



# 2020 G20 Riyadh Summit Final Compliance Report

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**Feedback, as always, is welcome and is kept anonymous.**

**We encourage readers to send comments to**

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## Contents

Preface .....	3
Research Teams .....	4
Toronto G20 Research Group Team.....	4
G20 Research Group Lead Analysts .....	4
G20 Research Group Analysts .....	4
CIIR G20 Research Team.....	5
Introduction and Summary .....	6
Methodology and Scoring System.....	6
Commitment Breakdown .....	6
Selection of Commitments.....	6
Final Compliance Scores .....	7
Final Compliance by Member .....	7
Final Compliance by Commitment.....	7
Table 1: 2020 G20 Riyadh Summit Commitments Selected for Compliance Monitoring.....	8
Table 2: 2020 G20 Riyadh Summit Final Compliance Scores.....	10
Table 3: 2020 G20 Riyadh Summit Final Compliance by Member .....	12
Table 4: 2020 G20 Riyadh Summit Final Compliance by Commitment .....	12
Table 5: G20 Compliance by Member, 2008-2020 .....	13
Conclusions .....	14
Future Research and Reports .....	14
Considerations and Limitations.....	14
Appendix: General Considerations.....	15
1. Macroeconomic Policy: Inclusive Growth.....	16
2. Macroeconomics: Capital Markets.....	119
3. Trade: Investment .....	149
4. Trade: Open Markets.....	251
5. Digital Economy: Consumer Rights .....	272
6. International Taxation: Tax Systems.....	310
7. International Taxation: BEPS .....	364
8. Crime and Corruption: Threats.....	385
9. Labour and Employment: Job Protection.....	418
10. Gender: Inequalities.....	473
11. Gender: Economic Participation .....	603
12. Development: Debt Relief.....	692
13. Development: COVID-19.....	759
14. Health Preparedness and Response .....	791
15. Health: Information Sharing .....	985
16. Health: Vaccine Distribution.....	1038
17. Energy: Fossil Fuels.....	1068
18. Environment: Marine Plastic Litter.....	1100
19. Climate Change: Circular Carbon Economy .....	1129
20. Climate Change: Paris Agreement.....	1225

## 19. Climate Change: Circular Carbon Economy

“We endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.”

*G20 Riyadh Leaders’ Declaration*

### Assessment

	No Compliance	Partial Compliance	Full Compliance
Argentina			+1
Australia			+1
Brazil		0	
Canada			+1
China			+1
France			+1
Germany			+1
India		0	
Indonesia		0	
Italy		0	
Japan		0	
Korea			+1
Mexico		0	
Russia		0	
Saudi Arabia		0	
South Africa		0	
Turkey			+1
United Kingdom			+1
United States			+1
European Union			+1
Average		+0.55 (78%)	

### Background

According to the United Nations, “the impacts of climate change are global in scope and unprecedented in scale,”<sup>8932</sup> threatening food production, the availability of resources, and economic development. For several decades, international organs such as the UN have begun referring to the rising climate and depletion of resources as a point of significant concern. The first earth conference was hosted by the UN in Stockholm, Sweden in 1972, introducing recommendations for international environmental action.<sup>8933</sup> In more recent years, these recommendations have evolved into further commitments, namely the 2015 Paris Agreement. Accordingly, the G20 members have addressed climate change in some capacity at every summit held since the inaugural summit in 2008.<sup>8934</sup> Accounting for nearly 80 per cent of global emissions, the G20 member states have a

<sup>8932</sup> Climate Change, United Nations (New York) n.d. Access Date: 26 February 2021.

<https://www.un.org/en/sections/issues-depth/climate-change/>

<sup>8933</sup> From Stockholm to Kyoto: A Brief History of Climate Change, United Nations (New York) n.d. Access Date: 26 February 2021. <https://www.un.org/en/chronicle/article/stockholm-kyoto-brief-history-climate-change>

<sup>8934</sup> Declaration of the Summit on Financial Markets and the World Economy, G20 Research Group (Washington) 15 November 2008. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2008/2008declaration1115.html>

significant role to play in collective actions aimed at addressing climate change and its effects.<sup>8935</sup> Additionally, bold action on climate change has the potential to produce USD26 trillion in economic benefits, as is cited by the UN.<sup>8936</sup> Meaning, addressing climate change is and will continue to be a pressing issue for the G20, as their primary goal is to promote “international financial stability.”<sup>8937</sup>

The topic of climate change was addressed at the G20 inaugural summit, the 2008 Washington, D.C. Summit. G20 members acknowledged climate change as a “critical challenge” that needed to be addressed; however, failed to provide further specificity indicating the instruments to do so.<sup>8938</sup> Nor did they identify a specific goal to meet in this topic area.

At the 2009 London Summit, the G20 members reaffirmed their “commitment to address the threat of irreversible climate change, based on the principle of common but differentiated responsibilities, and to reach agreement at the UN Climate Change conference in Copenhagen in December 2009” in their single commitment dedicated towards climate change.<sup>8939</sup> This marked the first time climate change was addressed in a commitment while referencing specific and measurable goals outlined in the 2009 UN Climate Change Agreement.

At the 2009 Pittsburgh Summit, the G20 members dedicated a significant portion of the conference to consider energy security and climate change, marking the first time the members recognized climate change as a multi-faceted issue with multiple factors. In the leaders’ statement, they addressed specific issues concerning climate change, including “inefficient fossil fuel subsidies [that] encourage wasteful consumption, distort markets, impede investment in clean energy sources and undermine efforts to deal with climate change.”<sup>8940</sup> Members also identified specific steps to address climate change, including “increasing clean and renewable energy supplies, improving energy efficiency, and promoting conservation.”<sup>8941</sup>

At the 2010 Toronto Summit, the G20 members reaffirmed their previous commitments to addressing climate change but failed to make any further commitments on the topic.<sup>8942</sup> The commitments on climate change at this summit also lack further specificity.

At the 2010 Seoul Summit, the G20 members reaffirmed their commitment to fight climate change. More specifically, they made a commitment to “rationalize and phase-out over the medium-term inefficient fossil fuel subsidies; mitigate excessive fossil fuel price volatility; safeguard the global marine environment; and combat the challenges of global climate change.”<sup>8943</sup>

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<sup>8935</sup> Lagging in climate action, G20 nations have huge opportunities to increase ambition, United Nations (New York) 21 September 2019. Access Date: 26 February 2021. <https://www.unep.org/news-and-stories/press-release/lagging-climate-action-g20-nations-have-huge-opportunities-increase>

<sup>8936</sup> Climate Action Key Findings, United Nations (New York) n.d. Access Date: 26 February 2021. <https://www.un.org/en/climatechange/science/key-findings>

<sup>8937</sup> G20 Information Centre, G20 Information Centre (Toronto) 30 November 1999. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/g20whatisit.html>

<sup>8938</sup> Declaration of the Summit on Financial Markets and the World Economy, G20 Information Centre (Toronto) 15 November 2008. Access Date: 26 February 2021 <http://www.g20.utoronto.ca/2008/2008declaration1115.html>

<sup>8939</sup> London Summit – Leader’s Statement, G20 Information Centre (London) 2 April 2009. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2009/2009communiqu0402.pdf>

<sup>8940</sup> G20 Leaders Statement: The Pittsburgh Summit, G20 Information Centre (Toronto) 25 September 2009. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2009/2009communiqu0925.html#energy>

<sup>8941</sup> G20 Leaders Statement: The Pittsburgh Summit, G20 Information Centre (Toronto) 25 September 2009. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2009/2009communiqu0925.html#energy>

<sup>8942</sup> The G20 Toronto Summit Declaration, G20 Information Centre (Toronto) 27 June 2010. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2010/to-communiqu.html>

<sup>8943</sup> G20 Seoul Summit, G20 Information Centre (Seoul) 12 November 2010. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/summits/2010seoul.html>

At the 2011 Cannes Summit, the G20 members identified the fight against climate change as a main priority. Specifically, there was a significant focus placed on financing initiatives addressing climate change, primarily supporting “climate-related investments in developing countries” and “assist[ing] developing countries to mitigate and adapt to the impact of climate change.”<sup>8944</sup> Additionally, G20 members committed to “fostering clean energy, green growth and sustainable development [through] promot[ing] low-carbon development strategies.”<sup>8945</sup>

At the 2012 Los Cabos Summit, the G20 members acknowledged the significant impact of climate change on the world economy and reaffirmed their commitment to fight climate change. They committed to take action to fulfill their Rio+20 and the United Nations Framework Convention on Climate Change agreements, the Green Climate Fund, implementation of Cancun and Durban outcomes and achieving greater outcomes at COP-18. Additionally, they recognized the importance of adapting agriculture to climate change, namely through “improving the efficiency of water and soil use in a sustainable manner.”<sup>8946</sup>

At the 2013 St. Petersburg Summit, the G20 members reaffirmed their commitment to the fight against climate change and committed to the full implementation of the United Nations Framework Convention on Climate Change outcomes, as well as the Green Climate Fund.<sup>8947</sup> In this, they specified their commitment to adhering to the Kyoto protocol for accounting and reporting emissions, marking the first direct reference to the role of CO<sub>2</sub> emissions in addressing climate change.<sup>8948</sup>

At the 2014 Brisbane Summit, the G20 members reaffirmed their commitment to the United Nations Framework Convention on Climate Change’s outcomes, as well as to the Green Climate Fund.<sup>8949</sup> Additionally, they committed to “an Action Plan for Voluntary Collaboration on Energy Efficiency, including new work on the efficiency and emissions performance of vehicles, particularly heavy-duty vehicles; networked devices; buildings; industrial processes; and electricity generation; as well as work on financing for energy efficiency.”<sup>8950</sup>

At the 2015 Antalya Summit, the G20 members identified climate change as “one of the greatest challenges of our time” and committed to the below 2°C goal in the Lima Call for Action, as well as the commitments made in the “ambitious agreement in Paris.”<sup>8951</sup> Additionally, members emphasized

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<sup>8944</sup> Cannes Summit Final Declaration – Building on our Common Future: Renewed Collective Action for the Benefit of All, G20 Research Group (Cannes) 4 November 2011. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2011/2011-cannes-declaration-111104-en.html>

<sup>8945</sup> Cannes Summit Final Declaration – Building on our Common Future: Renewed Collective Action for the Benefit of All, G20 Research Group (Cannes) 4 November 2011. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2011/2011-cannes-declaration-111104-en.html>

<sup>8946</sup> G20 Leaders Declaration, G20 Information Centre (Toronto) 19 June 2012. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html>

<sup>8947</sup> G20 Leaders’ Declaration, G20 Information Centre (Toronto) 6 September 2013. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2013/2013-0906-declaration.html>

<sup>8948</sup> G20 Leaders’ Declaration, G20 Information Centre (Toronto) 6 September 2013. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2013/2013-0906-declaration.html>

<sup>8949</sup> G20 Leaders’ Communiqué, G20 Information Centre (Toronto) 16 November 2014. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2014/2014-1116-communiqu.html>

<sup>8950</sup> G20 Leaders’ Communiqué, G20 Information Centre (Toronto) 16 November 2014. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2014/2014-1116-communiqu.html>

<sup>8951</sup> G20 Leaders’ Communiqué, G20 Information Centre (Toronto) 16 November 2015. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2015/151116-communiqu.html>

the importance of “improving energy efficiency, increasing investments in clean energy technologies and supporting related research and development activities.”<sup>8952</sup>

At the 2016 Hangzhou Summit, the G20 members reaffirmed their commitment to the Paris Agreement and the Green Climate Fund, specifically “in providing means of implementation including financial resources to assist developing countries with respect to both mitigation and adaptation actions in line with Paris outcomes.”<sup>8953</sup> Additionally, members restated their commitment to “to building well-functioning, open, competitive, efficient, stable and transparent energy markets, fostering more effective and inclusive global energy architecture to better reflect the changing realities of the world’s energy landscape, and shaping an affordable, reliable, sustainable and low greenhouse gas (GHG) emissions energy future while utilizing energy sources and technologies.”<sup>8954</sup>

At the 2017 Hamburg Summit, the G20 members recognized that “a strong economy and a healthy planet are mutually reinforcing”<sup>8955</sup> and reaffirmed their commitment to reducing greenhouse gas emissions. Members also acknowledged the importance of a collaborative effort in keeping in line with the 2030 Agenda for Sustainable Development, identifying “energy security as one of the guiding principles for the transformation of our energy systems.”<sup>8956</sup> The decision of the United States to withdraw from the Paris Climate Change Agreement was noted, and the leaders of the other G20 members acknowledged the irreversibility of the agreement.

At the 2018 Buenos Aires Summit, the G20 members “recognize[d] the importance of comprehensive adaptation strategies, including investment in infrastructure that is resilient to extreme weather events and disasters,” noting the global warming of 1.5 degrees.<sup>8957</sup> Members also reaffirmed the importance of “energy security, sustainability, resilience, efficiency, affordability and stability” in achieving the broader goal of reduced emissions.<sup>8958</sup>

From 15-16 June 2019, G20 Energy and Environment Ministers met for the first time. They stated that “We, the G20 Environment Ministers, recognize that improving resource efficiency through policies and approaches, such as circular economy, sustainable materials management, the 3Rs (reduce, reuse, recycle) and waste to value, supports our belief that economic growth and environmental protection can and should go hand-in-hand, contributing to the Sustainable Development Goals” and “We recognize the economic and environmental benefits of resource efficiency and circular economy policies in their potential to reduce all types of emissions, and look forward to pursuing these benefits.”<sup>8959</sup>

At the 2019 Osaka Summit, the G20 members recognized the “urgent need for addressing complex and pressing global issues and challenges including climate change; resource efficiency; air, land, freshwater and marine pollution; biodiversity loss; sustainable consumption and production; urban

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<sup>8952</sup> G20 Leaders’ Communiqué, G20 Information Centre (Toronto) 16 November 2015. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2015/151116-communication.html>

<sup>8953</sup> G20 Leaders’ Communiqué: Hangzhou Summit, G20 Information Centre (Toronto) 5 September 2016. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2016/160905-communication.html>

<sup>8954</sup> G20 Leaders’ Communiqué: Hangzhou Summit, G20 Information Centre (Toronto) 5 September 2016. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2016/160905-communication.html>

<sup>8955</sup> G20 Leaders’ Declaration: Shaping an Interconnected World, G20 Information Centre (Toronto) 8 July 2017. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2017/2017-G20-leaders-declaration.html>

<sup>8956</sup> G20 Leaders’ Declaration: Shaping an Interconnected World, G20 Information Centre (Toronto) 8 July 2017. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2017/2017-G20-leaders-declaration.html>

<sup>8957</sup> G20 Leaders’ Declaration: Building Consensus for Fair and Sustainable Development, G20 Information Centre (Toronto) 1 December 2018. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2018/2018-leaders-declaration.html>

<sup>8958</sup> G20 Leaders’ Declaration: Building Consensus for Fair and Sustainable Development, G20 Information Centre (Toronto) 1 December 2018. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2018/2018-leaders-declaration.html>

<sup>8959</sup> Communiqué, G20 Information Centre (Kaurizawa) 16 June 2019. Access Date: 26 March 2021.

<http://www.g20.utoronto.ca/2019/2019-energy-environment-communication.html>

environmental quality; and other environmental issues.”<sup>8960</sup> Key areas of focus on this topic were reducing emissions and fostering resilient development. In regard to resource efficiency, the G20 leaders also emphasized that “We recognize that improving resource efficiency through policies and approaches, such as circular economy, sustainable materials management, the 3Rs (reduce, reuse, recycle) and waste to value, contributes to the SDGs, as well as to addressing a wide range of environmental challenges, enhancing competitiveness and economic growth, managing resources sustainably, and creating jobs.”<sup>8961</sup>

On 28 September 2020, G20 Energy Ministers met virtually, dedicating an entire section of the communiqué to the “Circular Carbon Economy for Cleaner and More Sustainable Energy Systems.” G20 Energy Ministers stated “we endorse the Circular Carbon Economy (CCE) Platform and its “4Rs” framework (Reduce, Reuse, Recycle and Remove) while acknowledging...and recognizing the key importance of reducing greenhouse gas emissions, taking into account system efficiency and national circumstances, including its specific resources endowment and its political, economic, environmental, social, and risk-informed development contexts, noting:

- “Reduce: Lower GHG [greenhouse gas] emissions by utilizing technologies and innovations such as renewable energy and nuclear energy, improving energy productivity and efficiency, and better managing energy supply and consumption. Recognizing the vital role that:
  - “Energy efficiency plays an important role in reducing overall energy demand, avoiding energy waste and increasing energy productivity. We acknowledge the achievements of the G20 cooperation on Energy Efficiency and will encourage future international collaboration to fully utilize the potential energy efficiency;
  - “Renewables, such as wind, solar, hydro, geothermal, marine/ocean, bioenergy and biofuels, are important for providing clean energy systems;
  - “Nuclear plays, in providing clean energy, for those who opt to use it, as well as in enhancing energy security. We note the importance of addressing challenges including decommissioning and final disposal of radioactive waste issues;
- “Reuse: Convert emissions into useful industrial feedstock by deploying Carbon Capture and Utilization (CCU), including Emissions to Value (E2V) and Carbon Recycling (CR). Noting the potential of CCU as an advanced and cleaner technology that can help mitigate the impacts of emissions by capturing and reusing them;
- “Recycle: Neutralize carbon emissions through natural processes and decomposition, including through the use of renewable sources of energy such as biofuels, bioenergy and energy carriers such as methanol, ammonia, and urea representing the natural cycle and the recycling; and
- “Remove: Remove emissions from the atmosphere as well as from heavy industries and facilities through Carbon Capture and Storage (natural and geological) and Direct Air Capture.”<sup>8962</sup>

At the 2020 Riyadh Summit, the G20 members identified “preventing environmental degradation, conserving, sustainably using and restoring biodiversity, preserving our oceans, promoting clean air and clean water, responding to natural disasters and extreme weather events, and tackling climate

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<sup>8960</sup> G20 Osaka Leaders’ Declaration, G20 Information Centre (Toronto) 29 June 2019. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/2019/2019-g20-osaka-leaders-declaration.html>

<sup>8961</sup> G20 Osaka Leaders’ Declaration, G20 Information Centre (Toronto) 29 June 2019. Access Date: 26 March 2021. <http://www.g20.utoronto.ca/2019/2019-g20-osaka-leaders-declaration.html>

<sup>8962</sup> G20 Energy Ministers Communiqué, G20 Information Centre (Toronto) 28 September 2020. Access Date: 26 March 2021. <http://www.g20.utoronto.ca/2020/2020-g20-energy-0928.html>

change” as being among the most “pressing issues of our time.”<sup>8963</sup> They also reaffirmed the importance of international cooperation in addressing climate change, in accordance with the UNFCCC and the Paris Agreement.

### **Commitment Features**

On 21 November 2020, G20 leaders adopted the present commitment at a virtual summit hosted by Riyadh, Saudi Arabia. The commitment reads as the following: “We endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.” This was the first time the G20 leaders used the phrase “circular carbon economy.”

To “endorse” is understood as “to make a public statement of your approval or support for something or someone.”<sup>8964</sup> This verb constitutes a weak politically binding commitment, meaning, this term signifies a firm commitment but is a weak catalyst for compliance.<sup>8965</sup> The definition of this term indicates that actions surrounding this commitment are likely to be more political in nature, rather than policy centered. Actions compliant with this commitment include, but are not limited to, allocating funding towards renewable energy, implementing a more effective waste system, and taking steps towards reducing carbon emissions.

The “circular carbon economy” (CCE), as defined by the G20 in their Riyadh communiqué is a “voluntary, holistic, integrated, inclusive, pragmatic, and complementary approach to promote economic growth while enhancing environmental stewardship through managing emissions in all sectors including, but not limited to, energy, industry, mobility, and food.”<sup>8966</sup> Similarly, the CCE guide defines the CCE as “an integrated and inclusive approach to transitioning toward more comprehensive, resilient, sustainable, and climate-friendly energy systems that support and enable sustainable development. CCE enables countries to take advantage of all technologies, forms of energy, and mitigation opportunities according to resource availability, economics, and national circumstances.”<sup>8967</sup> The CCE Platform incorporates the 4Rs “while acknowledging and recognizing the key importance of reducing greenhouse gas emissions, taking into account system efficiency and national circumstances, including its specific resources endowment and its political, economic, environmental, social and risk-informed development contexts.”<sup>8968</sup>

The CCE “builds on the principles of circular economy and applies them to managing carbon emissions: to reduce the carbon that must be managed in the first place, to reuse carbon as an input to create feedstocks and fuels, to recycle carbon through the natural carbon cycle with bioenergy, and, unique to circular carbon economy, to remove excess carbon and store it.”<sup>8969</sup> To “reduce” refers to carbon reductions and energy efficiency, non-bio renewables, and nuclear electricity. To “reuse” refers to converting CO<sub>2</sub> into fuels, chemicals and building materials, including synthetic

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<sup>8963</sup> Leader’s Declaration, G20 Information Centre (Toronto) 21 November 2020. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2020/2020-g20-leaders-declaration-1121.html>

<sup>8964</sup> Cambridge Dictionary (Cambridge) n.d. Access Date: 26 February 2021.

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

<sup>8965</sup> Compliance Coding Manual for International Institutional Commitments, G7 and G20 research Groups (Toronto) 12 November 2020. Access Date: 26 February 2021. [http://www.g7.utoronto.ca/compliance/Compliance\\_Coding\\_Manual\\_2020.pdf](http://www.g7.utoronto.ca/compliance/Compliance_Coding_Manual_2020.pdf)

<sup>8966</sup> Leader’s Declaration, G20 Research Group (Riyadh) 21 November 2020. Access Date: 26 February 2021.

<http://www.g20.utoronto.ca/2020/2020-g20-leaders-declaration-1121.html>

<sup>8967</sup> Guide to the Circular Carbon Economy, King Abdullah Petroleum Studies and Research Centre (Riyadh) August 2020. Access Date: 26 March 2021. <https://www.cceguide.org/guide/>

<sup>8968</sup> G20 Energy Ministers Communiqué, G20 Information Centre (Toronto) 28 September 2020. Access Date: 26 March 2021. <http://www.g20.utoronto.ca/2020/2020-g20-energy-0928.html>

<sup>8969</sup> Guide to the Circular Carbon Economy, King Abdullah Petroleum Studies and Research Centre (Riyadh) August 2020. Access Date: 26 March 2021. <https://www.cceguide.org/guide/>



hydrocarbon fuels. To “recycle” refers to using bioenergy as fuel and feedstock or to generate electricity.<sup>8970</sup> To “remove” refers to carbon capture and storage,<sup>8971</sup> which involves “the capture of [CO<sub>2</sub>] from fuel combustion or industrial processes, the transport of this CO<sub>2</sub> via ship or pipeline, and either its use as a resource to create valuable products or services or its permanent storage deep underground in geological formations.”<sup>8972</sup> Furthermore, the CCE incorporates the use of hydrogen as “a highly versatile fuel that can help decarbonize hard-to-abate sectors where other low carbon alternatives are not an option (such as transport, industrial applications or buildings) while serving to store energy from renewable generation and assist in balancing its variability.”<sup>8973</sup> Enabling policies that support the CCE are overcoming barriers to financing the carbon capture, utilization and storage (“remove”) and accelerating innovation.<sup>8974</sup>

The term “efficiency” is to be understood as “the good use of time and energy in a way that does not waste any.”<sup>8975</sup> In this context, system efficiency indicates an understanding that policies in accordance with this commitment should be balanced with maintaining the efficiency of existing systems and when possible, should enhance the efficiency of these systems. Examples of systems to be considered include transportation systems, financial systems, and food production systems. These definitions indicate that this commitment takes into account the use of energy and emphasizes policies that reduce energy waste within systems. In cases where a complete shift in policy would disrupt the efficiency of an existing system, policies that commit to transitioning to a CCE will be considered.

In this context, “national circumstance” is to be understood as the consideration of the varying resources available to different G20 members. Meaning, policies in accordance with this compliance will vary between members and should utilize the resources available on a case-by-case basis. For example, members with little access to water as a source of renewable energy due to geographical reasons would be expected to employ other forms of venerable energy. The phrase “national circumstances” also takes into account each member state’s share of global CO<sub>2</sub> emissions when assessing policies aimed at reducing emissions.

To achieve full compliance (+1), G20 members must take actions in all 4Rs, including in the hydrogen or enabling policies aspect of the CCE. These actions must be strong actions where a G20 member takes concrete action on at least three of the 4Rs and partial action on the final of the 4Rs, as well as either hydrogen or enabling policies. Concrete actions include implementing policies, changing or drafting laws, initiating or implementing a new program or project, or contributing technical or financial assistance to an existing program or project. If a G20 member takes concrete action in all 4Rs, without specifically targeting the hydrogen or enabling practices, it would still be considered full compliance.

For partial compliance (0), a G20 member would take strong action in two three of the 4Rs without taking into consideration hydrogen or enabling policies.

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<sup>8970</sup> Guide to the Circular Carbon Economy, King Abdullah Petroleum Studies and Research Centre (Riyadh) August 2020. Access Date: 26 March 2021. <https://www.cceguide.org/guide/>

<sup>8971</sup> Guide to the Circular Carbon Economy, King Abdullah Petroleum Studies and Research Centre (Riyadh) August 2020. Access Date: 26 March 2021. <https://www.cceguide.org/guide/>

<sup>8972</sup> Carbon capture, utilization and storage, International Energy Agency (Paris) 5 November 2020. Access Date: 26 March 2021. <https://www.iea.org/fuels-and-technologies/carbon-capture-utilisation-and-storage>

<sup>8973</sup> Guide to the Circular Carbon Economy, King Abdullah Petroleum Studies and Research Centre (Riyadh) August 2020. Access Date: 26 March 2021. <https://www.cceguide.org/guide/>

<sup>8974</sup> Guide to the Circular Carbon Economy, King Abdullah Petroleum Studies and Research Centre (Riyadh) August 2020. Access Date: 26 March 2021. <https://www.cceguide.org/guide/>

<sup>8975</sup> Cambridge Dictionary (Cambridge) n.d. Access Date: 26 February 2021.

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

If a G20 member only takes partial action, such as reaffirmation of the commitment or attending a meeting, on one or two of the 4Rs, it would be non-compliance (-1). Similarly, if a G20 member takes no action, it would be considered non-compliance.

### Scoring Guidelines

-1	G20 member does not take strong action on any of the 4Rs.
0	G20 member takes strong action in TWO or THREE of the 4Rs, without taking into consideration hydrogen or enabling policies.
+1	G20 member takes strong action on THREE or FOUR of the 4Rs, while also taking into consideration hydrogen AND/OR enabling policies.

