



www.g7.utoronto.ca

2023 G7 Hiroshima Summit Interim Compliance Report

22 May 2023 to 3 December 2023

Prepared by
Samraggi Hazra and Ambra Bisagni
and the G7 Research Group

19 February 2024

www.g7.utoronto.ca • g7@utoronto.ca • [@g7_rg](https://twitter.com/g7_rg)

“We have meanwhile set up a process and there are also independent institutions monitoring which objectives of our G7 meetings we actually achieve. When it comes to these goals we have a compliance rate of about 80%, according to the University of Toronto. Germany, with its 87%, comes off pretty well. That means that next year too, under the Japanese G7 presidency, we are going to check where we stand in comparison to what we have discussed with each other now. So a lot of what we have resolved to do here together is something that we are going to have to work very hard at over the next few months. But I think that it has become apparent that we, as the G7, want to assume responsibility far beyond the prosperity in our own countries. That’s why today’s outreach meetings, that is the meetings with our guests, were also of great importance.”

Chancellor Angela Merkel, Schloss Elmau, 8 June 2015

G7 summits are a moment for people to judge whether aspirational intent is met by concrete commitments. The G7 Research Group provides a report card on the implementation of G7 and G20 commitments. It is a good moment for the public to interact with leaders and say, you took a leadership position on these issues — a year later, or three years later, what have you accomplished?

Achim Steiner, Administrator, United Nations Development Programme,
in G7 Canada: The 2018 Charlevoix Summit

Contents

Introduction.....	3
Research Team	4
Compliance Analysts	4
Summary	6
The Interim Compliance Score	6
Compliance by Member	6
Compliance by Commitment.....	6
The Compliance Gap Between Members.....	6
Future Research and Reports.....	7
Table A: 2023 Priority Commitments Selected for Assessment*	7
Table B: 2023 G7 Hiroshima Interim Compliance Scores	9
Table C: 2023 G7 Hiroshima Interim Compliance Scores by Member.....	10
Table D: 2023 G7 Hiroshima Interim Compliance Scores by Commitment	11
1. Regional Security: Sanctions	12
2. Regional Security: Security Assistance for Ukraine.....	34
3. Non-Proliferation: Responsible Nuclear Supply Chain	51
4. Climate Change: Domestic Mitigation Measures	74
5. Climate Change: Emission Reduction Policies	91
6. Energy: Clean Energy Technologies	108
7. Energy: Low Carbon and Renewable Hydrogen Markets	152
8. Environment: Conservation Measures.....	207
9. Food and Agriculture: Healthy and Safe Diets.....	226
10. Food and Agriculture: Food Safety and Sustainable Production	245
11. Health: Life Expectancy.....	273
12. Human Rights: Forced Labour	325
13. Education: Inclusivity and Equity	337
14. Gender: Labour Markets.....	355
15. Labour and Employment: Job Creation	370
16. Digital Economy: Digital Ecosystem with Trust	386
17. Macroeconomics: Fiscal Sustainability and Price Stability.....	402
18. Crime and Corruption: Synthetic Drugs.....	426
19. Development: Official Development Assistance.....	440
20. Trade: Resilient Supply Chains.....	470

6. Energy: Clean Energy Technologies

“We will work to ensure that our regulations and investments will make clean energy technologies more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.”

G7 Clean Energy Economy Action Plan

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 recent publication of the 2023 Synthesis Report by the Intergovernmental Panel on Climate Change (IPCC) has highlighted the urgency of climate action to attain net zero emissions by 2050 and keep global warming below 1.5°C above pre-industrial levels.⁵⁴⁵ With the Russo-Ukrainian war resulting in an unprecedented global energy crisis, it is crucial that the G7 leaders develop a joint approach to address the challenges posed by the global energy transition. The leaders of the G7 have then committed to take concrete steps to “drive the transition to clean energy economies of the future cooperation within and beyond the G7.”⁵⁴⁶ To achieve carbon neutrality no later than 2050, there is a need for an urgent shift toward clean energy globally. The G7 leaders have recognised that to fulfil this commitment, public and private investment in industries is necessary “to fill the investment gap for the clean energy transition to lower the cost of the energy transition worldwide.”⁵⁴⁷

At the 1976 San Juan Summit, G7 leaders stated the intention to develop, conserve and use a diverse array of energy resources rationally in addition to supporting the energy development goals of developing nations.⁵⁴⁸

At the 1977 London Summit, G7 leaders agreed on the need for diversified energy production to reduce the dependence on oil.⁵⁴⁹ The need for an increase in nuclear energy to meet the world’s energy requirements was also acknowledged.

⁵⁴⁵ Climate Change 2023: Synthesis Report, Intergovernmental Panel on Climate Change (Geneva) 23. Access Date: 9 January 2024. https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf

⁵⁴⁶ G7 Hiroshima Leaders’ Communiqué, G7 Information Centre (Toronto) 20 May 2023. Access Date: 29 September 2023. <http://www.g7.utoronto.ca/summit/2023hiroshima/230520-communication.html>

⁵⁴⁷ G7 Clean Energy Economy Action Plan, G7 Information Centre (Toronto) 20 May 2023. Access Date: 29 September 2023. <http://www.g7.utoronto.ca/summit/2023hiroshima/230520-energy-action-plan.html>

⁵⁴⁸ Joint Declaration of the International Conference, G7 Information Centre (Toronto) 28 June 1976. Access Date: 9 January 2024. <http://www.g7.utoronto.ca/summit/1976sanjuan/communication.html>

⁵⁴⁹ Declaration: Downing Street Summit Conference, G7 Information Centre (Toronto) 8 May 1977. Access Date: 29 September 2023. <http://www.g7.utoronto.ca/summit/1977london/communication.html>

At the 1979 Tokyo Summit, G7 leaders acknowledged the significance of advancing clean technology.⁵⁵⁰ It marked the initial recognition of the urgent necessity to stabilize atmospheric carbon dioxide levels and establish ethical and normative guidelines for addressing climate change in future summits.

At the 1981 Ottawa Summit, considering the 1979-80 oil price increase, G7 leaders expressed the intent to develop the “fullest possible extent sources of renewable energy such as solar, geothermal and biomass energy.”⁵⁵¹

At the 1990 Houston Summit, G7 leaders recognized the vital role of global collaboration in advancing innovative technologies and approaches to supplement energy conservation efforts in reducing carbon emissions.⁵⁵² They endorsed the acceleration of scientific and economic research aimed at identifying effective climate change mitigation strategies, both in developing and developed nations.

At the 1998 Birmingham Summit, G8 leaders committed themselves to the development of efficient energy markets to provide “reliable, economic, safe and environmentally sound energy supplies to meet the projected increase in demand.”⁵⁵³ To achieve this, G7 leaders have highlighted the importance of international cooperation and working within the framework and principles of the Energy Charter Treaty.

At the 2005 Gleneagles Summit, G8 leaders committed to addressing climate change and advocating for the adoption of clean energy solutions.⁵⁵⁴ They have also pledged to implement measures aimed at cultivating markets for clean energy technologies, making them more accessible in developing countries, and providing support for vulnerable communities in adapting to the effects of climate change.

At the 2006 St. Petersburg Summit, G8 leaders reaffirmed their past commitments related to energy made at previous summits.⁵⁵⁵ The St. Petersburg Plan of Action was adopted to achieve enhanced global energy security. Actions in the plan included improving investments in the energy sector, diversifying energy mix, reducing energy poverty etc.

At the 2010 Muskoka Summit, G8 leaders restated their commitment to the utilization of low carbon and renewable energy sources.⁵⁵⁶ They further urged the International Energy Agency (IEA) to establish an international platform for low-carbon technologies with the aim of accelerating their development and deployment.

At the 2014 Brussels Summit, considering the crisis in Ukraine, G7 leaders committed to enact specific domestic policies within their respective governments to construct a more competitive, diversified, resilient and low-carbon energy system.⁵⁵⁷

⁵⁵⁰ Declaration, G7 Information Centre (Toronto) 29 June 1979. Access Date: 29 September 2023.
<http://www.g7.utoronto.ca/summit/1979tokyo/communique.html>

⁵⁵¹ Declaration of the Ottawa Summit, G7 Information Centre (Toronto) 21 July 1981. Access Date: 30 September 2023.
<http://www.g7.utoronto.ca/summit/1981ottawa/communique/index.html>

⁵⁵² Houston Economic Declaration, G7 Information Centre (Toronto) 11 July 1990. Access Date: 30 September 2023.
<http://www.g7.utoronto.ca/summit/1990houston/declaration.html>

⁵⁵³ Communiqué, G7 Information Centre (Toronto) 17 May 1998. Access Date: 30 September 2023.
<http://www.g7.utoronto.ca/summit/1998birmingham/finalcom.htm>

⁵⁵⁴ Chair’s Summary, G7 Information Centre (Toronto) 8 July 2005. Access Date: 30 September 2023.
<http://www.g7.utoronto.ca/summit/2005gleneagles/summary.html>

⁵⁵⁵ Chair’s Summary, G7 Information Centre (Toronto) 17 July 2006. Access Date: 30 September 2023.
<http://www.g7.utoronto.ca/summit/2006stpetersburg/summary.html>

⁵⁵⁶ Muskoka Declaration: Recovery and New Beginnings, G7 Information Centre (Toronto) 26 June 2010. Access Date: 30 September 2023. <http://www.g8.utoronto.ca/summit/2010muskoka/communique.html>

⁵⁵⁷ G7 Brussels Summit Declaration, G7 Information Centre (Toronto) 5 June 2014. Access Date: 30 September 2023.
<http://www.g7.utoronto.ca/summit/2014brussels/declaration.html>

At the 2015 Energy Ministerial Meeting in Hamburg, G7 Energy Ministers affirmed their dedication to endorsing the adoption of renewable energy sources.⁵⁵⁸ The objective is to decrease greenhouse gas emissions in their energy systems, while also acknowledging the continued importance of fossil fuels as a component of the energy mix in the foreseeable future. Moreover, the G7 leaders have committed to enhancing the research, development and demonstration efforts with an emphasis on renewable energy and other technologies with low carbon emissions.⁵⁵⁹

At the 2016 Ise-Shima Summit, G7 leaders stated their determination to work towards accelerated energy transformation to bring about the decarbonization of the international economy.⁵⁶⁰ G7 Energy Ministers affirmed at Kitakyushu that “improving energy efficiency is key to decarbonisation of our economies, enhancing energy security and fostering economic growth.”⁵⁶¹

At the 2021 Cornwall Summit, G7 leaders committed to accelerating the adoption of zero-emissions energy and curtailing excessive and wasteful consumption.⁵⁶² The promotion of renewable energy alternatives was also a way to “build back better” from the impacts of the Covid-19 pandemic, aligning with the roadmap devised by the International Energy Agency and to adhere to the target from the Paris Agreement.

At the 2022 Elmau Summit, considering the Russian invasion of Ukraine, G7 leaders committed to working closely together to counter the risks caused to the global energy supply by the war.⁵⁶³ G7 leaders also reiterated their support to reach net zero by 2050 and reduce fossil fuel dependency to remain consistent with a 1.5 °C warming limit.

Commitment Features

At the 2023 Hiroshima Summit, G7 leaders committed to “ensure that our regulations and investments will make clean energy technologies more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.”⁵⁶⁴

Definitions and Concepts

“To ensure” indicates that the leaders will make certain that the commitment’s objective is achieved.⁵⁶⁵

“Regulations” are rules made by authority to control an organization or system.⁵⁶⁶

⁵⁵⁸ G7 Hamburg Initiative for Sustainable Energy Security, G7 Information Centre (Toronto) 12 May 2015. Access Date: 30 September 2023. <http://www.g7.utoronto.ca/energy/150512-hamburg.html>

⁵⁵⁹ Leaders' Declaration: G7 Summit, G7 Information Centre (Toronto) 8 June 2015. Access Date: 9 January 2024. <http://www.g7.utoronto.ca/summit/2015elmau/2015-G7-declaration-en.html>

⁵⁶⁰ G7 Ise-Shima Leaders' Declaration, G7 Information Centre (Toronto) 27 May 2016. Access Date: 9 January 2024. <http://www.g7.utoronto.ca/summit/2016shima/ise-shima-declaration-en.html#energy>

⁵⁶¹ G7 Kitakyushu Energy Ministerial Meeting Kitakyushu Initiative on Energy Security for Global Growth Joint Statement, G7 Information Centre (Toronto) 2 May 2016. Access Date: 30 September 2023. <http://www.g7.utoronto.ca/energy/160502-statement.html>

⁵⁶² Carbis Bay G7 Summit Communiqué, G7 Information Centre (Toronto) 13 June 2021. Access Date: 30 September 2023. <http://www.g7.utoronto.ca/summit/2021cornwall/210613-communication.html>

⁵⁶³ G7 Leaders' Communiqué, G7 Information Centre (Toronto) 28 June 2022. Access Date: 9 January 2024. <http://www.g7.utoronto.ca/summit/2022elmau/220628-communication.html>

⁵⁶⁴ G7 Hiroshima Leaders' Communiqué, G7 Information Centre (Toronto), 20 May 2023. Access Date: 30 September 2023. <http://www.g7.utoronto.ca/summit/2023hiroshima/230520-communication.html>

⁵⁶⁵ Ensure, Dictionary (Cambridge) n.d. Access Date: 29 November 2023. <https://dictionary.cambridge.org/dictionary/english/ensure>

⁵⁶⁶ Regulation, Merriam-Webster (Springfield) n.d. Access Date: 29 September 2023. <https://www.merriam-webster.com/dictionary/regulation>

“Investments” are acts that put “money, effort, time ... into something to make a profit or get an advantage.”⁵⁶⁷ This indicates that G7 members ought to invest in projects and programs that will advance the clean energy transition.

“Clean energy technologies” is any “process, product, or service that reduces negative environmental impacts.” In the context of this commitment, clean technology includes any innovation that either supports “energy efficiency improvements, the sustainable use of resources, or environmental protection activities.”⁵⁶⁸

“Drive” refers to action(s) that “propel or carry along by force in a specified direction.”⁵⁶⁹ In this context, G7 members must initiate actions that advance the clean energy transition.

“Just” in this context refers to behaviour that is in accordance with morally ethical and fair principle.⁵⁷⁰ This indicates that the G7 members ought to ensure that the benefits of the clean energy transition are disseminated and shared in line with the just transition.

“Transition” refers to a process of change or transformation.⁵⁷¹ In the context of this commitment, it refers to the shift from a high-emission, carbon economy to a net-zero carbon economy.

General Interpretive Guidelines

Full compliance, or a score of +1, will be given to G7 members that take strong action towards all four parts of this commitment, ensuring that: 1) regulations and 2) investments in the clean energy transition are 3) affordable to all countries and 4) include workers and communities. This report notes that there is a strong international focus of this commitment. As such, domestic action should take into account its impact on other countries, i.e. in line with ensuring actions ensure affordability “to all nations.”

Examples of strong actions include clean energy regulations and investments via investing in clean energy industries through government funds and tax credits; partnering with low-income countries to invest in clean energy technology development; working with the World Trade Organization to promote fair, free, and sustainable trade between countries; and eliminating green protectionist trade barriers. For both regulatory and investments, actions must ensure both affordability and inclusivity for workers and communities.

Partial compliance, or a score of 0, will be assigned to G7 members that take less strong action within the compliance period to accelerate an affordable and inclusive clean energy transition for all countries. This could include taking regulatory and investment actions but failing to ensure affordability or inclusivity for workers and communities, or some of both. Examples of less than strong action include actions that are neither regulatory or investments, such as such as public awareness campaigns, participate in clean energy knowledge sharing networks, diplomatic efforts, and reiterations of support for the commitment.

Non-compliance, or a score of -1, will be assigned if the G7 member that makes little to no effort towards an affordable, for all countries, and just, for workers and communities, clean energy transition or implements policies that make clean energy technology dissemination substantially more difficult.

⁵⁶⁷ Investment, Dictionary (Cambridge) n.d. Access Date: 28 September 2023.

<https://dictionary.cambridge.org/dictionary/english/investment>

⁵⁶⁸ Clean Technology, Wikipedia (San Francisco) n.d. Access Date: 28 September 2023.

https://en.wikipedia.org/wiki/Clean_technology

⁵⁶⁹ Drive, Oxford Languages (Oxfordshire) n.d. Access Date: 28 September 2023.

https://www.oxfordlearnersdictionaries.com/definition/english/drive_1

⁵⁷⁰ Just, Oxford Languages (Oxfordshire) n.d. Access Date: 28 September 2023.

https://www.oxfordlearnersdictionaries.com/definition/english/just_1

⁵⁷¹ Transform, Oxford Languages (Oxfordshire) n.d. Access Date: 28 September 2023.

https://www.oxfordlearnersdictionaries.com/definition/american_english/transform

Scoring Guidelines

-1	The G7 member has taken little to no action to ensure that its regulations or investments in clean energy technologies are more affordable for all countries or include workers and communities.
0	The G7 member has taken strong action in one or two areas or less than strong action in more than two areas to ensure that its regulations and its investments in clean energy technologies are affordable for all countries and include workers and communities.
+1	The G7 member has taken strong action in more than three or more areas to ensure that its regulations and its investments in clean energy technologies are affordable for all countries and include workers and communities.

Compliance Director: Chiara Barsanti

Lead Analyst: Ysabel Atienza

Canada: +1

Canada has fully complied with its commitment to ensure that both its regulations and investments in clean energy technologies are more affordable for all countries and help drive a global, just energy transition for workers and communities that will leave no one behind.

On 25 May 2023, Parliamentary Secretary Julie Dabrusin announced a new call funded by Canada's Energy Innovation Program to support research, development and demonstration (RD&D) projects.⁵⁷² Such projects will help lower or eliminate emissions from the transportation sector.

On 29 May 2023, Minister Wilkinson announced over CAD90,000 through the Green Municipal Fund's (GMF) Community Buildings Retrofit initiative for six feasibility studies, helping Ontario cities' municipally owned buildings find the best approach to reduce energy consumption and greenhouse gas emissions.⁵⁷³

On 29 May 2023, Parliamentary Secretary Dabrusin announced that CAD1.3 million will be funded to the Canadian Home Builders' Association over five years.⁵⁷⁴ The aim of the commitment is to expedite the adoption of innovative technologies in both new housing and the renovation of existing homes.

On 30 May 2023, Minister Wilkinson in partnership with the Governments of Nova Scotia and Newfoundland and Labrador, introduced amendments to expand the mandates of the two historic Atlantic Accord Acts.⁵⁷⁵ These changes will establish the legislative framework for offshore renewable energy, empowering Newfoundland and Labrador and Nova Scotia to leverage their current capabilities and expedite the development of offshore wind projects along Canada's East Coast.

On 2 June 2023, Minister Wilkinson announced CAD650,000 in funding for QUEST Canada to evolve its Accelerating Implementation of Renewable Energy (AIRE) for Indigenous Communities project to expand

⁵⁷² New Federal Call for Proposals to Decarbonize On-Road Transportation, Natural Resources Canada (Ottawa) 25 May 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/05/new-federal-call-for-proposals-to-decarbonize-on-road-transportation.html>

⁵⁷³ FCM and the Government of Canada support studies to enhance efficiency and performance for municipally owned-buildings across Ontario, Natural Resources Canada (Toronto) 29 May 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/05/fcm-and-the-government-of-canada-support-studies-to-enhance-efficiency-and-performance-for-municipally-owned-buildings-across-ontario.html>

⁵⁷⁴ PS Dabrusin Announces Federal Funding to Support Energy-Efficient Home Construction and Renovations across Canada, Natural Resources (Ottawa) 29 May 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/05/ps-dabrusin-announces-federal-funding-to-support-energy-efficient-home-construction-and-renovations-across-canada.html>

⁵⁷⁵ Building Offshore Renewables in Newfoundland and Labrador and Nova Scotia, Natural Resources Canada (Ottawa) 30 May 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/05/building-offshore-renewables-in-newfoundland-and-labrador-and-nova-scotia.html>

knowledge of local energy systems and accelerating clean energy opportunities in their community.⁵⁷⁶ Indigenous AIRE will provide an entry point for Indigenous communities to work with QUEST on identifying and pursuing clean energy opportunities.

On 12 June 2023, Minister Champagne announced the signing of a partnership agreement with Rio Tinto, outlining an agenda for the company to fortify its leadership in green aluminium production.⁵⁷⁷ This includes the production of aluminum with among the lowest global carbon emissions and the ongoing commitment to decarbonize the production of essential minerals and metals.

On 13 June 2023, Minister Wilkinson announced a CAD230,000 investment into the Pembina Institute for Appropriate Development through their Energy Innovation Program. The funding goes towards the Pembina Energy Policy Simulator, which facilitates a comprehensive technical and stakeholder consultation for Pembina's existing Energy Policy Simulator and gives analysts, academics, and general audiences access to explore different energy futures to better understand possible futures that can support Canada's progress towards a net-zero transition.⁵⁷⁸

On 13 June 2023, Minister Wilkinson announced a CAD327,535 investment into the Trottier Energy Institute of Polytechnique Montreal through their Energy Innovation Program.⁵⁷⁹ The funding goes towards the Canada Energy Outlook Pathways Explorer, which aims to create a net-zero energy system modelling platform and online visualization tool to analyze Canada's different cost-optimized net-zero pathways.

