projects-federal

<sup>&</sup>lt;sup>812</sup> DOE Announces Over \$20 Million to 32 States and Local Communities Addressing Place-Based, U.S. Department of Energy (Washington D.C.) 18 January 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/doe-announces-over-20-million-32-states-and-local-communities-addressing-place-based

solarization for low-income families, and municipal fleet electrification, aiming to enhance energy efficiency and support clean energy futures across diverse American communities.

On 19 January 2024, United States announced new actions to reduce electric vehicle (EV) costs and expand the US EV charging network.<sup>813</sup> This includes cutting EV prices, increasing EV charging reliability and accessibility. These steps aim to combat climate change by encouraging the shift to cleaner transportation, reducing greenhouse gas emissions from traditional combustion engines, and moving towards a more sustainable and electrified transportation future.

On 25 January 2024, the Department of Energy announced USD171 million to decarbonize America's industrial sector and boost domestic manufacturing.<sup>814</sup> This funding, allocated to 49 projects, aims to reduce greenhouse gas emissions, and develop innovative decarbonization technologies. Additionally, an USD83 million funding was announced to target hard-to-decarbonize industrial sectors, supporting the nation's goal for a net-zero emissions economy by 2050.

On 2 February 2024, the Department of Energy announced a nearly USD72 million investment to support hydropower facilities.<sup>815</sup> This funding will support 46 hydroelectric projects, enhancing efficiency and contributing to the generation of affordable, clean electricity. This investment aims to bolster the clean electricity generation capacity of the United States, emphasizing the role of hydropower as a crucial, renewable energy source.

On 6 February 2024, the Department of Energy announced nearly USD16 million in funding to advance marine energy in the US, supporting tidal energy and river current energy projects. 816 This investment aims to promote US leadership in marine energy, supporting community energy priorities and the development of the marine energy sector's supply chain and workforce. These efforts contribute to decarbonizing coastal communities and increasing their energy resilience.

On 13 February 2024, the Department of Energy announced a USD60 million investment to enhance geothermal energy through the selection of three projects focusing on enhanced geothermal systems (EGS).<sup>817</sup> This initiative aims to demonstrate the potential of EGS to deliver reliable, cost-effective electricity, aligning with the goal of achieving 100% clean electricity by 2035. These projects highlight commitment to exploring renewable energy sources, reducing carbon emissions, and advancing the United States toward a cleaner, more sustainable energy future.

<sup>&</sup>lt;sup>813</sup> FACT SHEET: Biden-Harris Administration Announces New Actions to Cut Electric Vehicle Costs for Americans and Continue Building Out a Convenient, Reliable, Made-in-America EV Charging Network, The White House (Washington D.C.) 19 January 2024. Access Date: 10 March 2024. https://www.whitehouse.gov/briefing-room/statements-releases/2024/01/19/fact-sheet-biden-harris-administration-announces-new-actions-to-cut-electric-vehicle-costs-for-americans-and-continue-building-out-aconvenient-reliable-made-in-america-ev-charging-network/

<sup>&</sup>lt;sup>814</sup> Biden-Harris Administration Announces \$254 Million to Decarbonize America's Industrial Sector, U.S. Department of Energy (Washington D.C.) 25 January 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-254-million-decarbonize-americas-industrial-sector

<sup>&</sup>lt;sup>815</sup> Biden-Harris Administration Announces Nearly \$72 Million, Largest Single Investment to Support, U.S. Department of Energy (Washington D.C.) 2 February 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-nearly-72-million-largest-single-investment-support

<sup>&</sup>lt;sup>816</sup> Biden-Harris Administration Invests Nearly \$16 Million to Advance Marine Energy in the US, U.S. Department of Energy (Washington D.C.) 6 February 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-invests-nearly-16-million-advance-marine-energy-us-1

<sup>&</sup>lt;sup>817</sup> Biden-Harris Administration Invests \$60 Million to Expand Clean Renewable Geothermal Energy, U.S. Department of Energy (Washington D.C.) 13 February 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-invests-60-million-expand-clean-renewable-geothermal-energy

On 23 February 2024, the Department of Energy announced a USD24 million investment to expand the Industrial Assessment Centers network.<sup>818</sup> This funding aims to train workers in clean energy jobs requiring less than a four-year degree and assist small and midsized manufacturers in increasing productivity and reducing energy waste. The initiative highlights commitment to growing America's clean energy workforce and supporting economic development while addressing energy efficiency.