*Compliance Director: Jenna Im  
Lead Analyst: Omar Kassam*

### Argentina: +1

Argentina has fully complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 1 December 2020, the Ministry of Environment and Sustainable Development introduced a working instruction that hopes to promote a Sustainable Public Administration. This methodology was developed to analyze the level of sustainability in areas including: “energy management; water management, waste management; maintenance, order and cleanliness; rationalization of the use of paper and implementation of the electronic process; sustainable shopping; sustainable mobility and telework; surfaces and green spaces, among others.”<sup>8976</sup>

On 2 December 2020, the Ministry of Environment and Sustainable Development announced it would implement a biodigester in the Bolivian Community Fruit and Vegetable Concentrator Market in Buenos Aires. The goal is to reduce organic waste and use the process of biodigestion to generate electricity.<sup>8977</sup>

On 12 December 2020, President Alberto Fernández announced Argentina’s goal of reducing greenhouse emissions by 25.7 per cent and reaching carbon neutrality by 2050 at the Climate Ambition Summit.<sup>8978</sup> The President stated: “Argentina reaffirms its commitment to the Paris Agreement and adopts climate change as a State policy.”<sup>8979</sup> It was also announced that Argentina

<sup>8976</sup> Cabandié and Montero headed the first meeting of the Internal Control Committee of the Ministry of the Environment, Ministry of Environment and Sustainable Development (Buenos Aires) 1 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/cabandie-y-montero-encabezaron-la-primera-reunion-del-comite-de-control-interno-deln>

<sup>8977</sup> The fruit and vegetable market "Bolivian Community" of Escobar will soon have a biodigester, Ministry of Environment and Sustainable Development (Buenos Aires) 2 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/el-mercado-frutihorticola-comunidad-boliviana-de-escobar-contara-proximamente-con-un>

<sup>8978</sup> Cabandié: "We are committing ourselves to the world to a much more ambitious reduction of greenhouse gases", Ministry of Environment and Sustainable Development (Buenos Aires) 12 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/cabandie-nos-estamos-comprometiendo-ante-el-mundo-una-reduccion-de-gases-de-efecto>

<sup>8979</sup> Argentina announced its new commitment in the fight against climate change, Ministry of Environment and Sustainable Development (Buenos Aires) 12 December 2020. Access Date: 12 March 2021.

<https://www.argentina.gob.ar/noticias/argentina-anuncio-su-nuevo-compromiso-en-la-lucha-contra-el-cambio-climatico>

would start preparing its National Plan for Adaptation and Mitigation to Climate Change and involve the participation of actors from public and private sectors.<sup>8980</sup>

On 14 December 2020, Minister of Environment and Sustainable Development Juan Cabandié presented the new Nationally Determined Contribution to the year 2030.<sup>8981</sup> It seeks to reaffirm Argentina's commitment to climate action. Through committing to delivering this commitment to the United Nations Framework Convention on Climate Change at the end of the year. Additionally, President Fernández announced that Argentina has identified carbon neutrality as the goal for 2050.

On 16 December 2020, Minister Cabandié announced the Ministry of Environment and Sustainable Development's contributions of ARS367 million to Santiago del Estero.<sup>8982</sup> Of the ARS367 million allocated to the city, ARS6.9 million will be used for renovation works, to be carried out through work cooperatives in the area, with the inclusion of recycled materials for urban furniture. Another ARS80 million is allocated for the purchase of machinery aimed at optimizing the management of urban solid waste and enhancing its classification, and separation. The remaining ARS280 million will be used for the national environmental portfolio through the Bosques Nativos y Comunidad project which will incorporate a variety of initiatives, namely forest regeneration, improved wood-burning stoves, and rainwater collection roofs.

On 17 December 2020, Ambassador of Portugal in Argentina José Ludovice and Minister Cabandié reaffirmed their commitment to continue two collaborative environmental and sustainable development projects. One of the projects, called "Program of systematization and online monitoring of the circular economy," aims to solicit statistical information to better understand urban solid waste and reinforce the circular economy.<sup>8983</sup>

On 30 December 2020, Minister Cabandié signed agreements for six projects under the Comprehensive Common House Plan, investing a total of ARS33 million.<sup>8984</sup> The Common House Program aims to promote sustainability and environmentalism, with particular commitment to the circular economy. The six projects are described as the following: the remodeling of the sustainable public space in Plaza Eva Perón, located in Puerto Iguazú, Misiones province; the improvement and development of the sustainable plaza Campanas del Rosario, located in the town of Fray Mamerto Esquiú in the province of Catamarca; the creation of the Villa Pehuena Environmental Park, in the province of Neuquén; the construction of a shed that will allow urban solid waste treatment tasks in

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<sup>8980</sup> Cabandié: "We are committing ourselves to the world to a much more ambitious reduction of greenhouse gases", Ministry of Environment and Sustainable Development (Buenos Aires) 12 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/cabandie-nos-estamos-comprometiendo-ante-el-mundo-una-reduccion-de-gases-de-efecto>

<sup>8981</sup> Climate change: the government advances in the commitment towards an environmentally sustainable development, Ministry of Environment and Sustainable Development (Buenos Aires) 14 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/cambio-climatico-el-gobierno-avanza-en-el-compromiso-hacia-un-desarrollo-ambientalmente>

<sup>8982</sup> "We have to do everything in our power to continue reversing the historical disadvantages that the North had.", Ministry of Environment and Sustainable Development (Buenos Aires) 16 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/tenemos-que-hacer-todo-lo-que-este-nuestro-alcance-para-seguir-revirtiendolo-las-desventajas>

<sup>8983</sup> Argentina and Portugal promote cooperation projects in the field of environment and sustainable development, Ministry of Environment and Sustainable Development (Buenos Aires) 17 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/argentina-y-portugal-impulsan-proyectos-de-cooperacion-en-materia-de-ambiente-y-desarrollo>

<sup>8984</sup> Cabandié signed agreements of the Comprehensive Common House Plan with municipalities of the country, Ministry of Environment and Sustainable Development (Buenos Aires) 30 December 2020. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/cabandie-firmo-convenios-del-plan-integral-casa-comun-con-municipios-del-pais>

El Pingo, Entre Ríos; and finally, the construction of a municipal nursery in Alto Río Senguer and the enhancement of the urban nature reserve located in Cholila, both located in Chubut.<sup>8985</sup>

On 30 December 2020, Minister Cabandié stated that the Ministry of Environment and Sustainable Development is making deliveries in 60 municipalities throughout Argentina to provide better infrastructure and equipment for waste management workers, investing a total of ARS60 million. The goal is to make improvements within local waste management systems across Argentina.<sup>8986</sup>

On 31 December 2020, the Ministry of Environment and Sustainable Development published the Second Contribution Determined at the National Level, which outlines Argentina's commitment to Paris Agreement objectives. This Second Contribution aims to improve adaptations to climate change and promote sustainable development in accordance with the Paris Agreement. In these objectives, Argentina commits to limiting gas emissions to 26 per cent lower than the goal identified in 2016.<sup>8987</sup>

On 22 January 2021, the Ministry of Environment and Sustainable Development deposited its ratification instrument of the Escazú Agreement before the Secretary-General of the United Nations on behalf of the Argentine Government. The Agreement, signed by 24 countries in Latin American and the Caribbean, outlines protocols for protecting the environment and points to Argentina's commitment to sustainability.<sup>8988</sup>

On 26 January 2021, the Ministry of Environment and Sustainable Development signed an agreement with the municipality of Escobar and the Asociación Civil Colectividad Boliviana de Escobar to install a biodigester in the region's Fruit and Vegetable Market. The biodigester will generate clean electricity from the organic waste and also produce natural biofertilizer.<sup>8989</sup>

On 5 February 2021, the Ministers of Environment of Chile and Argentina announced a collaborative initiative to share good practices for the implementation of climate action. The goal is to uphold the Paris Agreement by sharing resources and working with other Latin American and Caribbean countries.<sup>8990</sup>

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<sup>8985</sup> Cabandié signed agreements of the Comprehensive Common House Plan with municipalities of the country, Ministry of Environment and Sustainable Development (Buenos Aires) 30 December 2020. Access Date: 12 March 2021.

<https://www.argentina.gob.ar/noticias/cabandie-firmo-convenios-del-plan-integral-casa-comun-con-municipios-del-pais>

<sup>8986</sup> Cabandié led the delivery of machinery for Escobar's waste management, Ministry of Environment and Sustainable Development (Buenos Aires) 30 December 2020. Access Date: 12 March 2021.

<https://www.argentina.gob.ar/noticias/cabandie-encabezo-la-entrega-de-maquinaria-para-la-gestion-de-residuos-de-escobar>

<sup>8987</sup> Climate change: Environment made official the Second Contribution Determined at the National Level, Ministry of Environment and Sustainable Development (Buenos Aires) 31 December 2020. Access Date: 12 March 2021.

<https://www.argentina.gob.ar/noticias/cambio-climatico-ambiente-oficializo-la-segunda-contribucion-determinada-nivel-nacional>

<sup>8988</sup> Argentina facilitates the entry into force of the Escazú Agreement, Ministry of Environment and Sustainable Development (Buenos Aires) 22 January 2021. Access Date: 12 March 2021.

<https://www.argentina.gob.ar/noticias/argentina-facilita-la-entrada-en-vigor-del-acuerdo-de-escazu>

<sup>8989</sup> Environment promotes the generation of renewable energy in the Escobar Fruit and Vegetable Market, Ministry of Environment and Sustainable Development (Buenos Aires) 26 January 2021. Access Date: 12 March 2021.

<https://www.argentina.gob.ar/noticias/ambiente-impulsa-la-generacion-de-energia-renovable-en-el-mercado-frutihorticola-de-escobar>

<sup>8990</sup> Climate finance for Latin America and the Caribbean, Ministry of Environment and Sustainable Development (Buenos Aires) 5 February 2021. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/finanzas-climaticas-para-america-latina-y-el-caribe>

On 22 February 2021, the Ministry of Environment and Sustainable Development announced it will implement a biogas plant in the Gualaguaychú Ecopark of Entre Ríos. The plant will reduce greenhouse gas emissions while converting the biogas into electrical energy.<sup>8991</sup>

On 22 February 2021, Minister Cabandié announced that the Ministry of Environment and Sustainable Development tripled all provincial budgets towards the preservation of forest basins. The increased budget will encourage provinces to work to protect native forests. Additionally, a donation of ARS82 million was made to the Green Climate Fund for the next six years.<sup>8992</sup>

On 1 March 2021, President Fernández highlighted Argentina's commitment to climate sustainability, the circular economy, protection of native forests and the creation of new protected areas. The President stated, "We are absolutely committed to the principles established in the Paris Agreement." The President then announced Argentina's commitment to active policy promotion of the circular economy to "eradicate open-air dumps, improve the final disposal of urban solid waste and the working conditions of urban waste collectors."<sup>8993</sup>

On 16 March 2021, Minister Cabandié and Head of the Ministry of Agrarian Development of Buenos Aires Javier Rodríguez signed an agreement establishing collaboration between the two organizations. The agreement aims to "encourage innovative proposals that incorporate environmental criteria in order to design and implement specific programs, plans and projects at the local level for sustainable development in the provincial territory."<sup>8994</sup>

On 25 March 2021, the Ministry of Environment and Sustainable Development signed a financial and technical collaborative protocol with the Environmental Fund of the Ministry of Environment and Climate Action of Portugal.<sup>8995</sup> The Ministry of Environment and Sustainable Development will receive EUR200,000 as a result.<sup>8996</sup> The protocol will finance two initiatives: a national platform to monitor the progress of the management of urban solid waste, as well as comprehensive waste management in coastal areas.<sup>8997</sup> The goal of the protocol is to strengthen cooperation on education

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<sup>8991</sup> The Ministry will install a biogas plant in the Gualaguaychú Ecopark, Ministry of Environment and Sustainable Development (Buenos Aires) 22 February 2021. Access Date: 12 March 2021.

<sup>8992</sup> Cabandié: "In the region we are indebted countries, but we are also environmental creditors because the entire planet benefits from our ecosystems", Ministry of Environment and Sustainable Development (Buenos Aires) 22 February 2021. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/cabandie-en-la-region-somos-paises-endeudados-pero-tambien-somos-acreedores-ambientales>

<sup>8993</sup> Minister Cabandié accompanied the President at the opening of the ordinary sessions of the National Congress, Ministry of Environment and Sustainable Development (Buenos Aires) 1 March 2021. Access Date: 12 March 2021. <https://www.argentina.gob.ar/noticias/el-ministro-cabandie-acompano-al-presidente-en-la-apertura-de-las-sesiones-ordinarias-del>

<sup>8994</sup> Environment signed an institutional collaboration agreement with the Ministry of Agrarian Development of Buenos Aires, Ministry of Environment and Sustainable Development (Buenos Aires) 16 March 2021. Access Date: 18 March 2021. <https://www.argentina.gob.ar/noticias/ambiente-celebro-un-acuerdo-de-colaboracion-institucional-con-el-ministerio-de-desarrollo>

<sup>8995</sup> Argentina will receive financing from Portugal to carry out projects to tackle the problem of waste, Ministry of Environment and Sustainable Development (Buenos Aires) 25 March 2021. Access Date: 27 April 2021. <https://www.argentina.gob.ar/noticias/argentina-recibira-financiamiento-de-portugal-para-realizar-proyectos-de-abordaje-de-la>

<sup>8996</sup> Argentina will receive financing from Portugal to carry out projects to tackle the problem of waste, Ministry of Environment and Sustainable Development (Buenos Aires) 25 March 2021. Access Date: 27 April 2021. <https://www.argentina.gob.ar/noticias/argentina-recibira-financiamiento-de-portugal-para-realizar-proyectos-de-abordaje-de-la>

<sup>8997</sup> Argentina will receive financing from Portugal to carry out projects to tackle the problem of waste, Ministry of Environment and Sustainable Development (Buenos Aires) 25 March 2021. Access Date: 27 April 2021. <https://www.argentina.gob.ar/noticias/argentina-recibira-financiamiento-de-portugal-para-realizar-proyectos-de-abordaje-de-la>

for sustainable development, waste management, and circular economy.<sup>8998</sup> This commitment aims to increase awareness surrounding recycling and waste management.<sup>8999</sup>

On 30 March 2021, the Chief of the Cabinet of Ministers Santiago Cafiero and the Minister of Economy Martín Guzmán signed a modification of the 2021 National Budget raising the budget of the Ministry of Environment and Sustainable Development to more than ARS11.33 million, 300 per cent more than the 2020 budget.<sup>9000</sup> Also, the Inter-American Development Bank loan financing Argentina's Comprehensive Urban Solid Waste Management Program increased by ARS1.937 million and will go towards the eradication of open pit garbage dumps and optimizing urban solid waste disposal.<sup>9001</sup> These budgetary increases will provide more resources for the Ministry of Environment and Sustainable Development and "reaffirms [Argentina's] commitment to environmental policy," said Minister Cabanié.<sup>9002</sup>

On 10 April 2021, President Fernández and the Ministry of Environment and Sustainable Development launched a forest fire prevention campaign, aiming to raise awareness about the importance of protecting native forests.<sup>9003</sup> The Ministry of Environment and Sustainable Development recognized the necessity of the country's forests and reported that most forest fires are the result of recreational fires, fires used to burn waste and clearing of the land for livestock or urbanization.<sup>9004</sup> The campaign works towards preserving Argentina's forests, which serve as important carbon sinks.

On 22 April 2021, President Fernández renewed Argentina's commitment to the Paris Agreement while vowing to increase climate ambitions during the Leaders Summit on Climate hosted by President Joseph Biden of the United States.<sup>9005</sup> President Fernández announced that Argentina is committed to ensuring 30 per cent of the national energy matrix is developed using renewable energy

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<sup>8998</sup> Argentina will receive financing from Portugal to carry out projects to tackle the problem of waste, Ministry of Environment and Sustainable Development (Buenos Aires) 25 March 2021. Access Date: 27 April 2021. <https://www.argentina.gob.ar/noticias/argentina-recibira-financiamiento-de-portugal-para-realizar-proyectos-de-abordaje-de-la>

<sup>8999</sup> Argentina will receive financing from Portugal to carry out projects to tackle the problem of waste, Ministry of Environment and Sustainable Development (Buenos Aires) 25 March 2021. Access Date: 27 April 2021. <https://www.argentina.gob.ar/noticias/argentina-recibira-financiamiento-de-portugal-para-realizar-proyectos-de-abordaje-de-la>

<sup>9000</sup> The budget of the Ministry of Environment will be 300% higher than that of 2020, Ministry of Environment and Sustainable Development (Buenos Aires) 30 March 2021. Access Date: 27 April 2021.

<https://www.argentina.gob.ar/noticias/el-presupuesto-del-ministerio-de-ambiente-sera-300-mayor-que-el-de-2020>

<sup>9001</sup> The budget of the Ministry of Environment will be 300% higher than that of 2020, Ministry of Environment and Sustainable Development (Buenos Aires) 30 March 2021. Access Date: 27 April 2021.

<https://www.argentina.gob.ar/noticias/el-presupuesto-del-ministerio-de-ambiente-sera-300-mayor-que-el-de-2020>

<sup>9002</sup> The budget of the Ministry of Environment will be 300% higher than that of 2020, Ministry of Environment and Sustainable Development (Buenos Aires) 30 March 2021. Access Date: 27 April 2021.

<https://www.argentina.gob.ar/noticias/el-presupuesto-del-ministerio-de-ambiente-sera-300-mayor-que-el-de-2020>

<sup>9003</sup> The national government launched a forest fire prevention campaign, Ministry of Environment and Sustainable Development (Buenos Aires) 10 April 2021. Access Date: 27 April 2021. <https://www.argentina.gob.ar/noticias/el-gobierno-nacional-lanzo-una-campana-de-prevencion-de-incendios-forestales>

<sup>9004</sup> The national government launched a forest fire prevention campaign, Ministry of Environment and Sustainable Development (Buenos Aires) 10 April 2021. Access Date: 27 April 2021. <https://www.argentina.gob.ar/noticias/el-gobierno-nacional-lanzo-una-campana-de-prevencion-de-incendios-forestales>

<sup>9005</sup> "Argentina has put climate and environmental action at the center of its convictions", Ministry of Environment and Sustainable Development (Buenos Aires) 22 April 2021. Access Date: 27 April 2021.

<https://www.argentina.gob.ar/noticias/argentina-ha-puesto-la-accion-climatica-y-ambiental-en-el-centro-de-sus-convicciones>

and promoting energy efficient measures in transportation and construction industries.<sup>9006</sup> These measures focus on encouraging and increasing the use of renewable energy to lower the country's emissions.

On 1 May 2021, the Ministry of Environment and Sustainable Development announced it will launch a virtual course on the comprehensive management of electrical and electronic equipment waste.<sup>9007</sup> The course is aiming to strengthen Argentina's initiatives by improving regional environmental management of persistent organic pollutants in electrical and electronic equipment waste.<sup>9008</sup> The goal is to reduce potential emissions that can come from electrical waste and work towards a circular economy.<sup>9009</sup>

On 8 May 2021, the Ministry of Environment and Sustainable Development announced the creation of Argentina's largest national park, located in the province of Córdoba.<sup>9010</sup> The park is designed to conserve and expand hectares of protected areas to preserve biodiversity and promote sustainability.<sup>9011</sup> The region of the national park has ecosystems that can control floods, replenish groundwater, retain sediments and nutrients, purify water, and regulate the regional climate.<sup>9012</sup>

On 8 June 2021, the Ministry of Environment and Sustainable Development, the Secretary of Environmental Control and Monitoring and the head of the United Nations Development Program in Argentina signed a memorandum of understanding to establish a cooperation framework.<sup>9013</sup> This framework is focused on strengthening pollution monitoring and control systems, increasing climate action efforts such as air quality monitoring, including citizens in the development of public policies

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<sup>9006</sup> "Argentina has put climate and environmental action at the center of its convictions", Ministry of Environment and Sustainable Development (Buenos Aires) 22 April 2021. Access Date: 27 April 2021.

<https://www.argentina.gob.ar/noticias/argentina-ha-puesto-la-accion-climatica-y-ambiental-en-el-centro-de-sus-convicciones>

<sup>9007</sup> Ambiente will start next Monday a virtual course on comprehensive management of electrical and electronic equipment waste, Ministry of Environment and Sustainable Development (Buenos Aires) 1 May 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/ambiente-iniciara-el-lunes-proximo-un-curso-virtual-sobre-gestion-integral-de-residuos-de>

<sup>9008</sup> Ambiente will start next Monday a virtual course on comprehensive management of electrical and electronic equipment waste, Ministry of Environment and Sustainable Development (Buenos Aires) 1 May 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/ambiente-iniciara-el-lunes-proximo-un-curso-virtual-sobre-gestion-integral-de-residuos-de>

<sup>9009</sup> Ambiente will start next Monday a virtual course on comprehensive management of electrical and electronic equipment waste, Ministry of Environment and Sustainable Development (Buenos Aires) 1 May 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/ambiente-iniciara-el-lunes-proximo-un-curso-virtual-sobre-gestion-integral-de-residuos-de>

<sup>9010</sup> Cabandié announced the creation of a new national park in the province of Córdoba, it will be one of the largest in the country, Ministry of Environment and Sustainable Development (Buenos Aires) 8 May 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/cabandie-anuncio-la-creacion-de-un-nuevo-parque-nacional-en-la-provincia-de-cordoba-sera>

<sup>9011</sup> Cabandié announced the creation of a new national park in the province of Córdoba, it will be one of the largest in the country, Ministry of Environment and Sustainable Development (Buenos Aires) 8 May 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/cabandie-anuncio-la-creacion-de-un-nuevo-parque-nacional-en-la-provincia-de-cordoba-sera>

<sup>9012</sup> Cabandié announced the creation of a new national park in the province of Córdoba, it will be one of the largest in the country, Ministry of Environment and Sustainable Development (Buenos Aires) 8 May 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/cabandie-anuncio-la-creacion-de-un-nuevo-parque-nacional-en-la-provincia-de-cordoba-sera>

<sup>9013</sup> Environment signed a memorandum of understanding with the United Nations Development Program, Ministry of Environment and Sustainable Development (Buenos Aires) 8 June 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/ambiente-suscribio-un-memorando-de-entendimiento-con-el-programa-de-las-naciones-unidas>

and supporting national and regional efforts to accelerate the achievement of the 2030 Agenda and the Sustainable Development Goals.<sup>9014</sup>

On 24 June 2021, Minister Cabandié signed an agreement with the Ministry of Energy to invest ARS375 million to supply renewable energy to the buildings of nine national parks.<sup>9015</sup> 53 photovoltaic systems will be introduced to protected areas in Neuquén; Quebrada del Condorito, from Córdoba; Islands of Santa Fe, of Santa Fe; El Palmar, from Entre Ríos; Talampaya, from La Rioja; Aconquija, from Tucumán; Los Cardones, from Salta; Calilegua, from Jujuy; and Copo, from Santiago del Estero.<sup>9016</sup> These measures focus on encouraging and increasing the use of renewable energy to lower the member's emissions.<sup>9017</sup>

On 5 July 2021, the Ministry of Environment and Sustainable Development launched the National Program for the Prevention of Environmental Risk, which encourages public policies that seek to inspect and prevent environmental pollution.<sup>9018</sup> This initiative aims to strengthen technical-administrative capacities of environmental authorities and recognize problems at the interjurisdictional and provincial level in terms of environmental policy.<sup>9019</sup> The goals are to develop a platform for an internal control panel that systematizes environmental data and create a map illustrating environmental risks at the national level.<sup>9020</sup>

Argentina has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove). It has complied with its commitment to “recycle” and “reuse” carbon emissions through the implementation of a biogas plant and plans to install a biodigester. It has also complied with its commitment to reducing carbon emissions by establishing more ambitious emissions reduction goals and increasing Argentina's use of renewable energy-efficient sources. Argentina has also supported initiatives to remove carbon

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<sup>9014</sup> Environment signed a memorandum of understanding with the United Nations Development Program, Ministry of Environment and Sustainable Development (Buenos Aires) 8 June 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/ambiente-suscribio-un-memorando-de-entendimiento-con-el-programa-de-las-naciones-unidas>

<sup>9015</sup> Minister Cabandié signed an agreement in Neuquén to supply renewable energy to national parks, Ministry of Environment and Sustainable Development (Buenos Aires) 24 June 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/el-ministro-cabandie-firmo-en-neuquen-un-convenio-para-abastecer-de-energia-renovable>

<sup>9016</sup> Minister Cabandié signed an agreement in Neuquén to supply renewable energy to national parks, Ministry of Environment and Sustainable Development (Buenos Aires) 24 June 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/el-ministro-cabandie-firmo-en-neuquen-un-convenio-para-abastecer-de-energia-renovable>

<sup>9017</sup> Minister Cabandié signed an agreement in Neuquén to supply renewable energy to national parks, Ministry of Environment and Sustainable Development (Buenos Aires) 24 June 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/el-ministro-cabandie-firmo-en-neuquen-un-convenio-para-abastecer-de-energia-renovable>

<sup>9018</sup> The Ministry strengthens its commitment to the prevention of environmental pollution, Ministry of Environment and Sustainable Development (Buenos Aires) 5 July 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/el-ministerio-fortalece-su-compromiso-con-la-prevencion-de-la-contaminacion-ambiental>

<sup>9019</sup> The Ministry strengthens its commitment to the prevention of environmental pollution, Ministry of Environment and Sustainable Development (Buenos Aires) 5 July 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/el-ministerio-fortalece-su-compromiso-con-la-prevencion-de-la-contaminacion-ambiental>

<sup>9020</sup> The Ministry strengthens its commitment to the prevention of environmental pollution, Ministry of Environment and Sustainable Development (Buenos Aires) 5 July 2021. Access Date: 23 July 2021. <https://www.argentina.gob.ar/noticias/el-ministerio-fortalece-su-compromiso-con-la-prevencion-de-la-contaminacion-ambiental>



emissions through its investments in educational campaigns and activities towards forest protection. However, it falls short on its commitment to hydrogen and related enabling policies.

Thus, Argentina receives a score of +1.