On 13 June 2023, Minister Wilkinson announced over CAD3.6 million in funding for International Paper Company in collaboration with Via Separations Inc., for the implementation of filtration technology aimed at reducing the energy intensity and carbon emissions associated with the kraft pulping process.⁵⁸⁰

On 13 June 2023, Minister Wilkinson, announced a combined total investment of over CAD960,000 for three energy-modelling projects, which will support reducing emissions and clean technology by analyzing the most cost-effective ways to achieve net-zero.⁵⁸¹

On 14 June 2023, Minister Wilkinson met with Minister of Industry and Trade of the Czech Republic Jozef Síkela to discuss the significance of international collaboration on global energy security and the transition to

⁵⁷⁶ Federal Investment to Support Clean Energy Planning with QUEST Canada, Peter Ballantyne Cree Nation and Frog Lake First Nation, Natural Resources Canada (Saskatoon) 2 June 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/06/federal-investment-to-support-clean-energy-planning-with-quest-canada-peter-ballantyne-cree-nation-and-frog-lake-first-nation.html>

⁵⁷⁷ Canada deepening its collaboration with global leader Rio Tinto to produce the world's greenest aluminum, Innovation, Science and Economic Development Canada (Saguenay) 12 June 2023. Access Date: 31 October 2023. <https://www.canada.ca/en/innovation-science-economic-development/news/2023/06/canada-deepening-its-collaboration-with-global-leader-rio-tinto-to-produce-the-worlds-greenest-aluminum.html>

⁵⁷⁸ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

⁵⁷⁹ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

⁵⁸⁰ Government of Canada Invests in First-of-its-Kind Filtration Technology in Grande Prairie to Help Reduce Carbon Emissions, Natural Resources Canada (Grand Prairie) 13 June 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/06/government-of-canada-invests-in-first-of-its-kind-filtration-technology-in-grande-prairie-to-help-reduce-carbon-emissions.html>

⁵⁸¹ Government of Canada Invests in Energy-Modelling Tools to Support Emissions Reductions, Natural Resources Canada (Ottawa) 13 June 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/06/government-of-canada-invests-in-energy-modelling-tools-to-support-emissions-reductions.html>

net zero.⁵⁸² The discussion was centred on strengthening cooperation between Europe, the Czech Republic and Canada to ensure a more resilient and sustainable energy policy, bolster critical mineral supply chains, and combat climate change through the adoption of clean technology and sustainable practices.

On 19 June 2023, Chief Executive Officer of Canada Energy Regulator Gitane De Silva released a report titled Canada's Energy Future 2023, illustrating different energy futures for Canada that could achieve net-zero greenhouse gas emissions by 2050.⁵⁸³ The report identifies actions and policies the Government of Canada could take in regards to investing in clean energy technology research and development, providing financial incentives for adopting sustainable energy practices, and removing regulatory barriers in the industry.

On 19 June 2023, Minister of Transport Omar Alghabra concluded a trip representing Canada at the G7 Transport Ministers' Meeting in Ise-Shima, Japan.⁵⁸⁴ He highlighted initiatives to build sustainable supply chains and reduce pollution through increasing sustainable aviation fuels and establishing green shipping corridors.

On 20 June 2023, Minister Alghabra introduced B-52, the Enhancing Transparency and Accountability in the Transportation System Act.⁵⁸⁵ This enacts the Air Transportation Accountability Act which requires airports to publish and report on their pollution reduction plans to help achieve net-zero goals.

On 20 June 2023, Minister of Fisheries, Oceans, and the Canadian Coast Guard Joyce Murray and Minister Wilkinson announced the creation of a task force tasked with exploring challenges and possibilities of proposed tidal energy projects in the Bay of Fundy.⁵⁸⁶ The task force will define the criteria needed to protect fishes and marine life, as well as mechanisms for streamlining processing time for regulatory decisions related to tidal energy projects in the Bay of Fundy.

On 27 June 2023, Minister Wilkinson, British Columbia (BC) Minister of Energy, Mines and Low Carbon Innovation Josie Osborne, Political Executive of the First Nations Summit Robert Phillips, and Chief Don Tom of the Union of British Columbia Indian Chiefs, announced the British Columbia Regional Energy and Resource Table: Framework for Collaboration on the Path to Net Zero identifying six strategic areas of opportunity which have potential to contribute significantly to building a prosperous economy: clean fuels/hydrogen, electrification, critical minerals, forest sector, carbon management technology and systems, and regulatory efficiency.⁵⁸⁷

⁵⁸² Minister Wilkinson and Minister Síkela Discuss Shared Interest in Advancing Climate Action and Clean Energy, Natural Resources Canada (Ottawa) 14 June 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/06/minister-wilkinson-and-minister-sikela-discuss-shared-interest-in-advancing-climate-action-and-clean-energy.html>

⁵⁸³ Canada's energy future 2023: energy supply and demand projections to 2050, Canada Energy Regulator (Calgary) 19 June 2023. Access Date: 23 October 2023. <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/>

⁵⁸⁴ Minister Alghabra concludes successful trip representing Canada in the G7 Transport Ministers' Meeting in Japan, Transport Canada (Ise-Shima) 19 June 2023. Access Date: 24 October 2023. <https://www.canada.ca/en/transport-canada/news/2023/06/minister-alghabra-concludes-successful-trip-representing-canada-in-the-g7-transport-ministers-meeting-in-japan.html>

⁵⁸⁵ Minister of Transport introduces Bill C-52 to ensure accountability and transparency in the national transportation sector for Canadians, Transport Canada (Ottawa) 20 June 2023. Access Date: 23 October 2023. <https://www.canada.ca/en/transport-canada/news/2023/06/minister-of-transport-introduces-bill-c-52-to-ensure-accountability-and-transparency-in-the-national-transportation-sector-for-canadians.html>

⁵⁸⁶ Government of Canada establishes task force on sustainable tidal energy in the Bay of Fundy, Fisheries and Oceans Canada (Halifax) 20 June 2023. Access Date: 31 October 2023. <https://www.canada.ca/en/fisheries-oceans/news/2023/06/government-of-canada-establishes-task-force-on-sustainable-tidal-energy-in-the-bay-of-fundy.html>

⁵⁸⁷ First Regional Energy and Resource Tables Collaboration Framework for Accelerating a Low-Carbon Economy Released, Natural Resources Canada (Vancouver) 27 June 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/06/first-regional-energy-and-resource-tables-collaboration-framework-for-accelerating-a-low-carbon-economy-released.html>

On 28 June 2023, Minister Wilkinson announced over CAD7 million in investments, which is provided through the Smart Renewables and Electrification Pathways program, for four projects.⁵⁸⁸ These investments aim to assist the development and implementation of renewable energy projects in co-operation with Indigenous communities.

On 29 June 2023, Minister Wilkinson launched a combined call for proposals to provide funding through the Clean Fuels Awareness and Zero-Emission Vehicle Awareness Initiative.⁵⁸⁹ The call will fund projects that aim to increase awareness while boosting public and industry confidence to implement change through adopting zero-emission vehicles and clean fuels.

On 5 July 2023, Minister Wilkinson and Minister of Sport and Minister responsible for Canada Economic Development for Quebec Regions Pascale St-Onge announced a total contribution of CAD10.5 million to CABONITY for its project transforming wood residues into value-added biochar products that sequester carbon.⁵⁹⁰

On 12 July 2023, Minister Wilkinson announced over CAD160 million in federal funding for nine Indigenous-led solar energy projects across Alberta that will create jobs while producing and storing clean electricity.⁵⁹¹

On 18 July 2023, Minister Wilkinson announced a second call for proposals for the Critical Minerals Research Development and Demonstration Program.⁵⁹² It will make CAD40 million available to support developing technology and pilot demonstration projects on critical minerals value chains, contributing to Canada's goal of becoming net-zero by 2050.

On 18 July 2023, Member of Parliament Sean Casey announced a CAD1.8 million investment supporting two projects in Prince Edward Island (PEI) through the GMF.⁵⁹³ The funding will go towards upgrading energy efficiency and greenhouse gas reduction plans.

On 2 August 2023, Minister Wilkinson and Scott Pearce, President of the Federation of Canadian Municipalities (FCM), announced an investment of up to CAD500,000 towards a home retrofitting pilot program executed

⁵⁸⁸ Government of Canada Supports Clean Energy Projects in Saskatchewan With Over \$7-Million Investment, Natural Resources Canada (Regina) 28 June 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/06/government-of-canada-supports-clean-energy-projects-in-saskatchewan-with-over-7-million-investment.html>

⁵⁸⁹ Now Open: Call for Applications Supporting Clean Fuels and Zero-Emission Vehicles Awareness Projects, Natural Resources Canada (Ottawa) 29 June 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/06/now-open-call-for-applications-supporting-clean-fuels-and-zero-emission-vehicles-awareness-projects.html>

⁵⁹⁰ Largest Biochar Production Plant in North America Contributes to Canadian Net-Zero Goals, Natural Resources Canada (Port-Cartier) 5 July 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/07/largest-biochar-production-plant-in-north-america-contributes-to-canadian-net-zero-goals.html>

⁵⁹¹ Government of Canada Supports Nine Job-Creating Indigenous-Led Solar Energy Projects in Alberta With Over \$160 Million in Federal Investments, Natural Resources Canada (Ottawa) 12 July 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/07/government-of-canada-supports-nine-job-creating-indigenous-led-solar-energy-projects-in-alberta-with-over-160-million-in-federal-investments.html>

⁵⁹² Government of Canada Launches Second Call for Proposals for Critical Minerals Research Development and Demonstration Program, Natural Resources Canada (Ottawa) 18 July 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/07/government-of-canada-launches-second-call-for-proposals-for-critical-minerals-research-development-and-demonstration-program.html>

⁵⁹³ MP Casey and FCM Announce Federal Funds to Upgrade Charlottetown Buildings and Advance Climate Action in Stratford, P.E.I., Natural Resources Canada (Charlottetown) 18 July 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/07/mp-casey-and-fcm-announce-federal-funds-to-upgrade-charlottetown-buildings-and-advance-climate-action-in-stratford-pe.html>

by the HomeZero Collective Society in Vernon, BC.⁵⁹⁴ The project will retrofit 10-15 homes in Vernon and measures are expected to reduce home emissions by 85-99 per cent.

On 3 August 2023, Minister Wilkinson and FCM President Pearce announced an investment of around CAD1 million for five projects across southwestern Ontario.⁵⁹⁵ The funding will support deep retrofits and energy-efficient, low-carbon infrastructure, while creating jobs and saving consumers money.

On 8 August 2023, Minister Wilkinson released Powering Canada Forward, a vision to decarbonize grids by 2035 and ensure household energy cost affordability to transform Canada's electricity sector.⁵⁹⁶ This paper emphasizes the importance of decarbonization to achieve net-zero emissions and invites Canadians to help inform the development of Canada's Clean Electricity Strategy set to be released in 2024.

On 10 August 2023, Minister Guilbeault and Minister Wilkinson announced draft Clean Electricity Regulations.⁵⁹⁷ The regulations will guide Canada towards achieving a net-zero electricity grid by 2035. Maintaining household affordability remains a priority in the draft regulations, and a 75-day consultation period with Canadian groups and individuals will help inform final regulations.

On 11 August 2023, Leader of the Government in the House of Commons and Member of Parliament for Burlington Karina Gould announced a joint investment of CAD462,500 to support planning activities for the transition to zero emission buses.⁵⁹⁸

On 19 August 2023, Minister Wilkinson announced up to CAD74 million in federal funding for SMR development in Saskatchewan, a non-emitting form of energy, to help deliver clean, reliable, and affordable power.⁵⁹⁹ This funding will support pre-engineering work, technical studies, environmental assessments, regulatory studies, and community and Indigenous engagement.

On 30 August 2023, Minister Wilkinson announced a CAD1.3 million investment into Hydro-Quebec through their Energy Innovation Program.⁶⁰⁰ The funding goes towards a research project on diesel, solar and battery microgrids for remote communities.

⁵⁹⁴ 10 to 15 homes retrofitted in the Okanagan region (B.C.) as part of a pilot project with support from the Government of Canada and FCM (Vernon) 2 August 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/08/10-to-15-homes-retrofitted-in-the-okanagan-region-bc-as-part-of-a-pilot-project-with-support-from-the-government-of-canada-and-fcm.html>

⁵⁹⁵ Government of Canada and FCM invest in Ontario communities through the Green Municipal Fund, Natural Resources Canada (Essex) 3 August 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/08/government-of-canada-and-fcm-invest-in-ontario-communities-through-the-green-municipal-fund.html>

⁵⁹⁶ Government of Canada Releases Vision to Build a Clean, Affordable and Reliable Electricity System to Power Canada Forward, Natural Resources Canada (Vancouver) 8 August 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/08/government-of-canada-releases-vision-to-build-a-clean-affordable-and-reliable-electricity-system-to-power-canada-forward.html>

⁵⁹⁷ Canada powers toward more clean, affordable, and reliable electricity with draft regulations, Environment and Climate Change Canada (Toronto) 10 August 2023. Access Date: 23 October 2023. <https://www.canada.ca/en/environment-climate-change/news/2023/08/canada-powers-toward-more-clean-affordable-and-reliable-electricity-with-draft-regulations.html>

⁵⁹⁸ The Government of Canada and the City of Burlington invest in planning for the transition to zero emission buses, Infrastructure Canada (Burlington) 11 August 2023. Access Date: 31 October 2023. <https://www.canada.ca/en/office-infrastructure/news/2023/08/the-government-of-canada-and-the-city-of-burlington-invest-in-planning-for-the-transition-to-zero-emission-buses.html>

⁵⁹⁹ Government of Canada Announces Federal Support for Small Modular Reactor (SMR) Development in Saskatchewan, Natural Resources Canada (Saskatoon) 19 August 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/08/government-of-canada-announces-federal-support-for-small-modular-reactor-smr-development-in-saskatchewan.html>

⁶⁰⁰ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 30 August 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

On 30 August 2023, Minister Wilkinson concluded a zero-emissions vehicle tour and announced almost CAD30 million in federal investment for over 1,500 EV chargers across Quebec.⁶⁰¹

On 31 August 2023, Minister of Transport Pablo Rodriguez announced an investment of nearly CAD3 million under the Zero-Emission Trucking Program. CAD1.5 million will go towards a Zero-Emission Testbed in Montreal, and two investments totally over CAD1.3 million will support British Columbia and Nova Scotia projects on zero emission truck performance and safe deployment of zero emission trucking technologies.⁶⁰² A call for proposals under the program also allows projects to receive up to CAD1 million to advance efforts towards zero-emissions trucking.

On 8 September 2023, Minister of Housing, Infrastructure, and Communities Fraser announced up to CAD25 million for the Weavers Mountain Wind Energy Project.⁶⁰³ This project will supply zero-emissions power by reducing greenhouse gas emissions and provide clean energy to Nova Scotia's electricity grid while delivering low and stable prices.

On 15 September 2023, Minister Wilkinson announced over CAD15.2 million for four projects that aim to reduce emissions and increase the sustainability of buildings in Ontario.⁶⁰⁴

On 19 September 2023, Minister Wilkinson and Sebastian Burjuda, Minister of Energy of Romania, announced Canada's support of Romanian energy security and climate action through CAD3 billion in export financing to the national operator of the Cernavoda Nuclear Generating Station.⁶⁰⁵ The investment will also support Canadian jobs and business in Romania's nuclear sector.

On 27 September 2023, Minister Wilkinson released Canada's Carbon Management Strategy at the International Energy Agency in Paris, France.⁶⁰⁶ The strategy highlights priority areas for the Government of Canada to promote a competitive and robust carbon management industry and describes how carbon management will help Canada achieve a net-zero economy.

On 27 September 2023, Minister Wilkinson announced a CAD1.7 million investment into K+S Potash Canada through their Energy Innovation Program.⁶⁰⁷ The funding goes towards a study on heat integrated carbon

⁶⁰¹ Minister Wilkinson Announces Federal Investment for Over 1,500 New EV Chargers Across Quebec, Natural Resources Canada (Quebec City) 30 August 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/08/minister-wilkinson-announces-federal-investment-for-over-1500-new-ev-chargers-across-quebec.html>

⁶⁰² Minister of Transport announces funding to support clean energy adoption in the trucking sector, Transport Canada (Ottawa) 31 August 2023. Access Date: 24 October 2023. <https://www.canada.ca/en/transport-canada/news/2023/08/minister-of-transport-announces-funding-to-support-clean-energy-adoption-in-the-trucking-sector.html>

⁶⁰³ Federal Investment Delivers 95 Megawatt Weavers Mountain Wind Energy Project, Natural Resources Canada (Antigonish) 8 September 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/09/federal-investment-delivers-95-megawatt-weavers-mountain-wind-energy-project.html>

⁶⁰⁴ Government of Canada and FCM Invest \$15.2 Million in Four Projects in Communities Across Southern Ontario, Natural Resources Canada (London) 15 September 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/09/government-of-canada-and-fcm-invest-152-million-in-four-projects-in-communities-across-southern-ontario.html>

⁶⁰⁵ \$3 Billion in Federal Export Finance to Support Canadian Businesses While Providing Clean Energy Security for Romania, Natural Resources Canada (Ottawa) 19 September 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/09/3-billion-in-federal-export-finance-to-support-canadian-businesses-while-providing-clean-energy-security-for-romania.html>

⁶⁰⁶ Minister Wilkinson releases Canada's carbon management strategy, Natural Resources Canada (Paris) 27 September 2023. Access Date: 23 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/09/minister-wilkinson-releases-canadas-carbon-management-strategy.html>

⁶⁰⁷ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Saskatoon) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

capture, storage, and utilization at a potash mine to increase technological readiness to reduce greenhouse gas emissions in Canada.

On 27 September 2023, Minister Wilkinson announced a CAD7 million investment into Canada Natural on behalf of Pathways Alliance through their Energy Innovation Program.⁶⁰⁸ The funding goes towards a carbon capture and sequestration in oil sands project to support future carbon capture and sequestration developments in Alberta and lead to the creation of carbon dioxide capture facilities at oil stands assets.

On 27 September 2023, Minister Wilkinson announced a CAD4 million investment into Suncor Energy Inc. through their Energy Innovation Program.⁶⁰⁹ The funding goes towards a study of Svante's carbon dioxide capture technology, and will support the scale up and commercialization of carbon dioxide capture technology.

On 27 September 2023, Minister Wilkinson announced a CAD5.3 million investment into Vault 44.01 Ltd. through their Energy Innovation Program.⁶¹⁰ The funding goes towards a study on Hinton pulp bioenergy carbon capture and storage project for negative emissions, and contributes to investment decisions for carbon-capturing projects.

On 27 September 2023, Minister Wilkinson announced a CAD5 million investment into Enhance Energy Inc. through their Energy Innovation Program.⁶¹¹ The funding goes towards a technical feasibility assessment of Alberta's carbon sequestration hub and will allow multiple sectors to leverage common infrastructure for effective emissions management.

On 27 September 2023, Wilkinson announced a CAD3 million investment into Cenovus Energy Inc. through their Energy Innovation Program.⁶¹² The funding goes towards an ethanol plant carbon sequestration project for Minnedosa which will support future carbon capture and sequestration developments and create jobs in Manitoba.

On 28 September 2023, Minister Wilkinson and Minister Pannier-Runacher announced a Canada-France Bilateral Dialogue on Critical Minerals.⁶¹³ The dialogue will focus on deepening Canada-France cooperation on promoting ESG standards, securing critical minerals supplies, promoting investment, and collaborating in research and development.

On 29 September 2023, Minister Wilkinson met with business leaders and international partners in Europe to strengthen energy cooperation and attract investment to Canada in critical minerals and clean energy.⁶¹⁴ There,

⁶⁰⁸ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

⁶⁰⁹ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

⁶¹⁰ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

⁶¹¹ Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

⁶¹² Canada's investment in energy innovation is an important part of building our clean economy, Natural Resources Canada (Ottawa) 27 September 2023. Access Date: 23 October 2023. <https://natural-resources.canada.ca/science-and-data/funding-partnerships/opportunities/current-investments/21146>

⁶¹³ Canada and France Deepen Cooperation on Critical Minerals, Natural Resources Canada (Paris) 28 September 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/09/canada-and-france-deepen-cooperation-on-critical-minerals.html>

⁶¹⁴ Minister Wilkinson Champions Investments in Critical Minerals and Clean Energy, Natural Resources Canada (Paris) 29 September 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/09/minister-wilkinson-champions-investments-in-critical-minerals-and-clean-energy.html>

Wilkinson led discussions on transparent, sustainable, and responsible supply chains at the first Critical Minerals and Clean Energy Summit hosted by the International Energy Agency.

On 29 September 2023, the Government of Canada announced up to CAD19 million for Maritime Electric Company's Sustainable Electrification initiative.⁶¹⁵ The project will reduce greenhouse gas emissions and provide for the efficient use of renewable energy sources located on PEI by creating a more efficient and resilient electricity grid system.

On 3 October 2023, Minister Wilkinson and FCM President Pearce announced an investment of CAD335,000 through the GMF.⁶¹⁶ This funding will go towards two feasibility studies to improve energy efficiency and reduce greenhouse gas emissions in the City of Hamilton.

On 5 October 2023, Minister Wilkinson released a public statement outlining the Government of Canada's acceptance of the Integrated Strategy for Radioactive Waste.⁶¹⁷ This Strategy describes international best practices and supports the development of more detailed nuclear waste management plans.