On 27 February 2024, the Department of Energy announced USD25 million in funding for clean energy projects on Tribal lands to enhance energy sovereignty, reliability, and security, and lower energy costs.<sup>819</sup> This initiative supports the deployment of clean energy technology, aiming to ensure Tribal communities have access to affordable, clean energy solutions.

On 28 February 2024, the Department of Energy announced a USD 17.28 million investment under the Energy Efficiency and Conservation Block Grant Program, targeting energy efficiency improvements and clean energy technology adoption in public facilities and low-income homes.<sup>820</sup> This funding aims to enhance energy efficiency, reduce carbon emissions, and lower energy consumption, thereby supporting the long-term goal of energy cost savings for residents.

On 29 February 2024, the Department of Energy announced finalized energy efficiency standards for residential clothes washers and dryers<sup>821</sup> These standards aim to reduce energy waste and carbon dioxide emissions by nearly 71 million metric tons, equating to the emissions from around 9 million homes annually. This initiative underscores Unites States' to enhancing appliance efficiency and supporting environmental sustainability.

On 4 March 2024, the Department of Energy announced a USD90 million initiative aimed at improving building efficiency, enhancing resilience, and reducing costs for American families and businesses.<sup>822</sup> This funding, part of a broader \$225 million program established by the Bipartisan Infrastructure Law, supports the adoption, training, and technical assistance for modern building energy codes at the state and local levels. This effort is expected to significantly lower energy bills, fortify communities against extreme weather due to climate change, and contribute to the nation's clean energy and climate goals.

On 8 March 2024, the Department of Energy announced a USD425 million initiative to decarbonize and boost clean energy manufacturing in regions formerly reliant on coal.<sup>823</sup> This initiative aims to create high-quality jobs, strengthen the U.S. energy supply chain, and reduce industrial emissions. Focused on enhancing economic opportunities in former coal communities, this funding supports projects that produce or recycle clean energy products and invest in decarbonization efforts.

<sup>&</sup>lt;sup>818</sup> Biden-Harris Administration Announces \$24 Million to Expand America's Clean Energy Workforce, U.S. Department of Energy (Washington D.C.) 23 February 2024.Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-24-million-expand-americas-clean-energy-workforce

 <sup>819</sup> DOE Announces Funding for Tribal Clean Energy Projects, U.S. Department of Energy (Washington D.C.) 27 February 2024.
 Access Date: 10 March 2024. https://www.energy.gov/articles/doe-announces-funding-tribal-clean-energy-projects
 820 Biden-Harris Administration Supports Local Projects to Save Energy and Tackle Climate Crisis, U.S. Department of Energy (Washington D.C.) 28 February 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-supports-local-projects-save-energy-and-tackle-climate-crisis

<sup>&</sup>lt;sup>821</sup> DOE Finalizes Efficiency Standards for Residential Clothes Washers and Clothes Dryers to Save, U.S. Department of Energy (Washington D.C.) 29 February 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/doe-finalizes-efficiency-standards-residential-clothes-washers-and-clothes-dryers-save

<sup>822</sup> Biden-Harris Administration Announces \$90 Million to Improve Building Efficiency and Increase, U.S. Department of Energy (Washington D.C.) 4 March 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-90-million-improve-building-efficiency-increase

<sup>&</sup>lt;sup>823</sup> Biden-Harris Administration Announces \$425 Million to Decarbonize and Manufacture Clean Energy, U.S. Department of Energy (Washington D.C.) 8 March 2024. Access Date: 10 March 2024. https://www.energy.gov/articles/biden-harris-administration-announces-425-million-decarbonize-and-manufacture-clean-energy

On 12 March 2024, the Department of Energy announced the National Zero-Emission Freight Corridor Strategy.<sup>824</sup> This strategy aims to deploy zero-emission infrastructure across the nation's freight corridors from 2024 to 2040. It focuses on expanding medium- and heavy-duty vehicle charging and hydrogen fueling infrastructure, targeting the reduction of emissions in high-traffic areas and supporting clean transportation goals.