*Analyst: Amanda Wang*

### **Australia: +1**

Australia has fully complied with its commitment endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 18 December 2020, Australia announced it will fund a feasibility study into turning a former underground coal mine into pumped hydro energy storage, contributing AUD4.16 million to the AUD13.04 million project. If feasible, the site could supply an additional 600 megawatts of renewable energy to the grid. If the trial and study are successful, it could result in repurposing other retired coal sites into producing renewable energy.<sup>9021</sup>

On 30 December 2020, Australia submitted a new climate pledge to the United Nations, stating it will “meet and beat” the 2030 targets of reducing greenhouse gas emissions by 26 to 28 per cent below the country’s 2005 emission levels. The report states Australia’s reduction funds have been effective and delivered 60 million tons of abatement. The report includes the anticipated investment of AUD18 billion over the period to 2030. The package also includes an additional AUD2 billion for a Climate Solutions Fund to continue investment in low-cost abatement through the Emissions Reduction Fund and to support the adoption of new and emerging low emissions technologies inaccessible sectors.<sup>9022</sup>

On 17 February 2021, Australia’s Entrepreneurs’ Programme financed research and projects to motivate environmental action through seven grants.<sup>9023</sup> The Sea Forest Grant which will cultivate a special seaweed to reduce livestock emission by more than 99 per cent has been granted AUD1 million.<sup>9024</sup> UPowr, a company that offers end to end service for household solar and battery installations have received an AUD493,746 grant. Monsoon Aquatics has been granted AUD304,058 to commercialize its coral reproduction process to rebuild reefs.<sup>9025</sup>

On 25 February 2021, Australia, through the Clean Energy Finance Corporation, finalized their AUD160 million investment in Neoen’s Victorian Big Battery to support the integration of renewable energy into the grid. The battery will secure the state of Victoria’s energy grid while

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<sup>9021</sup> Renewable future for retired coal mines, Department of Industry, Science, Energy and Resources (Canberra, Australia) 18 December 2020. Access Date: 12 March 2021. <https://www.energy.gov.au/news-media/news/renewable-future-retired-coal-mine>

<sup>9022</sup> Australia’s First Nationally Determined Contribution, United Nations Framework Convention on Climate Change (Bonn, Germany) 30 December 2020. Access Date: 14 March 2021. <https://www4.unfccc.int/sites/ndcstaging/Pages/Party.aspx?party=AUS&prototype=1>

<sup>9023</sup> Grants for environmental game changers, Department of Industry, Science, Energy and Resources (Canberra, Australia) 17 February 2021. Access Date: 17 March 2021. <https://www.energy.gov.au/news-media/news/grants-environmental-game-changers>

<sup>9024</sup> Environmental game changes lead the way amongst Entrepreneurs’ Programme grant recipients, Australian Government Business (Canberra, Australia) 15 February 2021. Access Date: 17 March 2021. <https://business.gov.au/news/environmental-game-changers-lead-the-way-amongst-entrepreneurs-programme-grant-recipients>

<sup>9025</sup> Grants for environmental game changers, Department of Industry, Science, Energy and Resources (Canberra, Australia) 17 February 2021. Access Date: 17 March 2021. <https://www.energy.gov.au/news-media/news/grants-environmental-game-changers>

reducing carbon emissions. This project will play a large part in helping Victoria reach its target of 50 per cent of energy being used from renewable sources.<sup>9026</sup>

On 4 March 2021, Australia launched the National Plastics Plan.<sup>9027</sup> The plan is set to combat different plastics, on different fronts. Plastics on beaches will be banned. The plan aims to work with the industry to phase out fragmentable plastics by 2022.<sup>9028</sup> Polyvinyl chloride packaging labels will be phased out by the end of 2022. Expanded polystyrene from loose packaging fills and moulded packaging in consumer packaging will be phased out by July 2022. Ending polystyrene packaging for takeaway containers and phasing in microplastic filters in washing machines by the end of 2022.<sup>9029</sup> The Australian Recycling Label will be on at least 80 per cent of supermarket products by 2023 and 100 per cent of packaging will be reusable, recyclable or compostable by 2025 while also introducing an AUD20 million investment to create a waste data visualization platform.<sup>9030</sup>

On 19 March 2021, Australia signed on as a member of the Gglobal Adaptation Action Coalition. Australia has announced its commitment to practical climate adaptation strategies, with on-ground support for vulnerable communities. Australia's membership in the coalition builds on Prime Minister Scott Morrison's commitment to global climate action. The Ministry for Environment stated that Australia is committed to building partnerships that drive adaptation to protect and grow our economies, communities and the environment. At the conference, Australia also noted that the country is working on climate resilience and adaptation strategy.<sup>9031</sup>

On 18 April 2021, the Australian government, in collaboration with the state of South Australia, signed an AUD1.1 billion deal to finance measures aimed at making energy more affordable and to help curb carbon emissions.<sup>9032</sup> This money will be used in areas such as carbon storage, implementing electric vehicles, hydrogen and other projects with the aim to reduce emissions.<sup>9033</sup>

On 21 April 2021, Prime Minister Morrison pledged to spend AUD417 million on hydrogen and carbon capture.<sup>9034</sup> He stated that it is essential for Australia to position itself in a state where industries are supported while also contributing to lower emissions.<sup>9035</sup> The funding is part of the

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<sup>9026</sup> Boosting the security of Victoria's energy grid, Department of Industry, Science, Energy and Resources (Canberra, Australia) 25 February 2021. Access Date: 15 March 2021. <https://www.energy.gov.au/news-media/news/boosting-security-victorias-energy-grid>

<sup>9027</sup> National Plastics Plan, Department of Agriculture, Water and the Environment (Canberra, Australia) 4 March 2021. Access Date: 15 March 2021. <https://www.environment.gov.au/protection/waste/plastics-and-packaging/national-plastics-plan>

<sup>9028</sup> National Plastics Plan, Department of Agriculture, Water and the Environment (Canberra, Australia) 4 March 2021. Access Date: 15 March 2021. <https://www.environment.gov.au/protection/waste/plastics-and-packaging/national-plastics-plan>

<sup>9029</sup> National Plastics Plan, Department of Agriculture, Water and the Environment (Canberra, Australia) 4 March 2021. Access Date: 15 March 2021. <https://www.environment.gov.au/protection/waste/plastics-and-packaging/national-plastics-plan>

<sup>9030</sup> National Plastics Plan, Department of Agriculture, Water and the Environment (Canberra, Australia) 4 March 2021. Access Date: 15 March 2021. <https://www.environment.gov.au/protection/waste/plastics-and-packaging/national-plastics-plan>

<sup>9031</sup> Australia joins coalition for climate adaptation action, Department of Agriculture, Water, and the Environment (Canberra, Australia) 19 March 2021. Access Date: 20 March 2021. <https://minister.awe.gov.au/lev/media-releases/australia-joins-coalition-climate-adaptation-action>

<sup>9032</sup> Energy and Emissions Reduction Agreement with South Australia, Prime Minister of Australia (Sydney) 19 April 2021. Access Date: 25 April 2021. <https://www.pm.gov.au/media/energy-and-emissions-reduction-agreement-south-australia>

<sup>9033</sup> Energy and Emissions Reduction Agreement with South Australia, Prime Minister of Australia (Sydney) 19 April 2021. Access Date: 25 April 2021. <https://www.pm.gov.au/media/energy-and-emissions-reduction-agreement-south>

<sup>9034</sup> Australia to spend \$420 mln on hydrogen, carbon capture projects, PM to say, Financial Post (Canberra) 20 April 2021. Access Date: 27 April 2021. <https://financialpost.com/pm/business-pmn/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

<sup>9035</sup> Australia to spend \$420 mln on hydrogen, carbon capture projects, PM to say, Financial Post (Canberra) 20 April 2021. Access Date: 27 April 2021. <https://financialpost.com/pm/business-pmn/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

government's economic blueprint for 2022's fiscal year, and is yet to receive Parliament approval.<sup>9036</sup> This expenditure is part of the government's pledge to spend AUS18 billion over the next 10 years to meet climate goals.<sup>9037</sup>

On 22 April 2021, Prime Minister Morrison announced AUD565.8 million to back low emissions international technology partnerships and initiatives by co-funding research and demonstration projects.<sup>9038</sup>

On 23 April 2021, the Australian government announced a AUS100 million initiative to protect the Australian oceans.<sup>9039</sup> This ocean and coastal management will contribute to the reduction of Australia's emissions. The investment will target blue carbon systems involving seagrass and mangroves to draw carbon out of the atmosphere.<sup>9040</sup>

On 4 May 2021, Australia awarded AUD103 million to back three green hydrogen projects.<sup>9041</sup> This commitment increases previous funding by around 50 per cent.<sup>9042</sup> The federal government is seeking to speed up the commercial production of gas using renewable resources to reduce carbon emissions, not only in Australia, but also internationally.<sup>9043</sup>

On 11 May 2021, the Australian government released their budget for 2021-22, which includes significant climate initiatives and funding.<sup>9044</sup> The budget provides over AUD480 million in new funding for the environment, with AUD100 million specifically for protecting oceans. AUD1.6 billion will be used to fund technologies, including hydrogen and energy storage.<sup>9045</sup> Furthermore, AUD1.8 billion will go towards boosting jobs, reducing emissions and supporting affordable and reliable energy. Of this, AUD1.2 billion will be used for emissions reductions, including AUD639 million for low emissions international technology partnerships, AUD275.5 million to support the development of four clean hydrogen export hubs, AUD263.7 million for carbon capture

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<sup>9036</sup> Australia to spend \$420 mln on hydrogen, carbon capture projects, PM to say, Financial Post (Canberra) 20 April 2021. Access Date: 27 April 2021. <https://financialpost.com/pm/business-pmn/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

<sup>9037</sup> Australia to spend \$420 mln on hydrogen, carbon capture projects, PM to say, Financial Post (Canberra) 20 April 2021. Access Date: 27 April 2021. <https://financialpost.com/pm/business-pmn/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

<sup>9038</sup> Cutting emissions and creating jobs with international partnerships, Prime Minister of Australia (Canberra) 22 April 2021. Access Date: 25 October 2021. <https://www.pm.gov.au/media/cutting-emissions-and-creating-jobs-international-partnerships>

<sup>9039</sup> Australia Announces \$100 Million Initiative to Protect Our Oceans, Prime Minister of Australia (Sydney) 23 April 2021. Access Date: 27 April 2021. <https://www.pm.gov.au/media/australia-announces-100-million-initiative-protect-our-oceans>

<sup>9040</sup> Energy and Emissions Reduction Agreement with South Australia, Prime Minister of Australia (Sydney) 19 April 2021. Access Date: 25 April 2021. <https://www.pm.gov.au/media/energy-and-emissions-reduction-agreement-south-australia>

<sup>9041</sup> Australia backs three 'green' hydrogen projects with more than A\$100 mln, Financial Post (Toronto) 4 May 2021. Access Date: 12 May 2021. <https://financialpost.com/pm/business-pmn/australia-backs-three-green-hydrogen-projects-with-more-than-a100-mln>

<sup>9042</sup> Australia backs three 'green' hydrogen projects with more than A\$100 mln, Financial Post (Toronto) 4 May 2021. Access Date: 12 May 2021. <https://financialpost.com/pm/business-pmn/australia-backs-three-green-hydrogen-projects-with-more-than-a100-mln>

<sup>9043</sup> Australia backs three 'green' hydrogen projects with more than A\$100 mln, Financial Post (Toronto) 4 May 2021. Access Date: 12 May 2021. <https://financialpost.com/pm/business-pmn/australia-backs-three-green-hydrogen-projects-with-more-than-a100-mln>

<sup>9044</sup> Budget Paper No. 2 2021-22, The Commonwealth of Australia (Canberra) 11 May 2021. Access Date: 14 May 2021. [https://budget.gov.au/2021-22/content/bp2/download/bp2\\_2021-22.pdf](https://budget.gov.au/2021-22/content/bp2/download/bp2_2021-22.pdf)

<sup>9045</sup> Budget Paper No. 2 2021-22, The Commonwealth of Australia (Canberra) 11 May 2021. Access Date: 14 May 2021. [https://budget.gov.au/2021-22/content/bp2/download/bp2\\_2021-22.pdf](https://budget.gov.au/2021-22/content/bp2/download/bp2_2021-22.pdf)

technologies, and AUD59.6 million to support new agricultural feed technologies to reduce livestock emissions.<sup>9046</sup>

On 10 June 2021, Australia and Singapore partnered to accelerate the deployment of low-emissions technologies. Each country will commit up to AUD10 million over the span of five years, to fund an industry-led pilot and demonstration projects.<sup>9047</sup> The initiative will trial the use of clean hydrogen, clean ammonia and other hydrogen derivatives in shipping and port operations.<sup>9048</sup> This commitment will work towards introducing low emission industries to the nation.<sup>9049</sup>

On 30 July 2021, the Morrison government announced the expansion of the functions of the Australian Renewable Energy Agency, to support new technologies which will reduce carbon emissions.<sup>9050</sup> The investment will include exploring emerging technologies for clean hydrogen, energy storage, low carbon materials, and carbon capture and storage.<sup>9051</sup> The additional funding of AUD192.5 million will go towards electric vehicle charging infrastructure, lowering emissions in Australia's heavy vehicle fleets, and supporting large energy-consuming businesses to identify opportunities to adopt new technologies.<sup>9052</sup>

On 14 July 2021, Prime Minister Morrison announced AUD2 million in an initiative to support decarbonisation in industry supply chains across hard-to-abate sectors including iron, steel, alumina, aluminium, liquefied natural gas, other metals including lithium and copper and chemicals such as plastics and fertilisers.<sup>9053</sup>

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<sup>9046</sup> Investing in reliable affordable energy and reducing emissions to secure Australia's recovery, Ministry for Industry, Energy and Emissions Reduction (Canberra) 11 May 2021. Access Date: 25 October 2021.

<https://www.minister.industry.gov.au/ministers/taylor/media-releases/investing-reliable-affordable-energy-and-reducing-emissions-secure-australias-recovery>

<sup>9047</sup> Australia partners with Singapore on hydrogen in maritime sector, Australian Government Ministers for the Department of Industry, Science, Energy and Resources (Canberra) 10 June 2021. Access Date: 13 June 2021.

<https://www.minister.industry.gov.au/ministers/taylor/media-releases/australia-partners-singapore-hydrogen-maritime-sector>

<sup>9048</sup> Australia partners with Singapore on hydrogen in maritime sector, Australian Government Ministers for the Department of Industry, Science, Energy and Resources (Canberra) 10 June 2021. Access Date: 13 June 2021.

<https://www.minister.industry.gov.au/ministers/taylor/media-releases/australia-partners-singapore-hydrogen-maritime-sector>

<sup>9049</sup> Australia partners with Singapore on hydrogen in maritime sector, Australian Government Ministers for the Department of Industry, Science, Energy and Resources (Canberra) 10 June 2021. Access Date: 13 June 2021.

<https://www.minister.industry.gov.au/ministers/taylor/media-releases/australia-partners-singapore-hydrogen-maritime-sector>

<sup>9050</sup> Morrison Government supporting the next generation of low emissions technologies, Australian Government Ministers for the Department of Industry, Science, Energy and Resources (Canberra) 30 July 2021. Access Date: 23 August 2021. <https://www.minister.industry.gov.au/ministers/taylor/media-releases/morrison-government-supporting-next-generation-low-emissions-technologies>

<sup>9051</sup> Morrison Government supporting the next generation of low emissions technologies, Australian Government Ministers for the Department of Industry, Science, Energy and Resources (Canberra) 30 July 2021. Access Date: 23 August 2021. <https://www.minister.industry.gov.au/ministers/taylor/media-releases/morrison-government-supporting-next-generation-low-emissions-technologies>

<sup>9052</sup> Morrison Government supporting the next generation of low emissions technologies, Australian Government Ministers for the Department of Industry, Science, Energy and Resources (Canberra) 30 July 2021. Access Date: 23 August 2021. <https://www.minister.industry.gov.au/ministers/taylor/media-releases/morrison-government-supporting-next-generation-low-emissions-technologies>

<sup>9053</sup> Funding boost to help industry adopt low emissions technology, Ministry for Industry, Energy and Emissions Reduction (Canberra) 14 July 2021. Access Date: 25 October 2021.

<https://www.minister.industry.gov.au/ministers/taylor/media-releases/funding-boost-help-industry-adopt-low-emissions-technology-0>

On 20 September 2021, Australia announced the Clean Hydrogen Industrial Hubs program, investing AUD464 million in hydrogen hubs as part of its AUD1.2 billion commitment towards building a hydrogen industry to lower emissions and create more jobs.<sup>9054</sup>

Australia has taken actions to address three out of the four Rs framework (Reduce, Reuse, Recycle, Remove) and endorse the Circular Carbon Economy platform, partially complying with its commitment. By introducing the National Plastics Plan, the Australian government has fulfilled its commitment towards recycling. Through the study funded towards reusing former underground coal mines, Australia has complied with the reuse commitment. Australia has taken many actions towards reducing their carbon emissions, including the implementation of the Big Battery in Victoria which will reduce the state's emissions, and be a source for renewable energy. Further, Australia has taken into consideration hydrogen policies through the investment into hydrogen carbon capture.

Thus, Australia receives a score of +1.

*Analyst: Surabhi Pradhan*

### **Brazil: 0**

Brazil has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 24 February 2021, the Ministry of Economy announced the signing of an agreement between the Securities and Exchange Commission (CVM) and the Inter-American Development Bank (IDB), to produce “solutions to strengthen the capital market and the sustainable development of the country.”<sup>9055</sup> The four-year agreement aims for “cooperation between institutions to promote green finance and a favorable environment for fintechs” and consolidating the “partnership between CVM and IDB in favor of the Financial Innovation Laboratory [LAB].”<sup>9056</sup> The LAB will collaborate with the IDB projects titled “Green Finance Program for Latin America and the Caribbean to Mobilize Private Investment in Mitigation Actions and Sustainable and Low Carbon Business Models through National Development Banks” and “Support for the Development of Institutional Frameworks, Policies and Regulations of Fintech in Latin America and the Caribbean.”<sup>9057</sup>

On 14 April 2021, President Jair Bolsonaro signed a decree to include nine national parks in the Investment Partnership Program.<sup>9058</sup> This was done with the goal of promoting and improving efforts to conserve and protect the environment in these regions.<sup>9059</sup>

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<sup>9054</sup> Future hydrogen industry to create jobs, lower emissions and boost regional Australia, Ministry for Industry, Energy and Emissions Reduction (Canberra) 20 September 2021. Access Date: 25 October 2021.

<https://www.minister.industry.gov.au/ministers/taylor/media-releases/future-hydrogen-industry-create-jobs-lower-emissions-and-boost-regional-australia>

<sup>9055</sup> CVM and IDB sign agreement for exchange on Capital Markets, Government of Brazil (Brasilia) 24 February 2021. Access Date: 22 March 2021. <https://www.gov.br/cvm/pt-br/assuntos/noticias/cvm-e-bid-firmam-convenio-para-intercambio-sobre-mercado-de-capitais>

<sup>9056</sup> CVM and IDB sign agreement for exchange on Capital Markets, Government of Brazil (Brasilia) 24 February 2021. Access Date: 22 March 2021. <https://www.gov.br/cvm/pt-br/assuntos/noticias/cvm-e-bid-firmam-convenio-para-intercambio-sobre-mercado-de-capitais>

<sup>9057</sup> CVM and IDB sign agreement for exchange on Capital Markets, Government of Brazil (Brasilia) 24 February 2021. Access Date: 22 March 2021. <https://www.gov.br/cvm/pt-br/assuntos/noticias/cvm-e-bid-firmam-convenio-para-intercambio-sobre-mercado-de-capitais>

<sup>9058</sup> Presidential decree signed for concession of nine national parks (Brasilia) 14 April 2021. Access Date: May 14 2021. <https://www.gov.br/mma/pt-br/assuntos/noticias/assinado-decreto-presidencial-para-concessao-de-nove-parques-nacionais>

On 20 April 2021, the National Energy Policy Council approved the resolution to institute the Fuel of the Future program.<sup>9060</sup> This program was developed with the primary goal of transitioning Brazil into alternative forms of energy such as low carbon fuels and biofuels, thus decarbonizing the use of energy.<sup>9061</sup> The program will also propose measures for the development of technology to capture and store carbon dioxide, either through the production of biofuels or blue hydrogen.<sup>9062</sup>

On 29 April 2021, the Foreign Finance Commission of the Ministry of Economy approved USD767.10 million for 10 projects, some of which will be allocated towards the environment and the prevention of floods.<sup>9063</sup> More specifically, USD40 million will be allocated towards water security and increased resilience to extreme weather events.<sup>9064</sup>

On 3 to 14 May 2021, the Ministry of Mines and Energy participated in a mission to develop a technical cooperation project in the hydrogen area called H2 Brazil.<sup>9065</sup> The goal of this project is to support the implementation of a hydrogen program in Brazil as well as subsidies for energy planning and regulation.<sup>9066</sup> This will be done through disseminating information about hydrogen and promoting innovation to support the optimization of pilot projects on an industrial scale.<sup>9067</sup>

On 31 May 2021, the Ministry of Mines and Energy announced that Brazil would invest BRL400 billion into its energy matrix over the next 10 years.<sup>9068</sup> The announcement was made at the Brazil 2021 Investment Forum, and has the goal of increasing the amount of renewable energy in the energy matrix, which is already made up of 85 per cent renewable energy.<sup>9069</sup>

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<sup>9059</sup> Presidential decree signed for concession of nine national parks (Brasilia) 14 April 2021. Access Date: May 14 2021.

<https://www.gov.br/mma/pt-br/assuntos/noticias/assinado-decreto-presidencial-para-concessao-de-nove-parques-nacionais>

<sup>9060</sup> CNPE approves resolution that creates the Fuel of the Future Program (Brasilia) 20 April 2021. Access Date: 14 May 2021.

<https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-aprova-resolucao-que-cria-o-programa-combustivel-do-futuro>

<sup>9061</sup> CNPE approves resolution that creates the Fuel of the Future Program (Brasilia) 20 April 2021. Access Date: 14 May 2021.

<https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-aprova-resolucao-que-cria-o-programa-combustivel-do-futuro>

<sup>9062</sup> CNPE approves resolution that creates the Fuel of the Future Program (Brasilia) 20 April 2021. Access Date: 14 May 2021.

<https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-aprova-resolucao-que-cria-o-programa-combustivel-do-futuro>

<sup>9063</sup> Cofix approves US \$ 767.10 million in external resources for projects in Brazil (Brasilia) 29 April 2021. Access Date: May 14 2021. <https://www.gov.br/economia/pt-br/assuntos/noticias/2021/abril/cofix-aprova-us-767-10-milhoes-em-recursos-externos-para-projetos-no-brasil>

<sup>9064</sup> Cofix approves US \$ 767.10 million in external resources for projects in Brazil (Brasilia) 29 April 2021. Access Date: May 14 2021. <https://www.gov.br/economia/pt-br/assuntos/noticias/2021/abril/cofix-aprova-us-767-10-milhoes-em-recursos-externos-para-projetos-no-brasil>

<sup>9065</sup> MME Develops Technical Cooperation Project in the Hydrogen Area (Brasilia) 18 May 2021. Access Date: 7 August 2021. <https://www.gov.br/mme/pt-br/assuntos/noticias/mme-desenvolve-projeto-de-cooperacao-tecnica-na-area-de-hidrogenio-1>

<sup>9066</sup> MME Develops Technical Cooperation Project in the Hydrogen Area (Brasilia) 18 May 2021. Access Date: 7 August 2021. <https://www.gov.br/mme/pt-br/assuntos/noticias/mme-desenvolve-projeto-de-cooperacao-tecnica-na-area-de-hidrogenio-1>

<sup>9067</sup> MME Develops Technical Cooperation Project in the Hydrogen Area (Brasilia) 18 May 2021. Access Date: 7 August 2021. <https://www.gov.br/mme/pt-br/assuntos/noticias/mme-desenvolve-projeto-de-cooperacao-tecnica-na-area-de-hidrogenio-1>

<sup>9068</sup> Brazilian energy matrix will receive investments of R\$400 billion in the next ten years (Brasilia) 31 May 2021. Access Date: 7 August 2021. <https://www.gov.br/mme/pt-br/assuntos/noticias/matriz-energetica-brasileira-recebera-investimentos-de-r-400-bilhoes-nos-proximos-dez-anos>

<sup>9069</sup> Brazilian energy matrix will receive investments of R\$400 billion in the next ten years (Brasilia) 31 May 2021. Access Date: 7 August 2021. <https://www.gov.br/mme/pt-br/assuntos/noticias/matriz-energetica-brasileira-recebera-investimentos-de-r-400-bilhoes-nos-proximos-dez-anos>

On 14 June 2021, the Ministry of the Environment signed a cooperation agreement with a variety of associations under the Zero Waste program.<sup>9070</sup> The goal of the agreement is to boost the energy recovery of solid waste by incentivizing investment in the field. This agreement is said to allow for the closure of dumps and the reduction of waste disposed in landfills.<sup>9071</sup>

Brazil has taken actions to address two of the four key commitment areas within the four Rs framework to endorse the CCE platform. Their actions, namely the decision to implement the Fuel for the Future program, addresses the reduce and the remove commitment areas. Further, Brazil has done so while taking into consideration the use of hydrogen policies. Nevertheless, no actions have been taken to reuse or recycle.

Thus, Brazil receives a score of 0.

*Analysts: Aadi Thulasingham and Jenna Im*

### **Canada: +1**

Canada has fully complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 11 December 2020, Prime Minister Justin Trudeau announced Canada's strengthened climate plan, A Healthy Environment and a Healthy Economy, funded by a CAD15 billion investment. Included in this plan are steady annual increases to its carbon tax from CAD50 per ton in 2022 to CAD170 per ton by 2030.<sup>9072</sup>

On 14 December 2020, Transport Canada amended the Canadian Aviation Regulations to require air operators flying internationally to offset their share of increased greenhouse gas emissions. The new amendments would allow Canada to fulfil its international climate change obligations and “require Canada’s operators to do their part to maintain the annual global net carbon emissions from international aviation at 2020 levels.”<sup>9073</sup>

On 16 December 2020, Canada released its Hydrogen Strategy for Canada. The strategy “seeks to modernize Canada’s energy systems by leveraging Canadian expertise – including increased participation from marginalized and underrepresented groups – through building new hydrogen supply and distribution infrastructure and fostering uptake in various end-uses, that will underpin a low-carbon energy ecosystem in the near- and long-term. It will set the foundation to do this over the next five years.” The strategy outlines opportunities, challenges and recommendations.<sup>9074</sup>

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<sup>9070</sup> Ministry of the Environment closes agreement for atlas of conversion of waste into energy (Brasilia) 14 June 2021. Access Date: 7 August 2021. <https://www.gov.br/mma/pt-br/assuntos/noticias/ministerio-do-meio-ambiente-fecha-acordo-por-atlas-da-conversao-do-lixo-em-energia>

<sup>9071</sup> Ministry of the Environment closes agreement for atlas of conversion of waste into energy (Brasilia) 14 June 2021. Access Date: 7 August 2021. <https://www.gov.br/mma/pt-br/assuntos/noticias/ministerio-do-meio-ambiente-fecha-acordo-por-atlas-da-conversao-do-lixo-em-energia>

<sup>9072</sup> Prime Minister announces Canada’s strengthened climate plan to protect the environment, create jobs, and support communities, Prime Minister of Canada (Ottawa) 11 December 2020. Access Date: 19 March 2021. <https://pm.gc.ca/en/news/news-releases/2020/12/11/prime-minister-announces-canadas-strengthened-climate-plan-protect>

<sup>9073</sup> Regulations Amending the Canadian Aviation Regulations (Parts I and X — Offsetting of CO2 Emissions — CORSIA) Amendments: SOR/2020-275, Canada Gazette (Ottawa) 16 December 2020. Access Date: 15 March 2021. <https://canadagazette.gc.ca/rp-pr/p2/2020/2020-12-23/html/sor-dors275-eng.html>

<sup>9074</sup> Hydrogen Strategy for Canada, Government of Canada (Ottawa) 16 December 2020. Access Date: 7 July 2021. [https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/environment/hydrogen/NRCan\\_Hydrogen-Strategy-Canada-na-en-v3.pdf](https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/environment/hydrogen/NRCan_Hydrogen-Strategy-Canada-na-en-v3.pdf)

On 18 December 2020, Canada published the proposed regulations for Clean Fuel Standard, as well as initiated the public consultations for the Clean Fuel Standard which will lead to finalized regulations in late 2021. The proposed Clean Fuel Regulations “would require liquid fossil fuel primary suppliers (i.e. producers and importers) to reduce the carbon intensity of the liquid fossil fuels they produce in and import into Canada from 2016 CI [carbon intensity] levels by 2.4 gCO<sub>2</sub>e/MJ in 2022, increasing to 12 gCO<sub>2</sub>e/MJ in 2030. The proposed Regulations would also establish a credit market whereby the annual CI reduction requirement could be met via three main categories of credit-creating actions: (1) actions that reduce the CI of the fossil fuel throughout its lifecycle, (2) supplying low-carbon fuels, and (3) specified end-use fuel switching in transportation.”<sup>9075</sup>

On 10 February 2021, Prime Minister Trudeau announced CAD14.9 million for green public transit projects over the next eight years. The investments will reduce pollution and will enhance public transit systems and switching them to cleaner electrical power, including supporting the use of zero-emission vehicles and related infrastructure.<sup>9076</sup>

On 5 March 2021, the Government of Canada announced a proposal for a greenhouse gas carbon offset program which will “allow municipalities, farmers, Indigenous communities, businesses and others to earn credits for projects that reduce carbon emissions or take them out of the atmosphere.” The offset program will allow participants to earn credits in four different areas including projects that reduce the use of fluorinated refrigerants in refrigeration systems, projects that reduce methane from landfills, initiatives that improve carbon storage management and farming practices that promote carbon sequestration in soils.<sup>9077</sup>

On 10 March 2021, the Ministry of Environment and Climate Change and the Ministry of Infrastructure and Communities announced a CAD40.8 million investment into 162 schools in Ontario to become more energy efficient. This will be done through the Climate Action Incentive Fund.