On 5 October 2023, Minister Champagne and Deputy Prime Minister of Sweden Ebba Busch made a statement on their commitment to collaborating and leveraging strategic assets like critical minerals, clean energy, and talent, to foster economic growth and a green future.⁶¹⁸

On 12 October 2023, Canada and its Price Cap Coalition partners issued an advisory for the maritime oil industry and related sectors to promote responsible practices in the industry and enhance compliance with the price caps on crude oil and petroleum products of Russian Federation origin put in place by the Coalition.⁶¹⁹ The Price Cap Coalition is a group formed by the G7, the European Union and Australia.

On 13 October 2023, Deputy Prime Minister and Minister of Finance Chrystia Freeland attended the G7 and G20 Finance Minister meetings, Annual Meetings of the International Monetary Fund and World Bank meetings in Marrakech, Morocco.⁶²⁰ Minister Freeland announced an investment of CAD5 million to Japan's Resilient and Inclusive Supply-chain Enhancement Partnership in collaboration with the World Bank. This investment aims to accelerate clean economic growth in low- and middle-income countries while fostering the development of shared clean energy and critical minerals supply chain.

⁶¹⁵ Government of Canada Announces \$19 Million to Support Electricity Modernization in P.E.I., Natural Resources Canada (Summerside) 29 September 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/09/government-of-canada-announces-19-million-to-support-electricity-modernization-in-pei.html>

⁶¹⁶ Federal Government and FCM Invest in Innovative Energy-Saving Solutions in the City of Hamilton, Natural Resources Canada (Ottawa) 3 October 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/10/federal-government-and-fcm-invest-in-innovative-energy-saving-solutions-in-the-city-of-hamilton.html>

⁶¹⁷ Ministerial Statement Regarding NWMO Integrated Strategy for Radioactive Waste, Natural Resources Canada (Ottawa) 5 October 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/10/ministerial-statement-regarding-nwmo-integrated-strategy-for-radioactive-waste.html>

⁶¹⁸ Joint statement by Canada and Sweden on sustained engagement on critical raw materials, battery value chains and emerging technologies, Innovation, Science, and Economic Development Canada (Ottawa) 5 October 2023. Access Date: 31 October 2023. <https://www.canada.ca/en/innovation-science-economic-development/news/2023/10/joint-statement-by-canada-and-sweden-on-sustained-engagement-on-critical-raw-materials-battery-value-chains-and-emerging-technologies.html>

⁶¹⁹ Statement of the G7 and Australia on actions taken to enforce price caps for seaborne Russian-origin oil and petroleum products, Department of Finance Canada (Ottawa) 12 October 2023. Access Date: 23 October 2023. <https://www.canada.ca/en/department-finance/news/2023/10/statement-of-the-g7-and-australia-on-actions-taken-to-enforce-price-caps-for-seaborne-russian-origin-oil-and-petroleum-products.html>

⁶²⁰ Deputy Prime Minister concludes successful meetings of G7 and G20 Finance Ministers and Annual Meetings of the IMF and World Bank, Department of Finance Canada (Marrakech) 14 October 2023. Access Date: 31 October 2023. <https://www.canada.ca/en/department-finance/news/2023/10/deputy-prime-minister-concludes-successful-meetings-of-g7-and-g20-finance-ministers-and-annual-meetings-of-the-imf-and-world-bank.html>

On 16 October 2023, Minister Wilkinson met with several Maritime ministers to discuss phasing-out coal-fired electricity generation by 2030 and driving net-zero electricity by 2035 and a net-zero economy by 2050 in an affordable manner for Nova Scotians and New Brunswickers.⁶²¹

On 29 October 2023, Minister of Export Promotion Mary Ng participated in the G7 Trade Ministers' Meeting in Osaka, Japan.⁶²² At this meeting, Minister Ng reiterated Canada's role as an international leader in the critical mineral industry, demonstrating its achievement as one of the world's largest producers of minerals and metals supporting the transition to clean energy.

On 2 December 2023, at the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change in Dubai, Canada was one of the signatories to a pledge to triple nuclear power.⁶²³ The declaration cites the benefits of nuclear energy, such as low greenhouse gas emissions, combatting climate change, and the intent to scale this technology globally.

On 2 December 2023, at COP28 Canada was among the participants that launched the Coal Transition Accelerator to "share expertise, design new policies including through best practices and lessons learned, and unlock new sources of public and private financing to facilitate just transitions from coal to clean energy."⁶²⁴

Canada has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind. To respond to the need for cleaner and more efficient technology, Canada has made multiple investments at the domestic scale to upgrade existing energy technologies and develop innovative solutions. Moreover, Canada has partnered with other nations to share knowledge and leverage resources.

Thus, Canada receives a score of +1.

Analyst: Annabelle Liao

France: +1

France has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.

On 9 June 2023, the ministers of Higher Education and Research, Energy Transition and Education and Professional Training presented actions to develop more innovative nuclear technologies.⁶²⁵ France is devoting USD1 billion to enable more players to partake in this development, to allow heavy emitting sectors, such as

⁶²¹ Governments of Canada, Nova Scotia and New Brunswick Show Progress Toward Phasing Out Coal by 2030 and Expanding Their Clean, Reliable and Affordable Electricity Grids, Natural Resources Canada (Ottawa) 16 October 2023. Access Date: 30 October 2023. <https://www.canada.ca/en/natural-resources-canada/news/2023/10/governments-of-canada-nova-scotia-and-new-brunswick-show-progress-toward-phasing-out-coal-by-2030-and-expanding-their-clean-reliable-and-affordable.html>

⁶²² Minister Ng advances cooperation with G7 partners at Trade Minister's Meeting in Osaka, Japan, Global Affairs Canada (Osaka) 29 October 2023. Access Date: 31 October 2023. <https://www.canada.ca/en/global-affairs/news/2023/10/minister-ng-advances-cooperation-with-g7-partners-at-trade-ministers-meeting-in-osaka-japan.html>

⁶²³ At COP28, Countries Launch Declaration to Triple Nuclear Energy Capacity by 2050, Recognizing the Key Role of Nuclear Energy in Reaching Net Zero, US Department of Energy, 1 December 2023. Access Date: 5 December 2023. <https://www.energy.gov/articles/COP28-countries-launch-declaration-triple-nuclear-energy-capacity-2050-recognizing-key>.

⁶²⁴ Global Leaders Gather at COP28 to Launch a New Initiative to Support Acceleration of Just Coal Transitions, Elysee (Paris) 2 December 2023. Access Date: 5 December 2023. <https://www.elysee.fr/admin/upload/default/0001/15/5887a8f79e48ee44de83f61dc0ad3157b22dec30.pdf>

⁶²⁵ France 2030 accélère le nucléaire de demain en misant sur la formation et l'innovation, Gouvernement de la République française (Paris) 9 June 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.gouvernement.fr/france-2030-accelere-le-nucleaire-de-demain-en-misant-sur-la-formation-et-l-innovation>

agriculture to reduce their carbon dioxide emissions.⁶²⁶ This is part of the existing 3NC (New Nuclear, New Skills) project, which supports nuclear innovation and worker upskilling to join France’s nuclear industry.

On 19 June 2023, Secretary-General for Europe and Foreign Affairs Anne-Marie Descotes and Chairman of the Executive Affairs Authority for United Arab Emirates (UAE) Khaldoon Khalifa Al Mubarak met in Paris for the 15th session of the UAE-France Strategic Dialogue.⁶²⁷ This discussion welcomed cooperation between both nations on their nuclear energy programs to support a low carbon future.

On 19-23 June 2023, Minister for Energy Transition Agnès Pannier-Runacher hosted a series of conferences in Paris.⁶²⁸ These conferences addressed topics of raising capital for clean technologies, relaunching nuclear power in Europe and sustainable development in Colombia.

On 22 June 2023, France, as a part of the International Partners Group, comprising Germany, France, United Kingdom and Canada launched the Just Energy Transition Partnership.⁶²⁹ This partnership is aimed to finance and support Senegal’s pursuit of increasing renewable energy to 40 per cent of the country’s energy mix.

On 22 and 23 June 2023, President Emmanuel Macron organised a summit and hosted 300 high level international government officials to construct a financial architecture to support vulnerable populations from Climate Change.⁶³⁰ In addition to discussing the prevention of other impacts of climate change, the discussion stressed the need for green energy transition and resilience.

On 27 June 2023, Minister for Europe and Foreign Affairs Catherine Colonna and Minister of Foreign Affairs of the State of Kuwait Sheikh Salem al-Sabah had a meeting in Paris.⁶³¹ During this meeting, both countries signed an extended agreement to fight climate change and arranged for a more comprehensive discussion.

On 3 July 2023, the Ministry of Ecological Transition and Territorial Cohesion arranged the “Green Fund: everyday ecology” event.⁶³² During this event, ministers addressed private and public partners to discuss 2000 new projects aimed at ecological transformations supported by the ‘Green Fund.’

⁶²⁶ France 2030 accélère le nucléaire de demain en misant sur la formation et l’innovation, Gouvernement de la République française (Paris) 9 June 2023. Translation provided by Google Translate. Access Date: 8 November 2023.

<https://www.gouvernement.fr/france-2030-accelere-le-nucleaire-de-demain-en-misant-sur-la-formation-et-l-innovation>

⁶²⁷ 15th session of the UAE-France Strategic Dialogue discusses growing cooperation between UAE & France (19 June 2023), Ministère de l’europe et affaires étrangères (Paris) 19 June 2023. Access Date: 8 November 2023.

<https://www.diplomatie.gouv.fr/en/country-files/united-arab-emirates/events/article/15th-session-of-the-uae-france-strategic-dialogue-discusses-growing-cooperation>

⁶²⁸ Déplacement d’Agnès Pannier-Runacher au Danemark à l’occasion de la conférence Wind Europe le 25 avril 2023, GOUVERNEMENT (Paris) 24 April 2023. Translation provided by Google Translate. Access Date: 8 November 2023.

<https://www.ecologie.gouv.fr/deplacement-dagnes-pannier-runacher-au-danemark-loccasion-conference-wind-europe-25-avril-2023>

⁶²⁹ Senegal and the International Partners’ Group (IPG) announced a Just Energy Transition Partnership (JETP) combining climate and development goals (22 June 2023), Gouvernement de la République française (Paris) 22 June 2023. Access Date: 8 November 2023. <https://www.diplomatie.gouv.fr/en/country-files/senegal/news/article/senegal-and-the-international-partners-group-ipg-announced-a-just-energy>

⁶³⁰ France calls for the adoption of a New Global Financing Pact (22 – 23 June 2023), Gouvernement de la République française (Paris) 23 June 2023. Access Date: 8 November 2023. <https://www.diplomatie.gouv.fr/en/french-foreign-policy/development-assistance/news/2023/article/france-calls-for-the-adoption-of-a-new-global-financing-pact-22-23-06-23>

⁶³¹ Kuwait – Meeting between the Minister and her Kuwaiti counterpart, during his visit to Paris (27 June 2023), Ministère de l’europe et affaires étrangères (Paris) 27 June 2023. Access Date: 8 November 2023. <https://www.diplomatie.gouv.fr/en/country-files/kuwait/news/article/kuwait-meeting-between-the-minister-and-her-kuwaiti-counterpart-during-his>

⁶³² Invitation presse - Le Fonds Vert : l’écologie du quotidien, découvrez les nouveaux lauréats, Gouvernement de la République française (Paris) 30 June 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.ecologie.gouv.fr/invitation-presse-fonds-vert-lecologie-du-quotidien-decouvrez-nouveaux-laureats-0>

On 8 July 2023, Minister Pannier-Runacher met with the government of Saudi Arabia and announced a joint press release regarding France and Saudi Arabia's cooperation on energy issues.⁶³³ Both countries agreed to work together to devise efficient and safe solutions for hydrogen and nuclear energy production and storage.

On 28 July 2023, Minister of Ecological Transition and Territorial Cohesion Christophe Bechu travelled to Chennai, India to participate in the G20 Environment and Climate Ministers meeting.⁶³⁴ This entailed a technical discussion between G20 climate ministers on topics regarding resource efficiency and climate change.

On 20 September 2023, Ministers Bruno Le Maire, Minister Colonna and Minister Pannier-Runacher, as well as Secretary of State Chrysoula Zacharopoulou attended the United Nations Secretary-General's Climate Action Summit in New York.⁶³⁵ During this summit, France expressed their willingness to pursue meaningful international partnerships for a just energy transition through the French Development Agency and the Green Climate Fund.

On 12 October 2023, Minister Pannier-Runacher made an official announcement on France's plans to reducing the combined consumption of electricity and gas by 12 per cent.⁶³⁶ These plans include the continued mobilization of France's largest companies, enable a 'Thermostat Plan' for the public which would result 15 per cent of energy savings, enforce regulations on light pollution within offices, promote clean mobility amongst businesses and promote energy savings in conjunction with energy suppliers. Through these measures, France aspires to reduce their dependance on fossil fuels, through uses of nuclear, and other renewable energies.

On 27 October 2023, the Interministerial Committee of Cities doubled the share for green funds invested in neighbourhoods to 15 per cent.⁶³⁷ This target is part of a larger 'Resilient Neighbourhoods' initiative which aims to reduce fossil fuel use, better manage water resources, and promote a circular economy.

On 26 September 2023, President Macron took measures to freeze the price of fuel to curb inflationary fuel and retail good prices.⁶³⁸ This measure is coupled with a transparent auditing of gas production and distribution costs and margins. Additionally, a EUR10 million fund is in place to allow for an ecological transition of this polluting sector.

⁶³³ Communiqué conjoint entre la France et l'Arabie saoudite, à l'occasion du déplacement d'Agnès Pannier-Runacher en Arabie saoudite le 8 juillet 2023, Gouvernement de la République française (Paris) 13 July 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.ecologie.gouv.fr/communique-conjoint-entre-france-et-larabie-saoudite-occasion-du-deplacement-dagnes-pannier>

⁶³⁴ Déplacement Présidence indienne du G20 environnement, les 27 et 28 juillet 2023 à Chennai en Inde, Gouvernement de la République française (Paris) 26 July 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.ecologie.gouv.fr/deplacement-presidence-indienne-du-g20-environnement-27-et-28-juillet-2023-chennai-en-inde>

⁶³⁵ La France dépasse largement ses engagements en matière de financements pour le climat dans les pays en développement en 2022, Gouvernement de la République française (Paris) 21 September 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.ecologie.gouv.fr/france-depasse-largement-engagements-en-matiere-financements-climat-dans-pays-en-developpement-en>

⁶³⁶ Sobriété énergétique : cinq annonces pour aller plus loin, Gouvernement de la République française (Paris) 13 October 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.gouvernement.fr/actualite/sobriete-energetique-cinq-annonces-pour-aller-plus-loin>

⁶³⁷ Les principales mesures du Comité interministériel des villes, Gouvernement de la République française (Paris) 27 October 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.gouvernement.fr/actualite/les-principales-mesures-du-comite-interministeriel-des-villes>

⁶³⁸ Prix des carburants : la Première ministre a réuni les raffineurs, les distributeurs et les professionnels de la filière à Matignon, Gouvernement de la République française (Paris) 26 September 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.gouvernement.fr/communique/prix-des-carburants-la-premiere-ministre-a-reuni-les-raffineurs-les-distributeur-et-les-professionnels-de-la-filiere-a-matignon>

On 10 October 2023, an ecological subsidy for French residents switching to more sustainable or ecological cars became active, offering an amount up to EUR7000 for this change.⁶³⁹ The eligibility criteria accounts for the car's material, manufacturing emissions, battery production, assembly and distribution.

On 23 October 2023, Minister of Higher Education Sylvie Retailleau attended the third meeting of the France-Singapore Joint Committee for Science and Innovation (COSIMIX) in Singapore.⁶⁴⁰ This meeting established new agreements and partnerships that aim to create collaborative master's and doctoral programs, along with research initiatives focusing on women's health, the circular economy, fusion energy and quantum research.

On 27 November 2023, President Macron met with Director General of the International Atomic Energy Agency (IAEA) Rafael Grossi at the World Nuclear Exhibition.⁶⁴¹ During their conversation, France extended its support for the peaceful use of nuclear sciences and technologies in order to combat climate change and improve economic development worldwide.

On 1-2 December 2023, President Macron visited Dubai for the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change.⁶⁴² At the conference, President Macron represented France's position on energy matters, including France's intent to triple nuclear energy production capacity between 2020 and 2050, and to enable the gradual yet swift move away from fossil fuels entirely.

On 2 December 2023, participants led by France launched the Coal Transition Accelerator to "share expertise, design new policies including through best practices and lessons learned, and unlock new sources of public and private financing to facilitate just transitions from coal to clean energy."⁶⁴³

On 2 December 2023, at COP28 France was one of the signatories to a pledge to triple nuclear power.⁶⁴⁴ The declaration cites the benefits of nuclear energy, such as low greenhouse gas emissions, combatting climate change, and the intent to scale this technology globally.

⁶³⁹ Incentives and Legislation, European Commission (Brussels) 10 October 2023. Access Date: 8 November 2023. <https://alternative-fuels-observatory.ec.europa.eu/transport-mode/road/france/incentives-legislations>

⁶⁴⁰ Déclaration conjointe : Singapour et la France renforcent leurs partenariats en matière de recherche et d'innovation lors de la 3e réunion du Comité mixte sur la science et l'innovation, ministère de l'enseignement supérieur et de la recherche (Paris) 23 October 2023. Translation provided by Google Translate. Access Date: 8 November 2023. <https://www.enseignementsup-recherche.gouv.fr/fr/declaration-conjointe-singapour-et-la-france-renforcent-leurs-partenariats-en-matiere-de-recherche-93132>

⁶⁴¹ Entretien avec Rafael Grossi, directeur général de l'Agence Internationale de l'Energie Atomique. Elysee (Paris) 30 November 2023. Translation provided by Google Translate. Access Date: 30 November 2023. <https://www.elysee.fr/emmanuel-macron/2023/11/27/entretien-avec-rafael-grossi-directeur-general-de-lagence-internationale-de-lenergie-atomique>

⁶⁴² COP28 : introduction par le Président Emmanuel Macron d'un événement sur le nucléaire civil, Elysee (Paris) 2 December 2023. Translation provided by Google Translate. Access Date: 5 December 2023. <https://www.elysee.fr/emmanuel-macron/2023/12/02/cop28-introduction-par-le-president-emmanuel-macron-dun-evenement-sur-le-nucleaire-civil>

⁶⁴³ Global Leaders Gather at COP28 to Launch a New Initiative to Support Acceleration of Just Coal Transitions, Elysee (Paris) 2 December 2023. Access Date: 5 December 2023. <https://www.elysee.fr/admin/upload/default/0001/15/5887a8f79e48ee44de83f61dc0ad3157b22dec30.pdf>

⁶⁴⁴ At COP28, Countries Launch Declaration to Triple Nuclear Energy Capacity by 2050, Recognizing the Key Role of Nuclear Energy in Reaching Net Zero, US Department of Energy, 1 December 2023. Access Date: 5 December 2023. <https://www.energy.gov/articles/COP28-countries-launch-declaration-triple-nuclear-energy-capacity-2050-recognizing-key>

On 3 December 2023, the Democratic Republic of Congo and France, in addition to Germany, the US and the Bezos Earth Fund and Country Package Seed Fund announced a partnership to support Congo's New Climate Economy.⁶⁴⁵ Together, the partnership has announced an initial USD62 million to support this initiative.⁶⁴⁶

France has fully complied with their commitment towards clean energy technologies through their extensive collaborations internationally to promote the discourse and development of carbon reducing technologies. Internally, France is taking measures to reduce usage of fossil fuels through policies, and by increasing ambitions of increasing renewable energy within France's energy mix.

Thus, France receives a score of +1

Analyst: Kaavya Punn

Germany: +1

Germany has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.

On 24 May 2023, the Federal Cabinet established regulations on the legal and regulatory framework for a future hydrogen core network in Germany with the current amendment to the Energy Industry Act.⁶⁴⁷ Federal Minister for Economic Affairs and Climate Protection (BMWK) Robert Habeck emphasized their goal to expediently ramp up the hydrogen market to promote decarbonization. In the first stage, the hydrogen core network will include hydrogen infrastructure scheduled to be operational by 2032.

On 1 June 2023, Minister Habeck opened the second day of the Global NDC [Nationally Determined Contribution] Conference in Berlin, focusing on ambitious climate protection in emerging and developing countries.⁶⁴⁸ Minister Habeck announced that Germany and its partners in the Mitigation Action Facility will provide EUR100 million for a decarbonization funding competition project in developing and emerging countries.

On 1 June 2023, EU Energy Commissioner Kadri Simson and Minister Habeck decided to link the new European Hydrogen Bank with the H2Global instrument developed by Germany for the market ramp-up during a bilateral meeting.⁶⁴⁹ The agreed collaboration will help ensure hydrogen needs in Germany and Europe are met.