On 15 March 2024, the United States and the European Union released a joint statement following the 11th EU-US Energy Council reaffirming their commitment to phase out fossil fuels.<sup>825</sup> They aim to strengthen energy security by increasing collaboration to set clear regulations and incentives through the Clean Energy Incentives Dialogue to promote zero-sum competition and renewable energy deployment.

On 21 March 2024, the Department of Energy announced USD475 million initiative to develop clean energy solutions on current and former mine land.<sup>826</sup> This investment will fund five projects aimed at revitalizing these regions for clean energy projects like solar power and battery energy storage systems. This effort aims to significantly enhance the United States' clean energy capacity, contributing to broader environmental and economic sustainability goals.

On 25 March 2023, the Department of Energy announced a USD6 billion initiative to transform Unites States' industrial sector.<sup>827</sup> This initiative will fund 33 projects to reduce carbon emissions in high-emitting industries such as steel, cement, and chemicals. This underscores the United States' commitment to achieving net-zero emissions by enhancing energy efficiency and adopting alternative fuels like clean hydrogen.

On 28 March 2024, the United States announced USD62 million investment to reduce the costs of recycling batteries nationwide, supporting the transition to a zero-emissions future.<sup>828</sup> This funding will advance the sustainability of the battery recycling industry, enhancing the collection, and processing of end-of-life batteries from consumer electronics. By improving recycling technologies and expanding consumer participation, this initiative helps reduce the need for new raw materials, thereby decreasing environmental impact and supporting the goal of a low-carbon economy.

On 29 March 2024, the United States announced the allocation of USD4 billion in tax credits for over 100 projects to accelerate clean energy manufacturing and reduce industrial greenhouse gas emissions.<sup>829</sup> As part of the Inflation Reduction Act, the funding strives to address clean energy manufacturing and critical materials recycling through various measures. The initiative aims to create quality jobs, support historic energy communities, and advance climate and energy security goals.

<sup>&</sup>lt;sup>824</sup> Biden-Harris Administration Releases First-Ever National Strategy to Accelerate Deployment of Zero-Emission Infrastructure for Freight Trucks, U.S. Department of Energy (Washington D.C.) 12 March 2024. Access Date: 1 May 2024.

https://www.energy.gov/articles/biden-harris-administration-releases-first-ever-national-strategy-accelerate-deployment 825 Statement by the EU and the US following the 11th EU-US Energy Council, European Commission (Washington D.C.) 15 March 2024. Access Date: 21 April 2024. https://ec.europa.eu/commission/presscorner/detail/en/statement\_24\_1516

<sup>826</sup> Biden-Harris Administration Announces \$475 Million Investment to Support Clean Energy Solutions on Current and Former Mine Land, U.S. Department of Energy (Washington D.C.) 21 March 2024. Access Date: 1 May 2024.

https://www.energy.gov/articles/biden-harris-administration-announces-475-million-investment-support-clean-energy Biden-Harris Administration Announces \$6 Billion to Transform America's Industrial Sector, U.S. Department of Energy (Washington D.C.) 25 March 2023. Access Date: 1 May 2024. https://www.energy.gov/articles/biden-harris-administration-announces-6-billion-transform-americas-industrial-sector

<sup>&</sup>lt;sup>828</sup> Biden-Harris Administration Announces \$62 Million to Lower Battery Recycling Costs Across the Nation, U.S. Department of Energy (Washington D.C.) 28 March 2024. Access Date: 1 May 2024. https://www.energy.gov/articles/biden-harris-administration-announces-62-million-lower-battery-recycling-costs-across

<sup>829</sup> Biden-Harris Administration Announces \$4 Billion in Tax Credits to Build Clean Energy Supply Chain, Drive Investments and Lower Costs in Energy Communities, U.S. Department of Energy (Washington D.C.) 29 March 2024. Access Date: 1 May 2024. https://www.energy.gov/articles/biden-harris-administration-announces-4-billion-tax-credits-build-clean-energy-supply

On 4 April 2024, the United States government pledged USD20 billion in rewards to support clean energy projects across the country to reduce emissions and combat climate change.<sup>830</sup> The funding will be made available through the Environmental Protection Agency's Greenhouse Gas Reduction Fund and 70% will be provided to development projects in low-income areas to ensure environmental justice and equal opportunity and benefits for all in the green transition.