On 16 March 2021, during the international energy transition conference in Berlin, Natural Resources Minister Seamus O’Regan signed a memorandum of understanding with Germany outlining Canada’s commitment to green energy. It focuses on liquified natural gas and green hydrogen, which burns cleanly and can be produced using wind and solar power.

On 22 March 2021, Minister of Agriculture and Agri-food Marie-Claude Bibeau announced CAD4.5 million in funding for five green agriculture projects that will help Canadian farms responsibly manage plastic waste and improve their sustainability.<sup>9078</sup> The projects will help advance organic bioplastics replacing petroleum-based plastics.<sup>9079</sup>

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<sup>9075</sup> Canada Gazette, Part I, Volume 154, Number 51: Clean Fuel Regulations, Government of Canada (Ottawa) 19 December 2020. Access Date: 7 July 2021. <https://gazette.gc.ca/rp-pr/p1/2020/2020-12-19/html/reg2-eng.html>

<sup>9076</sup> New public transit investments to build strong communities, fight climate change, and create new jobs across Canada, Prime Minister of Canada (Ottawa) 10 February 2021. Access Date: 15 March 2021. <https://pm.gc.ca/en/news/news-releases/2021/02/10/new-public-transit-investments-build-strong-communities-fight-climate>

<sup>9077</sup> Federal government unveils plan to allow communities, industry to earn carbon offset credits, CBC News (Toronto) 5 March 2021. Access Date: 15 March 2021. <https://www.cbc.ca/news/politics/carbon-offset-credits-proposals-1.5938829>

<sup>9078</sup> Managing on-farm plastic waste and growing the bioeconomy, Agriculture and Agri-Food Canada (Ottawa) 22 March 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/agriculture-agri-food/news/2021/03/managing-on-farm-plastic-waste-and-growing-the-bioeconomy.html>

<sup>9079</sup> Managing on-farm plastic waste and growing the bioeconomy, Agriculture and Agri-Food Canada (Ottawa) 22 March 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/agriculture-agri-food/news/2021/03/managing-on-farm-plastic-waste-and-growing-the-bioeconomy.html>



On 31 March 2021, Special representative for the Prairies Jim Carr announced CAD2.890 million in funding to the University of Alberta's biojet technology.<sup>9080</sup> This new investment will support the university's Lipid-to-Hydrocarbon technology by developing pathways to generate renewable jet fuel from a range of feedstocks, including waste materials from the restaurant and livestock industries."<sup>9081</sup> The goal of the Lipid-to-Hydrocarbon technology is to reduce emissions from the aviation sector by 90 per cent.<sup>9082</sup>

On 1 April 2021, Parliamentary Secretary to the Minister of Natural Resources Marc Serré announced CAD3 million investment to Envoy Energy to install three compressed natural gas stations in Northern Ontario.<sup>9083</sup> The new stations will allow drivers to switch from diesel to compressed natural gas which produces more than 25 per cent fewer greenhouse gas emissions and can be produced using waste feedstocks.<sup>9084</sup>

On 6 April 2021, Minister of Northern Affairs Dan Vandal, announced CAD7.6 million in funding for three clean energy projects in Nunavut.<sup>9085</sup> The projects include an installation of a wind turbine that will decrease the use of diesel fuel by 50 per cent and a hybrid wind, solar and energy storage system.<sup>9086</sup>

On 7 April 2021, Minister O'Regan announced a CAD23 million investment to Hydro Ottawa through the Green Municipal Fund which will transform 34 acres of brownfield lands between Ottawa and Gatineau into a carbon-neutral community.<sup>9087</sup> The goal of the project is to eliminate greenhouse gas emissions by using hydroelectricity and waste industrial heat.<sup>9088</sup>

On 9 April 2021, Parliamentary secretary to the Minister of Public Safety and Emergency Preparedness Joël Lightbound announced CAD1 million to BOSK Bioproducts Inc to create a small

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<sup>9080</sup> Managing on-farm plastic waste and growing the bioeconomy, Agriculture and Agri-Food Canada (Ottawa) 22 March 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/agriculture-agri-food/news/2021/03/managing-on-farm-plastic-waste-and-growing-the-bioeconomy.html>

<sup>9081</sup> Managing on-farm plastic waste and growing the bioeconomy, Agriculture and Agri-Food Canada (Ottawa) 22 March 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/agriculture-agri-food/news/2021/03/managing-on-farm-plastic-waste-and-growing-the-bioeconomy.html>

<sup>9082</sup> Canada Invests in Innovative Clean Technology at the University of Alberta, Natural Resources Canada (Ottawa) 31 March 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/03/canada-invests-in-innovative-clean-technology-at-the-university-of-alberta.html>

<sup>9083</sup> Cleaner Refuelling Options for Northern Ontario Truck Drivers Coming to Trans-Canada Highway, Natural Resources Canada (Ottawa) 1 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/03/cleaner-refuelling-options-for-northern-ontario-truck-drivers-coming-to-trans-canada-highway.html>

<sup>9084</sup> Cleaner Refuelling Options for Northern Ontario Truck Drivers Coming to Trans-Canada Highway, Natural Resources Canada (Ottawa) 1 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/03/cleaner-refuelling-options-for-northern-ontario-truck-drivers-coming-to-trans-canada-highway.html>

<sup>9085</sup> Canada Invests Over \$7.6 Million in Community-Led Clean Energy Projects in Nunavut, Natural Resources Canada (Nunavut) 6 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-invests-over-76-million-in-community-led-clean-energy-projects-in-nunavut.html>

<sup>9086</sup> Canada Invests Over \$7.6 Million in Community-Led Clean Energy Projects in Nunavut, Natural Resources Canada (Nunavut) 6 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-invests-over-76-million-in-community-led-clean-energy-projects-in-nunavut.html>

<sup>9087</sup> Canada and FCM Invest in National Capital Region's First Net-Zero Community, Natural Resources Canada (Ottawa) 7 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-and-fcm-invest-in-national-capital-regions-first-net-zero-community.html>

<sup>9088</sup> Canada and FCM Invest in National Capital Region's First Net-Zero Community, Natural Resources Canada (Ottawa) 7 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-and-fcm-invest-in-national-capital-regions-first-net-zero-community.html>

production line to create compostable bioplastics made from forest biomass. The bioplastics can be used for food packaging and water bottles, therefore reducing pollution.<sup>9089</sup>

On 14 April 2021, Minister of Infrastructure and Communities Catherine McKenna announced the launch of the Green and Inclusive Community Buildings program. It will deliver CAD1.5 billion in funding in the next five years to projects that include reductions of energy waste and installations of energy efficient windows.<sup>9090</sup>

On 15 April 2021, Minister O'Regan announced a CAD500,000 investment in Compressed Air Energy Storage technology.<sup>9091</sup> The goal of this is to decrease greenhouse gas emissions by transitioning to a cleaner electricity grid.<sup>9092</sup>

On 15 April 2021, Minister of Environment and Climate Change Jonathan Wilkinson announced a CAD1.3 million to support five projects that aim to reduce plastic waste, prevent plastic pollution and support Canada in transitioning to a national circular plastics economy.<sup>9093</sup> The projects will include recycling personal protective equipment from hospitals, improving the management of compostable products and supporting the development of new standards for bioplastics.<sup>9094</sup>

On 16 April 2021, Member of Parliament for Toronto Centre Marci Ien announced CAD3.3million for Noventa Energy Partners to reduce pollution at the Toronto Western hospital.<sup>9095</sup> The project will supply the hospital with clean energy using recovered heat extracted from wastewater and the sewage system. The cumulative greenhouse gas emissions reductions amounts to 169,000 tonnes.<sup>9096</sup>

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<sup>9089</sup> Canada Supports Innovation for Compostable Bioplastic, Natural Resources Canada (Quebec City) 9 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-supports-innovation-for-compostable-bioplastic.html>

<sup>9090</sup> Government of Canada to invest in green and inclusive community buildings, Infrastructure Canada (Ottawa) 14 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/office-infrastructure/news/2021/04/government-of-canada-to-invest-in-green-and-inclusive-community-buildings.html>

<sup>9091</sup> Canada Invests in Innovative Energy Storage Solution, Natural Resources Canada (Toronto) 15 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-invests-in-innovative-energy-storage-solution.html>

<sup>9092</sup> Canada Invests in Innovative Energy Storage Solution, Natural Resources Canada (Toronto) 15 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-invests-in-innovative-energy-storage-solution.html>

<sup>9093</sup> Government of Canada invests in reducing plastic waste and supporting the transition of a circular economy for plastics, Environment and Climate Change Canada (Ottawa) 15 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/04/government-of-canada-invests-in-reducing-plastic-waste-and-supporting-the-transition-of-a-circular-economy-for-plastics.html>

<sup>9094</sup> Government of Canada invests in reducing plastic waste and supporting the transition of a circular economy for plastics, Environment and Climate Change Canada (Ottawa) 15 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/04/government-of-canada-invests-in-reducing-plastic-waste-and-supporting-the-transition-of-a-circular-economy-for-plastics.html>

<sup>9095</sup> Noventa Energy Partners using innovative technology to cut pollution at Toronto Western Hospital, Environment and Climate Change Canada (Toronto) 16 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/04/noventa-energy-partners-using-innovative-technology-to-cut-pollution-at-toronto-western-hospital.html>

<sup>9096</sup> Noventa Energy Partners using innovative technology to cut pollution at Toronto Western Hospital, Environment and Climate Change Canada (Toronto) 16 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/04/noventa-energy-partners-using-innovative-technology-to-cut-pollution-at-toronto-western-hospital.html>

On 16 April 2021, Special Representative Carr announced CAD41.1 million for 11 green infrastructure projects.<sup>9097</sup> The projects include improvements to solid waste management and a new solar power plant. The goal of these projects is to reduce emissions in the Prairies.<sup>9098</sup>

On 19 April 2021, Canada tabled Budget 2021. It was the first budget to specifically mention carbon capture, utilization and storage and proposed a tax incentive for these actions through “an investment tax credit invested in [carbon capture, utilization and storage] projects with the goal of reducing emissions by at least 15 megatonnes of Co2 annually. This measure will come into effect in 2022.”<sup>9099</sup>

On 22 April 2021, the Department of Finance Canada announced key elements of Budget 2021 that will contribute to creating a healthy environment for Canadians. Budget 2021 includes a CAD17.6 billion investment towards fighting climate change, reducing pollution and developing clean technology.<sup>9100</sup> Budget 2021 includes zero-interest loans of up to CAD40,000 for 200,00 households planning to make energy efficient upgrades to their homes. Budget 2021 also proposes an investment of CAD5 billion for seven years in the Net Zero Accelerator which will support companies in reducing their emissions.<sup>9101</sup>

On 22 April 2021, Prime Minister Trudeau announced that Canada will increase its emissions reductions target by 40-45 per cent below 2005 levels by 2030.<sup>9102</sup>

On 22 April 2021, Minister of Northern Affairs Daniel Vandal announced CAD40.4 million from budget 2021 to create hydroelectricity and grid interconnection projects in the North. The projects will reduce the reliance on fuels for electricity and heating.<sup>9103</sup>

On 5 May 2021, Member of Parliament for Central Nova Scotia, Sean Fraser announced an investment of CAD25,000 for a pilot project to improve St. Martha’s Regional Hospital’s energy efficiency.<sup>9104</sup> The project aims to use existing building commissioning to lower electricity and diesel

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<sup>9097</sup> Residents of Saskatoon area to benefit from upgrades to water, wastewater and solid waste infrastructure, and other community and green infrastructure projects, Infrastructure Canada (Saskatoon) 16 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/office-infrastructure/news/2021/04/residents-of-saskatoon-area-to-benefit-from-upgrades-to-water-wastewater-and-solid-waste-infrastructure-and-other-community-and-green-infrastructur.html>

<sup>9098</sup> Residents of Saskatoon area to benefit from upgrades to water, wastewater and solid waste infrastructure, and other community and green infrastructure projects, Infrastructure Canada (Saskatoon) 16 April 2021. Access Date: 21 April 2021. <https://www.canada.ca/en/office-infrastructure/news/2021/04/residents-of-saskatoon-area-to-benefit-from-upgrades-to-water-wastewater-and-solid-waste-infrastructure-and-other-community-and-green-infrastructur.html>

<sup>9099</sup> Canada’s Budget 2021: Carbon Caputre & Storage, International CCS Knowledge Centre (Regina) 29 April 2021. Access Date: 7 July 2021. <https://ccsknowledge.com/news/canadas-budget-2021-carbon-capture-and-storage>

<sup>9100</sup> Government of Canada highlights Budget 2021 investments to create a healthy environment for a healthy economy, Department of Finance Canada (Ottawa) 22 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/department-finance/news/2021/04/government-of-canada-highlights-budget-2021-investments-to-create-a-healthy-environment-for-a-healthy-economy.html>

<sup>9101</sup> Government of Canada highlights Budget 2021 investments to create a healthy environment for a healthy economy, Department of Finance Canada (Ottawa) 22 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/department-finance/news/2021/04/government-of-canada-highlights-budget-2021-investments-to-create-a-healthy-environment-for-a-healthy-economy.html>

<sup>9102</sup> Prime Minister Trudeau announces increased climate ambition, Prime Minister of Canada (Ottawa) 22 April 2021. Access Date: 28 April 2021. <https://pm.gc.ca/en/news/news-releases/2021/04/22/prime-minister-trudeau-announces-increased-climate-ambition>

<sup>9103</sup> Minister Vandal highlights clean energy investments in Budget 2021, Crown Indigenous Relations and Northern Affairs Canada (Ottawa) 22 April 2021. Access Date: 28 April 2021. <https://www.canada.ca/en/crown-indigenous-relations-northern-affairs/news/2021/04/minister-vandal-highlights-clean-energy-investments-in-budget-2021.html>

<sup>9104</sup> Canada Invests in Energy Efficiency Project for Regional Hospital in Nova Scotia, Natural Resources Canada (Antigonish) 5 May 2021. Access Date: 10 July 2021.

consumption, thus making the building cleaner. This process optimizes performance and reduces greenhouse gas emissions from existing buildings<sup>9105</sup>

On 5 May 2021, Minister O'Regan announced CAD1.7 million in funding to expand the Electric Vehicle Charging Network Management System developed by the British Columbia Institute of Technology.<sup>9106</sup> This investment will improve Electric Vehicle infrastructure to promote electric cars, thus ultimately supporting the reduction of emissions.<sup>9107</sup>

On 6 May 2021, Minister of Intergovernmental Affairs Dominic LeBlanc announced an investment of CAD200,000 to support three New Brunswick transport companies in reducing emissions from their heavy-duty vehicle fleets.<sup>9108</sup> Together, the companies will save 1,200 tonnes of greenhouse gas emissions annually.<sup>9109</sup> This will be done through making energy efficient retrofits to over 200 vehicles and providing fuel-efficient training to more than 320 drivers.<sup>9110</sup>

On 7 May 2021, Natural Resources Canada and the National Research Council of Canada, in partnership with Forschungszentrum Jülich and the Karlsruhe Institute of Technology in Germany, announced the German-Canadian Materials Acceleration centre.<sup>9111</sup> A combined sum of CAD8.8 million is being allocated for the centre over a period of five years.<sup>9112</sup> The centre will help advance technologies related to clean hydrogen production as well as carbon capture.<sup>9113</sup>

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<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-invests-in-energy-efficiency-project-for-regional-hospital-in-nova-scotia.html>

<sup>9105</sup> Canada Invests in Energy Efficiency Project for Regional Hospital in Nova Scotia, Natural Resources Canada (Antigonish) 5 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-invests-in-energy-efficiency-project-for-regional-hospital-in-nova-scotia.html>

<sup>9106</sup> Canada Invests in Next-Generation EV Charging Networks in B.C., Natural Resources Canada (Vancouver) 5 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-invests-in-next-generation-ev-charging-networks-in-bc.html>

<sup>9107</sup> Canada Invests in Next-Generation EV Charging Networks in B.C., Natural Resources Canada (Vancouver) 5 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-invests-in-next-generation-ev-charging-networks-in-bc.html>

<sup>9108</sup> Canada Invests in Greening New Brunswick Transport Companies, Natural Resources Canada (Moncton) 6 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-invests-in-greening-new-brunswick-transport-companies.html>

<sup>9109</sup> Canada Invests in Greening New Brunswick Transport Companies, Natural Resources Canada (Moncton) 6 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-invests-in-greening-new-brunswick-transport-companies.html>

<sup>9110</sup> Canada Invests in Greening New Brunswick Transport Companies, Natural Resources Canada (Moncton) 6 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/04/canada-invests-in-greening-new-brunswick-transport-companies.html>

<sup>9111</sup> Government of Canada Announces New German–Canadian Materials Acceleration Centre, Natural Resources Canada (Ottawa) 7 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/government-of-canada-announces-new-germancanadian-materials-acceleration-centre.html>

<sup>9112</sup> Government of Canada Announces New German–Canadian Materials Acceleration Centre, Natural Resources Canada (Ottawa) 7 May 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/government-of-canada-announces-new-germancanadian-materials-acceleration-centre.html>

<sup>9113</sup> Government of Canada Announces New German–Canadian Materials Acceleration Centre, Natural Resources Canada (Ottawa) 7 May 2021. Access Date: 10 July 2021.

On 19 May 2021, Minister O'Regan announced CAD4.8 million to support 13 climate action projects in Newfoundland and Labrador.<sup>9114</sup> The city of St. John's will receive CAD77,900 from the government to increase carbon sequestration with 11.4 hectares of reforestation. This investment will result in decreased pollution by removing carbon from the atmosphere.<sup>9115</sup>

On 19 May 2021, Parliamentary Secretary to the Minister of Northern Affairs Yvonne Jones announced a CAD2.8 million investment to help three, community-led, clean energy projects in Labrador.<sup>9116</sup> The projects' goal is to reduce reliance on diesel and fossil fuels for heat and power in remote communities.<sup>9117</sup> All three projects are funded through Natural Resource Canada's Clean Energy for Remote and Rural Communities program and share the goals of building a clear energy future, supporting new economic opportunities, and creating more energy resilient communities.<sup>9118</sup>

On 19 May 2021, Minister of Veterans Affairs and Associate Minister of National Defence Lawrence MacAulay and the president of the Federation of Canadian Municipalities announced an investment of CAD14.1 million for communities in Prince Edward Island and Nova Scotia to decrease greenhouse gas emissions.<sup>9119</sup> The investment will help finance renewable energy projects and promote energy storage initiatives.<sup>9120</sup>

On 19 May 2021, Member of Parliament for Whitby Ryan Turnbull announced a CAD87,000 investment for the town of Whitby, Ontario to lower emissions from 20 municipal buildings.<sup>9121</sup> This

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<https://www.canada.ca/en/natural-resources-canada/news/2021/05/government-of-canada-announces-new-german-canadian-materials-acceleration-centre.html>

<sup>9114</sup> Canada and Newfoundland and Labrador invest in climate action projects across the province, Environment and Climate Change Canada (St. John's) 19 May 2021. Access Date: 21 July 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/05/canada-and-newfoundland-and-labrador-invest-in-climate-action-projects-across-the-province.html>

<sup>9115</sup> Canada and Newfoundland and Labrador invest in climate action projects across the province, Environment and Climate Change Canada (St. John's) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/05/canada-and-newfoundland-and-labrador-invest-in-climate-action-projects-across-the-province.html>

<sup>9116</sup> Investing in Indigenous Clean Energy Projects in Newfoundland and Labrador, Natural Resources Canada (Nunatsiavut) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/investing-in-indigenous-clean-energy-projects-in-newfoundland-and-labrador.html>

<sup>9117</sup> Investing in Indigenous Clean Energy Projects in Newfoundland and Labrador, Natural Resources Canada (Nunatsiavut) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/investing-in-indigenous-clean-energy-projects-in-newfoundland-and-labrador.html>

<sup>9118</sup> Investing in Indigenous Clean Energy Projects in Newfoundland and Labrador, Natural Resources Canada (Nunatsiavut) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/investing-in-indigenous-clean-energy-projects-in-newfoundland-and-labrador.html>

<sup>9119</sup> Canada and FCM Invest in Energy Efficiency in Prince Edward Island and Nova Scotia, Natural Resources Canada (Charlottetown) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-and-fcm-invest-in-energy-efficiency-in-prince-edward-island-and-nova-scotia.html>

<sup>9120</sup> Canada and FCM Invest in Energy Efficiency in Prince Edward Island and Nova Scotia, Natural Resources Canada (Charlottetown) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-and-fcm-invest-in-energy-efficiency-in-prince-edward-island-and-nova-scotia.html>

<sup>9121</sup> Canada Invests in Whitby's Energy Saving Efforts, Natural Resources Canada (Whitby) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-invests-in-whitbys-energy-saving-efforts.html>

will be accomplished through renewable energy retrofits and improved insulation systems.<sup>9122</sup> These new updates will cut emissions by 30 per cent.<sup>9123</sup>

On 27 May 2021, Prime Minister Trudeau announced a new Canada Greener Homes Grant, which will allow 700,000 homeowners to improve the energy efficiency of their houses.<sup>9124</sup> The grant will allow for home improvements such as solar panels, added insulation and updated heating systems to ultimately reduce emissions.<sup>9125</sup>

On 27 May 2021, the Government of Canada and Ontario signed a new Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health which will help protect and restore the Great Lakes.<sup>9126</sup> This will be done through preventing toxic algae from growing, improving wastewater and stormwater management, reducing plastic pollution and excess road salt, restoring native species and habitats, and increasing resilience to climate change.<sup>9127</sup>

On 3 June 2021, Minister O'Regan announced a CAD2.3 million investment in the Alberta Zero-Emissions Truck Electrification Collaboration project.<sup>9128</sup> The investment will support the installation and testing of a hydrogen fueling station for heavy-duty trucks.<sup>9129</sup> The goal of this is to decarbonize trucks by switching from fuel to hydrogen.<sup>9130</sup>

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<sup>9122</sup> Canada Invests in Whitby's Energy Saving Efforts, Natural Resources Canada (Whitby) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/05/canada-invests-in-whitbys-energy-saving-efforts.html>

<sup>9123</sup> Canada Invests in Whitby's Energy Saving Efforts, Natural Resources Canada (Whitby) 19 May 2021. Access Date: 21 July 2021.

<https://www.canada>

<sup>9124</sup> Making homes more energy efficient to reduce energy bills, create jobs, and cut pollution, Prime Minister of Canada (Ottawa) 27 May 2021. Access Date: 21 July 2021.

<https://pm.gc.ca/en/news/news-releases/2021/05/27/making-homes-more-energy-efficient-reduce-energy-bills-create-jobs>

<sup>9125</sup> Making homes more energy efficient to reduce energy bills, create jobs, and cut pollution, Prime Minister of Canada (Ottawa) 27 May 2021. Access Date: 21 July 2021.

<https://pm.gc.ca/en/news/news-releases/2021/05/27/making-homes-more-energy-efficient-reduce-energy-bills-create-jobs>

<sup>9126</sup> Canada and Ontario mark 50th anniversary of Great Lakes Agreement by signing ninth agreement, Environment and Climate Change Canada (Toronto) 27 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/05/canada-and-ontario-mark-50th-anniversary-of-great-lakes-agreement-by-signing-ninth-agreement.html>

<sup>9127</sup> Canada and Ontario mark 50th anniversary of Great Lakes Agreement by signing ninth agreement, Environment and Climate Change Canada (Toronto) 27 May 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/05/canada-and-ontario-mark-50th-anniversary-of-great-lakes-agreement-by-signing-ninth-agreement.html>

<sup>9128</sup> Canada Invests in Hydrogen Fueling Station for Commercial Fleet in Alberta, Natural Resources Canada (Ottawa) 3 June 2021. Access Date: 24 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-invests-in-hydrogen-fueling-station-for-commercial-fleet-in-alberta.html>

<sup>9129</sup> Canada Invests in Hydrogen Fueling Station for Commercial Fleet in Alberta, Natural Resources Canada (Ottawa) 3 June 2021. Access Date: 24 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-invests-in-hydrogen-fueling-station-for-commercial-fleet-in-alberta.html>

<sup>9130</sup> Canada Invests in Hydrogen Fueling Station for Commercial Fleet in Alberta, Natural Resources Canada (Ottawa) 3 June 2021. Access Date: 24 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-invests-in-hydrogen-fueling-station-for-commercial-fleet-in-alberta.html>

Canada Invests in Hydrogen Fueling Station for Commercial Fleet in Alberta, Natural Resources Canada (Ottawa) 3 June 2021. Access Date: 24 July 2021.

On 4 June 2021, Minister of Middle-Class Prosperity and Associate Minister of Finance Mona Fortier announced the government of Canada will provide CAD54.9 million for 58 community-based climate action projects.<sup>9131</sup> From the fund, CAD5.3 million will be distributed to universities and colleges to help them reduce emissions.<sup>9132</sup>

On 17 June 2021, Member of Parliament for West Vancouver–Sunshine Coast–Sea to Sky Country, Patrick Weiler, announced CAD165.7 million for a new Agricultural Clean Technology Program.<sup>9133</sup> This program will help agri-businesses reduce their greenhouse gas emissions and recycle carbon by using agricultural waste for energy and bio-production generation.<sup>9134</sup>

On 29 June 2021, Parliamentary Secretary to the Minister of Environment and Climate Change Terry Duguid announced a CAD5 million funding from the federal government towards the Manitoba Metis Federation for two climate action initiatives.<sup>9135</sup> One project will upgrade the federation's office to make it more energy efficient by installing solar panels and improving the ventilation systems.<sup>9136</sup> The goal of these updates is to reduce about 7,000 tonnes of greenhouse gas emissions.<sup>9137</sup>

On 29 June 2021, Minister of Health Patty Hajdu announced CAD1.4 million to help reduce greenhouse gas emissions in communities in Northern Ontario.<sup>9138</sup> The town of Espanola will receive support for biosolids management which will lower greenhouse gas emissions to 591 tonnes over the

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<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-invests-in-hydrogen-fueling-station-for-commercial-fleet-in-alberta.html>

<sup>9131</sup> Marking World Environment Day, Canada invests up to \$55 million in 58 local climate action projects (Ottawa) 4 June 2021. Access Date: August 4 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/06/marketing-world-environment-day-canada-invests-up-to-55-million-in-58-local-climate-action-projects.html>

<sup>9132</sup> Marking World Environment Day, Canada invests up to \$55 million in 58 local climate action projects (Ottawa) 4 June 2021. Access Date: 4 August 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/06/marketing-world-environment-day-canada-invests-up-to-55-million-in-58-local-climate-action-projects.html>

<sup>9133</sup> MP Weiler announces program open to applicants to help farmers and agri-businesses develop and adopt clean technologies to reduce emissions and enhance competitiveness, Agriculture and Agri-Food Canada (Penticton) 17 June 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/agriculture-agri-food/news/2021/06/mp-weiler-announces-program-open-to-applicants-to-help-farmers-and-agri-businesses-develop-and-adopt-clean-technologies-to-reduce-emissions-and-enh.html>

<sup>9134</sup> MP Weiler announces program open to applicants to help farmers and agri-businesses develop and adopt clean technologies to reduce emissions and enhance competitiveness, Agriculture and Agri-Food Canada (Penticton) 17 June 2021. Access Date: 10 July 2021.