⁶⁴⁵ The Democratic Republic of the Congo, France and their international partners announce a \$62-million partnership to support the DRC's biodiversity and climate ambition, Ministere de l'Europe (Paris) 3 December 2023. Access Date: 5 December 2023. <https://www.diplomatie.gouv.fr/en/country-files/democratic-republic-of-the-congo/news/article/the-democratic-republic-of-the-congo-france-and-their-international-partners>

⁶⁴⁶ The Democratic Republic of the Congo, France and their international partners announce a \$62-million partnership to support the DRC's biodiversity and climate ambition, Ministere de l'Europe (Paris) 3 December 2023. Access Date: 5 December 2023. <https://www.diplomatie.gouv.fr/en/country-files/democratic-republic-of-the-congo/news/article/the-democratic-republic-of-the-congo-france-and-their-international-partners>

⁶⁴⁷ Bundeskabinett beschließt Gesetzentwurf zur Schaffung eines Wasserstoff-Kernetzes, Bundesministerium für Wirtschaft und Klimaschutz (Berlin) 24 May 2023. Translation provided by Google Translate. Access Date: 6 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/05/20230524-bundeskabinett-beschliesst-gesetzentwurf-zur-schaffung-eines-wasserstoff-kernetzes.html>

⁶⁴⁸ 100 million euros for sectoral decarbonization in developing and emerging countries, Federal Ministry of Economics and Climate Protection (Berlin) 1 June 2023. Access Date: 6 November 2023. <https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2023/06/20230601-100-million-euros-for-sectoral-decarbonisation-in-developing-and-emerging-economies.html>

⁶⁴⁹ Wichtige Etappe für globalen Markthochlauf für grünen Wasserstoff: Bundesregierung und EU -Kommission machen H2Global zum europäischen Wasserstoff-Projekt, Federal Ministry of Economics and Climate Protection (Berlin) 1 June 2023. Translation provided by Google Translate. Access Date: 6 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/06/20230601-bundesregierung-und-eu-kommission-machen-h2global-zum-europaeischen-wasserstoff-projekt.html>

On 1 June 2023, Minister Habeck signed the German-Danish offshore project “Bornholm Energy Island” with his Danish counterpart Energy Minister Lars Aagaard.⁶⁵⁰ This is the first legally binding cooperation agreement in Europe on a joint offshore project under the EU Renewable Energy Directive. At least three gigawatts of offshore wind power generation capacity will be connected on Danish territory by the early 2030s.

On 7 June 2023, the federal government approved the Seventh Federal Report for Energy Research 2023, outlining the federal government’s funding policy.⁶⁵¹ This program supports the innovation of climate-friendly, and highly efficient energy technologies.

On 7 June 2023, KfW Capital announced the provision of EUR100 million for investments in venture capital funds to acquire investments in environmental and climate technology start-ups through the new Green Transition Facility.⁶⁵²

On 13 June 2023, Parliamentary State Secretary to the Federal Minister for Economic Affairs and Climate Protection Dr. Franziska Brantner agreed with the Minister for Economy, Innovation and Energy of Quebec, Canada, Pierre Fitzgibbon on closer cooperation in promoting innovative projects by medium-sized companies in Germany and Quebec. Both sides reaffirmed their shared interest in combating climate change, transitioning to clean energy by developing decarbonization technologies.⁶⁵³ This preceded the first call for proposals for joint German-Quebec innovation projects by start-ups, small, and medium-sized companies and research institutions aimed at clean energy innovation.

On 16 June 2023, Federal Development Minister Svenja Schulze, Minister Habeck, Federal Environment Minister Steffi Lemke, Minister of State in the Foreign Office Anna Lührmann, and Colombian Foreign Minister Álvaro Leyva Durán signed a “Partnership for Climate and a Fair Energy Transition” in Berlin to formalize their climate and energy partnership.⁶⁵⁴ Minister Schulze promised additional financial support of up to EUR200 million for the implementation of Columbia’s national climate goals.

On 20 June 2023, Minister of Transport and Digital Infrastructure Volker Wissing announced the third round of funding available to make buses climate-friendly.⁶⁵⁵ He stated that their funding goal was to produce 5,000 clean buses each year such that, by 2030, half of the city busses will be electric.

⁶⁵⁰ Bundesminister Habeck unterzeichnet deutsch-dänisches Offshore-Projekt „Bornholm Energy Island“ mit seinem dänischen Amtskollegen, Federal Ministry of Economics and Climate Protection (Berlin) 1 June 2023. Translation provided by Google Translate. Access Date: 6 June 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/06/20230601-bundesminister-habeck-unterzeichnet-deutsch-danisches-offshore-projekt-bornholm-energy-island.html>

⁶⁵¹ Bundesregierung beschließt 7. Bundesbericht für Energieforschung 2023, Federal Ministry of Economics and Climate Protection (Berlin) 7 June 2023. Translation provided by Google Translate. Access Date: 6 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/06/20230607-bundesregierung-beschliesst-7-bundesbericht-fur-energieforschung-2023.html>

⁶⁵² Launch of the Green Transition Facility at KfW Capital: 100 million euros for venture capital funds in Germany and Europe for “climate tech” start-ups, Federal Ministry of Economics and Climate Protection (Berlin) 7 June 2023. Access Date: 6 November 2023. <https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2023/07/20230607-launch-of-green-transition-facility-at-kfw-capital.html>

⁶⁵³ Economic Affairs Ministry and Canadian province of Quebec agree on joint funding for R&D projects of SMEs, Federal Ministry of Economics and Climate Protection (Berlin) 13 June 2023. Access Date: 6 November 2023. <https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2023/06/20230613-economic-affairs-ministry-and-canadian-province-of-quebec-agree-on-joint-funding-for-rd-projects-of-smes.html>

⁶⁵⁴ Deutschland und Kolumbien vereinbaren Klima- und Energiepartnerschaft, Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 16 June 2023. Translation provided by Google Translate. Access Date: 1 November 2023. <https://www.bmu.de/pressemitteilung/deutschland-und-kolumbien-vereinbaren-klima-und-energiepartnerschaft>

⁶⁵⁵ BMDV startet 3. Förderrunde für klimafreundliche Busse, Federal Ministry of Transport and Digital Infrastructure (Berlin) 20 June 2023. Translation provided by Google Translate. Access Date: 4 November 2023. <https://bmdv.bund.de/SharedDocs/DE/Pressemitteilungen/2023/057-wissing-saubere-busse.html>

On 20 June 2023, the German and Chinese governments signed a declaration of intent on the establishment of a dialogue and cooperation mechanism on climate change and green transformation, including the expansion of renewable energy technology.⁶⁵⁶

On 27 June 2023, Minister Habeck and Minister for Electricity in the Presidential Office of South Africa Dr. Kgosientsho Ramokgopa signed a declaration of intent on the sidelines of the binational commission between Germany and South Africa to expand cooperation on green hydrogen and Power-to-X products.⁶⁵⁷ The agreement demonstrates the willingness of both countries to cooperate on the production, processing, application and transport of green hydrogen as well as the associated synthetic fuels and ammonia. The aim is to improve intergovernmental exchanges, make access to markets easier, and promote joint project development and dialogue between politics, research, and science.

On 27 June 2023, the Federal Ministry of Transport and Digital Infrastructure announced their support of 21 projects working to reduce ship emissions in sea and inland ports as part of its “BordstromTech” funding guidelines.⁶⁵⁸ The funding totals almost EUR9 million, and the projects are expected to reduce up to 11,900 tonnes of greenhouse gas emissions and up to 205 tonnes of air pollutant emissions annually in ports.

On 28 June 2023, the Federal Cabinet improved funding for electricity from renewable energies for EVs.⁶⁵⁹

On 29 June 2023, the BMWK announced EUR80 million of funding will be available for research directed at improving electromobility and environmental compatibility.⁶⁶⁰

On 3 July 2023, State Secretary at the Federal Ministry for Economic Affairs and Climate Action Michael Kellner engaged in a dialogue and work process with over 50 small and medium businesses, advising on measures to switch to new climate-neutral energy sources.⁶⁶¹

On 7 July 2023, the Federal Council adapted the LNG Acceleration Act, focusing on the adoption of forward-looking regulations for energy supply and designing sustainable, climate-neutral conversions of liquefied natural gas terminals.⁶⁶²

⁶⁵⁶ Germany and China sign a Memorandum of Understanding to launch climate and transformation dialogue, Federal Ministry of Economics and Climate Protection (Berlin) 20 June 2023. Access Date: 6 November 2023.

<https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2023/06/20230620-germany-and-china-sign-memorandum-of-understanding-to-launch-climate-and-transformation-dialogue.html>

⁶⁵⁷ Germany and South Africa sign cooperation agreement for green hydrogen, Federal Ministry of Economics and Climate Protection (Berlin) 27 June 2023. Access Date: 6 November 2023.

<https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2023/06/20230627-germany-south-africa-cooperation-green-hydrogen.html>

⁶⁵⁸ BMDV fördert 21 Projekte für saubere Luft in Häfen, Federal Ministry of Transport and Digital Infrastructure (Berlin) 28 June 2023. Translation provided by Google Translate. Access Date: 4 November 2023.

<https://bmdv.bund.de/SharedDocs/DE/Pressemitteilungen/2023/064-kluckert-innovation-bord-und-land.html>

⁶⁵⁹ Bundesregierung verbessert die Förderung von Ökostrom aus öffentlichen Ladesäulen, Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 28 June 2023. Translation provided by Google Translate. Access Date: 1 November 2023. <https://www.bmuv.de/pressemitteilung/bundesregierung-verbessert-die-foerderung-von-oekostrom-aus-oeffentlichen-ladesaeulen>

⁶⁶⁰ FuE-Förderaufruf des BMWK: „Schaufensterprojekte Elektromobilität 2025“, Federal Ministry of Economics and Climate Protection (Berlin) 29 June 2023. Translation provided by Google Translate. Access Date: 4 November 2023.

⁶⁶¹ Wasserstoff für den Mittelstand, Federal Ministry of Economics and Climate Protection (Berlin) 3 July 2023. Access Date: 4 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/07/20230703-wasserstoff-fuer-den-mittelstand.html>

⁶⁶² Bundesrat verabschiedet Gesetzentwurf zur Änderung des LNG-Beschleunigungsgesetzes, Federal Ministry of Economics and Climate Protection (Berlin) 7 July 2023. Translation provided by Google Translate. Access Date: 4 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/07/20230707-bundesrat-verabschiedet-gesetzentwurf-zur-aenderung-des-lng-beschleunigungsgesetzes.html>

On 10 July 2023, Minister Habeck, Baden-Württemberg Prime Minister Winfried Kretschmann, the Baden-Württemberg Environment Minister Thekla Walker and the Bavarian State Minister Melanie Huml delivered a funding notice of approximately EUR161 million for a hydrogen project at the Bosch research campus.⁶⁶³ This project is part of a large joint European hydrogen project and Bosch will move towards large-scale production of stationary fuel cells.

On 12 July 2023, Minister Lemke reaffirmed that the Federal Ministry for the Environment and Consumer Protection would continue to work “to ensure that predominately synthetic fuels from renewable energies are used in order to make maritime transport climate-neutral.”⁶⁶⁴ His comment was in light of the EU’s approval of the Maritim Fuel Regulation, which applies to ships with a gross tonnage of over 5000 and involves a shore power requirement and renewable energies for shipping.

On 18 July 2023, Minister Wissing announced the first funding call for the Ground Power Directive, a fund for investment grants targeting the procurement of mobile or stationary environmentally friendly ground power systems to supply aircraft, as well as the charging and refuelling infrastructure required for operation.⁶⁶⁵

On 19 July 2023, Minister Habeck reaffirmed Germany’s partnership with India and desire for deeper cooperation on renewable energies and green hydrogen.⁶⁶⁶

On 20 July 2023, the European Commission approved the largest decarbonization project in Germany to date, granting state aid approval for the Federal Ministry for Economic Affairs and Climate Protection to promote the decarbonization of steel production at ThyssenKrupp Steel Europe.⁶⁶⁷ The BMWK will support the project with the state of North Rhine-Westphalia through around EUR2 billion, and the project is expected to help avoid 2.5 million tonnes of carbon emissions annually.

On 26 July 2023, the Federal Cabinet updated the National Hydrogen Strategy with more ambitious goals for 2030.⁶⁶⁸

⁶⁶³ Bundeswirtschaftsminister Habeck bei Bosch: Förderbescheid für wichtiges Wasserstoffprojekt in Höhe von rund 161 Millionen Euro übergeben, Federal Ministry of Economics and Climate Protection (Renningen) 10 July 2023. Translation provided by Google Translate. Access Date: 2 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/07/20230710-bundeswirtschaftsminister-habeck-bei-bosch.html>

⁶⁶⁴ Weg in der EU frei zur Implementierung von nachhaltigen erneuerbaren Kraftstoffen im Seeverkehr, Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 25 July 2023. Translation provided by Google Translate. Access Date: 1 November 2023. <https://www.bmu.de/pressemitteilung/weg-in-der-eu-frei-zur-implementierung-von-nachhaltigen-erneuerbaren-kraftstoffen-im-seeverkehr>

⁶⁶⁵ BMDV startet neues Förderprogramm für umweltfreundliche Bodenstromversorgung von Flugzeugen, Federal Ministry of Transport and Digital Infrastructure (Berlin) 18 July 2023. Translation provided by Google Translate. Access Date: 4 November 2023. <https://bmdv.bund.de/SharedDocs/DE/Pressemitteilungen/2023/075-wissing-neues-foerderprogramm-umweltfreundliche-bodenstromversorgung-flugzeuge.html>

⁶⁶⁶ Habeck reist nach Indien: „Wichtiger Partner bei der Diversifizierung der deutschen Wirtschaft“, Federal Ministry of Economics and Climate Protection (Berlin) 19 July 2023. Translation provided by Google Translate. Access Date: 2 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/07/20230719-habeck-reist-nach-indien.html>

⁶⁶⁷ Europäische Kommission genehmigt bislang größtes Dekarbonisierungsprojekt in Deutschland (Berlin) 20 July 2023. Access Date: 2 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/07/20230720-europaeische-kommission-genehmigt-bislang-groesstes-dekarbonisierungsprojekt-in-deutschland.html>

⁶⁶⁸ Markthochlauf für Wasserstoff beschleunigen – Bundeskabinett beschließt Fortschreibung der Nationalen Wasserstoffstrategie, Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 26 July 2023. Translation provided by Google Translate. Access Date: 1 November 2023.

<https://www.bmu.de/pressemitteilung/markthochlauf-fuer-wasserstoff-beschleunigen-bundeskabinett-beschliesst-fortschreibung-der-nationalen-wasserstoffstrategie>

On 9 August 2023, the Federal Cabinet approved the draft economic plan of the Climate and Transformation Fund (KTF) for 2024 and financial plan up to 2027, with a funding focus on the energy-efficient renovation of buildings.⁶⁶⁹ The KTF is projected to also support the development of a hydrogen economy in the future.

On 16 August 2023, the federal government approved the solar package presented by the BMWK with measures to triple the pace of solar expansion and achieve an annual expansion of 22 GW by 2026.⁶⁷⁰

On 16 August 2023, the Federal Cabinet approved the draft law on heat planning and the decarbonization of heat networks submitted by the Federal Ministry of Housing, Urban Development and Construction and the Federal Ministry of Economics and Climate Protection.⁶⁷¹ The aim of the draft law is to have heat planning in all of Germany's approximately 11,000 municipalities so that citizens, but also businesses, know which energy source and supply they can count on locally, as well as generate half of the pipe-bound heat in a climate-neutral manner by 2030. By 2030, 30 per cent of heating networks will be supplied with heat from renewable energies or unavoidable waste heat and by 2040, 80 per cent of the heat will be supplied.

On 30 August 2023, the Cabinet approved the expansion of the German Recovery and Resilience Plan presented by the Federal Ministry of Finance, increasing support for measures that support the construction of refueling and charging infrastructure, and funding for efficient heating networks.⁶⁷² This approval aims to strengthen Germany's transition to a climate-neutral energy supply.

On 30 August 2023, Minister Habeck and State Minister for Economic Affairs Martin Dulig delivered a funding notice of EUR162 million to Sunfire GmbH which is working to produce electrolyzers that can be used to create large quantities of hydrogen from renewable energy.⁶⁷³

On 31 August 2023, a new funding focus of EUR30 million within the Maritime Research Program of the Federal Ministry for Economic Affairs and Climate Protection was released with the intention to specifically help create the technological basis for the decarbonization of shipping and shipbuilding.⁶⁷⁴ The goal is to achieve climate neutrality in maritime transport by 2050.

⁶⁶⁹ Klima- und Transformationsfonds: Gezielt und technologieoffen in die Transformation unseres Landes investieren, Federal Minister of Finance (Berlin) 9 August 2023. Translation provided by Google Translate. Access Date: 1 November 2023.

<https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2023/08/2023-08-09-klima-und-transformationsfonds.html>

⁶⁷⁰ Habeck: Mehr Tempo und weniger Bürokratie beim Solarausbau – Solarpaket steckt Kurs ab für Verdreifachung des Zubautempos, Federal Ministry of Economics and Climate Protection (Berlin) 16 August 2023. Translation provided by Google Translate. Access Date: 2 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/08/20230816-mehr-tempo-und-weniger-buerokratie-beim-solarausbau.html>

⁶⁷¹ BMWK veröffentlicht „Bundesregelung Transformationstechnologien“ – Rechtsrahmen für Förderung von Transformationstechnologien steht und ist beihilferechtlich genehmigt, Federal Ministry of Economics and Climate Protection (Berlin) 16 August 2023. Translation provided by Google Translate. Access Date: 2 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/08/20230807-bmwk-veroeffentlicht-bundesregelung-transformationstechnologien.html>

⁶⁷² Cabinet decides to expand the German recovery and resilience plan, Federal Ministry of Finance (Berlin) 30 August 2023. Access Date: 1 November 2023.

<https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2023/08/2023-08-30-deutscher-aufbau-und-resilienzplan.html>

⁶⁷³ Bundeswirtschaftsminister Habeck übergibt Förderbescheid über 162 Mio. Euro für den Aufbau einer industriellen Fertigung von Elektrolyseuren in Dresden, Federal Ministry of Economics and Climate Protection (Dresden) 30 August 2023. Translation provided by Google Translate. Access Date: 2 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/08/20230830-habeck-uebergibt-foerderbescheid-fuer-den-aufbau-elektrolyseuren.html>

⁶⁷⁴ Neue Förderung für die klimaneutrale Schifffahrt, Federal Ministry of Economics and Climate Protection (Berlin) 31 August 2023. Translation provided by Google Translate. Access Date: 2 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/08/20230831-neue-foerderung-fuer-die-klimaneutrale-schifffahrt.html>

On 4 September 2023, Minister Wissing announced a funding program of up to EUR500 million for projects which promote the self-generation and use of solar power for EVs in residential buildings.⁶⁷⁵

On 8 September 2023, Minister Habeck met with his Israeli counterpart Nir Barkat to reaffirm the German-Israeli energy partnership promoting innovative startups, networking young technology companies, and building up a climate-neutral energy supply.⁶⁷⁶ The Federal Ministry for Economic Affairs and Climate Action also welcomed delegations from Germany, Israel, and the United Arab Emirates for a trilateral dialogue on sustainable urban development, decarbonization of the building sector, energy efficiency, and smart buildings.

On 8 September 2023, the Bundestag passed an amendment to the Building Energy Act, initiating a modernization of Germany's heat supply with more efficient, economical, and climate-friendly heating technology.⁶⁷⁷ With the new regulations, renewable energies will become the standard in the building sector and gradually replace climate-damaging heating systems based on natural gas or crude oil. From 1 January 2024, all newly installed heating systems in new development areas must use at least 65 per cent renewable energy.

On 13 September 2023, the Federal Cabinet approved the draft ordinance presented by the BMWK to amend the Electrotechnical Properties Verification Ordinance, which aims to accelerate the connection of renewable systems to the grid.⁶⁷⁸ The largest expansion is expected in renewable systems, and the regulation will modernize the verification process for minimum technical requirements of electricity generation and storage systems.

On 14 September 2023, Federal Chancellor Olaf Scholz acknowledged the need to boost port capacity and sustainability in his opening speech at the 13th National Maritime Conference in Bremen, announcing the National Ports Strategy through which the federal government wants to make ports efficient and sustainable.⁶⁷⁹ Central to the energy transition, he emphasized the International Maritime Organization's goal of achieving climate neutrality by 2050.

On 19 September 2023, the BMWK announced their EUR16 million funding measure for "Training Cluster 4.0 in the lignite regions," which strengthens the dual training of skilled workers in the last three German coal mining areas as a result of the upcoming coal phase-out.⁶⁸⁰ To advance the structural change in coal regions, climate-friendly energy industries are replacing the careers of young workers. The mission statement for this program includes carbon-neutral energy supply, and securing skilled workers in innovation, sustainability, digitalization, and education.

BMDV fördert Kombi-Paket aus Ladestation, PV-Anlage und Speicher, Federal Ministry of Transport and Digital Infrastructure (Berlin) 4 September 2023. Translation provided by Google Translate. Access Date: 4 November 2023.