On 10 April 2024, the Department of Energy and the Japanese Ministry of Education, Culture, Sports, Science, and Technology declared the formation of a strategic partnership to accelerate the development and commercialization of fusion energy.<sup>831</sup> This collaboration aims to leverage both countries' capacities to tackle significant scientific and technical challenges in making fusion energy commercially viable. The initiative also emphasizes community engagement and workforce development to support a sustainable and equitable transition to clean energy. This partnership reflects a shared commitment to enhancing energy security and achieving net-zero carbon emissions through innovative energy solutions.

On 24 April 2024, the Department of Energy announced USD48 million funding initiative to accelerate technology and manufacturing advancements in the offshore wind sector.<sup>832</sup> This investment is part of the Offshore Wind Liftoff Report's strategy to enhance US wind capabilities, aiming to improve the supply chain and support research and development efforts. The funding aims to strengthen US energy independence and supporting sustainable economic growth through renewable energy advancements.

On 6 May 2024, the Biden-Harris administration announced a final rule revising the Environmental Protection Agency's Greenhouse Gas Reporting Program.<sup>833</sup> The final rule enhances the reporting requirements for oil and natural gas systems, increasing accountability for methane pollution from emitting industries. Furthermore, the Biden administration will make USD1 billion available in funding to support the development of necessary low and zero-emitting oil and gas technology to sustain the green energy transition and reduce waste and methane emissions.

On 10 May 2024, the Department of Defense announced a partnership with the Dominion Energy Virginia to jointly collaborate on devising solutions to reduce emissions and achieve the Federal Sustainability Plan's target of achieving 100% carbon pollution-free electricity (CFE) for federal government operations by 2030.834 The partnership will explore the possibility of expanding Dominion Energy's regulated tariff products to cover clean electricity sources and increasing CFE generation onsite to decarbonize military installations.

The United States has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. The United States has taken strong action to reduce emissions such as providing funding for carbon management, clean hydrogen, and clean energy technology. The United States financing for marine carbon removal solutions and the Affordable Home

<sup>830</sup> Biden-Harris Administration Announces Historic \$20 Billion in Awards to Expand Access to Clean Energy and Climate Solutions and Lower Energy Costs for Communities Across the Nation, The White House (Washington D.C.) 4 April 2024. Access Date: 14 May 2024. https://www.whitehouse.gov/briefing-room/statements-releases/2024/04/04/biden-harris-administration-announces-historic-20-billion-in-awards-to-expand-access-to-clean-energy-and-climate-solutions-and-lower-energy-costs-for-communities-across-the-nation/

<sup>&</sup>lt;sup>831</sup> Joint Statement between DOE and Japan Ministry of Education, Sports, Science, and Technology Concerning a Strategic Partnership to Accelerate Fusion Energy Demonstration and Commercialization, U.S. Department of Energy (Washington D.C.) 10 April 2024. Access Date: 1 May 2024. https://www.energy.gov/articles/joint-statement-between-doe-and-japan-ministry-education-sports-science-and-technology

Biden-Harris Administration Releases Offshore Wind Liftoff Report and \$48 Million in New Funding to Accelerate Technology and Manufacturing, U.S. Department of Energy (Washington D.C.) 24 April 2024. Access Date: 1 May 2024.
 https://www.energy.gov/articles/biden-harris-administration-releases-offshore-wind-liftoff-report-and-48-million-new
 Biden-Harris Administration Announces Final Rule to Cut Methane Emissions, Strengthen and Update Greenhouse Gas
 Emissions Reporting for the Oil and Gas Sector, United States Environmental Protection Agency, (Washington D.C.) 6 May 2024.
 Access Date: 14 May 2024.

<sup>&</sup>lt;sup>834</sup> Biden-Harris Administration Announces Partnership to Supply Federal Facilities in Virgina With 100% Clean Energy, U.S. Department of Defense (Washington D.C.) 10 May 2024. Access Date: 14 May 2024.