<https://www.canada.ca/en/agriculture-agri-food/news/2021/06/mp-weiler-announces-program-open-to-applicants-to-help-farmers-and-agri-businesses-develop-and-adopt-clean-technologies-to-reduce-emissions-and-enh.html>

<sup>9135</sup> The Manitoba Metis Federation takes on two climate action initiatives with about \$5 million in support from the Government of Canada, Environment and Climate Change Canada (Ottawa) 29 June 2021. Access Date: 10 July 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/06/the-manitoba-metis-federation-takes-on-two-climate-action-initiatives-with-about-5-million-in-support-from-the-government-of-canada.html>

<sup>9136</sup> The Manitoba Metis Federation takes on two climate action initiatives with about \$5 million in support from the Government of Canada, Environment and Climate Change Canada (Ottawa) 29 June 2021. Access Date: 10 July 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/06/the-manitoba-metis-federation-takes-on-two-climate-action-initiatives-with-about-5-million-in-support-from-the-government-of-canada.html>

<sup>9137</sup> The Manitoba Metis Federation takes on two climate action initiatives with about \$5 million in support from the Government of Canada, Environment and Climate Change Canada (Ottawa) 29 June 2021. Access Date: 10 July 2021. <https://www.canada.ca/en/environment-climate-change/news/2021/06/the-manitoba-metis-federation-takes-on-two-climate-action-initiatives-with-about-5-million-in-support-from-the-government-of-canada.html>

<sup>9138</sup> Canada and FCM Announce New Green Investments in Northern Ontario Communities, Natural Resources Canada (Espanola) 29 June 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-and-fcm-announce-new-green-investments-in-northern-ontario-communities.html>

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next 20 years.<sup>9139</sup> The city of Timmins will receive support to turn its wastewater control plant into a net-zero resource recovery facility and increase its biogas production.<sup>9140</sup>

On 5 July 2021, Prime Minister Trudeau announced CAD420 million for Algoma Steel Inc to phase out coal-fired steelmaking processes at their facility.<sup>9141</sup> This will allow the company to decrease its greenhouse gas emissions by more than 3 million metric tonnes by the year 2030.<sup>9142</sup>

On 7 July 2021, Parliamentary Secretary Neil Ellis announced CAD1.48 million in funding for extractX Inc, which will help the company cut its greenhouse gas emissions.<sup>9143</sup> This will be done through adopting an ethanol-based extraction lab for biomass processing.<sup>9144</sup>

On 8 July 2021, Minister of Fisheries, Oceans and the Canadian Coast Guard Bernadette Jordan announced funding for the installation of three new solar farms in the towns of Antigonish, Berwick and Mahone Bay.<sup>9145</sup> The solar farms will produce 10GWh of clean energy, to power 1,000 homes per year, ultimately allowing these communities to produce 50 per cent of their own energy using clean courses<sup>9146</sup>

On 14 July 2021, Prime Minister Trudeau announced over CAD160 million in joint funding between the federal government and the government of Quebec for a renewable energy project with LM Wind power, a renewable energy company.<sup>9147</sup> The project will help the company increase its production of wind turbine blades, therefore supporting the reduction of pollution.<sup>9148</sup>

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<sup>9139</sup> Canada and FCM Announce New Green Investments in Northern Ontario Communities, Natural Resources Canada (Espanola) 29 June 2021. Access Date: 21 July 2021.  
<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-and-fcm-announce-new-green-investments-in-northern-ontario-communities.html>

<sup>9140</sup> Canada and FCM Announce New Green Investments in Northern Ontario Communities, Natural Resources Canada (Espanola) 29 June 2021. Access Date: 21 July 2021.  
<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-and-fcm-announce-new-green-investments-in-northern-ontario-communities.html>

<sup>9141</sup> New investment in Canada's steel industry to create jobs and build a cleaner future, Prime Minister of Canada (Ottawa) 5 July 2021. Access Date: 21 July 2021.  
<https://pm.gc.ca/en/news/news-releases/2021/07/05/new-investment-canadas-steel-industry-create-jobs-and-build-cleaner>

<sup>9142</sup> New investment in Canada's steel industry to create jobs and build a cleaner future, Prime Minister of Canada (Ottawa) 5 July 2021. Access Date: 21 July 2021.  
<https://pm.gc.ca/en/news/news-releases/2021/07/05/new-investment-canadas-steel-industry-create-jobs-and-build-cleaner>

<sup>9143</sup> Government of Canada supports cutting-edge biotechnology company in Welland, Agriculture and Agri-Food Canada (Welland) 7 July 2021. Access Date: 10 July 2021.  
<https://www.canada.ca/en/agriculture-agri-food/news/2021/07/government-of-canada-supports-cutting-edge-biotechnology-company-in-welland.html>

<sup>9144</sup> Government of Canada supports cutting-edge biotechnology company in Welland, Agriculture and Agri-Food Canada (Welland) 7 July 2021. Access Date: 10 July 2021.  
<https://www.canada.ca/en/agriculture-agri-food/news/2021/07/government-of-canada-supports-cutting-edge-biotechnology-company-in-welland.html>

<sup>9145</sup> Canada and Nova Scotia invest in renewable energy infrastructure with three solar farms in Antigonish, Berwick and Mahone Bay, Infrastructure Canada (Mahone Bay) 8 July 2021. Access Date: 21 July 2021.  
<https://www.canada.ca/en/office-infrastructure/news/2021/07/canada-and-nova-scotia-invest-in-renewable-energy-infrastructure-with-three-solar-farms-in-antigonish-berwick-and-mahone-bay.html>

<sup>9146</sup> Canada and Nova Scotia invest in renewable energy infrastructure with three solar farms in Antigonish, Berwick and Mahone Bay, Infrastructure Canada (Mahone Bay) 8 July 2021. Access Date: 21 July 2021.  
<https://www.canada.ca/en/office-infrastructure/news/2021/07/canada-and-nova-scotia-invest-in-renewable-energy-infrastructure-with-three-solar-farms-in-antigonish-berwick-and-mahone-bay.html>

<sup>9147</sup> Supporting renewable energy manufacturing in Quebec to create jobs and build a cleaner future, Prime Minister of Canada (Gaspé) 14 July 2021, Access Date: 21 July 2021.



On 19 July 2021, Minister Bibeau, announced an investment of CAD2.6 million to Canadian Forage and Grassland Association to develop a Canadian grassland carbon offset system.<sup>9149</sup> This will allow farmers to produce and sell carbon offsets, therefore reducing greenhouse gas emissions.<sup>9150</sup> The system will protect 5,000 hectares of Canadian grasslands and will save 10,000 tonnes of carbon dioxide equivalent.<sup>9151</sup>

On 26 July 2021, Minister O'Regan announced CAD220,000 to support four Ontario transit companies in improving their energy efficiency and decreasing their emissions.<sup>9152</sup> This federal investment comes from the Natural Resources Canada's Green Freight Assessment Program, which is designed to help Canadian companies reduce their emissions.<sup>9153</sup> With this funding, the four transit companies will be able to purchase new fuel-reducing equipment and make further green retrofits to their fleets.<sup>9154</sup> The goal of this is to reduce greenhouse gas emissions by 430 tonnes annually.<sup>9155</sup>

On 27 July 2021, Parliamentary Secretary to the Minister of Diversity and Inclusion and Youth Adam van Koevorden, on behalf of the Minister of Natural Resources, announced an investment of CAD2.3 million in the Anvil Crawler Development Corporation to install 36 new electric vehicle chargers across Ontario.<sup>9156</sup> The funding for the project comes from Natural Resources Canada's Green Infrastructure-Electric Vehicle Infrastructure Demonstration Program which aims to promote

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<https://pm.gc.ca/en/news/news-releases/2021/07/14/supporting-renewable-energy-manufacturing-quebec-create-jobs-and>

<sup>9148</sup> Supporting renewable energy manufacturing in Quebec to create jobs and build a cleaner future, Prime Minister of Canada (Gaspé) 14 July 2021, Access Date: 21 July 2021.

<https://pm.gc.ca/en/news/news-releases/2021/07/14/supporting-renewable-energy-manufacturing-quebec-create-jobs-and>

<sup>9149</sup> Government of Canada invests \$2.6 million to improve alfalfa growth and develop a grassland carbon offset system, Agriculture and Agri-Food Canada (Sawyerville) 19 July 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/agriculture-agri-food/news/2021/07/government-of-canada-invests-26-million-to-improve-alfalfa-growth-and-develop-a-grassland-carbon-offset-system.html>

<sup>9150</sup> Government of Canada invests \$2.6 million to improve alfalfa growth and develop a grassland carbon offset system, Agriculture and Agri-Food Canada (Sawyerville) 19 July 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/agriculture-agri-food/news/2021/07/government-of-canada-invests-26-million-to-improve-alfalfa-growth-and-develop-a-grassland-carbon-offset-system.html>

<sup>9151</sup> Government of Canada invests \$2.6 million to improve alfalfa growth and develop a grassland carbon offset system, Agriculture and Agri-Food Canada (Sawyerville) 19 July 2021. Access Date: 21 July 2021.

<https://www.canada.ca/en/agriculture-agri-food/news/2021/07/government-of-canada-invests-26-million-to-improve-alfalfa-growth-and-develop-a-grassland-carbon-offset-system.html>

<sup>9152</sup> Canada Invests in Greening Ontario Transport Companies, Natural resources Canada (Toronto) 26 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/07/canada-invests-in-greening-ontario-transport-companies.html>

<sup>9153</sup> Canada Invests in Greening Ontario Transport Companies, Natural resources Canada (Toronto) 26 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/07/canada-invests-in-greening-ontario-transport-companies.html>

<sup>9154</sup> Canada Invests in Greening Ontario Transport Companies, Natural resources Canada (Toronto) 26 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/07/canada-invests-in-greening-ontario-transport-companies.html>

<sup>9155</sup> Canada Invests in Greening Ontario Transport Companies, Natural resources Canada (Toronto) 26 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/07/canada-invests-in-greening-ontario-transport-companies.html>

<sup>9156</sup> New EV Chargers Coming to Ontario, Natural Resources Canada (Burlington) 27 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/07/new-ev-chargers-coming-to-ontario.html>

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clean energy across Canada.<sup>9157</sup> This new project will help promote zero-emission vehicle sales, therefore reducing transportation emissions in the long run.<sup>9158</sup>

On 28 July 2021, Minister of Seniors Deb Schulte, on behalf of the Minister of Environment and Climate Change, announced an investment of CAD9 million for Conservation Ontario to better conserve and protect lands.<sup>9159</sup> The funding comes from the Nature Smart Climate Solutions Fund which is a 10 year fund for projects supporting the restoration of wetlands and grasslands as well as the storage and capture of carbon.<sup>9160</sup> The new investment will help fight climate change in Southern Ontario by capturing and storing carbon.<sup>9161</sup>

On 30 July 2021, Minister of Finance Chrystia Freeland announced a federal investment of CAD400 million for ArcelorMittal Dofasco, Canada's largest steel producer.<sup>9162</sup> The funding will support the company in phasing out coal-fired steelmaking and transitioning to a hydrogen-ready, direct reduced iron-fed electric arc furnace for the development of steel.<sup>9163</sup> This new low emissions steelmaking technique will benefit many consumer packaging sectors including the automotive and medical sectors.<sup>9164</sup> The project will help reduce greenhouse gas emissions by three million tonnes per year by the year 2030.<sup>9165</sup>

On 3 August 2021, Member of Parliament for West Vancouver–Sunshine Coast–Sea to Sky Country Patrick Weiler announced on behalf of the Minister of Infrastructure and Communities federal funding of CAD1.3 million to upgrade two health care centres in the communities of Lil'wat Nation

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<sup>9157</sup> New EV Chargers Coming to Ontario, Natural Resources Canada (Burlington) 27 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/07/new-ev-chargers-coming-to-ontario.html>

<sup>9158</sup> New EV Chargers Coming to Ontario, Natural Resources Canada (Burlington) 27 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/07/new-ev-chargers-coming-to-ontario.html>

<sup>9159</sup> Canada invests \$9 million for nature conservation across southern Ontario, Environment and Climate Change Canada (Newmarket) 28 July 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/07/canada-invests-9-million-for-nature-conservation-across-southern-ontario.html>

<sup>9160</sup> Canada invests \$9 million for nature conservation across southern Ontario, Environment and Climate Change Canada (Newmarket) 28 July 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/07/canada-invests-9-million-for-nature-conservation-across-southern-ontario.html>

<sup>9161</sup> Canada invests \$9 million for nature conservation across southern Ontario, Environment and Climate Change Canada (Newmarket) 28 July 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/07/canada-invests-9-million-for-nature-conservation-across-southern-ontario.html>

<sup>9162</sup> Government investing in Hamilton's steel industry to support good jobs and significantly reduce emissions, Innovation, Science and Economic Development Canada (Hamilton) 30 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/innovation-science-economic-development/news/2021/07/government-investing-in-hamiltons-steel-industry-to-support-good-jobs-and-significantly-reduce-emissions.html>

<sup>9163</sup> Government investing in Hamilton's steel industry to support good jobs and significantly reduce emissions, Innovation, Science and Economic Development Canada (Hamilton) 30 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/innovation-science-economic-development/news/2021/07/government-investing-in-hamiltons-steel-industry-to-support-good-jobs-and-significantly-reduce-emissions.html>

<sup>9164</sup> Government investing in Hamilton's steel industry to support good jobs and significantly reduce emissions, Innovation, Science and Economic Development Canada (Hamilton) 30 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/innovation-science-economic-development/news/2021/07/government-investing-in-hamiltons-steel-industry-to-support-good-jobs-and-significantly-reduce-emissions.html>

<sup>9165</sup> Government investing in Hamilton's steel industry to support good jobs and significantly reduce emissions, Innovation, Science and Economic Development Canada (Hamilton) 30 July 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/innovation-science-economic-development/news/2021/07/government-investing-in-hamiltons-steel-industry-to-support-good-jobs-and-significantly-reduce-emissions.html>

and N'Quatqua Nation.<sup>9166</sup> The projects aim to make the care centres more energy-efficient and climate-friendly through the installation of solar power systems.<sup>9167</sup> This will reduce greenhouse gas emissions and decrease reliance on backup diesel in case of emergencies.<sup>9168</sup>

On 4 August 2021, Parliamentary Secretary to the Minister of International Development Maninder Sidhu announced CAD1.28 million to plant 8,000 trees across the city of Brampton.<sup>9169</sup> This investment supports the Canadian government's plan to plant 2 billion trees over 10 years.<sup>9170</sup> By planting trees, the city of Brampton will be able to remove emissions from the atmosphere through carbon capture and sequestration.<sup>9171</sup>

On 5 August 2021, Minister Vandal announced funding of CAD1.8 million to the Forks Renewal Corporation to create a district geothermal system for its Winnipeg buildings.<sup>9172</sup> The federal funding for this project is derived from the Partnerships stream of the Government of Canada's Low Carbon Economy Challenge.<sup>9173</sup> The new system is set to reduce greenhouse gas emissions by replacing gas

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<sup>9166</sup> Canada and British Columbia support upgrades to two health care centres in the communities of Lil'wat Nation and N'Quatqua Nation, Infrastructure Canada (Pemberton) 3 August 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/office-infrastructure/news/2021/08/canada-and-british-columbia-support-upgrades-to-two-health-care-centres-in-the-communities-of-lilwat-nation-and-nquatqua-nation.html>

<sup>9167</sup> Canada and British Columbia support upgrades to two health care centres in the communities of Lil'wat Nation and N'Quatqua Nation, Infrastructure Canada (Pemberton) 3 August 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/office-infrastructure/news/2021/08/canada-and-british-columbia-support-upgrades-to-two-health-care-centres-in-the-communities-of-lilwat-nation-and-nquatqua-nation.html>

<sup>9168</sup> Canada and British Columbia support upgrades to two health care centres in the communities of Lil'wat Nation and N'Quatqua Nation, Infrastructure Canada (Pemberton) 3 August 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/office-infrastructure/news/2021/08/canada-and-british-columbia-support-upgrades-to-two-health-care-centres-in-the-communities-of-lilwat-nation-and-nquatqua-nation.html>

<sup>9169</sup> Planting Trees in Brampton as Part of Two Billion Trees, Natural Resources Canada (Brampton) 4 August 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/planting-trees-in-brampton-as-part-of-two-billion-trees.html>

<sup>9170</sup> Planting Trees in Brampton as Part of Two Billion Trees, Natural Resources Canada (Brampton) 4 August 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/planting-trees-in-brampton-as-part-of-two-billion-trees.html>

<sup>9171</sup> Planting Trees in Brampton as Part of Two Billion Trees, Natural Resources Canada (Brampton) 4 August 2021. Access Date: 6 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/planting-trees-in-brampton-as-part-of-two-billion-trees.html>

<sup>9172</sup> The Forks Renewal Corporation brings clean energy to downtown Winnipeg buildings with support from the Government of Canada, Environment and Climate Change Canada (Winnipeg) 5 August 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/08/the-forks-renewal-corporation-brings-clean-energy-to-downtown-winnipeg-buildings-with-support-from-the-government-of-canada.html>

<sup>9173</sup> The Forks Renewal Corporation brings clean energy to downtown Winnipeg buildings with support from the Government of Canada, Environment and Climate Change Canada (Winnipeg) 5 August 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/08/the-forks-renewal-corporation-brings-clean-energy-to-downtown-winnipeg-buildings-with-support-from-the-government-of-canada.html>

consumption for heating and cooling.<sup>9174</sup> Approximately 26,000 tonnes of greenhouse gas emissions will be reduced over the lifespan of the project.<sup>9175</sup>

On 9 August 2021, Minister Fortier announced a CAD547,000 investment for the Ottawa Community Housing Corporation to retrofit a four-unit townhome in Ottawa into net-zero homes.<sup>9176</sup> The project will include the installation of solar panels, a new roof and windows.<sup>9177</sup> The goal of these retrofits is to decrease the building's carbon footprint and cut its energy use by 55 per cent.<sup>9178</sup>

On 10 August 2021, Parliamentary Secretary Serré announced an investment of CAD4.25 million for Anomera incorporation to build a facility that will produce 250 tonnes per year of carboxylated-cellulose nanocrystals.<sup>9179</sup> This new technology has the potential to replace plastic and silica microbeads in many industries but mainly in cosmetics and personal care products.<sup>9180</sup> This will reduce plastic usage, therefore reducing pollution.<sup>9181</sup> The funding for this new project is provided through the Investments in Forest Industry Transformation program and the Regional Economic Growth through Innovation program.<sup>9182</sup>

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<sup>9174</sup> The Forks Renewal Corporation brings clean energy to downtown Winnipeg buildings with support from the Government of Canada, Environment and Climate Change Canada (Winnipeg) 5 August 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/08/the-forks-renewal-corporation-brings-clean-energy-to-downtown-winnipeg-buildings-with-support-from-the-government-of-canada.html>

<sup>9175</sup> The Forks Renewal Corporation brings clean energy to downtown Winnipeg buildings with support from the Government of Canada, Environment and Climate Change Canada (Winnipeg) 5 August 2021. Access Date: 5 September 2021.

<https://www.canada.ca/en/environment-climate-change/news/2021/08/the-forks-renewal-corporation-brings-clean-energy-to-downtown-winnipeg-buildings-with-support-from-the-government-of-canada.html>

<sup>9176</sup> Canada Invests in Net-Zero Retrofits for Affordable Housing in Ottawa, Natural Resources Canada (Ottawa) 9 August 2021. Access Date: 10 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/canada-invests-in-net-zero-retrofits-for-affordable-housing-in-ottawa.html>

<sup>9177</sup> Canada Invests in Net-Zero Retrofits for Affordable Housing in Ottawa, Natural Resources Canada (Ottawa) 9 August 2021. Access Date: 10 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/canada-invests-in-net-zero-retrofits-for-affordable-housing-in-ottawa.html>

<sup>9178</sup> Canada Invests in Net-Zero Retrofits for Affordable Housing in Ottawa, Natural Resources Canada (Ottawa) 9 August 2021. Access Date: 10 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/canada-invests-in-net-zero-retrofits-for-affordable-housing-in-ottawa.html>

<sup>9179</sup> Canada Invests in Eco-Friendly Alternative to Plastic Microbeads, Natural Resources Canada (Témiscamingue) 10 August 2021. Access Date: 10 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/canada-invests-in-eco-friendly-alternative-to-plastic-microbeads.html>

<sup>9180</sup> Canada Invests in Eco-Friendly Alternative to Plastic Microbeads, Natural Resources Canada (Témiscamingue) 10 August 2021. Access Date: 10 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/canada-invests-in-eco-friendly-alternative-to-plastic-microbeads.html>

<sup>9181</sup> Canada Invests in Eco-Friendly Alternative to Plastic Microbeads, Natural Resources Canada (Témiscamingue) 10 August 2021. Access Date: 10 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/canada-invests-in-eco-friendly-alternative-to-plastic-microbeads.html>

<sup>9182</sup> Canada Invests in Eco-Friendly Alternative to Plastic Microbeads, Natural Resources Canada (Témiscamingue) 10 August 2021. Access Date: 10 September 2021.

<https://www.canada.ca/en/natural-resources-canada/news/2021/08/canada-invests-in-eco-friendly-alternative-to-plastic-microbeads.html>

Canada has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove). It has complied with its commitment to reduce carbon emissions by investing in renewable energy and improving the energy efficiency of buildings and homes. It has also invested in expanding electric vehicle charging stations, therefore encouraging the transition to electric vehicles. Canada has also complied with its commitment to recycling by promoting the use of bioenergy and investing in recycling projects. It has also complied with its commitment to reuse by investing in carbon capture technologies and storage projects. Additionally, Canada has complied with its commitment to remove carbon emissions by investing in afforestation initiatives. It has also committed to the development of the hydrogen sector, by investing in Hydrogen fueling stations.

Thus, Canada receives a score of +1.

*Analyst: Meryem Althani*

### **China: +1**

China has fully complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 30 December 2020, the Ministry of Ecology and Environment published an interim regulation on the management of carbon trading, allocating carbon emission allowances to 2,225 companies, for the year 2019-2020. The documents issued a rule stating that companies could use China Certified Emission Reductions, generated within the China Greenhouse Gas Voluntary Emission Reduction Program, but that they can only offset 5 per cent of required permits using such reductions.<sup>9183</sup>

On 1 February 2021, China put into effect a set of interim rules aimed at establishing its national emissions trading system. This allows 2,225 power entities with assigned carbon dioxide emission caps to trade their emission quotas. Entities who exceed their emission caps can purchase unused quotas from low emitters. The objective of these rules is to meet the country's goals of peaking in carbon emissions before 2030 and achieving carbon neutrality by 2060.<sup>9184</sup>

On 22 February 2021, the State Council issued a circular outlining its goal for 2025 that “industry, energy and transportation system will see a noticeable improvement, with the manufacturing, circulation and consumption system featuring green, low-carbon and circular development taking initial shape.”<sup>9185</sup> It also stated that by 2035, “the endogenous power for green development will be intensified, the scale of green industry will advance to a new level.”<sup>9186</sup>

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<sup>9183</sup> Nation's carbon trading efforts could serve as model, Government of China (Beijing) 7 January 2021. Access Date: 19 March 2021.

[http://english.www.gov.cn/statecouncil/ministries/202101/07/content\\_WS5ff643dcc6d0f725769435bd.html](http://english.www.gov.cn/statecouncil/ministries/202101/07/content_WS5ff643dcc6d0f725769435bd.html)

<sup>9184</sup> New carbon trading rules take effect to strengthen China's green development, Government of China (Beijing) 2 February 2021. Access Date: 19 March 2021.

[http://english.www.gov.cn/news/videos/202102/02/content\\_WS6018ad31c6d0f72576944f2e.html](http://english.www.gov.cn/news/videos/202102/02/content_WS6018ad31c6d0f72576944f2e.html)

<sup>9185</sup> State Council calls for green, low-carbon and circular development, Government of China (Beijing) 22 February 2021. Access Date: 19 March 2021

[http://english.www.gov.cn/policies/latestreleases/202102/22/content\\_WS6033af98c6d0719374af946b.html](http://english.www.gov.cn/policies/latestreleases/202102/22/content_WS6033af98c6d0719374af946b.html)

<sup>9186</sup> State Council calls for green, low-carbon and circular development, Government of China (Beijing) 22 February 2021. Access Date: 19 March 2021

[http://english.www.gov.cn/policies/latestreleases/202102/22/content\\_WS6033af98c6d0719374af946b.html](http://english.www.gov.cn/policies/latestreleases/202102/22/content_WS6033af98c6d0719374af946b.html)

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On 23 February 2021, the State Council released a guideline to “accelerate the development of a green and low-carbon circular economic development system.”<sup>9187</sup> The policy is aimed at efficient resource usage, strengthening environmental protection and curbing greenhouse gas emissions. The guideline calls for a “marked rise in the scale of green industries, a continued drop in major pollutants, and a slashed carbon emission intensity” by 2025. It adds that by 2035, “energy and resource utilization efficiency in key industries and for key products is expected to reach an internationally-advanced level.” The policy measures it outlines include developing “green and low-carbon production, consumption and circulation systems.”<sup>9188</sup>

On 22 April 2021, the General Office of the State Council issued a notice on “Effectively Strengthening Reservoir Reinforcement and Operation Management and Protection” during a policy briefing.<sup>9189</sup> As part of this notice, it was announced that the Ministry of Water Resources, the National Development and Reform Commission, the Ministry of Finance and other relevant departments will collaborate on a joint task force to work towards better protecting China’s reservoirs.<sup>9190</sup> Reservoirs are one of the crucial engineering measures to support the development and utilization of water resources, including flood control, water supply, and power generation<sup>9191</sup>. As hydropower is a useful form of renewable energy, this action contributes towards reducing emissions in China.