<https://bmdv.bund.de/SharedDocs/DE/Pressemitteilungen/2023/086-wissing-selbst-erzeugter-strom-fuer-elektrofahrzeuge.html>

⁶⁷⁵ Germany and Israel consolidate their cooperation on innovative startups and energy, Federal Ministry of Economics and Climate Protection (Berlin) 8 September 2023. Access Date: 2 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/09/20230908-germany-and-israel-consolidate-their-cooperation-on-innovative-startups-and-energy.html>

⁶⁷⁷ Startschuss für klimafreundliches Heizen: Bundestag beschließt Novelle des Gebäudeenergiegesetzes, Federal Ministry of Economics and Climate Protection (Berlin) 8 September 2023. Translation provided by Google Translate. Access Date: 2 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/09/20230908-bundestag-beschliesst-novelle-des-gebaeudeenergiegesetzes.html>

⁶⁷⁸ Beschleunigung von Netzanschlüssen für Erneuerbare-Energien-Anlagen im Kabinett beschlossen, Federal Ministry of Economics and Climate Protection (Berlin) 13 September 2023. Translation provided by Google Translate. Access Date: 2 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/09/20230913-beschleunigung-von-netzanschluesen-fuer-erneuerbare-energien-anlagen.html>

⁶⁷⁹ Boosting port capacity and sustainability, German Federal Government (Bremen) 14 September 2023. Access Date: 4 November 2023. <https://www.bundeskanzler.de/bk-en/news/maritime-conference-2223574>

⁶⁸⁰ Habeck: „Wir stärken die duale Ausbildung in Kohleausstiegsregionen und investieren in Zukunftsberufe“, Federal Ministry of Economics and Climate Protection (Berlin) 19 September 2023. Translation provided by Google Translate. Access Date: 2 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/09/20230919-bmwk-stellt-16-millionen-eur-fuer-ausbildungscluster-bereit.html>

On 21 September 2023, the German Bundestag passed the Energy Efficiency Act with clear efficiency goals, including concrete efficiency measures for the public sector and companies, and energy efficiency standard definitions for data centers.⁶⁸¹

On 27 September 2023, the Federal Ministry of Transport and Digital Infrastructure awarded contracts to 10 companies who will build and operate almost 8,000 new ultra-fast charging points at around 900 locations for electric vehicles.⁶⁸² Locations cover rural, urban and suburban areas and makes the use of electric cars on medium and long-haul routes more attractive.

On 2 October 2023, State Secretary and Special Representative for International Climate Policy in the Federal Foreign Office Jennifer Morgan and the Parliamentary State Secretary in the Federal Ministry for Economic Affairs and Climate Protection Stefan Wenzel emphasized their commitment to a global expansion target for renewable energies in the run-up to the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change during the International Climate and Energy Summit in Madrid.⁶⁸³

On 4 October 2023, the Federal Environment Ministry announced EUR800,000 in funding for a new facility from E-Lyte Innovations GmbH to produce electrolyte solutions for innovative battery and other energy storage technologies and promote the resource-efficient production of electrolytes for energy storage.⁶⁸⁴ The project is projected to save 100 cubic meters of water, 20 tonnes of cleaning waste, and 6,000 cubic meters of nitrogen annually, with eight tons of carbon emissions avoided.

On 4 October 2023, the Federal Cabinet approved the 2023 climate protection program.⁶⁸⁵ It amended the Building Energy Act to expedite the heat transition away from fossil fuels. The emergency energy measures package also includes an onshore wind energy law, offshore wind energy law, and the amendment to the Energy Industry Act.

On 4 October 2023, Minister Wissing presented over EUR31 million in funding to five shipping companies for modernization and decarbonization of coastal ships.⁶⁸⁶

On 11 October 2023, the Sixth Franco-German Energy Forum took place virtually, organized by the Franco-German Office for the Energy Transition together with the BMWK, the Foreign Office and the French

⁶⁸¹ Bundestag beschließt Energieeffizienzgesetz, Federal Ministry of Economics and Climate Protection (Berlin) 21 September 2023. Translation provided by Google Translate. Access Date: 2 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/09/20230921-bundestag-beschliesst-energieeffizienzgesetz.html>

⁶⁸² BMDV erteilt Zuschlag für bundesweit 8.000 weitere Schnellladepunkte, Federal Ministry of Transport and Digital Infrastructure (Berlin) 27 September 2023. Translation provided by Google Translate. Access Date: 3 November 2023.

<https://bmdv.bund.de/SharedDocs/DE/Pressemitteilungen/2023/098-wissing-deutschlandnetz-fuer-elektroautos.html>

⁶⁸³ Internationaler Energie- und Klimagipfel wichtiges Signal vor COP28, um die Welt auf 1,5°C-Pfad zu bringen Einleitung, Federal Ministry of Economics and Climate Protection (Madrid) 2 October 2023. Translation provided by Google Translate. Access Date: 3 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/10/20231002-internationaler-energie-und-klimagipfel-wichtiges-signal-vor-cop28.html>

⁶⁸⁴ Bundesumweltministerium fördert ressourceneffiziente Produktion von Elektrolyten für Energiespeicher, Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Rhineland-Palatinate) 4 October 2023.

Translation provided by Google Translate. Access Date: 1 November 2023.

<https://www.bmu.de/pressemitteilung/bundesumweltministerium-foerdert-ressourceneffiziente-produktion-von-elektrolyten-fuer-energiespeicher>

⁶⁸⁵ Bundeskabinett verabschiedet umfassendes Klimaschutzprogramm 2023 Einleitung, Federal Ministry of Economics and Climate Protection (Berlin) 4 October 2023. Translation provided by Google Translate. Access Date: 1 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/10/20231004-bundeskabinett-verabschiedet-umfassendes-klimaschutzprogramm-2023.html>

⁶⁸⁶ Starke Innovationsimpulse für die Dekarbonisierung von Küstenschiffen, Federal Ministry of Transport and Digital Infrastructure (Berlin) 4 October 2023. Translation provided by Google Translate. Access Date: 3 November 2023.

<https://bmdv.bund.de/SharedDocs/DE/Pressemitteilungen/2023/102-wissing-starke-innovationsimpulse-dekarbonisierung-kuestenschiffe.html>

Ministry for Energy Transition.⁶⁸⁷ They discussed ways to improve the regulatory framework for hydrogen in various sectors across their countries.

On 13 October 2023, State Secretary Michael Kellner delivered a funding notice for a research project on swam-capable shuttle vehicles that explores “individualized public transport” in the NeMo.bil funding project, aiming to promote electrified, ultralight, climate-friendly transportation.⁶⁸⁸ The project is funded as part of the future investment program for vehicle manufacturers and the supplier industry “New Vehicle and System Technologies,” running until June 2026.

On 23 October 2023, Parliamentary State Secretary of the BMWK Stefan Wenzel and Algerian Minister for Energy and Mining Mohamed Arkab opened the 5th German-Algerian Energy Day in Algiers as a part of the German-Algerian Energy Partnership.⁶⁸⁹ They discussed converting the gas pipeline corridor which runs from Algeria through Central Europe to Germany into green hydrogen. There was also a focus on promoting solar energy in Algeria.

On 2 November 2023, Minister Habeck participated in bilateral discussions with his British counterparts on economic, trade, climate, and energy policy issues.⁶⁹⁰ They reaffirmed their collaborative efforts in the areas of hydrogen, energy security, and renewable energies.

Germany has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind. Acknowledging the integral role of clean energy in future innovation, Germany has invested in multiple renewable energy projects to transform the car, ship, and air travel sector, while strengthening partnerships with countries on decarbonization strategies and continuing to fund research and development projects.

Thus, Germany receives a score of +1.

Analyst: Annabelle Liao

Italy: +1

Italy has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.

⁶⁸⁷ 6. Deutsch-französisches Energieforum, Federal Ministry of Economics and Climate Protection (Berlin) 11 October 2023. Translation Provided by Google Translate. Access Date: 1 November 2023.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/10/20231011-6-deutsch-franzoesisches-energieforum.html>
Nachhaltig, individuell und autonom - BMWK fördert innovatives Mobilitätskonzept für den Einsatz im ÖPNV, Federal Ministry of Economics and Climate Protection (Berlin) 13 October 2023. Translation provided by Google Translate. Access Date: 1 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/10/20231013-nachhaltig-individuell-und-autonom.html>

⁶⁸⁹ Neue Wasserstoffpipeline und beschleunigter Solarausbau vertiefen deutsch-algerische Energiepartnerschaft, Federal Ministry of Economics and Climate Protection (Berlin) 23 October 2023. Translation provided by Google Translate. Access Date: 1 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/10/20231023-neue-wasserstoffpipeline-und-beschleunigter-solarausbau-vertiefen-deutsch-algerische-energiepartnerschaft.html>

⁶⁹⁰ Habeck travels to London – artificial intelligence and energy issues are the focus, Federal Ministry of Economics and Climate Protection (London) 2 November 2023. Access Date: 1 November 2023. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/11/20231102-habeck-london-kuenstliche-intelligenz-und-energiefragen.html>

On 6 June 2023, Minister of the Environment and Energy Security Gilberto Fratin attended the International Energy Agency Conference in Paris.⁶⁹¹ During the meeting, Minister Fratin spoke on the importance of market incentives and the mobilization of private entities in clean energy transition.

On 19 June 2023, Minister Fratin met with the Transport, Telecommunications and Energy Council of the European Union.⁶⁹² He highlighted the importance of a new market design for the electricity market system, one that prioritizes sustaining natural gas capacity in addition to deploying new renewable energy.

On 21 June 2023, Minister Fratin expressed his opposition to increasing the 2030 emission reduction target for vehicles from 30 per cent to 45 per cent during a debate at the EU Council.⁶⁹³ He promoted an approach focusing on complementing combustion vehicles with low-emission fuels and clean energy technologies.

On 30 June 2023, the Ministry of the Environment and Energy Security (MEES) submitted its proposed Integrated National Energy and Climate Plan to EU regulatory authorities.⁶⁹⁴ The plan prioritizes increasing the adoption of renewables and meets almost all EU environmental and climate targets.

On 5 July 2023, Minister Fratin issued a memorandum to the Regulatory Authority for Energy, Networks, and the Environment instructing it to diversify national energy production.⁶⁹⁵ The new organization plan focuses on the transition to renewables by phasing out electricity production from oil-fueled power plants and keeping lower emission-producing coal-fired plants running at minimum levels.

On 6 July 2023, the MEES signed a memorandum of understanding with the National Council for Economics and Labour.⁶⁹⁶ This memorandum signals a partnership between the two organizations on collaborating towards a just and economically pragmatic clean energy transition.

On 10 July 2023, the MEES announced the winning projects for a government competition for the construction of 46 new biomethane production plants.⁶⁹⁷ This action helps advance the biomethane industry in Italy and the transition towards clean biofuels.

⁶⁹¹Energia: Pichetto alla Conferenza AIE, "efficienza è nostro primo combustibile, Italia ha sviluppato leadership", Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 8 June 2023. Translation provided by Google Translate. Access Date: 5 November 2023. <https://www.mase.gov.it/comunicati/energia-pichetto-alla-conferenza-aie-efficienza-e-nostro-primo-combustibile-italia-ha>

⁶⁹² Energia: l'Italia sostiene la riforma del mercato elettrico. Pichetto: trasformazione rapida e radicale,, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 19 June 2023. Translation provided by Google Translate. Access Date: 5 November 2023. <https://www.mase.gov.it/comunicati/energia-litalia-sostiene-la-riforma-del-mercato-elettrico-pichetto-trasformazione-rapida>

⁶⁹³ Emissioni di Co2 sui veicoli pesanti: Pichetto in Consiglio Ue, proposta troppo ambiziosa, ruolo chiave carburanti a basse emissioni, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 21 June 2023. Translation provided by Google Translate. Access Date: 5 November 2023. <https://www.mase.gov.it/comunicati/emissioni-di-co2-sui-veicoli-pesanti-pichetto-consiglio-ue-proposta-troppo-ambiziosa>

⁶⁹⁴ Clima: il MASE ha trasmesso a Bruxelles la proposta di PNIEC, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 30 June 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

⁶⁹⁵ Energia: Pichetto, fermare centrali a olio combustibile, al minimo quelle a carbone, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 5 July 2023. Translation provided by Google Translate. Access Date: 5 November 2023. <https://www.mase.gov.it/comunicati/energia-pichetto-fermare-centrali-olio-combustibile-al-minimo-quelle-carbone>

⁶⁹⁶ Energia: firmato protocollo MASE - CNEL, azioni comuni su green e Comunità Energetiche, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 6 July 2023. Translation provided by Google Translate. Access Date: 5 November 2023. <https://www.mase.gov.it/comunicati/energia-firmato-protocollo-mase-cnel-azioni-comuni-su-green-e-comunita-energetiche>

⁶⁹⁷ PNRR: MASE, selezionati 60 progetti per la produzione di biometano, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 10 July 2023. Translation provided by Google Translate. Access Date: 5 November 2023. <https://www.mase.gov.it/comunicati/pnrr-mase-selezionati-60-progetti-la-produzione-di-biometano>

On 20 July 2023, the MEES issued a decree launching the Guarantees of Origin system.⁶⁹⁸ This decree promotes transparency and helps ensure that customers will be able to see which portions of their energy come from clean renewable sources.

On 2 August 2023, Minister Fratin voted against the EU Nature Restoration Regulation during a meeting of the EU council.⁶⁹⁹ During his speech, he noted the regulation's exemptions for renewable energy plants as a significant reason for his opposition.

On 21 August 2023, Minister Fratin issued a decree establishing a EUR200 million fund for 2024-2025 to deploy solar power systems for families living in economic hardship.⁷⁰⁰ This measure aims to provide impoverished families with access to energy that is consistent, affordable, and clean.

On 9 September 2023, Italy joined the Global Alliance for Biofuels.⁷⁰¹ This international partnership aims to promote the supply and usage of biofuels as a clean energy alternative to traditional fuel sources.

On 21 September 2023, the MEES hosted the first National Platform for Sustainable Nuclear Energy.⁷⁰² The meeting assembled researchers, non-government organizations, and private companies to collaborate on a plan for the reintroduction of nuclear energy in Italy.

On 28 September 2023, Minister Fratin spoke at an International Energy Agency meeting on the importance of ensuring supply chains of critical minerals.⁷⁰³ He emphasized Italy's efforts to ensure a supply of raw materials through recycling and innovations in sustainable energy technologies.

On 10 October 2023, Italy received approval for their plan to use EUR100 million in EU funds to deploy electrolyzers, which are crucial for the production of clean hydrogen.⁷⁰⁴

On 23 October 2023, Italy attended the Eighth Strategic Dialogue of the Carbon Market Platform in Tokyo. The discussions centered on "market integrity, enhancing integrity in voluntary carbon markets and enhancing Article Six of the Paris Agreement implementation."⁷⁰⁵ Participants mentioned the need for an increase in transparency for carbon markets.

⁶⁹⁸ Energia: pubblicato il decreto attuativo del MASE per le Garanzie d'Origine, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 20 July 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/energia-pubblicato-il-decreto-attuativo-del-mase-le-garanzie-dorigine>

⁶⁹⁹ Clima: Pichetto, Italia si attiene a impegni, no a direttive inapplicabili, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 2 J 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/clima-pichetto-italia-si-attiene-impegni-no-direttive-inapplicabili>

⁷⁰⁰ Energia: nasce il Fondo nazionale reddito energetico, 200 milioni per famiglie in disagio economico, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 21 August 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/energia-nasce-il-fondo-nazionale-reddito-energetico-200-milioni-famiglie-disagio>

⁷⁰¹ G20: Pichetto, piena adesione Italia ad alleanza biocarburanti, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 9 September 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/g20-pichetto-piena-adesione-italia-ad-alleanza-biocarburanti>

⁷⁰² Al MASE la prima riunione della Piattaforma Nazionale per un Nucleare Sostenibile, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 21 September 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/al-mase-la-prima-riunione-della-piattaforma-nazionale-un-nucleare-sostenibile>

⁷⁰³ Materie prime critiche, Pichetto al vertice AIE: "Puntare su riciclo come miniera urbana", Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 28 September 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/materie-prime-critiche-pichetto-al-vertice-aie-puntare-su-riciclo-come-miniera-urbana>

⁷⁰⁴ Energia: ok Commissione a sostegno italiano per 100 milioni a elettrolizzatori, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 10 October 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/energia-ok-commissione-sostegno-italiano-100-milioni-elettrolizzatori>

⁷⁰⁵ Results of Eighth Strategic Dialogue of the Carbon Market Platform, Ministry of Environment (Tokyo) 30 October 2023. Access Date: 5 November 2023. https://www.env.go.jp/en/press/press_02084.html

On 26 October 2023, the MEES launched a subsidization program for companies and professionals to install electric vehicle chargers.⁷⁰⁶ This initiative aims to hasten the clean energy transition by increasing the accessibility and availability of necessary infrastructure for electric vehicles.

On 31 October 2023, the MEES launched the project selection process for a EUR100 million hydrogen fuel investment program.⁷⁰⁷ This program aims to advance clean hydrogen fuel usage and innovation in Italy.

On 13 November 2023, the MEES initiated an investment selection process with funds totaling EUR100 million for projects aiming to expand domestic electrolyser production.⁷⁰⁸ This program seeks to bolster domestic clean hydrogen fuel production to meet growing local demand.

On 17 November 2023, the MEES allocated EUR502 million in funding towards the research and development of clean energy technologies during the 2024-2026 period.⁷⁰⁹

Italy has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind. Domestically, Italy has taken action by ensuring that its clean energy movements benefit many industries and to also consider the needs low-income communities. Internationally, Italy has partnered with other countries to improve clean energy access for all.

Thus, Italy receives a score of +1.

Analyst: Sara Cai

Japan: +1

Japan has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.

On 17 July 2023, Prime Minister Fumio Kishida visited Emirati President Sheikh Mohammed bin Zayed Al Nahyan in Abu Dhabi to focus on promoting green technology.⁷¹⁰ The two countries agreed on developing a new program which would accelerate energy security in both regions, but the two countries continued to ensure Japan's access to Emirati oil.

On 31 August 2023, the Ministry of Economy, Trade and Industry, the U.S. Department of Energy, National Energy Technology Laboratory (NETL), and the New Energy and Industrial Technology Development Organization (NEDO) hosted the US-Japan Carbon Recycling Working Group in Pittsburgh.⁷¹¹ The discussions centred on the collaboration between NETL's National Carbon Capture Center and NEDO's base

⁷⁰⁶ Energia: MASE, parte il "bonus colonnine" per imprese e professionisti, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 11 October 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/energia-mase-parte-il-bonus-colonnine-impres-e-professionisti>

⁷⁰⁷ Idrogeno rinnovabile: MASE, 100 milioni per gli investimenti sulla filiera delle componenti, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 31 October 2023. Translation provided by Google Translate. Access Date: 5 November 2023.

<https://www.mase.gov.it/comunicati/idrogeno-rinnovabile-mase-100-milioni-gli-investimenti-sulla-filiera-delle-componenti>

⁷⁰⁸ Idrogeno green: da MASE 100 milioni per nuovi investimenti in elettrolizzatori. Proposte dal prossimo 11 dicembre fino al 26 gennaio 2024, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 13 November 2023. Translation provided by Google Translate. Access Date: 1 December 2023. <https://www.mase.gov.it/comunicati/idrogeno-green-da-mase-100-milioni-nuovi-investimenti-elettrolizzatori-proposte-dal>

⁷⁰⁹ Energia : da MASE 502 milioni di euro per accelerare la transizione energetica, Ministero dell'Ambiente e della Sicurezza Energetica (Roma) 17 November 2023. Translation provided by Google Translate. Access Date: 1 December 2023.

<https://www.mase.gov.it/comunicati/energia-da-mase-502-milioni-di-euro-accelerare-la-transizione-energetica>

⁷¹⁰ Japan and UAE agree to Cooperate on Tech Innovation and Climate Change, Japan Times (Tokyo) 17 July 2023. Access Date: 5 November 2023. <https://www.japantimes.co.jp/news/2023/07/17/national/kishida-united-arab-emirates-visit/>

⁷¹¹The U.S.-Japan CCUS/Carbon Recycling Working Group Held, Ministry of Economy, Trade and Industry of Japan (Tokyo) 5 September 2023. Access Date: 5 November 2023. https://www.meti.go.jp/english/press/2023/0905_002.html

for carbon recycling at Osaki-Kamijima. Japan and the US agreed to expanding clean energy technologies to the Asia-Pacific region.

On 27 September 2023, the Ministry of Economy, Trade and Industry and the Economic Research Institute for ASEAN [Association for South East Asian Nations] and East Asia (ERIA) hosted the CCUS Network Forum in Hiroshima.⁷¹² Discussions were held regarding advancing energy transition in Asia, including enhanced oil recovery and enhanced gas recovery for increased energy security.⁷¹³ The participants recognized the potential of Recycled Carbon Fuels in reducing carbon emissions which would provide increased energy security through supply chains.

On 27 September 2023, the Minister of Economy, Trade, and Industry Nishimura Yasutoshi signed a Memorandum of Cooperation on Transboundary Transport and Storage of Carbon Dioxide with the Japan Organization for Metals and Energy Security and PETRONAS, the Malaysia national oil company at the third CCUS Network Forum held in Hiroshima.⁷¹⁴ This memorandum centred on launching a Carbon Dioxide Capture and Storage project in collaboration between the two countries. Malaysia was identified as having suitable land for geological storage of carbon emitted from Japanese industry and thus being able to help lower Japan's emissions.

On 28 September 2023, the Ministry of the Environment and Ministry of Economy, Trade and Industry co-hosted the Asia Zero Emission Committee conference to develop carbon markets and the Joint Crediting Mechanism (JCM).⁷¹⁵ The conference involved collaboration between member countries of AZEC including Australia, Brunei, Malaysia, Cambodia, Indonesia, Laos, Thailand, Singapore and Vietnam. This conference allowed participants to exchange information of JCM and discuss developing carbon markets, thereby implementing Article 6 of the Paris Agreement.