Energy Shot campaign highlights the United States' commitment to sustainable alternatives. Furthermore, the United States has taken strong action to accelerate the development of clean energy, clean vehicles, and clean manufacturing through a variety of pricing and non-pricing mechanisms.

Thus, the United States receives a score of +1.

Analyst: Divvy Gupta

# **European Union: +1**

The European Union has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions.

On 9 June 2023, the European Commission approved a state aid scheme of EUR150 million in Slovenia to support the deployment of renewable energy.<sup>835</sup> The scheme aims to encourages businesses and individuals to transition toward clean energy, enabling for reductions in carbon emissions. The state aid scheme aligns with the EU's goals of reducing carbon emissions and achieving climate neutrality by 2050.

On 9 June 2023, the European Union launched a call for evidence and a public consultation on industrial carbon management under the European Green Deal. 836 The consultation collaborated with both citizens and policymakers to develop the new EU strategy for carbon capture, utilisation and storage and considered the public's emission reduction policy recommendations. This process helps to inform sustainable practices and technologies, contributing to the reduction of carbon emissions.

On 25 July 2023, the European Union adopted the Energy Efficiency Directive as part of the European Green Deal. 837 This directive is a component of the EU's efforts to achieve its Fit for 55 goals. The Energy Efficiency Directive aims to enhance energy performance, encouraging the reduction of carbon emissions and transition to clean energy.

On 3 August 2023, the three Baltic states agreed to synchronize their electricity grids with the European grid by early 2025.838 Estonia, Latvia, and Lithuania agreed that synchronizing electricity grids with the European grid can enhance energy security and sustainability, reducing overall emissions.

On 10 August 2023, the European Commission approved EUR6.5 billion in aid to Germany to provide partial compensation to energy-intensive companies in order to address carbon leakage from higher fuel prices as a result of the German fuel emission trading system.839

November 2023. https://energy.ec.europa.eu/news/state-aid-commission-approves-eu150-million-slovenian-scheme-supportrollout-renewable-energy-and-2023-06-09 en

<sup>835</sup> State aid: Commission Approves €150 Million Slovenian Scheme to Support the Rollout of Renewable Energy and Energy Storage to Foster the Transition to a Net-Zero Economy, European Commission (Brussels) 9 June 2023. Access Date: 01

<sup>836</sup> Call for Evidence and Public Consultation Launched on Industrial Carbon Management under European Green Deal, European Commission (Brussels) 9 June 2023. Access Date: 1 November 2023. https://energy.ec.europa.eu/news/call-evidence-and-publicconsultation-launched-industrial-carbon-management-under-european-green-2023-06-09 en

<sup>837</sup> European Green Deal: Energy Efficiency Directive Adopted, Helping Make EU 'Fit for 55', European Commission (Brussels) 25 July 2023. Access Date: 1 November 2023. https://energy.ec.europa.eu/news/european-green-deal-energy-efficiency-directiveadopted-helping-make-eu-fit-55-2023-07-25 en

<sup>838</sup> Estonia, Latvia, Lithuania Agree to Synchronize Their Electricity Grids with European Grid by Early 2025, European Commission (EU) August 3, 2023. Access Date: 1 November 2023. https://energy.ec.europa.eu/news/estonia-latvia-lithuania-agreesynchronise-their-electricity-grids-european-grid-early-2025-2023-08-03 en

<sup>839</sup> State aid: Commission approves €6.5 billion German scheme to address carbon leakage risk for energy-intensive companies resulting from national fuel emission trading system, European Commission (Brussels) 10 August 2023. Access Date: 27 December 2023. https://ec.europa.eu/commission/presscorner/detail/en/ip 23 4105

On 31 August 2023, the European Union improved the EU Building Stock Observatory, a web tool which monitors energy performances of buildings across Europe. 840 By monitoring performance, the web tool helps stakeholders implement sustainable alternatives and operational choices, reducing emissions.

On 21 September 2023, the European Commission approved a state aid scheme, amounting to EUR233 million in Austria to compensate energy-intensive companies.<sup>841</sup> By supporting these businesses, the scheme helps to prevent relocations of energy companies to regions with lower environmental standards.