On 28 April 2021, Director of the Eco-Environment Enforcement Bureau of the Ministry of Ecology and Environment Cao Liping announced a commitment to focus special law enforcement resources this year on activities that threaten the environment: the disposal of hazardous waste and environmental violations.<sup>9192</sup> This will be done with the goal of preserving the environmental rights of Chinese citizens and achieving a better-quality environment.<sup>9193</sup>

On 7 July 2021, the National Development and Reform Commission (NDRC) released its development plan for the resource recycling industry as part of China’s 14th Five-Year Plan 2021-2025.<sup>9194</sup> This plan will increase the overall recycle rate for resources and reduce the consumption of energy and water per unit of GDP by around 13.5 per cent and 16 per cent respectively, taking into account the approximate 20 per cent increase in resource output rates over 2020 levels.<sup>9195</sup> The NDRC aims to accelerate the construction of resource recycle systems in industrial production and will target high-energy consumption sectors such as petrochemicals, coking, cement and printing.<sup>9196</sup> The NDRC also plans to improve the low grade re-use of ores and urban waste treatment, stating

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<sup>9187</sup> State Council releases guideline to boost green, low-carbon economy, Government of China (Beijing) 23 February 2021. Access Date: 19 March 2021. [http://www.china.org.cn/business/2021-02/23/content\\_77239599.htm](http://www.china.org.cn/business/2021-02/23/content_77239599.htm)

<sup>9188</sup> State Council releases guideline to boost green, low-carbon economy, Government of China (Beijing) 23 February 2021. Access Date: 19 March 2021. [http://www.china.org.cn/business/2021-02/23/content\\_77239599.htm](http://www.china.org.cn/business/2021-02/23/content_77239599.htm)

<sup>9189</sup> Strengthening of Reservoir Reinforcement and Operation Management and Protection in China (Beijing) 23 April 2021. Access Date: 15 May 2021. [http://www.gov.cn/zhengce/2021-04/23/content\\_5601541.htm](http://www.gov.cn/zhengce/2021-04/23/content_5601541.htm)

<sup>9190</sup> Strengthening of Reservoir Reinforcement and Operation Management and Protection in China (Beijing) 23 April 2021. Access Date: 15 May 2021. [http://www.gov.cn/zhengce/2021-04/23/content\\_5601541.htm](http://www.gov.cn/zhengce/2021-04/23/content_5601541.htm)

<sup>9191</sup> Strengthening of Reservoir Reinforcement and Operation Management and Protection in China (Beijing) 23 April 2021. Access Date: 15 May 2021. [http://www.gov.cn/zhengce/2021-04/23/content\\_5601541.htm](http://www.gov.cn/zhengce/2021-04/23/content_5601541.htm)

<sup>9192</sup> The Ministry of Ecology and Environment will carry out four special law enforcement activities this year (Beijing) 28 April 2021. Access Date: 15 May 2021. [http://www.gov.cn/xinwen/2021-04/28/content\\_5603634.htm](http://www.gov.cn/xinwen/2021-04/28/content_5603634.htm)

<sup>9193</sup> The Ministry of Ecology and Environment will carry out four special law enforcement activities this year (Beijing) 28 April 2021. Access Date: 15 May 2021. [http://www.gov.cn/xinwen/2021-04/28/content\\_5603634.htm](http://www.gov.cn/xinwen/2021-04/28/content_5603634.htm)

<sup>9194</sup> China’s resource recycling industry output value to reach 5 trillion yuan by 2025: top economic planner, Global Times (Beijing) 7 July 2021. Access Date: 21 July 2021. <https://www.globaltimes.cn/page/202107/1228039.shtml>

<sup>9195</sup> China’s resource recycling industry output value to reach 5 trillion yuan by 2025: top economic planner, Global Times (Beijing) 7 July 2021. Access Date: 21 July 2021. <https://www.globaltimes.cn/page/202107/1228039.shtml>

<sup>9196</sup> China’s resource recycling industry output value to reach 5 trillion yuan by 2025: top economic planner, Global Times (Beijing) 7 July 2021. Access Date: 21 July 2021. <https://www.globaltimes.cn/page/202107/1228039.shtml>

that China's utility rate of bulk solid waste will increase to 60 per cent by 2025.<sup>9197</sup> Furthermore, the plan aims to develop a "green developmental society with a sophisticated resource recycling system", which will include establishing recycling networks for used materials and trade platforms for used items.<sup>9198</sup> The agriculture and electronics sectors will also be covered under this enhanced recycling plan, which will support China's commitment to the Circular Carbon Economy.<sup>9199</sup>

On 25 August 2021, the Chinese government announced plans to plant 33.33 million hectares of forest and grassland by 2025.<sup>9200</sup> The repopulation of carbon sinks such as forests and grasslands is conducive to China's commitment to peaking carbon dioxide emissions by 2030 and sequestering carbon for the purpose of achieving carbon neutrality by 2060.<sup>9201</sup>

On 26 August 2021, the state-run Power Construction Corporation of China announced a contract with the Iraqi government to build solar power plants in Iraq with a production capacity of 2,000 megawatts.<sup>9202</sup> The project is conducive to the reduction of carbon emissions through the production of renewable energy sources and will produce up to 750 megawatts of energy as soon as the first phase is complete.<sup>9203</sup>

China has taken action to address all of the four key commitment areas within the four Rs framework (Reduce, Reuse, Recycle, Remove) of the Circular Carbon Economy and has additionally advanced hydrogen policies. China has complied with its commitment to reduce carbon emissions by increasing sustainable energy production through hydrogen and reservoir-preservation policies. China has also complied with its commitment to reducing emissions by regulating carbon allowances through its national emissions trading system (ETS). China has complied with its commitment to the "Recycle" component by its planned overhaul of industrial recycling in various sectors. Finally, China has complied with its commitment to remove emissions by installing offshore carbon storage facilities as well as its pledge to create and protect forest and grassland carbon sinks.

Thus, China receives a score of +1.

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### **France: +1**

France has fully complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

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<sup>9197</sup> China's resource recycling industry output value to reach 5 trillion yuan by 2025: top economic planner, Global Times (Beijing) 7 July 2021. Access Date: 21 July 2021. <https://www.globaltimes.cn/page/202107/1228039.shtml>

<sup>9198</sup> China's resource recycling industry output value to reach 5 trillion yuan by 2025: top economic planner, Global Times (Beijing) 7 July 2021. Access Date: 21 July 2021. <https://www.globaltimes.cn/page/202107/1228039.shtml>

<sup>9199</sup> China's resource recycling industry output value to reach 5 trillion yuan by 2025: top economic planner, Global Times (Beijing) 7 July 2021. Access Date: 21 July 2021. <https://www.globaltimes.cn/page/202107/1228039.shtml>

<sup>9200</sup> China announces massive greening plan to achieve carbon goals, Government of China (Beijing) 25 August 2021. Access Date: 12 September 2021.

[http://english.www.gov.cn/statecouncil/ministries/202108/25/content\\_WS61258116c6d0df57f98df156.html](http://english.www.gov.cn/statecouncil/ministries/202108/25/content_WS61258116c6d0df57f98df156.html)

<sup>9201</sup> China announces massive greening plan to achieve carbon goals, Government of China (Beijing) 25 August 2021. Access Date: 12 September 2021.

[http://english.www.gov.cn/statecouncil/ministries/202108/25/content\\_WS61258116c6d0df57f98df156.html](http://english.www.gov.cn/statecouncil/ministries/202108/25/content_WS61258116c6d0df57f98df156.html)

<sup>9202</sup> Iraqi government signs contract with Power China to build solar plants, Global Times (Beijing) 26 August 2021. Access Date: 12 September 2021. <https://www.globaltimes.cn/page/202108/1232519.shtml>

<sup>9203</sup> Iraqi government signs contract with Power China to build solar plants, Global Times (Beijing) 26 August 2021. Access Date: 12 September 2021. <https://www.globaltimes.cn/page/202108/1232519.shtml>

On 22 November 2020, the French Development Agency and the International Union for the Conservation of Nature and Natural Resources announced a EUR10 million grant agreement, as part of the ongoing Minka Middle East Initiative, to fund ecologically responsible and economically accessible updates to Jordan's agricultural sector. The project seeks to modernize farms in order to make them more productive and resource efficient, (particularly to reduce water-use).<sup>9204</sup>

On 12 December 2020, France co-hosted the Climate Ambition Summit with the UK and the EU. The summit saw new commitments from 75 world leaders and reaffirmed the global community's commitment to net zero emissions by 2050. At the conference, President Emmanuel Macron noted that the COVID-19 crisis presented an opportunity to accelerate ecological transition and reaffirmed France's commitment to reducing greenhouse gas emissions and to climate financing.<sup>9205</sup>

On 14 December 2020, Minister of Ecological Transition Barbara Pompili, and Minister Delegate to the Minister of the Economy, Finance and Recovery Agnès Pannier-Runacher announced 60 projects that will receive EUR16 million in aid to support the continued recycling of plastics. This funding initiative is part of the circular economy portion of France's COVID-19 economic recovery initiative, France Relance. Propping up these businesses is conducive to France's goal of having 100 per cent recycled plastics by 2025. The funds will be distributed by the French Ecological Transition Agency.<sup>9206</sup>

On 14 December 2020, Prime Minister Jean Castex announced that 4,214 projects were selected to receive funding for renovations of government, public and higher education buildings. The renovations, all of which will be finished by 2023, will improve energy efficiency allowing for a reduction in energy use. The total funding for these projects amounts to EUR2.7 billion.<sup>9207</sup>

On 11 January 2021, Minister Pompili, Minister of the Economy, Finance and Recovery Bruno Le Maire, Minister of Higher Education, Research and Innovation Frédérique Vidal and Minister Agnès Pannier-Runacher announced the formation of the National Hydrogen Council. The council will oversee the development of the French hydrogen sector and the implementation of the national strategy for the development of carbon-free hydrogen. This announcement included a commitment to invest EUR7 billion into this strategy by 2030.<sup>9208</sup>

On 11 January 2021, France co-hosted the One Planet Summit along with the United Nations and the World Bank. The summit discussed the protection of terrestrial and marine ecosystems, agroecology, financing biodiversity and protecting forests.<sup>9209</sup> At the summit, France, Spain, and Monaco launched the Coalition for an Exemplary Mediterranean in 2030. The coalition intends to

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<sup>9204</sup> A 10 Million Euros Grant To Support The Development Of Ecologically Responsible And Economically Accessible Agricultural Solutions And Techniques In Jordan, the French Development Agency (Amman) 22 November 2020. Access Date: 18 March 2021. <https://www.afd.fr/en/actualites/communique-de-presse/10-million-euros-grant-support-development-ecologically-responsible-and-economically-accessible-agricultural-solutions-and-techniques-jordan>

<sup>9205</sup> Climate Ambition Summit Builds Momentum for COP26, UNFCCC Secretariat (New York, London, Paris) 12 December 2020. Access Date: 18 March 2021. <https://unfccc.int/news/climate-ambition-summit-builds-momentum-for-cop26>

<sup>9206</sup> The Government supports the circular economy of plastics: 16 million euros in emergency aid for the plastics industry, Ministry of Ecological Transition (Paris) 14 December 2020. Access Date: 18 March 2021. <https://www.ecologie.gouv.fr/gouvernement-soutient-leconomie-circulaire-des-plastiques-16-millions-deuros-daide-durgence-secteur>

<sup>9207</sup> Thermal renovation for 4,214 state and higher education buildings by 2023, State Real Estate Department (Paris) 15 December 2020. Access Date: 21 March 2020. <https://immobilier-etat.gouv.fr/actualites/renovation-thermique-pour-4214-batiments-letat-lenseignement-superieur-dici-2023>

<sup>9208</sup> Installation of the National Hydrogen Council, Ministry of Ecological Transition (Paris) 11 January 2021. Access Date: 19 March 2021. <https://www.ecologie.gouv.fr/installation-du-conseil-national-lhydrogene>

<sup>9209</sup> One Planet Summit – Commitments to act in favor of biodiversity, Ministry of Europe and Foreign Affairs (Paris) 11 January 2021. Access Date: 19 March 2021. <https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate-and-environment/the-one-planet-movement/article/one-planet-summit-commitments-to-act-in-favor-of-biodiversity-12-jan-2021>



develop a network of protected areas, fight marine pollution, ban single-use plastics and reduce the environmental impact of maritime transport.<sup>9210</sup> France also announced its support for the initiative undertaken by the Great Green Wall to plant 7,000 kilometres of hedgerows by 2022.<sup>9211</sup> This initiative is part of a plan to sequester 250 million tonnes of carbon, and restore 100 million hectares of degraded land by 2030.<sup>9212</sup>

On 12 January 2021, the Ministry of Ecological Transition and the Environment and Energy Management Agency announced the #LesBonnesHabitudes awareness campaign. The goal of this campaign is to inform and encourage French citizens to act according to the 3 Rs of individual consumption, reduce, reuse, and recycle, and in doing so contribute towards the development of a circular economy.<sup>9213</sup>

On 28 January 2021, the French Development Agency signed an agreement with the Indian government to support the development of the Surat metro. The project is financed by a EUR250 million loan from the French Development Agency. The goal of the project is to support emission reduction and provide sustainable and easily accessible transportation as the metro will reduce carbon emissions by 40,000 tons and service 400,000 people.<sup>9214</sup>

On 28 January 2021, the Ministry of Ecological Transition and the Environment and Energy Management Agency launched the “Springboard for the ecological transition of [small and medium sized enterprises]” initiative, which provides funding to small and medium businesses who are conducting studies on ecological studies or renovating their businesses for improved energy efficiency. A flat rate between EUR5,000 and EUR20,000 depending on the project. This fund is part of France’s COVID-19 recovery program, France Relance, which has dedicated EUR30 billion to matters of ecological transition including promoting the circular economy and reducing greenhouse gas emissions.<sup>9215</sup>

On 23 February 2021, Minister Pompili and Secretary of State for Digital Transition and Electronic Communications Cédric O released the digital and environment roadmap, the national strategy on the transition to digital technology and its impact and role in ecological transitions. This national strategy focuses on developing knowledge of the impact of digital technology on the environment, reducing the environmental footprint of digital technology and using digital technology to innovate for the purpose of ecological transition.<sup>9216</sup>

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<sup>9210</sup> One Planet Summit – Commitments to act in favor of biodiversity, Ministry of Europe and Foreign Affairs (Paris) 11 January 2021. Access Date: 19 March 2021. <https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate-and-environment/the-one-planet-movement/article/one-planet-summit-commitments-to-act-in-favor-of-biodiversity-12-jan-2021>

<sup>9211</sup> One Planet Summit – Commitments to act in favor of biodiversity, Ministry of Europe and Foreign Affairs (Paris) 11 January 2021. Access Date: 19 March 2021. <https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate-and-environment/the-one-planet-movement/article/one-planet-summit-commitments-to-act-in-favor-of-biodiversity-12-jan-2021>

<sup>9212</sup> 4th edition of the One Planet Summit: mobilizing and taking action for biodiversity, Ministry of Europe and Foreign Affairs (Paris) 11 January 2021. Access Date: 19 March 2021. <https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate-and-environment/news/article/4th-edition-of-the-one-planet-summit-mobilizing-and-taking-action-for>

<sup>9213</sup> #LesBonnesHabitudes: launch of a campaign to reduce, reuse and recycle, Ministry of Ecological Transition (Paris) 12 January 2021. Access Date: 20 March 2021. <https://www.ecologie.gouv.fr/lancement-campagne-les-bonnes-habitudes>

<sup>9214</sup> France and India sign 250M€ credit financing agreement to build Surat Metro, the French Embassy in India (New Delhi) 28 January 2021. Access Date: 18 March 2021. <https://in.ambafrance.org/France-and-India-sign-250MEUR-credit-financing-agreement-to-build-Surat-Metro>

<sup>9215</sup> Launch of the “Springboard for the Ecological Transition of SMEs,” Ministry of Ecological Transition (Paris) 28 January 2021. Access Date: 19 March 2021. <https://presse.ademe.fr/2021/01/lancement-de-linitiative-tremplin-pour-la-transition-ecologique-des-pme.html>

<sup>9216</sup> Digital and environment: new stage of the Government's roadmap, The Ministry of the Economy, Finance and Recovery (Paris) 23 February 2021. Access Date: 20 March 2021. <https://www.economie.gouv.fr/environnement-numerique-feuille-de-route-gouvernement>

On 17 March 2021, Minister Pompili and Minister Delegate in charge of Transport Jean-Baptiste announced a microcredit for low-income purchasers of low-polluting vehicles. EUR1.9 billion has been dedicated to the plan, and eligible recipients can receive up to EUR5,000.<sup>9217</sup>

On 7 April 2021, the French Development Agency approved a EUR50 million loan and a EUR500,000 technical assistance grant in order to support Serbia's agenda on climate change and low carbon development in accordance with its commitments under the Paris Agreement.<sup>9218</sup>

On 9 April 2021, Secretary of State for Biodiversity Bérangère Abba announced the creation of a new nature reserve "Étangs et Rigoles d'Yveline."<sup>9219</sup> The new reserve will protect 310 hectares of land including the former Saint-Quentin-en-Yvelines reserve. The protection of this land places 308 hectares under strong protection.<sup>9220</sup> The new reserve also contains wetlands, valuable carbon sinks, whose inclusion in the protected area is consistent with the government's focus on wetland protection in its 2021-2030 national strategy for protected areas.<sup>9221</sup>

On 19 April 2021, Minister of Agriculture and Food Julien Denormandie, Minister responsible for Housing Emmanuelle Wargon, and Minister Pannier-Runacher signed an amendment to the timber sector strategy contract.<sup>9222</sup> This action aims to achieve France's decarbonization goals by promoting construction of wood buildings which will serve as carbon sinks.<sup>9223</sup> To this end, environmental regulations for new buildings will also be modified, promoting the use of mixed materials in buildings.<sup>9224</sup>

On 22 April 2021, the French Development Agency announced funding for sustainable and green development projects in Montenegro<sup>9225</sup>. The French Development Agency signed two financing agreements with the Development Fund of Montenegro, in which the French Development Agency will provide a EUR50 million line of credit and EUR400,000 grant for the purpose of promoting and

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<sup>9217</sup> Barbara Pompili and Jean-Baptiste Djebbari announce the establishment of the "Clean vehicles" microcredit for low-income households, Ministry of Ecological Transition (Paris) 17 March 2021. Access Date: 21 March 2021. <https://www.ecologie.gouv.fr/barbara-pompili-et-jean-baptiste-djebbari-annoncent-mise-en-place-du-microcredit-vehicules-propres>

<sup>9218</sup> AFD Approves EUR 50 Million to Support Serbia's Reform Agenda on Climate Change, the French Development Agency (Belgrade), 7 April 2021. Access Date: 1 May 2021. <https://www.afd.fr/en/actualites/communique-de-presse/afd-approuve-50-million-support-serbie-reform-agenda-climate-change>

<sup>9219</sup> Bérangère Abba announces the creation of the Yveline Ponds and Rigoles National Nature Reserve, Ministry of Ecological Transition (Paris) 9 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/berangere-abba-annonce-creation-reserve-naturelle-nationale-des-etangs-et-rigoles-dyveline>

<sup>9220</sup> Bérangère Abba announces the creation of the Yveline Ponds and Rigoles National Nature Reserve, Ministry of Ecological Transition (Paris) 9 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/berangere-abba-annonce-creation-reserve-naturelle-nationale-des-etangs-et-rigoles-dyveline>

<sup>9221</sup> Bérangère Abba announces the creation of the Yveline Ponds and Rigoles National Nature Reserve, Ministry of Ecological Transition (Paris) 9 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/berangere-abba-annonce-creation-reserve-naturelle-nationale-des-etangs-et-rigoles-dyveline>

<sup>9222</sup> Bérangère Abba announces the creation of the Yveline Ponds and Rigoles National Nature Reserve, Ministry of Ecological Transition (Paris) 9 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/berangere-abba-annonce-creation-reserve-naturelle-nationale-des-etangs-et-rigoles-dyveline>

<sup>9223</sup> Bérangère Abba announces the creation of the Yveline Ponds and Rigoles National Nature Reserve, Ministry of Ecological Transition (Paris) 9 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/berangere-abba-annonce-creation-reserve-naturelle-nationale-des-etangs-et-rigoles-dyveline>

<sup>9224</sup> Low-carbon transition: the Government places the timber industry at the heart of its strategy, Ministry of Agriculture, Agrifood, and Forestry (Paris) 19 April 2021. Access Date: 1 May 2021.

<https://agriculture.gouv.fr/transition-bas-carbone-le-gouvernement-place-la-filiere-bois-au-coeur-de-sa-strategie>

<sup>9225</sup> Climate Finance and Post-COVID-19 Recovery: AFD Supports Sustainable and Inclusive Development Projects in Montenegro, the French Development Agency (Paris) 22 April 2021. Access Date: 1 May 2021.

<https://www.afd.fr/en/actualites/communique-de-presse/climate-finance-afd-support-sustainable-and-inclusive-development-projects-in-montenegro>

funding green investment projects undertaken by Montenegrin municipalities and small and medium sized businesses.<sup>9226</sup>

On 26 April 2021, the Ministry of Ecological Transition published its climate action plan. This action plan will complement France's National Low Carbon Strategy and the National Adaptation Plan for Climate Change in the ministry's policy and decision-making.<sup>9227</sup> The plan focuses on mitigation primarily through the reduction of emissions and on adaptation, limiting the effects of climate change on human societies and the environment.<sup>9228</sup>

On 28 April 2021, France announced the fifth phase of the Energy Saving Certificate scheme.<sup>9229</sup> This scheme impacts energy producers, requiring them to undertake actions to improve energy efficiency such as improving company infrastructure or producing energy saving products.<sup>9230</sup> This fifth phase sets the target for energy savings at 2,500 terawatt hours with 730 terawatt hours set aside for energy reduction projects on houses with the lowest incomes.<sup>9231</sup> This fifth phase of the scheme will help France meet its energy reduction goals outlined in the National Low Carbon Strategy (SNBC).<sup>9232</sup>

On 29 April 2021, the Ministry of the Economy, Finance and Recovery presented its climate action plan.<sup>9233</sup> The ministry presented an 11-point action plan that will guide its actions in accordance with the SNBC, the National Adaptation Plan for Climate Change and France's commitments under the Paris Agreement.<sup>9234</sup>

On 30 April 2021, Minister Pompili and Minister Djebbari announced the signing of a contract of objectives and performance with Waterways of France providing additional funding of EUR175

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<sup>9226</sup> Climate Finance and Post-COVID-19 Recovery: AFD Supports Sustainable and Inclusive Development Projects in Montenegro, the French Development Agency (Paris) 22 April 2021. Access Date: 1 May 2021.

<https://www.afd.fr/en/actualites/communiquede-presse/climate-finance-afd-support-sustainable-and-inclusive-development-projects-in-montenegro>

<sup>9227</sup> Climate mission letters: The Ministry of Ecological Transition publishes its action plan, Ministry of Ecological Transition (Paris) 26 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/lettres-mission-climat-ministere-transition-ecologique-publie-plan-dactions>

<sup>9228</sup> Climate mission letters: The Ministry of Ecological Transition publishes its action plan, Ministry of Ecological Transition (Paris) 26 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/lettres-mission-climat-ministere-transition-ecologique-publie-plan-dactions>

<sup>9229</sup> The Government specifies the levels of obligation of energy saving certificates for the 5th period, in order to strengthen the ecological ambition and support for the most modest households, Ministry of Ecological Transition (Paris) 28 April, 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/gouvernement-precise-niveaux-dobligation-des-certificats-deconomies-denergie-5eme-periode-afin>

<sup>9230</sup> The Government specifies the levels of obligation of energy saving certificates for the 5th period, in order to strengthen the ecological ambition and support for the most modest households, Ministry of Ecological Transition (Paris) 28 April, 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/gouvernement-precise-niveaux-dobligation-des-certificats-deconomies-denergie-5eme-periode-afin>

<sup>9231</sup> The Government specifies the levels of obligation of energy saving certificates for the 5th period, in order to strengthen the ecological ambition and support for the most modest households, Ministry of Ecological Transition (Paris) 28 April, 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/gouvernement-precise-niveaux-dobligation-des-certificats-deconomies-denergie-5eme-periode-afin>

<sup>9232</sup> The Government specifies the levels of obligation of energy saving certificates for the 5th period, in order to strengthen the ecological ambition and support for the most modest households, Ministry of Ecological Transition (Paris) 28 April, 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/gouvernement-precise-niveaux-dobligation-des-certificats-deconomies-denergie-5eme-periode-afin>

<sup>9233</sup> Environment: Bercy publishes its climate action plan, The Ministry of the Economy, Finance and Recovery (Paris) 29 April 2021. Access Date: 1 May 2021. <https://www.economie.gouv.fr/plan-de-relance/environnement-bercy-plan-action-clima>

<sup>9234</sup> Environment: Bercy publishes its climate action plan, The Ministry of the Economy, Finance and Recovery (Paris) 29 April 2021. Access Date: 1 May 2021. <https://www.economie.gouv.fr/plan-de-relance/environnement-bercy-plan-action-climat>

million.<sup>9235</sup> The purpose of the contract is to provide funding for diversifying river infrastructure and make transporting goods by river a more viable alternative to road transport.<sup>9236</sup> The funding will also enable Waterways of France to modernize France's waterways and provide water management support globally. Modernization measures would include introducing green technology such as hydrogen powered boats as well as the installation of hydroelectric dams and water turbines along waterways.<sup>9237</sup>

On 17 May 2021, the French government announced an additional EUR350 million in funding to the brownfield fund for the rehabilitation of previously developed, contaminated land for commercial and residential purposes.<sup>9238</sup> The purpose of this fund is to provide financial aid to various projects that are seeking to recycle land in order to make more efficient use of urban spaces, control urban sprawl and limit soil artificialization.<sup>9239</sup>

On 26 May 2021, the French Development Agency signed an agreement to provide the Investment and Development Bank of Vietnam with a EUR100 million line of credit to encourage investment in renewable energy and energy efficiency.<sup>9240</sup> As part of the agreement, the French Development Agency will also provide the Investment and Development Bank of Vietnam with assistance in transitioning to a green finance model.<sup>9241</sup>

On 30 June 2021, director of the French Development Agency in Vietnam Fabrice Richey and vice-president of Vietnam Electricity Nguyen Xuan Nam signed a loan agreement of EUR74.7 million for the purpose of financing an extension of the Ialy hydroelectric power station by 360 megawatts.<sup>9242</sup> This will enable the station to increase its electricity production without having to increase the flooded area and will help reduce the use of electricity produced by fossil fuels avoiding 68,000 tons of greenhouse gas emissions annually.<sup>9243</sup>

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<sup>9235</sup> Barbara Pompili and Jean-Baptiste Dejabbari signed today with Voies Navigables de France a contract of objectives providing for an additional € 175 million in State support, Ministry of Ecological Transition (Paris) 30 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/barbara-pompili-et-jean-baptiste-dejabbari-ont-signé-jour-voies-navigables-france-contrat-dobjectifs>

<sup>9236</sup> Barbara Pompili and Jean-Baptiste Dejabbari signed today with Voies Navigables de France a contract of objectives providing for an additional € 175 million in State support, Ministry of Ecological Transition (Paris) 30 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/barbara-pompili-et-jean-baptiste-dejabbari-ont-signé-jour-voies-navigables-france-contrat-dobjectifs>

<sup>9237</sup> Barbara Pompili and Jean-Baptiste Dejabbari signed today with Voies Navigables de France a contract of objectives providing for an additional € 175 million in State support, Ministry of Ecological Transition (Paris) 30 April 2021. Access Date: 1 May 2021. <https://www.ecologie.gouv.fr/barbara-pompili-et-jean-baptiste-dejabbari-ont-signé-jour-voies-navigables-france-contrat-dobjectifs>