On 29 September 2023, the Ministry of Economy, Trade and Industry and the Clean Fuel Ammonia Association held the Third International Conference on Fuel Ammonia in Tokyo with the aim to develop stable ammonia markets and supply chains.⁷¹⁶ At the conference, both public and private sectors shared strategies in technology of fuel ammonia development.

On 3 October 2023, the Ministry of Environment selected projects for the city-to-city collaboration program to support decarbonization efforts by overseas subnational governments.⁷¹⁷ The city-to-city collaboration program involves working with private sectors and research institutions as well as the government. These parties identify projects and conduct studies regarding the introduction of decarbonization technologies domestically. This program is a part of the Clean Cities Partnership Program launched by the Ministry of Education.

On 5 October 2023, Ambassador for Climate Change Toshihiro Kitamura represented Japan at the High-Level Pledging Conference for the Second Replenishment of the Green Climate Fund in Bonn, Germany.⁷¹⁸ At this

⁷¹²The U.S.-Japan CCUS/Carbon Recycling Working Group Held, Ministry of Economy, Trade and Industry of Japan (Tokyo) 5 September 2023. Access Date: 5 November 2023. https://www.meti.go.jp/english/press/2023/0905_002.html

⁷¹³ The Third Asia CCUS Network Forum Held. Ministry of Economy, Trade and Industry of Japan (Tokyo) 28 September 2023. Access Date: 5 November 2023. https://www.meti.go.jp/english/press/2023/0928_001.html

⁷¹⁴METI, JOGMEC and PETRONAS Have Concluded MoC on Cross-Border Transportation of CO2 for CCS Businesses, Ministry of Economy, Trade and Industry of Japan (Tokyo) 6 October 2023. Access Date: 5 November 2023. https://www.meti.go.jp/english/press/2023/1006_002.html

⁷¹⁵AZTEC International Conference to Promote the JCM and Develop Carbon Markets, Ministry of the Environment (Tokyo) 29 September 2023. Access Date: 5 November 2023. https://www.env.go.jp/en/press/press_02018.html

⁷¹⁶Third International Conference on Fuel Ammonia, ICFA (Tokyo) 29 September 2023. Access Date: 5 November 2023. <https://www.icfa-conference.org/en/>

⁷¹⁷MOE Japan Selects Two Projects for the City-to-City Collaboration Program to Support the Decarbonization Efforts by Overseas Subnational Governments, Ministry of the Environment (Tokyo) 3 October 2023. Access Date: 5 November 2023. https://www.env.go.jp/en/press/press_02025.html

⁷¹⁸High-Level Pledging Conference of the Green Climate Fund or the Second Replenishment, Ministry of Foreign Affairs (Tokyo) 10 October 2023. Access Date: 5 November 2023. https://www.mofa.go.jp/ic/ge/page22e_001062.html

conference, the Government of Japan intends to contribute JPY165 billion to the Green Climate Fund to address impacts of climate change in developing nations.

On 13 October 2023, Maiko Uga from the Office of Market Mechanisms within the Ministry of the Environment, Senior Planning Officer Yuji Mizuno from the Ministry of Foreign Affairs and Senior Negotiator for Climate Change, Norihiro Kimura from the Ministry of Economy, Trade and Industry attended the first Joint Committee of the Joint Crediting Mechanism between the Democratic Socialist Republic of Sri Lanka and Japan in Battaramulla, Sri Lanka.⁷¹⁹ Japan's promotion of the JCM in Sri Lanka aims to reduce green-house gas emissions through decarbonization technology in Sri Lanka.

On 23 October 2023, the Ministry of the Environment co-hosted the Eighth Strategic Dialogue of the Carbon Market Platform in Tokyo with the German Federal Ministry for Economic Affairs and Climate Action.⁷²⁰ It was attended by the officials of the G7 members. The discussions centred on “market integrity, enhancing integrity in voluntary carbon markets and enhancing article 6 of the Paris Agreement implementation.” Participants mentioned the need for an increase in transparency for carbon markets.

On 30 October 2023, Ambassador Jun Yamada signed the Memorandum of Cooperation on the Joint Crediting Mechanism in Kazakhstan.⁷²¹ This makes Kazakhstan the 28th partner country in the Joint Crediting Mechanism. In this agreement, Japan will implement projects to reduce emissions and contribute to global decarbonization as outlined by the Paris Agreement in Kazakhstan.

On 30 October 2023, Parliamentary Vice-Minister of the Environment of Japan Asahi Kentaro attended the preparatory meeting for the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change in Abu Dhabi, where Asahi stated that goods and services tax should be used to accelerate climate actions.⁷²² He affirmed that global greenhouse gas emissions must peak by 2025 at the latest to be consistent with the 1.5°C goal.

On 17 November 2023, Prime Minister Fumio attended a summit with the President of the Republic of Korea Yoon Suk Yeol at Stanford University where he discussed relations with the Republic of Korea in terms of trade and technology.⁷²³ This discussion included partnering to develop technologies that assist with decarbonization and clean energy.

On 23 November 2023, the Ministry of the Environment published its proposal, Strategic Program for ASEAN Climate and Environment (SPACE), which aims to help ASEAN Member States address climate change, biodiversity loss and pollution as well as the global energy crisis.⁷²⁴ SPACE consists of the three pillars, Climate Change, Pollution and Biodiversity, with each activity being facilitated directly between each ASEAN Member State and Japan. Regarding decarbonization, the Ministry of the Environment proposed financing support for projects which reduce methane emissions in ASEAN Member States. Furthermore, the Ministry of the Environment emphasized the need for the dissemination of decarbonization technologies such as carbon capture and storage to ASEAN Member States.

⁷¹⁹Result of First Joint Committee of the Joint Crediting Mechanism (JCM) between Japan and Sri Lanka, Ministry of Environment (Tokyo) 31 October 2023. Access Date: 5 November 2023. https://www.env.go.jp/en/press/press_02057.html

⁷²⁰Results of Eighth Strategic Dialogue of the Carbon Market Platform, Ministry of Environment (Tokyo) 30 October 2023. Access Date: 5 November 2023. https://www.env.go.jp/en/press/press_02084.html

⁷²¹Japan and Republic of Kazakhstan Sign the Memorandum of Cooperation for Establishing the JCM, Ministry of Environment (Tokyo) 30 October 2023. Access Date: 6 November 2023. https://www.env.go.jp/en/press/press_02091.html

⁷²²Pre-COP28 of the UNFCCC, Ministry of the Environment (Tokyo) 13 November 2023. Access Date: 2 December 2023. https://www.env.go.jp/en/press/press_02442.html

⁷²³Prime Minister Kishida attends a Japan-ROK event at Stanford University, Ministry of Foreign Affairs of Japan (Tokyo) 17 November 2023. Access Date: 2 December 2023. https://www.mofa.go.jp/a_o/na/kr/page1e_000812.html

⁷²⁴Strategic Program for ASEAN Climate and Environment, Ministry of Environment (Tokyo) 23 November 2023. Access Date: 3 December <https://www.env.go.jp/content/000159223.pdf>

On 23 November 2023, the Ministry of Environment outlined the goals of LD-Tech which will help Japan achieve carbon neutrality by 2050 through its ability to reduce energy-derived carbon dioxide emissions.⁷²⁵ The LD-Tech certification system has equipment that is effective for decarbonization efforts, and the Ministry of Japan is proactively disseminating information on certified products. The goal is that by publishing the Ministry of Environment's LD-Tech list, manufacturers and research institutes can refer to the development status of decarbonization technology and use it for decision-making in their future development. By using this technology, the Ministry of Environment hopes by guiding manufacturers and users, greenhouse gas emissions can be reduced by 46 per cent in 2030.

On 2 December 2023, at COP28 in Dubai, Japan was one of the signatories to a pledge to triple nuclear power.⁷²⁶ The declaration cites the benefits of nuclear energy, such as low greenhouse gas emissions, combatting climate change, and the intent to scale this technology globally.

On 1 December 2023, the Institute for Global Environmental Strategies organized a seminar with domestic governments to discuss the zero-carbon transition where the mayors of Tokyo 23 wards declared their initiatives towards zero-carbon efforts.⁷²⁷ Furthermore, the Ministry of Environment announced its decision to create 100 "decarbonization areas" which will aim to achieve zero carbon emissions by 2030.

Japan has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind. Japanese representatives have attended international conferences regarding clean energy technologies, made agreements on JCMs with developing countries and are working on implementing their LD-Tech certification system which will help ensure decarbonization and carbon neutrality by 2050 in alignment with the Paris Agreement.

Thus, Japan receives a score of +1.

Analyst: Madeline Hiron

United Kingdom: +1

The United Kingdom has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.

On 26 May 2023, the Foreign, Commonwealth and Development Office (FCDO) launched the Ukraine Resilience and Energy Security Programme (URES) which aims to support Ukraine in its transition to more efficient energy use and decrease reliance on hydrocarbons.⁷²⁸ GBP62 million will be provided to support Ukraine's energy security using expertise from the United Kingdom. The program will increase investment and development of green energy in Ukraine.

On 5 June 2023, the Transforming Energy Access Learning Programme (TEA-LP), an organization under UK Aid, held a four-day workshop to educate people about improving energy access education in master's programs

⁷²⁵環境省LD-Tech認証制度の概要及び前年度からの変更点, Ministry of Environment (Tokyo) 23 November 2023 Translation provided by Google Translate. Access Date: 2 December 2023. <https://www.env.go.jp/content/000169573.pdf>

⁷²⁶ At COP28, Countries Launch Declaration to Triple Nuclear Energy Capacity by 2050, Recognizing the Key Role of Nuclear Energy in Reaching Net Zero, US Department of Energy, 1 December 2023. Access Date: 5 December 2023. <https://www.energy.gov/articles/COP28-countries-launch-declaration-triple-nuclear-energy-capacity-2050-recognizing-key>.

⁷²⁷Local Governments led Resilient Zero Carbon and Sustainable Society Transition, COP Japan (Tokyo) 1 December 2023. Access Date: 2 December 2023. <http://copjapan.env.go.jp/cop/cop28/en/exhibition/details/iges-1/>

⁷²⁸Ukraine Resilience and Energy Security Programme (URES), Foreign, Commonwealth Development Office (London) 14 June 2023. Access Date: 5 November 2023. <https://devtracker.fcdo.gov.uk/projects/GB-GOV-1-400024/summary>

and was aimed at 23 new partner universities in the Indo-Pacific region.⁷²⁹ The program aimed to equip 31 universities in the Global South on how to deliver effective master's programs regarding energy access.

On 12 June 2023, Energy Catalyst, a British program funded by the FCDO, and the TEA Platform sent representatives to the Sankalp West Africa Summit to discuss alternatives to diesel, focusing on the development of technology and innovation in the West Africa Region.⁷³⁰

On 14 June 2023, GBP15 million was spent by the FCDO on URES to assist with delivering generators and green innovations to Ukraine.⁷³¹

On 15 July 2023, the Transforming Energy Access platform sponsored 30 Chevening scholarships which aim to help leaders in the clean energy sector to emerge in the Global South as part of Work Youth Skills Day.⁷³² TEA also increased spending on the project by GBP2.5 million to go towards helping youth gain employment in the field of energy.⁷³³

On 4 September 2023, the Climate Compatible Growth program, funded by the FCDO, launched applications for the Energy Modelling Platform for Latin America and the Caribbean conference taking place in early 2024.⁷³⁴ This conference will contribute to creating investment cases for the transition to clean energy in the region of Latin America and the Caribbean and coach local businesses in energy planning.

On 18 September 2023, the Brilho program carried out training sessions for credit management of companies that supply solar products in Mozambique.⁷³⁵ This training, funded by the FCDO aims to address the issues purchasers of solar products in Mozambique face and assist with increasing the presence of clean energy in Mozambique.

On 26 September 2023, the UK and the US signed the Memorandum of Understanding on trade cooperation and clean energy.⁷³⁶ This memorandum supports global decarbonization by phasing out coal power and helping communities reliant on fossil fuel economies transition in energy use.

⁷²⁹Energy Access in Higher Education Receives Boost as 23 Universities Gather in Nairobi for TEA-LP's Course Delivery Workshop, UK Aid Transforming Energy Access (London) 9 June 2023. Access Date: 5 November 2023.

<https://tea.carbontrust.com/updates/energy-access-in-higher-education-receives-boost-as-23-universities-gather-in-nairobi-for-tea-lps-course-delivery-workshop>

⁷³⁰Energy Catalyst Representative in the Spotlight at the Sankalp West Africa Summit 2023, Energy Catalyst (London) 19 July 2023. Access Date: 5 November 2023. <https://energycatalyst.ukri.org/news/strongenergy-catalyst-representatives-in-the-spotlight-at-sankalp-west-africa-summit-2023/>

⁷³¹Ukraine Resilience and Energy Security Programme (URES), Foreign, Commonwealth Development Office (London) 14 June 2023. Access Date: 5 November 2023. <https://devtracker.fcdo.gov.uk/projects/GB-GOV-1-400024/summary>

⁷³²World Youth Skills Day – Shining a light on Four Youth-focused Clean Energy Initiatives, UK Aid Transforming Energy Access (London) 15 July 2023. Access Date: 5 November 2023. <https://tea.carbontrust.com/updates/world-youth-skills-day-shining-a-light-on-four-youth-focused-clean-energy-initiatives>

⁷³³World Youth Skills Day – Shining a light on Four Youth-focused Clean Energy Initiatives, UK Aid Transforming Energy Access (London) 15 July 2023. Access Date: 5 November 2023. <https://tea.carbontrust.com/updates/world-youth-skills-day-shining-a-light-on-four-youth-focused-clean-energy-initiatives>

⁷³⁴EMP-LAC 2024, Climate Compatible Growth (London) 4 September 2023. Access Date: 5 November 2023. <https://climatecompatiblegrowth.com/emp-lac/>

⁷³⁵BRILHO programme capacity companies in credit management in Mozambique's PAYGo Solar Sector BRILHO (Maputo) 28 September 2023. Access Date: 5 November 2023. <https://brilhomoz.com/post/brilho-programme-capacite-companies-in-credit-management-in-mozambiques-paygo-solar-sector>

⁷³⁶Memorandum of Understanding of Trade Co-operation, Innovation and Clean Energy between the Washington State and the United Kingdom, Department for Business and Trade (London) 26 September 2023. Access Date: 5 November 2023. <https://www.gov.uk/government/publications/uk-and-washington-state-trade-cooperation-innovation-and-clean-energy-memorandum-of-understanding>

On 28 September 2023, the Department for Energy Security and Net Zero backed the launch of the Inclusive Smart Solutions program.⁷³⁷ This program aims to help low-income consumers participate in the UK's smart energy system and will be carried out between September 2023 and March 2025. The first phase of the program took place from 28 September to 29 October 2023 and aimed to research existing barriers faced by low-income consumers to draft effective solutions.

On 23 October 2023, the UK attended the Eighth Strategic Dialogue of the Carbon Market Platform in Tokyo. The discussions centred on “market integrity, enhancing integrity in voluntary carbon markets and enhancing article 6 of the Paris Agreement implementation.”⁷³⁸ Participants mentioned the need for an increase in transparency for carbon markets.

On 26 October 2023, the House of Commons gave the Energy Act 2023 Royal Assent status which will increase competition in Great Britain's electricity networks and aims to strengthen energy security, which will help the government deliver net zero by 2050.⁷³⁹ In this act, the government also introduced a licensing framework for carbon transport and storage for carbon capture sites, the first in the UK. This act will lead to legislation for fusion regulation and commercial arrangements for carbon capture and storage, hydrogen production, low carbon heat schemes and carbon dioxide transport and storage.

On 3 November 2023, Energy Security Secretary Claire Coutinho and German Vice Chancellor Robert Habeck signed a partnership on their commitment to net zero and energy.⁷⁴⁰ This commitment involves the collaboration of expertise to improve the development of carbon capture, utilization and storage.

On 14 November 2023, the Department for Business and Trade published the Enhanced Trade Partnership Arrangement between Taiwan and the UK which aims to strengthen trade relations between the two countries and support efforts to address Climate Change, prioritizing driving decarbonization forward in the two countries by developing energy infrastructure and wind energy models.⁷⁴¹

On 22 November 2023, the Department for Energy Security and Net Zero launched the Climate Change Agreements Consultation, which seeks proposals from energy suppliers, trade associations, and non-government organizations to add three new target periods to provide further reduction pledges prior to the 2050 deadline.⁷⁴²

On 27 November 2023, Prime Minister Rishi Sunak pledged GBP29.5 billion at the Global Investment Summit which will go to multiple sectors, including funding the renewable energy sector and clean energy efforts.⁷⁴³

⁷³⁷The Carbon Trust to Support Delivery of Government-backed Inclusive Smart Solutions Programme, The Carbon Trust (London) 28 September 2023. Access Date: 5 November 2023. <https://www.carbontrust.com/news-and-insights/news/the-carbon-trust-to-support-delivery-of-government-backed-inclusive-smart-solutions-programme>

⁷³⁸Results of Eighth Strategic Dialogue of the Carbon Market Platform, Ministry of Environment (Tokyo) 30 October 2023. Access Date: 5 November 2023. https://www.env.go.jp/en/press/press_02084.html

⁷³⁹Energy Act 2023, UK Parliament (London) 3 November 2023. Access Date: 5 November 2023. <https://bills.parliament.uk/bills/3311>

⁷⁴⁰ Joint Declaration of Cooperation on Energy and Climate, Department for Energy Security and Net Zero (London) 3 November 2023. Access Date: 5 November 2023. <https://www.gov.uk/government/publications/cooperation-on-energy-and-climate-joint-declaration-between-united-kingdom-and-germany/joint-declaration-of-cooperation-on-energy-and-climate>

⁷⁴¹Enhanced Trade Partnership Arrangement between Taiwan and the United Kingdom, Department for Business and Trade (London) 14 November 2023. Access Date: 2 December 2023. <https://www.gov.uk/government/publications/uk-and-taiwan-enhanced-trade-partnership-arrangement/enhanced-trade-partnership-arrangement-between-taiwan-and-the-united-kingdom>

⁷⁴²Climate Change Agreements: Consultation on a New Scheme, Department for Energy Security and Net Zero (London) 22 November 2023. Access Date: 2 December 2023. <https://www.gov.uk/government/consultations/climate-change-agreements-consultation-on-a-new-scheme>

⁷⁴³Prime Minister unveils £29.5bn of Investment at Historic Global Investment Summit, Prime Minister's Office (London) 27 November 2023. Access Date: 2 December 2023. <https://www.gov.uk/government/news/prime-minister-unveils-295bn-of-investment-at-historic-global-investment-summit>

On 1 December 2023, Prime Minister Sunak announced GBP1.6 billion for renewable energy and forest conservation at the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change in Dubai.⁷⁴⁴ Prime Minister Sunak also announced the joint investment of GBP11 billion towards the UK's new windfarm to boost British renewables and energy security.

On 2 December 2023, at COP28, the UK was one of the signatories to a pledge to triple nuclear power.⁷⁴⁵ The declaration cites the benefits of nuclear energy, such as low greenhouse gas emissions, combatting climate change, and the intent to scale this technology globally.

On 1 December 2023, Energy Security Secretary Coutinho announced GBP85 million at COP28 for forest conservation and cutting methane emissions. Secretary Coutinho also announced the UK government's intent to sign partnerships with Brazil on facilitating decarbonization through research and technology development.⁷⁴⁶ This pledge of GBP85 million includes up to GBP40 million to go to funding the UK's Climate Finance Accelerator which aims to aid countries finance their climate commitments under the Paris Agreement.

On 1 December 2023, the FCDO spent over GBP15 million on URES to assist with delivering generators and green innovations to Ukraine.⁷⁴⁷

On 2 December 2023, the Department for Energy Security and Net Zero published the Net Zero Government Initiative: UK Roadmap to Net Zero Government Emissions, which will lay the framework for achieving net-zero emissions by 2050.⁷⁴⁸ In this report, the UK government aims to reduce all direct emissions from public sector buildings by 50 per cent by 2032 and to be completely net zero by 2050 through renewable energy plans and frameworks.

On 2 December 2023, at COP28 in Dubai, the UK was among the participants that launched the Coal Transition Accelerator to “share expertise, design new policies including through best practices and lessons learned, and unlock new sources of public and private financing to facilitate just transitions from coal to clean energy.”⁷⁴⁹

The United Kingdom has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind. The United Kingdom has assisted with increasing clean energy practices in Mozambique, Ukraine, West Africa, the Indo-Pacific region as well as Latin America and the Caribbean. Furthermore, the United Kingdom House of Commons has given the Energy Act 2023 the status of Royal Assent and has collaborated with the United States and Germany by signing agreements regarding commitments to clean energy.

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

Analyst: Madeline Hirons

⁷⁴⁴PM Speech at COP28 Climate Summit, Prime Minister's Office (London) 1 December 2023. Access Date: 2 December 2023. <https://www.gov.uk/government/speeches/pm-speech-at-cop28-climate-summit-4-january-2023>

⁷⁴⁵ At COP28, Countries Launch Declaration to Triple Nuclear Energy Capacity by 2050, Recognizing the Key Role of Nuclear Energy in Reaching Net Zero, US Department of Energy, 1 December 2023. Access Date: 5 December 2023.

<https://www.energy.gov/articles/COP28-countries-launch-declaration-triple-nuclear-energy-capacity-2050-recognizing-key>.