On 6 October 2023, the European Commission approved EUR2.5 billion in aid to Czechia to help the manufacturing industry decarbonize the production process and improve energy efficiency in order to promote net-zero economy in accordance with the Commission's Green Deal Industrial Plan.842

On 9 October 2023, the European Commission approved funding for Italy's Net Zero scheme to reduce fuel dependency and increase decarbonization processes in industry production.<sup>843</sup> The direct EUR100 million grants will allow Italy to diversify their energy sources, reduce energy prices, and decrease its carbon footprint under the aid of The Temporary Crisis and Transition Framework. The funding shows support for the decarbonization processes in industrial production, contributing to a decrease in Italy's carbon emissions.

On 9 October 2023, the European Commission established the final two pillars of the "Fit for 55" legislative package by adopting the Energy Directive and the ReFuelEU Aviation Regulation, which will set legally binding climate goals for all key sectors of the EU economy.844 This includes emissions reduction targets, goals to promote natural carbon sinks and an improved emissions trading system that will limit carbon emissions, increase the costs of pollution and create funds for green transitions.

On 23 October 2023, the European Parliament backed carbon dioxide emissions reduction targets for trucks and buses.<sup>845</sup> This includes the implementation of recharging infrastructure that is cost-efficient, as well as fasttracking on benchmarks to accelerate the green transition. These targets align with the EU's climate neutrality by 2050 target, encouraging carbon emission reduction in the transportation sector.

On 29 November 2023, the European Parliament and Council reached a provisional agreement on revising the Industrial Emissions Directive, the Directive on the Landfill of Waste, and the Industrial Emissions Portal.846 The revision further combats health-threatening air, water and soil pollution from the agro-industrial sector and increase transparency and public participation in the licensing and control of regulated industrial

<sup>840</sup> EU Building Stock Observatory: Monitoring Energy Performance of Buildings Across Europe, European Commission (Brussels) 31 August 2023. Access Date: 1 November 2023. https://energy.ec.europa.eu/news/eu-building-stock-observatory-monitoringenergy-performance-buildings-across-europe-2023-08-31\_en

<sup>&</sup>lt;sup>841</sup> State aid: Commission Approves €233 Million Austrian Scheme to Compensate Energy-Intensive Companies, European Commission (Brussels) 21 September 2023. Access Date: 1 November 2023. https://energy.ec.europa.eu/news/state-aidcommission-approves-eu233-million-austrian-scheme-compensate-energy-intensive-companies-2023-09-21 en 842 State aid: Commission approves €2.5 billion Czech scheme to support the decarbonisation and energy efficiency of industrial processes to foster the transition to a net-zero economy, European Commission (Brussels) 6 October 2023. Access Date: 27

December 2023. https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_4788 843 State aid: Commission approves €100 million Italian scheme to support the production of electrolysers to foster the transition to a net-zero economy, The European Commission (Brussels) 9 October 2023. Access Date: 2 November 2023. https://ec.europa.eu/commission/presscorner/detail/en/ip 23 4730

<sup>844</sup> Commission welcomes completion of key 'Fit for 55' legislation, putting EU on track to exceed 2030 targets, European Commission (Brussels) 9 October 2023. Access Date: 16 February 2024. https://ec.europa.eu/commission/presscorner/detail/en/IP 23 4754 <sup>845</sup> MEPs Support CO2 Emissions Reduction Targets for Trucks and Buses, European Parliament (Brussels) 23 October 2023. Access Date: 1 November 2023. https://www.europarl.europa.eu/news/en/press-room/20231023IPR08171/meps-support-co2emissions-reduction-targets-for-trucks-and-buses

<sup>846</sup> Pollution: deal with Council to reduce industrial emissions, European Parliament (Brussels) 29 November 2023. Access Date: 10 April 2024. https://www.europarl.europa.eu/news/en/press-room/20231127IPR15436/pollution-deal-with-council-to-reduceindustrial-emissions

installations. The rules outlined in the directives promote the use of less and non-toxic chemicals and energy efficiency in industries and prevent waste generation.