<sup>9238</sup> Waste land recycling: the government doubles the dedicated fund to reach 650 million euros, Ministry of Ecological Transition (Paris) 17 May 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/recyclage-des-friches-gouvernement-double-fonds-dedie-atteindre-650-millions-deuros>

<sup>9239</sup> Waste land recycling: the government doubles the dedicated fund to reach 650 million euros, Ministry of Ecological Transition (Paris) 17 May 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/recyclage-des-friches-gouvernement-double-fonds-dedie-atteindre-650-millions-deuros>

<sup>9240</sup> Green Finance For The Energy Transition in Vietnam, the French Development Agency (Paris) 17 May 2021. Access Date: 23 July 2021. <https://www.afd.fr/fr/actualites/finance-verte-transition-energetique-vietnam>

<sup>9241</sup> Green Finance For The Energy Transition in Vietnam, the French Development Agency (Paris) 17 May 2021. Access Date: 23 July 2021. <https://www.afd.fr/fr/actualites/finance-verte-transition-energetique-vietnam>

<sup>9242</sup> Energy Transition: In Vietnam, AFD Supports The Extension Of The Ialy Hydropower Plant, the French Development Agency (Hanoi) 9 July 2021. Access Date: 23 July 2021. <https://www.afd.fr/fr/actualites/transition-energetique-au-vietnam-lafd-soutient-lextension-de-la-centrale-hydroelectrique-de-ialy>

<sup>9243</sup> Energy Transition: In Vietnam, AFD Supports the Extension of The Ialy Hydropower Plant, the French Development Agency (Hanoi) 9 July 2021. Access Date: 23 July 2021. <https://www.afd.fr/fr/actualites/transition-energetique-au-vietnam-lafd-soutient-lextension-de-la-centrale-hydroelectrique-de-ialy>

On 5 July 2021, Minister Pompili and Minister Delegate in charge of Small and Medium Enterprises Alain Griset announced, in partnership with the French Agency for Ecological Transition, the Chamber of Trades and Crafts and the Chamber of Commerce, funding of EUR15 million in order to provide small and medium businesses with diagnostic reports by an advisor from the Chamber of Trades and Crafts or the Chamber of Commerce and Industry.<sup>9244</sup> These reports outline steps that businesses can take to optimize energy efficiency and resource use, as well as information on funding and training for employees.<sup>9245</sup> The funding will allow for 35,000 diagnostic reports as well as 10,000 instances of additional support.<sup>9246</sup>

On 7 July 2021, Minister Djebbari signed a commitment outlining plans for green growth of industries that rely on water-borne transportation.<sup>9247</sup> This includes a commitment to reduce GHG emissions from the sector by 20 per cent within 10 years, which will be achieved in part by introducing electric terminals in quays and through researching and using alternative low-emission engine solutions.<sup>9248</sup>

On 15 July 2021, the Ministry of Ecological Transition announced a decree that gives renewable energy producers the option to request an alternative connection from energy grid operators, allowing renewable energy to be attached to the grid at a lower cost and greater speed than the standard connection.<sup>9249</sup> The goal of this decree is to simplify the process of connecting renewable energy producers to the electrical grid and accelerate the production and use of renewable energies up to an additional 750 megawatts of additional power by 2030.<sup>9250</sup>

On 20 July 2021, the National Assembly announced the adoption of the Climate and Resilience Bill.<sup>9251</sup> The bill promotes renewable energy and energy efficiency and reduction through stricter housing insulation standards and mandatory energy audits, creating low emission zones in metropolitan areas with more than 150,000 citizens to improve air quality and restrict car traffic by 2024, prohibiting short domestic flights, carbon offsets for all domestic flights by 2024, ending the sale of high emission automobiles by 2030, instituting consumer labels explaining the environmental

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<sup>9244</sup> The Government is accelerating the ecological transition of artisans, traders and independent workers in collaboration with ADEME, CCI France and CMA France, Ministry of Ecological Transition (Paris) 5 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/gouvernement-accelere-transition-ecologique-des-artisans-commerçants-et-independants-en>

<sup>9245</sup> The Government is accelerating the ecological transition of artisans, traders and independent workers in collaboration with ADEME, CCI France and CMA France, Ministry of Ecological Transition (Paris) 5 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/gouvernement-accelere-transition-ecologique-des-artisans-commerçants-et-independants-en>

<sup>9246</sup> The Government is accelerating the ecological transition of artisans, traders and independent workers in collaboration with ADEME, CCI France and CMA France, Ministry of Ecological Transition (Paris) 5 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/gouvernement-accelere-transition-ecologique-des-artisans-commerçants-et-independants-en>

<sup>9247</sup> Jean-Baptiste Djebbari signed the commitments for green growth in the river sector, Ministry of Ecological Transition (Paris) 7 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/jean-baptiste-djebbari-signe-engagements-croissance-verte-du-secteur-fluvial>

<sup>9248</sup> Jean-Baptiste Djebbari signed the commitments for green growth in the river sector, Ministry of Ecological Transition (Paris) 7 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/jean-baptiste-djebbari-signe-engagements-croissance-verte-du-secteur-fluvial>

<sup>9249</sup> Renewable energies: Barbara Pompili signs a decree to facilitate their connection to public electricity networks, Ministry of Ecological Transition (Paris) 15 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/energies-renouvelables-barbara-pompili-signe-arrete-faciliter-leur-raccordement-aux-reseaux-publics>

<sup>9250</sup> Renewable energies: Barbara Pompili signs a decree to facilitate their connection to public electricity networks, Ministry of Ecological Transition (Paris) 15 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/energies-renouvelables-barbara-pompili-signe-arrete-faciliter-leur-raccordement-aux-reseaux-publics>

<sup>9251</sup> Climate & Resilience Bill - Final vote in the National Assembly and the Senate: ecology in our lives, Ministry of Ecological Transition (Paris) 20 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/projet-loi-climat-resilience-vote-definitif-lassemblee-nationale-et-au-senat-lecologie-dans-nos-vies>

impact of products and by requiring large buildings to have solar panels or green roofs installed either upon construction or renovation.<sup>9252</sup>

On 23 July 2021, Minister Pompili announced the publication of an action plan to reduce the emission of fine particulate pollutants from domestic wood burning by 50 per cent by 2030.<sup>9253</sup> The plan includes measures to replace 600,000 appliances by 2025, the creation of an indication of obsolescence rates on new appliances and plans to increase supervision of wood burning in heavily polluted areas as well as the promotion of quality fuel.<sup>9254</sup>

On 28 July 2021, Minister Pompili, Deputy Minister in charge of Housing Emmanuelle Wargon and Deputy Minister in charge of Industry Agnès Pannier-Runacher announced the signing of a six-year commitment charter with key businesses in logistics real estate.<sup>9255</sup> The goal of the charter is to create warehouses that are more environmentally friendly which will be achieved by installing solar panels on 50 per cent of roof space, encouraging rehabilitation of current wastelands for new warehouse sites, planting greenery and by committing to providing ecological studies of potential warehouse sites by an ecologist before receiving approval to build, all of which are conducive to France's commitment to transition to reusable energy, reuse underutilized land, reduce reliance on carbon emitting energy in buildings and remove carbon through the planting of carbon sinks.<sup>9256</sup>

On 2 August 2021, the French Development Agency announced a EUR50 million loan agreement with ProCredit Bank to finance green projects and small and medium sized businesses in Serbia.<sup>9257</sup> The purpose of this loan agreement is to encourage sustainable development and continued green financing in Serbia.<sup>9258</sup>

On 30 August 2021, the Transport Innovation Agency announced the launch of the Propulse program which includes a call for innovative projects in sustainable transportation.<sup>9259</sup> This is

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<sup>9252</sup> Climate and resilience law: ecology in our lives, Ministry of Ecological Transition (Paris) 20 July 2021. Access Date: 23 July 2021. <https://www.ecologie.gouv.fr/loi-climat-resilience>

<sup>9253</sup> The Government publishes the action plan to reduce the emissions of fine particles from domestic wood heating by 50%, Ministry of Ecological Transition (Paris) 23 July 2021. Access Date: 24 July 2021. <https://www.ecologie.gouv.fr/gouvernement-publique-plan-daction-reuire-50-emissions-particules-fines-du-chauffage-au-bois>

<sup>9254</sup> The Government publishes the action plan to reduce the emissions of fine particles from domestic wood heating by 50%, Ministry of Ecological Transition (Paris) 23 July 2021. Access Date: 24 July 2021. <https://www.ecologie.gouv.fr/gouvernement-publique-plan-daction-reuire-50-emissions-particules-fines-du-chauffage-au-bois>

<sup>9255</sup> The Government signs a commitment with the main players in logistics real estate in order to improve their environmental performance and their integration into the regions, Ministry of Ecological Transition (Paris) 28 July 2021. Access Date: 8 September 2021. <https://www.ecologie.gouv.fr/gouvernement-signe-engagement-principaux-acteurs-limmobilier-logistique-afin-dameliorer-leur>

<sup>9256</sup> The Government signs a commitment with the main players in logistics real estate in order to improve their environmental performance and their integration into the regions, Ministry of Ecological Transition (Paris) 28 July 2021. Access Date: 8 September 2021. <https://www.ecologie.gouv.fr/gouvernement-signe-engagement-principaux-acteurs-limmobilier-logistique-afin-dameliorer-leur>

<sup>9257</sup> 50 Million Euros For Small And Medium-sized Enterprises And Green Projects In Serbia, the French Development Agency (Paris) 2 August 2021. Access Date: 8 September 2021. <https://www.afd.fr/en/actualites/communique-de-presse/50-million-euros-small-and-medium-sized-enterprises-and-green-projects-serbia?origin=/en/actualites/communique-de-presse>

<sup>9258</sup> 50 Million Euros For Small And Medium-sized Enterprises And Green Projects In Serbia, the French Development Agency (Paris) 2 August 2021. Access Date: 8 September 2021. <https://www.afd.fr/en/actualites/communique-de-presse/50-million-euros-small-and-medium-sized-enterprises-and-green-projects-serbia?origin=/en/actualites/communique-de-presse>

<sup>9259</sup> The Transport Innovation Agency launches the "Propulse" program with 4 calls for projects, Ministry of Ecological Transition (Paris) 30 August 2021. Access Date: 8 September 2021. <https://www.ecologie.gouv.fr/lagence-linnovation-transports-lance-programme-propulse-dote-4-appels-projets>

conducive to the government's goals of decarbonizing the nation's vehicles, reducing energy use and ensuring accessible transportation.<sup>9260</sup>

France has fully complied with its commitment to endorse the CCE platform with its 4Rs framework, while also taking into consideration hydrogen and hydrogen enabling policies. It has complied with its commitment to reduce carbon emissions by investing in renewable energy, providing incentives for businesses to take actions to improve energy efficiency and by taking action to prevent waste and unnecessary production of materials. It has also complied with its commitment to reuse and recycle by raising public awareness about waste, the importance of recycling and the energy efficiency of products. Additionally, France has complied with its commitment to remove carbon by promoting the removal of emissions through investment in the conservation and production of carbon sinks. France also announced policies targeted towards hydrogen including the formation of the National Hydrogen Council.

Thus, France receives a score of +1.

*Analyst: Karči Aldridge Végi*

### **Germany: +1**

Germany has fully complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 4 December 2020, Germany launched a EUR5 million funding program for the production of climate-friendly steel, also known as “green steel,” a s part of a wider industry decarbonization project. The Ministry of Environment intends “to reduce process-related greenhouse gas emissions in energy-intensive industries such as steel, cement, lime, and chemicals” using innovative technologies.<sup>9261</sup>

On 12 December 2020, Germany pledged an additional EUR500 million to help developing countries meet their climate targets, agreed upon at the United Nations Climate Summit. Of this investment, EUR50 million is allocated to the Adaptation Fund and EUR100 million to the NAMA facility which helps developing countries cut emissions.<sup>9262</sup>

On 15 December 2020, the Federal Ministry for Economic Affairs and Energy released its call for funding for CO<sub>2</sub> capture and use in the primary industry. The call aims to “help close technical gaps that currently hinder the use of technologies and processes for CO<sub>2</sub> capture and use on a large scale.” Those eligible to apply include “universities and non-university research institutions as well as regional authorities or public administrations, clubs, associations and foundations.”<sup>9263</sup>

On 11 January 2021, Chancellor Angela Merkel announced that Germany would join the High Ambition Coalition for Nature and People, making a minimum of 30 per cent of land and sea in

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<sup>9260</sup> The Transport Innovation Agency launches the "Propulse" program with 4 calls for projects, Ministry of Ecological Transition (Paris) 30 August 2021. Access Date: 8 September 2021. <https://www.ecologie.gouv.fr/lagence-linnovation-transports-lance-programme-propulse-dote-4-appels-projets>

<sup>9261</sup> Germany launches funding programme for 'green steel', Euractiv (Berlin) 7 December 2020. Access Date: 19 March 2021. <https://www.euractiv.com/section/energy-environment/news/germany-launches-funding-programme-for-green-steel/>

<sup>9262</sup> AS IT HAPPENED: World leaders upgrade climate commitments on Paris anniversary, Climate Change News (Broadstairs) 12 December 2020. Access Date: April 5 2021. <https://www.climatechangenews.com/2020/12/12/live-world-leaders-upgrade-climate-commitments-paris-anniversary-summit/>

<sup>9263</sup> Call for funding for CO<sub>2</sub> capture and use in the primary industry, Federal Ministry for Economic Affairs and Energy (Berlin) 15 December 2020. Access Date: 16 July 2021.

<https://www.energieforschung.de/antragsteller/foerderangebote/co2-abscheidung-und-nutzung>

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Germany protected areas. The goal is to protect biological diversity, as well as the indigenous communities in these regions. Germany also agreed to support the funding of protecting areas in developing countries and emerging Geconomies through the Legacy Landscapes Fund.<sup>9264</sup>

On 10 March 2021, Germany updated its sustainable development strategy. This update included a broader commitment to promoting and supporting climate action globally, rather than within Germany alone. Additionally, the updated strategy outlines a plan for the quicker implementation of the United Nations Sustainable Development Goals.<sup>9265</sup>

On 24 March 2021, Germany announced their decision to compensate payments to energy companies for residual electricity volumes that can no longer be generated due to the phaseout of nuclear power.<sup>9266</sup> In return, energy companies will remove any barriers preventing the phaseout of nuclear power.<sup>9267</sup> The decision to phase out nuclear power will contribute to Germany's climate and renewable energy goals.

On 20 April 2021, Germany and Russia signed a Declaration of Intent. The document stipulated the creation of the High-level working group on sustainable energy and its constituent Sub-group on cooperation in the field of hydrogen energy. The Sub-group's goals include the exchange of experience in studying the technology of hydrogen production, storage, use, and transportation.<sup>9268</sup>

On 27 April 2021, the Ministry of Finance announced the German Recovery plan for the European Commission Regarding Corona Recovery Assistance, which included a significant investment and dedication to climate action and energy transformation.<sup>9269</sup> The various investments into climate action outlined in this plan amount to roughly EUR28 billion.<sup>9270</sup>

On 12 May 2021, the German government adopted its revised Climate Change Act. It is stated that the "purpose of this law is to protect against the effects of global climate change, the fulfillment of the national climate protection targets as well as the compliance with the European [and to] ensure targets are met." To do this, there will be a focus on carbon sinks to achieve carbon neutrality by 2045 and negative emissions by 2050.<sup>9271</sup>

On 28 May 2021, the German Federal Council passed the Act on the Provision of Comprehensive Fast Charging Infrastructure for Pure Battery Electric Vehicles or the "Fast Charging Act" which creates the legal basis for the targeted expansion of a nationwide network of fast charging stations for electric vehicles.<sup>9272</sup> The goal of the act is to ensure proper infrastructure for the charging of battery-

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<sup>9264</sup> Protecting 30 per cent of the world's natural environment, the Federal Government (Berlin) 11 January 2021. Access Date April 5 2021. <https://www.bundesregierung.de/breg-en/news/protecting-biodiversity-1836008>

<sup>9265</sup> New version of the Sustainable Development Strategy, Federal Government (Berlin) 10 March 2021. Access Date: April 5 2021. <https://www.bundesregierung.de/breg-en/news/sustainable-development-strategy-2021-1875228>

<sup>9266</sup> Compensation for the phaseout of nuclear power (Berlin) 24 March 2021. Access Date: May 3 2021. <https://www.bundesregierung.de/breg-en/news/compensation-for-nuclear-phaseout-1881422>

<sup>9267</sup> Compensation for the phaseout of nuclear power (Berlin) 24 March 2021. Access Date: 3 May 2021. <https://www.bundesregierung.de/breg-en/news/compensation-for-nuclear-phaseout-1881422>

<sup>9268</sup> The Ministry of Energy of Russia and the Ministry of Economy and Energy of Germany Signed a Joint Declaration of Intent on Cooperation in the Field of Sustainable Energy, Russian Ministry of Energy (Moscow) 20 April 2021. Access Date: 28 May 2021. <https://minenergo.gov.ru/node/20562>

<sup>9269</sup> 28 billion euros for climate action and digitalisation (Berlin) 27 April 2021. Access Date: 3 May 2021. <https://www.bundesregierung.de/breg-en/news/german-recovery-and-resilience-plan-1898532>

<sup>9270</sup> 28 billion euros for climate action and digitalisation (Berlin) 27 April 2021. Access Date: 3 May 2021. <https://www.bundesregierung.de/breg-en/news/german-recovery-and-resilience-plan-1898532>

<sup>9271</sup> Lesefassung des Bundes-Klimaschutzgesetzes 2021 mit markierten Änderungen zur Fassung von 2019, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Bonn) 7 July 2021. Access Date: 16 July 2021. [https://www.bmu.de/fileadmin/Daten\\_BMU/Download\\_PDF/Klimaschutz/ksg\\_aendg\\_2021\\_bf.pdf](https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/ksg_aendg_2021_bf.pdf)

<sup>9272</sup> Federal Council Adopts Fast Charging Law (Berlin) 28 May 2021. Access Date: 7 August 2021. <https://www.bmvi.de/SharedDocs/DE/Pressemitteilungen/2021/052-scheuer-schnellladegesetz.html>



powered vehicles.<sup>9273</sup> Thus, electric vehicles will become more accessible and more accepted, consequently reducing CO2 emissions in the transportation sector.<sup>9274</sup>

On 5 July 2021, the Federal Environment Minister Svenja Schulze, Federal Transport Minister Andreas Scheuer and the president of the German aviation association BDL Peter Gerber signed the PtL Roadmap or market ramp-up of climate friendly electricity-based aviation fuel.<sup>9275</sup> With this joint roadmap, policy-makers and industry have agreed on the requirements and measures needed to establish and expand production of kerosene from power-to-liquid technologies over the coming years.<sup>9276</sup> This roadmap will produce 200,000 tonnes of sustainable kerosene for the German aviation industry by 2030, accounting for one third of Germany's current fuel consumption.<sup>9277</sup>

On 15 July 2021, United States President Joe Biden announced the United States-Germany Climate and Energy Partnership, under which the two countries will develop policies for reduced carbon emissions, advance the development and production of renewable energy technologies, including sustainable hydrogen technologies, and increase the production and adoption of electric vehicles.<sup>9278</sup> They will also provide investments in Central and Eastern Europe for mobilizing sustainable energy, including specific investments supporting Ukraine's energy transformation, efficiency, and security.<sup>9279</sup>

On 29 July 2021, Parliamentary State Secretary at the Federal Ministry of Economics Elisabeth Winkelmeier-Becker announced a funding decision to grant EUR10.9 million to Air Liquide Germany.<sup>9280</sup> The grant will be used for the construction of a 20 megawatt electrolyzer for the production of green hydrogen in Oberhausen, Germany.<sup>9281</sup> This decision represents the first project

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<sup>9273</sup> 1,000 rapid charging stations (Berlin) 21 May 2021. Access Date: 7 August 2021.

<https://www.bundesregierung.de/breg-en/news/faq-rapid-charging-act-1916410>

<sup>9274</sup> 1,000 rapid charging stations (Berlin) 21 May 2021. Access Date: 7 August 2021.

<https://www.bundesregierung.de/breg-en/news/faq-rapid-charging-act-1916410>

<sup>9275</sup> Federal government, states and industry agree on roadmap for market ramp-up of climate friendly electricity-based aviation fuel (Berlin) 5 July 2021. Access Date: 7 August 2021.

<https://www.bmvi.de/SharedDocs/EN/PressRelease/2021/044-scheuer-roadmap.html>

<sup>9276</sup> Federal government, states and industry agree on roadmap for market ramp-up of climate friendly electricity-based aviation fuel (Berlin) 5 July 2021. Access Date: 7 August 2021.

<https://www.bmvi.de/SharedDocs/EN/PressRelease/2021/044-scheuer-roadmap.html>

<sup>9277</sup> Federal government, states and industry agree on roadmap for market ramp-up of climate friendly electricity-based aviation fuel (Berlin) 5 July 2021. Access Date: 7 August 2021.

<https://www.bmvi.de/SharedDocs/EN/PressRelease/2021/044-scheuer-roadmap.html>

<sup>9278</sup> U.S.-Germany Climate and Energy Partnership, The White House (Washington) 15 July 2021. Access Date: 22 July 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/15/fact-sheet-u-s-germany-climate-and-energy-partnership/>

<sup>9279</sup> U.S.-Germany Climate and Energy Partnership, The White House (Washington) 15 July 2021. Access Date: 22 July 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/15/fact-sheet-u-s-germany-climate-and-energy-partnership/>

<sup>9280</sup> First BMWi funding decision for green hydrogen project in Germany handed over as part of the national hydrogen strategy (Berlin) 29 July 2021. Access Date: 23 September 2021.

<https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/07/20210729-erster-bmwi-foerderbescheid-gruenes-wasserstoffprojekt-in-deutschland-im-rahmen-nationaler-wasserstoffstrategie.html>

<sup>9281</sup> First BMWi funding decision for green hydrogen project in Germany handed over as part of the national hydrogen strategy (Berlin) 29 July 2021. Access Date: 23 September 2021.

<https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/07/20210729-erster-bmwi-foerderbescheid-gruenes-wasserstoffprojekt-in-deutschland-im-rahmen-nationaler-wasserstoffstrategie.html>

to be funded in Germany under their National Hydrogen Strategy, and will supply a variety of industries with renewable hydrogen.<sup>9282</sup>

On 2 September 2021, the Federal Minister of Economics Peter Altmaier, the Prime Minister of Rhineland-Palatinate Malu Dreyer, and the Minister of Economic Affairs of Rhineland-Palatinate Daniela Schmitt, announced a joint commitment to provide a grant for a large battery cell factory to be built at the Opel site in Kaiserslautern.<sup>9283</sup> The sum of the grant is EUR436.8 million, EUR385.8 of which will come from Germany alone.<sup>9284</sup> The purpose of this grant is to fund the development of more innovative, sustainable, and efficient batteries for the automotive industry.<sup>9285</sup>

On 3 September 2021, the federal Environment Ministry announced their decision to provide EUR12.6 million to a pilot project for the climate-friendly management of moors.<sup>9286</sup> The goal of this project is to rewet two previously drained bog areas and establish and test paludiculture as a climate-friendly agricultural use, thus identifying possible solutions for reducing greenhouse gas emissions<sup>9287</sup>. State Secretary for the Environment Jochen Flasbarth was quoted stating, “Moors are not only unique natural landscapes, they are also important for nature and climate protection.”<sup>9288</sup> Due to environmental mismanagement, these landscapes in Germany are currently releasing large amounts of emissions, which this project will seek to reduce.<sup>9289</sup>

Germany has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove), while also taking into consideration hydrogen and hydrogen enabling policies. Germany has taken actions to address three out of the four Rs framework (Reduce, Reuse, Recycle, Remove), partially complying with its commitment to endorse the Circular Carbon Economy platform. Their actions towards reducing emissions, as well as

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<sup>9282</sup> First BMWi funding decision for green hydrogen project in Germany handed over as part of the national hydrogen strategy (Berlin) 29 July 2021. Access Date: 23 September 2021.

<https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/07/20210729-erster-bmwi-foerderbescheid-gruenes-wasserstoffprojekt-in-deutschland-im-rahmen-nationaler-wasserstoffstrategie.html>

<sup>9283</sup> Funding decision for battery cell production handed over at the Opel site in Kaiserslautern: 437 million euros for sustainable battery cell production (Berlin) 2 September 2021. Access Date: 23 September 2021.

<https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/09/20210902-foerderbescheid-fuer-batteriezellfertigung-am-opel-standort-kaiserslautern-uebergeben-437-millionen-euro-fuer-nachhaltige-batteriezellfertigung.html>

<sup>9284</sup> Funding decision for battery cell production handed over at the Opel site in Kaiserslautern: 437 million euros for sustainable battery cell production (Berlin) 2 September 2021. Access Date: 23 September 2021.

<https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/09/20210902-foerderbescheid-fuer-batteriezellfertigung-am-opel-standort-kaiserslautern-uebergeben-437-millionen-euro-fuer-nachhaltige-batteriezellfertigung.html>

<sup>9285</sup> Funding decision for battery cell production handed over at the Opel site in Kaiserslautern: 437 million euros for sustainable battery cell production (Berlin) 2 September 2021. Access Date: 23 September 2021.

<https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/09/20210902-foerderbescheid-fuer-batteriezellfertigung-am-opel-standort-kaiserslautern-uebergeben-437-millionen-euro-fuer-nachhaltige-batteriezellfertigung.html>

<sup>9286</sup> BMU funds pilot projects for climate-friendly management of moors (Berlin) 3 September 2021. Access Date: 23 September 2021. <https://www.bmu.de/pressemitteilung/bmu-foerdert-pilotvorhaben-zur-klimafreundlichen-bewirtschaftung-von-mooren>

<sup>9287</sup> BMU funds pilot projects for climate-friendly management of moors (Berlin) 3 September 2021. Access Date: 23 September 2021. <https://www.bmu.de/pressemitteilung/bmu-foerdert-pilotvorhaben-zur-klimafreundlichen-bewirtschaftung-von-mooren>

<sup>9288</sup> BMU funds pilot projects for climate-friendly management of moors (Berlin) 3 September 2021. Access Date: 23 September 2021. <https://www.bmu.de/pressemitteilung/bmu-foerdert-pilotvorhaben-zur-klimafreundlichen-bewirtschaftung-von-mooren>

<sup>9289</sup> BMU funds pilot projects for climate-friendly management of moors (Berlin) 3 September 2021. Access Date: 23 September 2021. <https://www.bmu.de/pressemitteilung/bmu-foerdert-pilotvorhaben-zur-klimafreundlichen-bewirtschaftung-von-mooren>

removing harm through investments in biodiversity contribute to their commitment. Contributing to the reuse aspect of the commitment, they have decided to fund a pilot project aimed at revitalizing and reusing moors. Further, Germany has demonstrated its commitment to hydrogen policies through the decision to fund the production of green hydrogen.

Thus, Germany receives a score of +1.

*Analysts: Angelo Wijaya, Deinse Wong and Jenna Im*

### **India: 0**

India has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 22 November 2020, Prime Minister Narendra Modi announced India's aim to "restore 26 million hectares of degraded land by 2030," "encouraging a circular economy."<sup>9290</sup> This project is aimed at achieving the country's target of producing 175 gigawatts of renewable energy annually by 2022. Prime Minister Modi added that India is "taking a big step ahead by seeking to achieve 450 gigawatts [GW] by 2030."<sup>9291</sup>

On 10 March 2021, the Ministry for New and Renewable Energy reported an 419.74 megawatts of renewable energy capacity was added in February 2021, taking the cumulative renewable energy capacity to 92.97 GW as of 28 February 2021.<sup>9292</sup> The Ministry's report added projects adding 50.15 GW capacity are at different implementation stages and projects adding 27.02 GW of capacity are at different bidding stages.<sup>9293</sup> This additional capacity will support India in their transition to renewable energy, and reaffirms their commitment to this goal.