⁷⁴⁶UK leads global action to protect rainforests, cut methane emissions and advance low carbon technologies, Department for Energy Security and Net Zero (London) 2 December 2023. Access Date: 2 December 2023. <https://www.gov.uk/government/news/uk-leads-global-action-to-protect-rainforests-cut-methane-emissions-and-advance-low-carbon-technologies>

⁷⁴⁷Ukraine Resilience and Energy Security Programme (URES), Foreign, Commonwealth Development Office (London) 2 December 2023. Access Date: 2 December 2023. <https://devtracker.fcdo.gov.uk/projects/GB-GOV-1-400024/summary>

⁷⁴⁸Net Zero Government Initiative: UK roadmap to net zero government emissions, Department for Energy Security and Net Zero (London) 2 December 2023. Access Date: 2 December. <https://www.gov.uk/government/publications/net-zero-government-emissions-uk-roadmap>

⁷⁴⁹ Global Leaders Gather at COP28 to Launch a New Initiative to Support Acceleration of Just Coal Transitions, Elysee (Paris) 2 December 2023. Access Date: 5 December 2023.

<https://www.elysee.fr/admin/upload/default/0001/15/5887a8f79e48ee44de83f61dc0ad3157b22dec30.pdf>

United States: +1

The United has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.

On 22 May 2023, the Department of Energy (DOE) announced an investment of USD150 million into the National Renewable Energy Laboratory.⁷⁵⁰ This funding will go towards modernizing lab infrastructure in support of cutting-edge research and development on clean energy technologies.

On 22 May 2023, the DOE announced nearly USD42 million in funding for multiple clean hydrogen technology projects.⁷⁵¹ This investment supports various initiatives to develop clean fuel-sources and achieve decarbonization.

On 22 May 2023, the DOE invested USD17.8 million towards the establishment of a North American research consortium.⁷⁵² This consortium includes universities from the US, Mexico, and Canada, and aims to aid regional governments and institutions in improving energy grid decarbonization and resilience.

On 23 May 2023, the DOE announced USD34 million in funding to deploy clean energy technology in 18 native communities.⁷⁵³ This money will go towards strengthening access to solar power, increasing grid resilience, and ensuring all community buildings have access to electricity.

On 24 May 2023, the DOE launched the Clean Fuels and Products Shot initiative.⁷⁵⁴ This program aims to contribute towards meeting net-zero carbon emissions by 2050 goals through developing sustainable sources of carbon resources across various sectors.

On 31 May 2023, the DOE announced USD46 million total in research funding to eight companies.⁷⁵⁵ This investment will go towards advancing research into the field and developing plans for a pilot fusion power plant.

On 7 June 2023, the DOE announced USD80 million in grant funding for small and medium manufacturing firms.⁷⁵⁶ This grant aims to aid firms in transitioning to clean energy and adopting DOE recommendations for the lowering of energy usage and carbon emissions.

⁷⁵⁰ Biden-Harris Administration Announces \$150 Million Through Investing in America Agenda for the National Renewable Energy Laboratory, United States Department of Energy (Washington D.C.) 22 May 2023. Access Date: 3 November 2023.

<https://www.energy.gov/articles/biden-harris-administration-announces-150-million-through-investing-america-agenda>

⁷⁵¹ DOE Announces Nearly \$60 Million to Advance Clean Hydrogen Technologies and Improve the Electric Power Grid, United States Department of Energy (Washington D.C.) 22 May 2023. Access Date: 3 November 2023.

<https://www.energy.gov/articles/doe-announces-nearly-60-million-advance-clean-hydrogen-technologies-and-improve-electric>

⁷⁵² DOE Announces Nearly \$60 Million to Advance Clean Hydrogen Technologies and Improve the Electric Power Grid, United States Department of Energy (Washington D.C.) 22 May 2023. Access Date: 3 November 2023.

<https://www.energy.gov/articles/doe-announces-nearly-60-million-advance-clean-hydrogen-technologies-and-improve-electric>

⁷⁵³ U.S. Department of Energy Announces \$34 Million to Deploy Clean Energy Technologies in American Indian and Alaska Native Communities, United States Department of Energy (Washington D.C.) 23 May 2023. Access Date: 3 November 2023.

<https://www.energy.gov/articles/us-department-energy-announces-34-million-deploy-clean-energy-technologies-american-indian>

⁷⁵⁴ DOE Launches New Energy Earthshot to Decarbonize Transportation and Industrial Sectors, United States Department of Energy (Washington D.C.) 24 May 2023. Access Date: 3 November 2023. <https://www.energy.gov/articles/doe-launches-new-energy-earthshot-decarbonize-transportation-and-industrial-sectors>

⁷⁵⁵ DOE Announces \$46 Million for Commercial Fusion Energy Development, United States Department of Energy (Washington D.C.) 31 May 2023. Access Date: 3 November 2023. <https://www.energy.gov/articles/doe-announces-46-million-commercial-fusion-energy-development>

⁷⁵⁶ Biden-Harris Administration Announces \$80 Million To Strengthen American Manufacturing, United States Department of Energy (Washington D.C.) 7 June 2023. Access Date: 3 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-80-million-strengthen-american-manufacturing>

On 12 June 2023, the DOE announced USD192 million in funding for the recycling of batteries from consumer products.⁷⁵⁷ This money will go towards launching a new research and development consortium for battery recycling technology and supporting previously launched battery recycling programs.

On 13 June 2023, the DOE invested USD13.5 million across 12 projects to grow the workforce for the solar energy industry.⁷⁵⁸ These projects will contribute to fostering the workforce growth necessary to meet government decarbonization goals.

On 15 June 2023, the DOE announced USD135 million in funding across 40 projects to reduce carbon emissions from the industrial sector.⁷⁵⁹ This funding will go towards various initiatives to foster a transition towards clean energy through use of new transformational technologies and innovations.

On 22 June 2023, the DOE allocated more than USD21 million in funding for 30 projects to promote commercialization of clean energy.⁷⁶⁰ These projects aim to advance adoption of clean energy technology and solutions by businesses and the market.

On 6 July 2023, the DOE invested USD45 million to boost manufacturing for the domestic solar power industry.⁷⁶¹ These boosts to the domestic supply chain were deemed necessary by the DOE to meet planned green energy transition goals.

On 10 July 2023, the DOE invested USD23.4 million across 16 projects to foster carbon management deployment among local industries and facilities.⁷⁶² This funding goes towards supporting various organizations in providing technical assistance and education on carbon management to stakeholders.

On 10 July 2023, the DOE awarded USD72 million in grants across 296 projects supporting small business research and development projects on clean energy and climate.⁷⁶³ This investment supports clean energy innovation and solutions advancement in the US.

On 13 July 2023, the DOE announced USD32 million investment into strengthening supply chains for critical minerals and rare earth metals.⁷⁶⁴ These materials are a critical component of most clean energy technologies and boosting their availability is an important step in green transition.

⁷⁵⁷ Biden-Harris Administration Announces \$192 Million to Advance Battery Recycling Technology, United States Department of Energy (Washington D.C.), 12 June 2023. Access Date: 3 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-192-million-advance-battery-recycling-technology>

⁷⁵⁸ Biden-Harris Administration Announces \$13.5 Million Investment to Equitably Grow Solar Energy Workforce, United States Department of Energy (Washington D.C.) 13 June 2023. Access Date: 3 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-135-million-investment-equitably-grow-solar-energy>

⁷⁵⁹ Biden-Harris Administration Announces \$135 Million to Reduce Emissions Across America's Industrial Sector, United States Department of Energy (Washington D.C.) 15 June 2023. Access Date: 3 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-135-million-reduce-emissions-across-americas>

⁷⁶⁰ DOE Announces Over \$21 Million to Advance Commercialization of Clean Energy Solutions, United States Department of Energy (Washington D.C.) 22 June 2023. Access Date: 3 November 2023. <https://www.energy.gov/articles/doe-announces-over-21-million-advance-commercialization-clean-energy-solutions>

⁷⁶¹ Biden-Harris Administration Announces \$45 Million to Boost Domestic Solar Manufacturing, United States Department of Energy (Washington D.C.) 6 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-45-million-boost-domestic-solar-manufacturing>

⁷⁶² DOE Invests Over \$23 Million to Reduce Carbon Emissions Across the United States, United States Department of Energy (Washington D.C.) 10 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/doe-invests-over-23-million-reduce-carbon-emissions-across-united-states>

⁷⁶³ DOE Announces \$72 Million For Small Business Research and Development Grants, United States Department of Energy (Washington D.C.) 10 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/doe-announces-72-million-small-business-research-and-development-grants>

⁷⁶⁴ Biden-Harris Administration Invests \$32 Million to Strengthen Nation's Critical Minerals Supply Chain, United States Department of Energy (Washington D.C.) 13 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/biden-harris-administration-invests-32-million-strengthen-nations-critical-minerals-supply>

On 18 July 2023, Secretary of Energy Jennifer Granholm met with Indian Minister of Petroleum and Natural Gas Hardeep Singh Puri.⁷⁶⁵ This meeting was the third of the US-India Strategic Clean Energy Partnership and is part of ongoing bilateral cooperation towards facilitating clean energy transition and trade.

On 21 July 2023, Secretary Granholm met with Brazil's Minister of Mines and Energy Alexandre Silveira.⁷⁶⁶ The two issued a joint statement highlighting their commitment to clean energy cooperation, particularly through the mobilization of local communities and the private sectors. This meeting is a continuation of the bilateral partnership through the U.S.-Brazil Energy Forum (USBEF) in accordance with the USBEF Action Plan 2023-2024.

On 21 July 2023, the DOE announced a USD20 million funding opportunity for projects optimizing the recycling of solar energy systems and end of lifespan processes.⁷⁶⁷ The chosen projects will work with the government on developing solutions towards improving material recovery and lowering the costs of solar power systems.

On 22 July 2023, Secretary Granholm attended the G20 Energy Ministerial, meeting with energy ministers from other G20 members.⁷⁶⁸ The members discussed and collaborated on international efforts to bring about the clean energy transition and made various commitments dedicated to advancing towards sustainable development and net-emissions goals.⁷⁶⁹

On 24 July 2023, the DOE provided USD100 million in funding for lower levels of government to purchase goods sustainably derived from carbon pollution.⁷⁷⁰ This action works towards boosting the market for clean products recycled from carbon emissions and further promotes the green economy.

On 26 July 2023, the DOE announced USD33 million in research funding across 14 projects.⁷⁷¹ This funding helps advance climate and energy technology research and development.

On 28 July 2023, the DOE launched the "Cleanup to Clean Energy" initiative to repurpose DOE lands for clean energy generation.⁷⁷² Deploying renewable sources in these areas helps to increase clean electricity generation through new sources.

⁷⁶⁵ U.S. and India Advance Partnership on Clean Energy, United States Department of Energy (Washington D.C.) 18 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/us-and-india-advance-partnership-clean-energy>

⁷⁶⁶ United States and Brazil Strengthen Bilateral Clean Energy Cooperation with a Renewed Commitment to Mobilize Private Sector and Community Engagement, United States Department of Energy (Washington D.C.) 21 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/united-states-and-brazil-strengthen-bilateral-clean-energy-cooperation-renewed-commitment>

⁷⁶⁷ Biden-Harris Administration Invests \$20 Million to Optimize Lifecycle of Solar Energy Systems and Minimize Technology Waste, United States Department of Energy (Washington D.C.) 21 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/biden-harris-administration-invests-20-million-optimize-lifecycle-solar-energy-systems-and>

⁷⁶⁸ U.S. Energy Secretary Jennifer M. Granholm Concludes Trip to India, United States Department of Energy (Washington D.C.) 25 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/us-energy-secretary-jennifer-m-granholm-concludes-trip-india>

⁷⁶⁹ Outcome Document and Chair's Summary, University of Toronto G20 Research Group (Toronto) 22 July 2023. Access Date: 4 November 2023. <http://www.g20.utoronto.ca/2023/230722-energy.html>

⁷⁷⁰ Biden-Harris Administration Announces \$100 Million to Transform Climate Pollution into Sustainable Products, United States Department of Energy (Washington D.C.) 24 July 2023. Access Date: 4 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-100-million-transform-climate-pollution-sustainable>

⁷⁷¹ DOE Announces \$33 Million to Advance Energy Research Across America, United States Department of Energy (Washington D.C.) 26 July 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/doe-announces-33-million-advance-energy-research-across-america>

⁷⁷² DOE Launches First-Ever 'Cleanup to Clean Energy' Initiative to Explore Generating Clean Energy on DOE-Owned Lands, United States Department of Energy (Washington D.C.) 28 July 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/doe-launches-first-ever-cleanup-clean-energy-initiative-explore-generating-clean-energy>

On 31 July 2023, the DOE issued USD453.5 million from the Puerto Rico Energy Resilience Fund towards deploying rooftop solar energy installations for residents.⁷⁷³ These rooftop solar systems will provide residents with access to consistent power and bolster sustainable electricity generation in the region.

On 15 August 2023, Secretary Granholm hosted the first Net Zero World Ministerial in Seattle, attended by delegations from eight countries and the Bill and Melinda Gates Foundation.⁷⁷⁴ The goal of the ministerial was to share knowledge on clean energy technologies in order to foster international collaboration on development and implementation.

On 15 August 2023, Secretary Granholm hosted 21 energy ministers from the Asia-Pacific Economic Cooperation group for an Energy Ministerial Meeting lasting until August 16.⁷⁷⁵ During the meeting, work began on establishing a Just Energy Transition Initiative to accelerate domestic green energy transitions among present countries.⁷⁷⁶ Additionally, the US issued a joint statement with 10 other countries expressing their commitment to reduce methane emissions in the fossil energy sectors.⁷⁷⁷ This is a direct reaffirmation of goals set by the international community at the 2021 United Nations Climate Change Conference, particularly the Global Methane Pledge.

On 17 August 2023, the US awarded USD34 million to 19 research projects across universities and the private sector.⁷⁷⁸ These projects focus on developing solutions to bolster the availability and affordability of clean hydrogen as an alternative to traditional polluting fuel sources.

On 21 August 2023, the DOE invested USD30 million into lowering the costs of critical mineral production.⁷⁷⁹ This helps to bolster the critical mineral supply line which is essential for the building of most clean energy technologies.

On 25 August 2023, the DOE awarded USD126 million to 90 small businesses with projects addressing key DOE interests.⁷⁸⁰ Among other DOE priorities, chosen projects included those that focused on clean energy and fusion energy research and development.

⁷⁷³ U.S. Department of Energy Announces Over \$450 Million to Increase Access to Rooftop Solar Power for Puerto Rico Residents, United States Department of Energy (Washington D.C.) 31 July 2023. Access Date: 5 November 2023.

<https://www.energy.gov/articles/us-department-energy-announces-over-450-million-increase-access-rooftop-solar-power-puerto>

⁷⁷⁴ DOE Brings Partners Together for First-Ever Net Zero World Ministerial, United States Department of Energy (Seattle) 17 August 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/doe-brings-partners-together-first-ever-net-zero-world-ministerial>

⁷⁷⁵ ICYMI: Secretary Granholm Hosted 13th APEC Energy Ministerial Meeting, United States Department of Energy (Seattle) 18 August 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/icymi-secretary-granholm-hosted-13th-apec-energy-ministerial-meeting>

⁷⁷⁶ Secretary Granholm's Statement on the 13th APEC Energy Ministerial Meeting, Asia-Pacific Economic Cooperation (Seattle) 16 August 2023. <https://www.apec.org/press/news-releases/2023/secretary-granholm-s-statement-on-the-13th-apec-energy-ministerial-meeting>

⁷⁷⁷ Joint Statement on Accelerating Methane Mitigation from the LNG Value Chain, United States Department of Energy (Washington D.C.) 16 August 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/joint-statement-accelerating-methane-mitigation-lng-value-chain>

⁷⁷⁸ DOE Awards \$34 Million to Advance Clean Hydrogen, United States Department of Energy (Washington D.C.) 17 August 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/doe-awards-34-million-advance-clean-hydrogen>

⁷⁷⁹ Biden-Harris Administration Announces \$30 Million to Build Up Domestic Supply Chain for Critical Minerals, United States Department of Energy (Washington D.C.) 21 August 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-30-million-build-domestic-supply-chain-critical>

⁷⁸⁰ DOE Announces \$126 Million for Small Businesses to Pursue Clean Energy Research and Development, United States Department of Energy (Washington D.C.) 25 August 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/doe-announces-126-million-small-businesses-pursue-clean-energy-research-and-development>

On 30 August 2023, the US provided USD350 million in funding to the oil and gas sector to help reduce methane emissions.⁷⁸¹ These grants will help oil and gas producers identify and apply means of reducing methane emissions from their operations, thus lowering the climate change effects of energy produced from these fuel sources.

On 31 August 2023, the Biden-Harris Administration announced USD15.5 billion in funding to transition the domestic automotive industry towards electric vehicles.⁷⁸² This money will help ensure a measured and just transition towards clean energy technology while safeguarding the industry and prospects of workers.

On 6 September 2023, the Biden-Harris Administration invested USD13 million across seven hydropower research and development projects.⁷⁸³ This funding supports continued innovation in the hydropower sector and advancements in affordability, accessibility, and effectiveness.

On 6 September 2023, the DOE announced USD150 million towards supporting sustainable cost-effective domestic production of critical minerals.⁷⁸⁴ This is meant to bolster supply chains in an environmentally friendly way to match the demand needs of clean energy technology production.

On 9 September 2023, President Joe Biden joined other global leaders to launch the Global Biofuels Alliance.⁷⁸⁵ This partnership aims to ensure the supply and promote the deployment of biofuels as a clean energy alternative to traditional polluting fuel sources.

On 14 September 2023, the DOE announced USD25 million in funding through the Clean Energy to Communities Partnerships Program.⁷⁸⁶ This program works closely with communities to research, model, and deploy clean energy systems that are suitable for local conditions and needs.

On 20 September 2023, the DOE announced USD47.7 million for 16 clean hydrogen technology projects.⁷⁸⁷ This will support research and development in this field, helping transition to alternative clean fuel sources.

⁷⁸¹ Biden-Harris Administration Announces Availability of \$350 Million in Grants to States to Cut Methane Emissions from Oil and Gas Sector, United States Department of Energy (Washington D.C.) 30 August 2023. Access Date: 5 November 2023.

<https://www.energy.gov/articles/biden-harris-administration-announces-availability-350-million-grants-states-cut-methane>

⁷⁸² Biden-Harris Administration Announces \$15.5 Billion to Support a Strong and Just Transition to Electric Vehicles, Retooling Existing Plants, and Rehiring Existing Workers, United States Department of Energy (Washington D.C.) 31 August 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-155-billion-support-strong-and-just-transition>

⁷⁸³ Biden-Harris Administration Invests More Than \$13 Million to Enhance Continued Deployment of Hydropower, United States Department of Energy (Washington D.C.) 6 September 2023. Access Date: 5 November 2023.

<https://www.energy.gov/articles/biden-harris-administration-invests-more-13-million-enhance-continued-deployment>

⁷⁸⁴ Biden-Harris Administration Announces \$150 Million to Strengthen Domestic Critical Material Supply Chains, United States Department of Energy (Washington D.C.) 6 September 2023. Access Date: 5 November 2023.

<https://www.energy.gov/articles/biden-harris-administration-announces-150-million-strengthen-domestic-critical-material>

⁷⁸⁵ Readout of Launch of Global Biofuels Alliance, The White House (Washington D.C.) 9 September 2023. Access Date: 5 November 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/09/readout-of-launch-of-global-biofuels-alliance/>

⁷⁸⁶ DOE Announces \$25 Million To Help Communities Expand Affordable and Reliable Clean Energy Across America, United States Department of Energy (Washington D.C.) 14 September 2023. Access Date: 5 November 2023.

<https://www.energy.gov/articles/doe-announces-25-million-help-communities-expand-affordable-and-reliable-clean-energy>

⁷⁸⁷ DOE Announces Nearly \$48 Million To Advance Clean Hydrogen Technologies, United States Department of Energy (Washington D.C.) 20 September 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/doe-announces-nearly-48-million-advance-clean-hydrogen-technologies>

On 21 September 2023, the DOE provided USD72 million for projects accelerating the manufacturing and deployment of hydro and wind energy technologies.⁷⁸⁸ This funding will support these research and development initiatives in advancing these clean energy fields through innovation.

On 28 September 2023, the DOE invested USD38 million for 13 projects advancing clean energy technology deployment in Native American communities.⁷⁸⁹ These projects will bolster the clean energy transition by providing accessibility to previously disconnected communities.

On 29 September 2023, the DOE issued USD264 million for 29 projects to develop solutions for the Energy Earthshots Initiative.⁷⁹⁰ Funded research and development projects will help address scientific challenges and advance clean energy technology such to support DOE climate and clean energy goals.

On 11 October 2023, the DOE gave 66 hydro facilities a total of more than USD38 million to support hydroelectric power generation.⁷⁹¹ This investment will help these facilities sustain and expand their operations and clean energy production.

On 12 October 2023, President Biden announced the Affordable Home Energy Shot initiative.⁷⁹² This Earth shot advances innovation in clean energy solutions for the housing sector.

On 13 October 2023, President Biden announced the investment of USD7 billion to launch seven Clean Hydrogen Hubs.⁷⁹³ These deployments will accelerate the clean energy transition by allowing for commercial-scale introduction of clean hydrogen fuel.