On 7 December 2023, the European Parliament and the Spanish Presidency of the Council agreed to revise the Energy Performance of Buildings Directive.<sup>847</sup> The proposed plans aim to reduce greenhouse gas emissions and energy consumption in the EU building sector by 2030 and make it climate neutral by 2050. The revision will include financial incentives and measures to promote decarbonisation and protect consumers from energy price fluctuations.

On 18 January 2024, the European Commission, the European Parliament and the European Council reached a provisional agreement to strengthen carbon emissions standards and reduction targets for new heavy-duty vehicles entering the EU market from 2030.848 The agreement contributes to the EU's goal to promote the transition to zero-emission mobility in the road transport sector.

On 6 February 2024, the European Commission published an impact assessment recommending a 90 per cent net greenhouse gas emissions reduction by 2040, aligning with the EU's goal of climate neutrality by 2050.849 The impact assessment guides legislation, promotes stakeholder dialogue, and progresses with the commitments made under the Paris Agreement, paving the way for a sustainable and competitive economy. The Commission will support various financial incentives to achieve these targets and establish a designated task force to develop a global strategy for carbon pricing.

On 16 February 2024, the European Commission approved a EUR4 billion German scheme to support companies within the EU Emission Trading System (ETS) in decarbonizing their industrial production processes.<sup>850</sup> This measure aligns with Germany's climate and energy targets and supports the EU's strategic objectives outlined in the European Green Deal.

On 15 March 2024, the EU and the United States released a joint statement following the 11th EU-US Energy Council reaffirming their commitment to phase out fossil fuels.<sup>851</sup> They aim to strengthen energy security by increasing collaboration to set clear regulations and incentives through the Clean Energy Incentives Dialogue to promote zero-sum competition and renewable energy deployment.

On 18 April 2024, the European Commission announced the LIFE calls for proposals 2024. This initiative aims to give citizens of the EU the opportunity to create projects to reduce emissions, support the clean energy transition, and fight biodiversity loss.<sup>852</sup> The EU is offering EUR571 million to support these initiatives which could allow the EU to support innovative solutions to lowering carbon emissions.

The European Union has fully complied with its commitment to support appropriate policy mixes including carbon pricing, non-pricing mechanisms, and incentives that effectively reduce emissions. The EU has taken

<sup>&</sup>lt;sup>847</sup> Energy efficiency of buildings: MEPs strike deal with Council, European Parliament (Brussels) 7 December 2023. Access Date: 10 April 2024. https://www.europarl.europa.eu/news/en/press-room/20231204IPR15651/energy-efficiency-of-buildings-meps-strike-deal-with-council

 <sup>848</sup> Commission welcomes agreement on strong EU targets to reduce CO2 emissions from new trucks and urban buses, European
 Commission (Brussels) 18 January 2024. Access Date: 10 April 2024. https://ec.europa.eu/commission/presscorner/detail/en/ip\_24\_287
 849 Commission Presents Recommendation For 2040 Emissions Reduction Target to Set the Path to Climate Neutrality In 2050,
 European Commission (Strasbourg) 6 February 2024. Access Date: 10 April 2024.
 https://ec.europa.eu/commission/presscorner/detail/en/ip\_24\_588

<sup>850</sup> Commission approves €4 billion German State aid scheme partially funded under Recovery and Resilience Facility to help industries decarbonise production processes, European Commission (Brussels) 16 February 2024. Access Date: 29 April 2024. https://ec.europa.eu/commission/presscorner/detail/en/ip\_24\_845

<sup>851</sup> Statement by the EU and the US following the 11th EU-US Energy Council, European Commission (Washington D.C.) 15 March 2024. Access Date: 21 April 2024. https://ec.europa.eu/commission/presscorner/detail/en/statement\_24\_1516
852 LIFE Calls for proposals 2024: bring your green dream to life with a share of €571 million funding!, European Commission (Brussels) 18 April 2024. Access Date: 19 April 2024. https://cinea.ec.europa.eu/news-events/news/life-calls-proposals-2024-bring-your-green-dream-life-share-eu571-million-funding-2024-04-18 en

strong action to reduce emissions such as by providing support for various state schemes and introducing incentives that support a clean energy transition. Utilizing both pricing and non-pricing policies, the EU has supporting policy mixes to effectively reduce emissions.

Thus, the European Union receives a score of +1.

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