On 19 October 2023, President Biden opened applications for the Low-Income Communities Bonus Credit Program.⁷⁹⁴ This program offers a tax incentive for solar and wind projects serving low-income communities across America, thus furthering the transition toward clean energy deployment.

On 23 October 2023, the US attended the Eighth Strategic Dialogue of the Carbon Market Platform in Tokyo. The discussions centred on “market integrity, enhancing integrity in voluntary carbon markets and enhancing

⁷⁸⁸ Biden-Harris Administration Announces \$72 Million to Innovate Manufacturing and Accelerate Deployment of Wind and Water Energy Technologies, United States Department of Energy (Washington D.C.) 20 September 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-72-million-innovate-manufacturing-and-accelerate>

⁷⁸⁹ U.S. Department of Energy Announces \$38 Million to Deploy Clean Energy Technology in American Indian and Alaska Native Communities, United States Department of Energy (Washington D.C.) 20 September 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/us-department-energy-announces-38-million-deploy-clean-energy-technology-american-indian>

⁷⁹⁰ DOE Announces \$264 Million for Basic Research in Support of Energy Earthshots™, United States Department of Energy (Washington D.C.) 20 September 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/doe-announces-264-million-basic-research-support-energy-earthshotstm>

⁷⁹¹ Biden-Harris Administration Announces More Than \$38 Million to Support Hydropower Facilities Across the Country, United States Department of Energy (Washington D.C.) 11 October 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-more-38-million-support-hydropower-facilities-across>

⁷⁹² Biden-Harris Administration Launches New Energy Earthshot to Lower Energy Bills in Affordable Housing, United States Department of Energy (Washington D.C.) 12 October 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/biden-harris-administration-launches-new-energy-earthshot-lower-energy-bills-affordable>

⁷⁹³ Biden-Harris Administration Announces \$7 Billion For America’s First Clean Hydrogen Hubs, Driving Clean Manufacturing and Delivering New Economic Opportunities Nationwide, United States Department of Energy (Washington D.C.) 13 October 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-7-billion-americas-first-clean-hydrogen-hubs-driving>

⁷⁹⁴ Biden-Harris Administration Opens Low-Income Communities Bonus Credit Program for Clean Energy Projects Benefitting Underserved Communities, United States Department of Energy (Washington D.C.) 19 October 2023. Access Date: 5 November 2023. <https://www.energy.gov/articles/biden-harris-administration-opens-low-income-communities-bonus-credit-program-clean-energy>

article 6 of the Paris Agreement implementation.⁷⁹⁵ Participants mentioned the need for an increase in transparency for carbon markets.

On 26 October 2023, the DOE announced USD36 million across eleven projects supporting marine carbon dioxide removal through capture and storage technologies.⁷⁹⁶ This funding will help advance decarbonization through clean energy technologies.

On 2 November 2023, the DOE provided various solar companies and non-profits a total of USD440 million to install rooftop solar systems in Puerto Rico.⁷⁹⁷ This initiative will support clean energy use in the region and ensure vulnerable households have access to consistent sustainable electricity.

On 14 November 2023, the DOE announced the provision of over USD444 million into 16 projects bolstering the carbon management industry.⁷⁹⁸ These projects aim to expand the deployment of clean energy technology infrastructure needed to reduce emissions from industrial operations.

On 15 November 2023, the DOE invested USD3.5 billion into boosting domestic battery production.⁷⁹⁹ This money will go towards expanding the production of critical minerals and battery components to support growing battery demand from clean energy technologies.

On 16 November 2023, the DOE selected 27 training and assessment centers to be awarded USD40.8 million to foster clean energy workforce development.⁸⁰⁰ Supporting these programs improves accessibility to clean energy career pathways and helps to meet the demand for technical knowledge and jobs in the clean energy economy.

On 27 November 2023, the DOE announced the provision of USD275 million across seven projects to expand clean energy supply chains and manufacturing.⁸⁰¹ This funding will help accelerate clean energy transition while ensuring the health of domestic industries and economies.

On 29 November 2023, the DOE selected a slate of local partners to receive USD13.85 million for the deployment of residential solar systems in Puerto Rico.⁸⁰² This action helps to expand clean energy infrastructure to help vulnerable households and accelerate the use of renewable energy.

⁷⁹⁵Results of Eighth Strategic Dialogue of the Carbon Market Platform, Ministry of Environment (Tokyo) 30 October 2023. Access Date: 5 November 2023. https://www.env.go.jp/en/press/press_02084.html

⁷⁹⁶ DOE Announces \$36 Million To Advance Marine Carbon Dioxide Removal Techniques and Slash Harmful Greenhouse Gas Pollution, United States Department of Energy (Washington D.C.) 26 October 2023. Access Date: 1 December 2023. <https://www.energy.gov/articles/doe-announces-36-million-advance-marine-carbon-dioxide-removal-techniques-and-slash>

⁷⁹⁷ DOE Announces Up to \$440 Million to Install Rooftop Solar and Batteries in Puerto Rico's Most Vulnerable Communities, United States Department of Energy (San Juan) 2 November 2023. Access Date: 5 November 2023.

⁷⁹⁸ Biden-Harris Administration Invests \$444 Million to Strengthen America's Infrastructure for Permanent Safe Storage of Carbon Dioxide Pollution, United States Department of Energy (Washington D.C.) 14 November 2023. Access Date: 1 December 2023. <https://www.energy.gov/articles/biden-harris-administration-invests-444-million-strengthen-americas-infrastructure>

⁷⁹⁹ Biden-Harris Administration Announces \$3.5 Billion to Strengthen Domestic Battery Manufacturing, United States Department of Energy (Washington D.C.) 15 November 2023. Access Date: 1 December 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-35-billion-strengthen-domestic-battery-manufacturing>

⁸⁰⁰ Biden-Harris Administration Announces \$40 Million to Expand Clean Energy Workforce Training and Enhance U.S. Building and Manufacturing Efficiency, United States Department of Energy (Washington D.C.) 16 November 2023. Access Date: 1 December 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-40-million-expand-clean-energy-workforce-training>

⁸⁰¹ Biden-Harris Administration Announces Actions to Strengthen Clean Energy Supply Chains and Accelerate Manufacturing in Energy and Industrial Communities, United States Department of Energy (Washington D.C.) 27 November 2023. Access Date: 1 December 2023. <https://www.energy.gov/articles/biden-harris-administration-announces-actions-strengthen-clean-energy-supply-chains-and>

⁸⁰² DOE Announces Over \$13 Million to Connect More Puerto Rico Communities with Residential Solar and Battery Storage, United States Department of Energy (Washington D.C.) 29 November 2023. Access Date: 1 December 2023. <https://www.energy.gov/articles/doe-announces-over-13-million-connect-more-puerto-rico-communities-residential-solar-and>

On 30 November 2023, the DOE provided USD3 million in funding to transition two tribal community colleges to clean energy.⁸⁰³ These projects help provide access to clean energy to traditionally disadvantaged communities.

On 2 December 2023, at the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change in Dubai, the US was one of the signatories to a pledge to triple nuclear power.⁸⁰⁴ The declaration cites the benefits of nuclear energy, such as low greenhouse gas emissions, combatting climate change, and the intent to scale this technology globally.

On 2 December 2023, at COP28 the US was among the participants that launched the Coal Transition Accelerator to “share expertise, design new policies including through best practices and lessons learned, and unlock new sources of public and private financing to facilitate just transitions from coal to clean energy.”⁸⁰⁵

The United States has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind. The United States has taken steps to invest in the production of critical minerals, thus securing supply chains. Moreover, through numerous initiatives, it has funded the research, development, and deployment of various forms of clean energy technologies. Lastly, the United States has taken to fostering international cooperation and collaboration on clean energy trade, transition, and technology.

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

Analyst: Sara Cai

European Union: +1

The European Union has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind.

On 17 July 2023, the EU and Argentina established cooperation on areas on renewable energy, hydrogen and methane emissions abatement at the EU-CELAC (Community of Latin American and Caribbean States) Summit in Brussels.⁸⁰⁶ Both the EU and Argentina have agreed to work together to ensure a just transition of these energy sources into communities, and to reduce leakages in operations.

On 17 July 2023, the Committee on Employment and Social Affairs held a hearing on “Future-proof jobs and skills training for the digital and green transitions.”⁸⁰⁷ During this discussion, members discussed the merits of ensuring that the current and future generations possess the skills required to reap the benefits of green and digital transitions.

⁸⁰³ U.S. Department of Energy Announces \$3 Million to Transition Tribal Colleges and Universities to Clean Energy, United States Department of Energy (Washington D.C.) 30 November 2023. Access Date: 1 December 2023.

<https://www.energy.gov/articles/us-department-energy-announces-3-million-transition-tribal-colleges-and-universities-clean>

⁸⁰⁴ At COP28, Countries Launch Declaration to Triple Nuclear Energy Capacity by 2050, Recognizing the Key Role of Nuclear Energy in Reaching Net Zero, US Department of Energy, 1 December 2023. Access Date: 5 December 2023.

<https://www.energy.gov/articles/COP28-countries-launch-declaration-triple-nuclear-energy-capacity-2050-recognizing-key>.

⁸⁰⁵ Global Leaders Gather at COP28 to Launch a New Initiative to Support Acceleration of Just Coal Transitions, Elysee (Paris) 2 December 2023. Access Date: 5 December 2023.

<https://www.elysee.fr/admin/upload/default/0001/15/5887a8f79e48ee44de83f61dc0ad3157b22dec30.pdf>

⁸⁰⁶ EU-CELAC Summit: EU and Argentina step up cooperation on clean energy transition and energy security, European Economic and Social Committee (Brussels) 17 July 2023. Access Date: 8 November 2023. https://ec.europa.eu/commission/presscorner/detail/en/IP_23_3859

⁸⁰⁷ Hearing on Future-proof jobs and skills training for the digital and green transition, European Parliament (Brussels) 17 July 2023. Access Date: 5 December 2023. <https://www.europarl.europa.eu/committees/en/hearing-on-future-proof-jobs-and-skills-/product-details/20230419CHE11602>

On 21 September 2023, a loan of EUR175 million by the European Investment Bank (EIB) to Germany and potentially other EU countries to develop low carbon energy infrastructure was signed.⁸⁰⁸ The loan will finance a series of renewable energy generation plants including onshore wind and solar PV located in Germany and other EU countries.

In October 2023, the EU released a budget for EUR22 million to support the government of Vietnam, and the EU Vietnam Sustainability Energy Transition Programme.⁸⁰⁹ This is part of a larger EUR142 million grant by the EU to Vietnam to support clean energy transitions, and to help them achieve net zero emissions by 2050.

In October 2023, the EU Council adopted new rules for the REPowerEU plan, which seeks to reduce dependence on Russian fossil fuel imports and facilitate the development of renewable energy supplements.⁸¹⁰ The plan's overall commitments commit to the goal of reducing the EU greenhouse gas emissions by at least 55 per cent by 2030, and recent negotiations ensure the focus on this goal, despite international energy market disruptions.

On 5 October 2023, Members of the European Parliament (MEPs) reassessed the EU's resources to continue developments in clean energy, in the wake of inflationary shocks caused by Russia's invasion of Ukraine.⁸¹¹ The discussion revealed new financing solutions including: "corporate tax-based own resources, the financial transaction tax, a new fair border mechanism, a tax on crypto-assets, green own resources and national contributions based on statistics." These changes will be formalised in 2024.

On 9 October 2023, the EU council adopted the new Renewables Energy Directive to raise the share of renewable energy consumption to 42.5 per cent by 2030.⁸¹² An additional 2.5 per cent indicated top-up was introduced as well to facilitate reaching the target of 45 per cent. This aims to increase the uptake of renewable energy by all member states through ambitious sector-specific targets across transport, industry, buildings, district heating and cooling.⁸¹³

On 25 October 2023, the Industry Committee voted in favour of the "Net-Zero Industry Act."⁸¹⁴ The act sets a target for 40 per cent of net-zero technologies based on National Energy and Climate Plans and to capture 25 per cent of the global market value for these technologies, which include nuclear fission of fusion technologies, sustainable aviation fuels and specific industrial technologies.

On 25 October 2023, a loan of EUR350 million by the EIB to Bangladesh's Ministry of Power, Energy and Mineral Resources was signed to support Bangladesh's climate actions.⁸¹⁵ Through the loan, a Renewable

⁸⁰⁸ LBBW REPOWEREU ENHANCED RENEWABLE ENERGY, European Investment Bank (Luxembourg) 7 November 2023. Access Date: 8 November 2023. <https://www.eib.org/en/projects/pipelines/all/20220697>

⁸⁰⁹ The European Union released EUR 22 million to support Viet Nam's Clean Energy Transition, Delegation of the European Union to Vietnam (Hanoi) 3 November 2023. Access Date: 8 November 2023. https://www.eeas.europa.eu/setp-22-million_en

⁸¹⁰ REPowerEU at a glance, European Commission (Brussels) Access Date: 9 November 2023.

https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en

⁸¹¹ EU revenue: a new start for EU finances, a new start for Europe, European Parliament (Brussels) 5 October 2023. Access Date: 8 November 2023. <https://www.europarl.europa.eu/news/en/press-room/20230505IPR85010/eu-revenue-a-new-start-for-eu-finances-a-new-start-for-europe>

⁸¹² Renewable energy: Council adopts new rules, European Council (Brussels) 9 October 2023. Access Date: 8 November 2023. <https://www.consilium.europa.eu/en/press/press-releases/2023/10/09/renewable-energy-council-adopts-new-rules/>

⁸¹³ Renewable energy: Council adopts new rules, European Council (Brussels) 9 October 2023. Access Date: 8 November 2023. <https://www.consilium.europa.eu/en/press/press-releases/2023/10/09/renewable-energy-council-adopts-new-rules/>

⁸¹⁴ MEPs back plans to boost Europe's Net-Zero technology production, European Parliament (Brussels) 25 October 2023. Date Accessed: 8 November 2023. <https://www.europarl.europa.eu/news/en/press-room/20231023IPR08159/meps-back-plans-to-boost-europe-s-net-zero-technology-production>

⁸¹⁵ BANGLADESH RENEWABLE ENERGY FACILITY, European Investment Bank (Luxembourg) 27 October 2023. Access Date: 8 November 2023. <https://www.eib.org/en/projects/pipelines/all/20220280>

Energy Facility will be built and it would allow the Bangladeshi government to develop renewable and other long term energy projects.

On 26 October 2023, a loan by the EIB to Spain to finance the construction of Solar panels, with an approximate capacity of 227MW was under appraisal.⁸¹⁶ This loan reflects the EU commitment to adopt greater renewable energy and reduce dependence on fossil fuels.⁸¹⁷

On 9 November 2023, MEPs passed the new regulation for type-approval and market surveillance of motor vehicles (Euro 7).⁸¹⁸ The new regulation will revise existing thresholds for exhaust emissions and will implement new measures to decrease emissions originating from tires and brakes, while also enhancing battery durability.

On 16 November 2023, the Deputy Head of the EU Delegation to Uganda, Minister Guillaume Chartrain, spoke at the 2023 Renewable Energy Conference in Uganda affirmed the EU's commitment to help Uganda's transition towards clean and sustainable energy.⁸¹⁹ During the conference, the EU Delegation organised a panel to display EU's ongoing and planned support towards Uganda's energy sector. Delegation Head of Cooperation Caroline Adriaensen expressed that the EU will support the Ugandan private sector by providing financial support to bridge the gap between green start-ups and investors.

On 21 November 2023, the EU Parliament adopted a new negotiation position to demand stronger carbon dioxide reduction from medium and heavy trucks.⁸²⁰ The aspired targets are 45 per cent for 2030-2034, 65 per cent for 2035-2039 and 90 per cent as of 2040. Additional measures discussed include only allowing zero-emission new urban busses from 2030 and proposing a temporary exception for urban busses fueled by biomethane under strict conditions, until 2035.

On 21 November 2023, MEPs voted in favour to demand an end to all direct and indirect fossil fuel subsidies at the national, EU and global level.⁸²¹ The resolution constituted the mandate for Parliament's delegation, who attended the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change in Dubai shortly after.

On 21 November 2023, the EU Parliament adopted a position to reinforce the need for decarbonisation using Europe's manufacturing output in technologies, to remain in line with the "Net Zero Industry Act", which aims to produce 40 per cent of Europe's annual deployment needs in net-zero technologies by 2030 and capture 25 per cent market share for these technologies.⁸²² The new amendments increased the scope of legislation to 'encompass the entire supply chain, including components, materials, and machinery for producing net-zero technologies' and to include a broader range of technologies.

⁸¹⁶ CADIZ REPOWEREU SOLAR ENERGY, European Investment Bank (Luxembourg) 26 October 2023. Access Date: 8 November 2023. <https://www.eib.org/en/projects/pipelines/all/20220648>

⁸¹⁷ CADIZ REPOWEREU SOLAR ENERGY, European Investment Bank (Luxembourg) 26 October 2023. Access Date: 8 November 2023. <https://www.eib.org/en/projects/pipelines/all/20220648>

⁸¹⁸ Euro 7: MEPs support new rules to cut down pollutant emissions, European Parliament (Brussels) 9 November 2023. Access Date: 9 November 2023. <https://www.europarl.europa.eu/news/en/press-room/20231106IPR09026/euro-7-meps-support-new-rules-to-cut-down-pollutant-emissions>

⁸¹⁹ European Union commits to Uganda's clean energy transition, Delegation of the European Union to Uganda (Kampala) 20 November 2023. Access Date: 5 December 2023. https://www.eeas.europa.eu/delegations/uganda/european-union-commits-uganda-s-clean-energy-transition_en

⁸²⁰ Parliament backs new rules to reduce air pollution from trucks and buses, European Parliament (Brussels) 21 November 2023. Access Date: 5 December 2023. <https://www.europarl.europa.eu/news/en/press-room/20231117IPR12204/parliament-backs-new-rules-to-reduce-air-pollution-from-trucks-and-buses>

⁸²¹ COP28: MEPs want to end all subsidies for fossil fuel globally by 2025, European Parliament (Brussels) 21 November 2023. Access Date: 5 December 2023. <https://www.europarl.europa.eu/news/en/press-room/20231117IPR12108/cop28-meps-want-to-end-all-subsidies-for-fossil-fuel-globally-by-2025>

⁸²² MEPs back plans to boost Europe's Net-Zero technology production, European Parliament (Brussels) 21 November 2023. Access Date: 5 December 2023. <https://www.europarl.europa.eu/news/en/press-room/20231117IPR12205/meps-back-plans-to-boost-europe-s-net-zero-technology-production>

On 28 November 2023, MEPs and the Spanish Presidency agreed on plans to catalyse the uptake of renewable and low-carbon gasses, including hydrogen into the EU gas market.⁸²³ A quote extracted from this discussion discloses that sectors that are difficult to decarbonise, such as steel and chemicals will be at the centre of developing Europe's hydrogen market, enabling the phasing out of fossil fuels and preserving competitiveness in the green job market.

On 1 and 2 December 2023, during COP28, President von der Leyen attended the World Climate Action Summit.⁸²⁴ At the EU Pavilion, she hosted a panel on the Paris Agreement's aligned carbon markets, with the International Monetary Fund, World Bank and World Trade Organisation, and a launch event for the 'Just Energy Transition Partnership' with Vietnam. She also launched the Global Pledge on Renewables and Energy Efficiency, aimed at increasing installed renewable capacity and efficiency by 2030.

On 2 December 2023, at COP28 the European Commission was among the participants that launched the Coal Transition Accelerator to "share expertise, design new policies including through best practices and lessons learned, and unlock new sources of public and private financing to facilitate just transitions from coal to clean energy."⁸²⁵

On 2 December 2023, the EIB announced that building partnerships with other countries to advance clean energy technologies was one of its main goals at COP28.⁸²⁶

The European Union has fully complied with its commitment to ensure that both its regulations and investments towards clean energy technologies are more affordable for all nations and help drive a global, just energy transition for workers and communities that will leave no one behind. This has been achieved by their internal investments to achieve a greater adoption of renewable energy within the internal energy mix, and foreign investments to increase uses of renewable energy sources through funding, and collaborations for research and transitions. While these actions be motivated by the European Union's attempt to isolate Russia's fossil fuel exports, they aim to pave way for a low carbon future overall.

Thus, the European Union receives a score of +1

Analyst: Kaavya Punn

⁸²³ Deal reached on gas market reform to address energy security and climate change, European Parliament (Brussels) 28 November 2023. Access Date: 5 December 2023. <https://www.europarl.europa.eu/news/en/press-room/20231127IPR15412/deal-reached-on-gas-market-reform-to-address-energy-security-and-climate-change>

⁸²⁴ EU calls for accelerated emissions reductions and clean energy transition at COP28, European Commission (Brussels). Access Date: 5 December 2023. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_6181

⁸²⁵ Global Leaders Gather at COP28 to Launch a New Initiative to Support Acceleration of Just Coal Transitions, Elysee (Paris) 2 December 2023. Access Date: 5 December 2023. <https://www.elysee.fr/admin/upload/default/0001/15/5887a8f79e48ee44de83f61dc0ad3157b22dec30.pdf>

⁸²⁶ COP28: EIB Group and Mission Innovation team up to accelerate clean energy innovation, European Investment Bank (Luxembourg) 2 December 2023. Access Date: 5 December 2023. <https://www.eib.org/en/press/all/2023-486-eib-group-and-mission-innovation-team-up-to-accelerate-clean-energy-innovation>