On 7 April 2021, the cabinet approved the Ministry of New and Renewable Energy's proposal for "implementation of the Production Linked Incentive Scheme "National Programme on High Efficiency Solar PhotoVoltaic Modules" for achieving manufacturing capacity of [GW] scale in high efficiency solar [photovoltaic] PV modules with an outlay of Rs.4,500 crore."<sup>9294</sup> As the capacity of solar energy largely depends on solar PV cells, this action works towards the goal of transitioning to renewable energy.<sup>9295</sup>

On 15 April 2021, Oil Secretary Tarun Kapoor announced at the "Hydrogen Economy – New Delhi Dialogue" event that India has directed state-run oil and gas companies to establish seven hydrogen

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<sup>9290</sup> G20 Summit | PM Modi calls for integrated approach to combat climate change, The Hindu (New Delhi/Riyadh) 22 November 2020. Access Date: 18 March 2020. <https://www.thehindu.com/news/national/climate-change-must-be-fought-not-in-silos-but-in-integrated-holistic-way-pm-modi-at-g20/article33155391.ece>

<sup>9291</sup> G20 Summit | PM Modi calls for integrated approach to combat climate change, The Hindu (New Delhi/Riyadh) 22 November 2020. Access Date: 18 March 2020. <https://www.thehindu.com/news/national/climate-change-must-be-fought-not-in-silos-but-in-integrated-holistic-way-pm-modi-at-g20/article33155391.ece>

<sup>9292</sup> Monthly Summary of the Ministry of New and Renewable Energy for the month of February 2021, Government of India (New Delhi) 10 March 2021. Access Date: 18 March 2021. [https://mnre.gov.in/img/documents/uploads/file\\_f-1615785529839.pdf](https://mnre.gov.in/img/documents/uploads/file_f-1615785529839.pdf)

<sup>9293</sup> Monthly Summary of the Ministry of New and Renewable Energy for the month of February 2021, Government of India (New Delhi) 10 March 2021. Access Date: 18 March 2021. [https://mnre.gov.in/img/documents/uploads/file\\_f-1615785529839.pdf](https://mnre.gov.in/img/documents/uploads/file_f-1615785529839.pdf)

<sup>9294</sup> Cabinet approves Production Linked Incentive scheme 'National Programme on High Efficiency Solar PV Modules' (New Delhi) 7 April 2021. Access Date: 14 May 2021. <https://pib.gov.in/PressReleasePage.aspx?PRID=1710114>

<sup>9295</sup> Cabinet approves Production Linked Incentive scheme 'National Programme on High Efficiency Solar PV Modules' (New Delhi) 7 April 2021. Access Date: 14 May 2021. <https://pib.gov.in/PressReleasePage.aspx?PRID=1710114>

pilot plants by the end of the current financial year.<sup>9296</sup> This is a significant initiative as part of the Ministry of New and Renewable Energy's commitment to invest USD200 million for promoting hydrogen use over the next five to seven years.<sup>9297</sup>

On 22 April 2021, Prime Minister Modi, addressed the Leaders Summit on Climate 2021, emphasizing the importance of taking action to combat climate change.<sup>9298</sup> In his address, he reaffirmed India's commitment to achieving its renewable energy target of 450 GW by 2030.<sup>9299</sup> Further, he announced the launching of the India-US climate and clean energy Agenda 2030 partnership alongside President Joseph Biden of the United States.<sup>9300</sup>

On 29 June 2021, Minister of Power Raj Kumar Singh announced at the BloombergNEF Summit the government's planned new rules to allow companies to purchase renewable electricity from state distributors at weighted average prices, which are called "green tariffs."<sup>9301</sup> The government's regulatory framework also includes easing hurdles for businesses looking to purchase clean power directly from generators and will cut down their waiting periods to get access to the distribution network.<sup>9302</sup> This set of actions will accelerate clean energy usage in offices and factories and help India realize its 2030 decarbonization goal of expanding its renewable power capacity by nearly five-fold.<sup>9303</sup>

On 15 August 2021, Prime Minister Modi announced India's National Hydrogen Mission.<sup>9304</sup> Under this plan, India will aim to become a global hub for green hydrogen production, hydrogen export and renewable energy.<sup>9305</sup> According to Prime Minister Modi, this initiative will help India in obtaining energy self-reliance by 2047 and will reduce its historic reliance on imported fossil fuels.<sup>9306</sup>

On 9 September 2021, Minister of Petroleum and Natural Gas Hardsheep Singh Puri and United States Secretary of Energy Jennifer Granholm held a meeting where they relaunched the U.S-India

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<sup>9296</sup> India to spend \$200 mln in next 5-7 years to promote hydrogen use, Reuters (New Delhi) 19 April 2021. Access Date: 3 May 2021. <https://www.reuters.com/world/india/india-spend-200-mln-next-5-7-years-promote-hydrogen-use-2021-04-15/>

<sup>9297</sup> India to spend \$200 mln in next 5-7 years to promote hydrogen use, Reuters (New Delhi) 19 April 2021. Access Date: 3 May 2021. <https://www.reuters.com/world/india/india-spend-200-mln-next-5-7-years-promote-hydrogen-use-2021-04-15/>

<sup>9298</sup> Address by Prime Minister at the Leaders' Summit on Climate 2021 (New Delhi) 22 April 2021. Access Date: 14 May 2021. <https://pib.gov.in/PressReleasePage.aspx?PRID=1713442>

<sup>9299</sup> Address by Prime Minister at the Leaders' Summit on Climate 2021 (New Delhi) 22 April 2021. Access Date: 14 May 2021. <https://pib.gov.in/PressReleasePage.aspx?PRID=1713442>

<sup>9300</sup> Address by Prime Minister at the Leaders' Summit on Climate 2021 (New Delhi) 22 April 2021. Access Date: 14 May 2021. <https://pib.gov.in/PressReleasePage.aspx?PRID=1713442>

<sup>9301</sup> India Sets Easier Path for Companies to Switch to Green Energy, Bloomberg (New York City) 29 June 2021. Access Date: 22 July 2021. <https://www.bloomberg.com/news/articles/2021-06-29/india-to-set-rules-to-encourage-companies-shift-to-green-energy>

<sup>9302</sup> India Sets Easier Path for Companies to Switch to Green Energy, Bloomberg (New York City) 29 June 2021. Access Date: 22 July 2021. <https://www.bloomberg.com/news/articles/2021-06-29/india-to-set-rules-to-encourage-companies-shift-to-green-energy>

<sup>9303</sup> India Sets Easier Path for Companies to Switch to Green Energy, Bloomberg (New York City) 29 June 2021. Access Date: 22 July 2021. <https://www.bloomberg.com/news/articles/2021-06-29/india-to-set-rules-to-encourage-companies-shift-to-green-energy>

<sup>9304</sup> Independence Day: PM Modi announces National Hydrogen Mission (New Delhi) 15 August 2021. Access Date: 12 September 2021. <https://www.livemint.com/news/india/independence-day-pm-modi-announces-national-hydrogen-mission-11629002077955.html>

<sup>9305</sup> Independence Day: PM Modi announces National Hydrogen Mission, Mint (New Delhi) 15 August 2021. Access Date: 12 September 2021. <https://www.livemint.com/news/india/independence-day-pm-modi-announces-national-hydrogen-mission-11629002077955.html>

<sup>9306</sup> Modi Pledges Massive Green Hydrogen "Quantum Leap" to Indian Energy Independence, Recharge News (Santa Monica) 16 August 2021. Access Date: 12 September 2021. <https://www.rechargenews.com/energy-transition/modi-pledges-massive-green-hydrogen-quantum-leap-to-indian-energy-independence/2-1-1052701>

Strategic Clean Energy Partnership.<sup>9307</sup> With this partnership, India and the United States will deploy technologies for transition to clean energy, for promoting efficient and smart energy building production, and for decarbonizing the energy sectors of India with the production of alternate fuels such as hydrogen.<sup>9308</sup> The initiative will also advance production of clean energy technologies for reducing consumption of high polluting fuels.<sup>9309</sup> This partnership will support India's goal of installing 450 gigawatts of renewable energy by 2030.<sup>9310</sup>

India has taken actions to address two out of the four Rs framework (Reduce, Reuse, Recycle, Remove) of the Circular Carbon Economy, namely reducing carbon emissions by increasing renewable energy generation and removing emissions by increasing forest cover and hydrogen-enabling policies. Nevertheless, India has not taken actions towards reusing or recycling.

Thus, India receives a score of 0.

*Analysts: Aadi Thulasingham and Minabil Iftikhar*

### **Indonesia: 0**

Indonesia has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 1 December 2020, Environment and Forestry Minister Siti Nurbaya announced the extension of the Peat Restoration Agency for the following years.<sup>9311</sup> The extension implements President Joko Widodo's commitment and efforts for peatland ecosystem recovery.<sup>9312</sup> Rehabilitating the country's peatland will enable the government to meet its emissions commitments, and help avoid forest fires, which have contributed substantially to carbon dioxide and other greenhouse gases entering the atmosphere. The Agency will work to restore five million acres of degraded peatland and mangrove ecosystems across 13 provinces.<sup>9313</sup>

On 22 December 2020, Indonesia launched biodiesel containing 30 per cent palm-based fuel, to reduce the country's fossil fuel imports by IDR63 trillion a year.<sup>9314</sup> Through this program, Indonesia

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<sup>9307</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership, Department of Energy (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9308</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9309</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9310</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9311</sup> Minister: Indonesia peat restoration agency's tenure extended, FORESTHINTS.NEWS (Jakarta) 1 December 2020. Access Date: 19 March 2021. <https://foresthints.news/minister-indonesian-peat-restoration-agency-tenure-extended/>

<sup>9312</sup> Minister: Indonesia peat restoration agency's tenure extended, FORESTHINTS.NEWS (Jakarta) 1 December 2020. Access Date: 19 March 2021. <https://foresthints.news/minister-indonesian-peat-restoration-agency-tenure-extended/>

<sup>9313</sup> Indonesia's Peatland Restoration Agency gets an extension despite failing to hit its target: what are the hurdles and next strategies?, The Conversation (Melbourne) 17 December 2020. Access Date: 19 March 2021. <https://theconversation.com/indonesias-peatland-restoration-agency-gets-an-extension-despite-failing-to-hit-its-target-what-are-the-hurdles-and-next-strategies-151989>

<sup>9314</sup> Indonesia launches B30 biodiesel to cut costs, boost palm oil, Reuters (Jakarta) 23 December 2020. Access Date: 19 March 2021. <https://www.reuters.com/article/us-indonesia-biodiesel-idUSKBN1YR0D2>

plans to eventually phase out the use of conventional diesel and replace current oil consumption. The program aims to reach a 50 per cent palm oil blend by 2025.<sup>9315</sup>

On 15 March 2021, Indonesia committed to offering tax incentives on electric vehicles.<sup>9316</sup> The tax break provided for hybrid cars will provide Indonesians with more incentive to purchase a low-emissions vehicle. Battery-powered electric vehicles will maintain their zero per cent tax rate, while plug-in-hybrid vehicles will have their five per cent drop to zero per cent.

On 19 March 2021, the Environment and Forestry Ministry Climate Change Management Director General Ruandha Agung Sugardiman acknowledged in a conference, reducing greenhouse gas emissions is a pressing issue, due to the rise in natural disasters.<sup>9317</sup> Director General Sugardiman stated that by 2050, the government will start working toward a net-zero emission, with the hopes of reaching the goal by 2070.<sup>9318</sup> This pledge contributes towards the commitment of reducing carbon emissions in the country.

On April 29 2021, President Widodo tasked the National Energy Council ministers and stakeholders to plan energy policies.<sup>9319</sup> The group has stated that the country will stop both liquefied petroleum gas and fuel imports by 2030.<sup>9320</sup> The Council's secretary general Djoko Siswanto has committed to introducing devise strategies to halt the imports, by building or upgrading refineries, converting refineries to biodiesel refineries, and increasing domestic production.<sup>9321</sup> This action will contribute towards the nation reducing their emissions with the introduction of biodiesel.

On 8 May 2021, Indonesian state-owned electricity monopolist, PT Perusahaan Listrik Negara, pledged to become carbon neutral by 2050, with a plan to phase out fossil power plants, and transition to renewable energy.<sup>9322</sup> The president of the company, Zulkifli Zaini said the company was planning to develop new solar and wind power plants.<sup>9323</sup> Under the same commitment, the company also commits to stop building coal plants by 2023.<sup>9324</sup> This commitment will work towards reducing the country's emissions.

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<sup>9315</sup> Need 15 Million Hectares of Palm Oil to Replace Oil, Yes or No?, CNBC Indonesia (Jakarta) 23 November 2020. Access Date: 19 March 2021. <https://www.cnbcindonesia.com/news/20201123192446-4-204061/butuh-15-juta-hektar-sawit-buat-gantikan-minyak-yes-or-no>

<sup>9316</sup> Indonesia Offers More Aggressive Tax Perks for Electric Vehicles, BNN Bloomberg (Toronto) 15 March 2021. Access Date: 17 March 2021. <https://www.bnnbloomberg.ca/indonesia-offers-more-aggressive-tax-perks-for-electric-vehicles-1.1577069>

<sup>9317</sup> Indonesia mulls net-zero emissions target by 2070, The Jakarta Post (Jakarta) 22 March 2021. Access Date: 27 March 2021. <https://www.thejakartapost.com/news/2021/03/22/indonesia-mulls-net-zero-emissions-target-by-2070.html>

<sup>9318</sup> Indonesia mulls net-zero emissions target by 2070, The Jakarta Post (Jakarta) 22 March 2021. Access Date: 27 March 2021. <https://www.thejakartapost.com/news/2021/03/22/indonesia-mulls-net-zero-emissions-target-by-2070.html>

<sup>9319</sup> Indonesia to stop LPG and fuel imports by 2030- official, Reuters (Jakarta) 29 April 2021. Access Date: 30 April 2021. <https://www.reuters.com/article/indonesia-oil/indonesia-to-stop-lpg-and-fuel-imports-by-2030-official-idUSL4N2MM0YZ>

<sup>9320</sup> Indonesia to stop LPG and fuel imports by 2030- official, Reuters (Jakarta) 29 April 2021. Access Date: 30 April 2021. <https://www.reuters.com/article/indonesia-oil/indonesia-to-stop-lpg-and-fuel-imports-by-2030-official-idUSL4N2MM0YZ>

<sup>9321</sup> Indonesia to stop LPG and fuel imports by 2030- official, Reuters (Jakarta) 29 April 2021. Access Date: 30 April 2021. <https://www.reuters.com/article/indonesia-oil/indonesia-to-stop-lpg-and-fuel-imports-by-2030-official-idUSL4N2MM0YZ>

<sup>9322</sup> PLN pledges carbon neutrality by 2050, The Jakarta Post (Jakarta) 8 May 2021. Access Date: 12 June 2021. <https://www.thejakartapost.com/news/2021/05/07/pln-pledges-carbon-neutrality-by-2050.html>

<sup>9323</sup> PLN pledges carbon neutrality by 2050, Jakarta Post (Jakarta) 8 May 2021. Access Date: 12 June 2021. <https://www.thejakartapost.com/news/2021/05/07/pln-pledges-carbon-neutrality-by-2050.html>

<sup>9324</sup> Indonesia's PLN to stop building coal plants by 2023, Pinsent Masons (London) 24 May 2021. Access Date 12 June 2021. <https://www.pinsentmasons.com/out-law/news/indonesias-pln-to-stop-building-coal-plants-by-2023>

On 24 May 2021, the state-owned Indonesia Battery Corporation and South Korea's LG announced their plan to build a new battery plant.<sup>9325</sup> This battery plant, worth IDR142 trillion will have the capacity of 10 gigawatt hours.<sup>9326</sup> This commitment will work towards reducing the nation's carbon emissions, and removing fossil fuelled power sources.

On 14 June 2021, Energy Minister Arifin Tasrif announced that, starting in 2040, only electric motorcycles and scooters will be sold and, starting in 2050, only electric cars will be sold.<sup>9327</sup> By 2030, the country hopes to produce 600,000 electric cars and 2.5 million electric motorcycles and scooters.<sup>9328</sup> This measure will work towards replacing and removing vehicles powered by combustion engines, further reducing the country's carbon emissions.<sup>9329</sup>

On 18 June 2021, the Chief Executive Officer of Pertamina, a state-owned oil and natural gas corporation, signed a collaborative and joint study agreement with Japanese companies to review the implementation of carbon capture technologies.<sup>9330</sup> This study will work towards reducing carbon emissions with potential reducing carbon emission as much as 300,000 tons of carbon emission per year, from a total of 3 million tons of carbon for 10 years.<sup>9331</sup>

On 30 June 2021, the Indonesian government inaugurated a polyethylene terephthalate bottle-recycling factory.<sup>9332</sup> The plant has a production capacity of 25,000 tons per year.<sup>9333</sup> The plant will help the country reduce plastic waste and will strengthen the recycling ecosystem and circular economy.<sup>9334</sup>

On 1 July 2021, Indonesian state-owned oil and gas company Pertamina announced its commitment to invest IDR12 billion in green power to meet its target of generating 10 gigawatts of electricity

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<sup>9325</sup>Indonesia says building \$1.2 billion battery plant with S.Korea's LG, WTVB News (Coldwater) 24 May 2021. Access Date: 13 June 2021. <https://wtvbam.com/2021/05/24/indonesia-says-building-1-2-billion-battery-plant-with-s-koreas-lg/>

<sup>9326</sup> Electric car battery factory to commence production in 2023: minister, Antara News (Jakarta) 24 June 2021. Access Date: 3 July 2021. <https://en.antaranews.com/news/177374/electric-car-battery-factory-to-commence-production-in-2023-minister>

<sup>9327</sup> Indonesia aims to sell only electric-powered cars, motorbikes by 2050, Reuters (Jakarta) 14 June 2021. Access Date: 27 June 2021. <https://www.reuters.com/business/sustainable-business/indonesia-aims-sell-only-electric-powered-cars-motorbikes-by-2050-2021-06-14/>

<sup>9328</sup> Indonesia To Go Fully Electric By 2050, RideApart (Los Angeles) 25 June 2021. Access Date: 27 June 2021. <https://www.rideapart.com/news/516247/indonesia-fully-electric-2050/>

<sup>9329</sup> Indonesia aims to sell only electric-powered cars, motorbikes by 2050, Reuters (Jakarta) 14 June 2021. Access Date: 27 June 2021. <https://www.reuters.com/business/sustainable-business/indonesia-aims-sell-only-electric-powered-cars-motorbikes-by-2050-2021-06-14/>

<sup>9330</sup> Committed to Reduce CO2 Emissions, Pertamina Collaborates with Japanese Companies & ITB for CCUS Study in Gundih Field, Pertamina (Jakarta) 18 June 2021. Access Date: 20 June 2021. <https://www.pertamina.com/en/news-room/news-release/committed-to-reduce-co2-emissions-pertamina-collaborates-with-japanese-companies-and-itb-for-ccus-study-in-gundih-field>

<sup>9331</sup> Committed to Reduce CO2 Emissions, Pertamina Collaborates with Japanese Companies & ITB for CCUS Study in Gundih Field, Pertamina (Jakarta) 18 June 2021. Access Date: 20 June 2021. <https://www.pertamina.com/en/news-room/news-release/committed-to-reduce-co2-emissions-pertamina-collaborates-with-japanese-companies-and-itb-for-ccus-study-in-gundih-field>

<sup>9332</sup> Danone-Veolia opens recycling plant to reduce plastic waste, The Jakarta Post (Jakarta) 30 June 2021. Access Date: 13 July 2021. <https://www.thejakartapost.com/news/2021/06/30/danone-veolia-opens-recycling-plant-to-reduce-plastic-waste.html>

<sup>9333</sup> Danone-Veolia opens recycling plant to reduce plastic waste, The Jakarta Post (Jakarta) 30 June 2021. Access Date: 13 July 2021. <https://www.thejakartapost.com/news/2021/06/30/danone-veolia-opens-recycling-plant-to-reduce-plastic-waste.html>

<sup>9334</sup> Danone-Veolia opens recycling plant to reduce plastic waste, The Jakarta Post (Jakarta) 30 June 2021. Access Date: 13 July 2021. <https://www.thejakartapost.com/news/2021/06/30/danone-veolia-opens-recycling-plant-to-reduce-plastic-waste.html>

from renewable sources by 2026.<sup>9335</sup> This will support the government's plan to reduce greenhouse gas emissions by 29 per cent by 2030 and reach net-zero by 2060.<sup>9336</sup>

On 23 July 2021, the Energy and Mineral Resources Ministry announced plans to make co-firing of biomass in power stations mandatory in an effort to phase out coal power plants.<sup>9337</sup> The co-firing is an intermediate solution as the country works towards determining how to wholly phase out coal plants.<sup>9338</sup> The state power company PT Perusahaan Listrik Negara plans to start co-firing at 52 of its biggest coal power plants, which is estimated to replace 9 million tonnes of coal per year with biomass.<sup>9339</sup>

Indonesia has taken actions to address two out of the four Rs framework (Reduce, Reuse, Recycle, Remove) and endorse the Circular Carbon Economy platform. Indonesia has implemented many policies and actions towards reducing their carbon emissions, including committing to reaching net-zero emissions by 2070. Through their inauguration of a polyethylene terephthalate bottle recycling factory, they have also satisfied the recycling commitment. However, they have not taken into consideration hydrogen or enabling policies, nor have they taken actions towards removing emissions or reusing.

Thus, Indonesia receives a score of 0.

*Analyst: Surabhi Pradhan*

### **Italy: 0**

Italy has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 10 December 2020, Minister of Environment Sergio Costa signed a decree on the Minimum Environmental Criteria for the industrial washing and rental service of textiles and mattresses.<sup>9340</sup> This decree is in line with “the objectives of reducing the environmental impact set out in the Action Plan for environmental sustainability and consumption in the public administration adopted in 2008” and contributes to the “reuse” aspect of the four Rs framework through improving the ability to reuse textiles and mattresses.<sup>9341</sup>

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<sup>9335</sup> Pertamina to sink \$12B in new, green power sources, The Phnom Penh Post (Phnom Penh) 04 July 2021. Access Date: 13 July 2021. <https://www.phnompenhpost.com/business/pertamina-sink-12b-new-green-power-sources>

<sup>9336</sup> Pertamina to sink \$12B in new, green power sources, The Phnom Penh Post (Phnom Penh) 04 July 2021. Access Date: 13 July 2021. <https://www.phnompenhpost.com/business/pertamina-sink-12b-new-green-power-sources>

<sup>9337</sup> Indonesia to make biomass co-firing mandatory in power plants, Reuters (Jakarta) 23 July 2021. Access Date: 24 July 2021. <https://www.reuters.com/business/sustainable-business/indonesia-make-biomass-co-firing-mandatory-power-plants-2021-07-23/>

<sup>9338</sup> Indonesia to make biomass co-firing mandatory in power plants, Reuters (Jakarta) 23 July 2021. Access Date: 24 July 2021. <https://www.reuters.com/business/sustainable-business/indonesia-make-biomass-co-firing-mandatory-power-plants-2021-07-23/>

<sup>9339</sup> Indonesia to make biomass co-firing mandatory in power plants, Reuters (Jakarta) 23 July 2021. Access Date: 24 July 2021. <https://www.reuters.com/business/sustainable-business/indonesia-make-biomass-co-firing-mandatory-power-plants-2021-07-23/>

<sup>9340</sup> Environment: Minister Costa Signs a Decree on CAMs for Sterile Textiles, Mattresses and Medical Devices, Ministry of Ecological Transition (Rome) 10 December 2020. Access date: 15 March 2021. <https://www.minambiente.it/comunicati/ambiente-ministro-costa-firma-decreto-sui-cam-tessili-materassi-e-dispositivi-medici>

<sup>9341</sup> CAMs Published for the Wash-Hire Services, L. C. A. Ambiente. (Rome) 18 January 2021. Access date: 15 March 2021. <https://www.lca-ambiente.com/en/news/pubblicati-i-cam-per-il-servizio-di-lavano/>



On 17 December 2020, Minister Costa published a decree allocating EUR20 million for “experimental projects for the construction or implementation of the school transport service with hybrid or electric means of transport.”<sup>9342</sup> This initiative is aimed at addressing violations of air quality parameters.

On 23 March 2021, Italy convened the National Conference on the Circular Economy, at which the third annual report was presented.<sup>9343</sup> Minister of Ecological Transition Roberto Cingolani delivered remarks, in which he reaffirmed Italy’s commitment to the circular economy and environmental and economic sustainability.<sup>9344</sup> He observed that “Circularity is an essential tool in our context, with the climate emergency we are experiencing and the awareness that we must achieve important objectives of decarbonisation, upgrading of renewables, restoration of the natural values of our environment.”<sup>9345</sup> He also reiterated Italy’s strides thus far, noting that the country “recycle[s] almost double the total waste compared to the European Community...with a circularity rate that is around 30% higher than in the rest of Europe.”<sup>9346</sup>

On 21 April 2021, the Ministry of Ecological Transition delivered 50 zero-emission electric vehicles to the Port Authority Corps of the Italian Coast Guard.<sup>9347</sup> The vehicles will be used by the Port Authority Corps to provide control and patrol services in support of the Coast Guard’s mission.<sup>9348</sup> The Coast Guard’s new green fleet is part of a broader effort by the Ministry of Ecological Transition to improve environmental sustainability through decarbonization.<sup>9349</sup>

On 13 July 2021, the Ministry of Ecological Transition signed a ministerial decree allocating EUR15 million to urban reforestation projects.<sup>9350</sup> A total of 34 projects will be financed and will ultimately work towards removing CO2 emissions from the environment.<sup>9351</sup>

On 2 September 2021, the Council of Ministers approved the decree-law to combat the fires that have impacted Italy, with the goal of strengthening forest fire prevention and improving the ability to fight forest fires.<sup>9352</sup> Included in the decree-law are plans to update the technology used to fight

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<sup>9342</sup> Twenty Million to Municipalities for “Ecological” School Buses, Ministry of Ecological Transition (Rome) 17 December 2020. Access date: 15 March 2021. <https://www.minambiente.it/comunicati/venti-milioni-ai-comuni-scuolabus-ecologici>

<sup>9343</sup> “Circularity Essential Tool for the Future of Society,” Ministry of Ecological Transition (Rome) 23 March 2021. Access Date: 8 May 2021. <https://www.minambiente.it/comunicati/circularita-strumento-essenziale-il-futuro-della-societa>

<sup>9344</sup> “Circularity Essential Tool for the Future of Society,” Ministry of Ecological Transition (Rome) 23 March 2021. Access Date: 8 May 2021. <https://www.minambiente.it/comunicati/circularita-strumento-essenziale-il-futuro-della-societa>

<sup>9345</sup> “Circularity Essential Tool for the Future of Society,” Ministry of Ecological Transition (Rome) 23 March 2021. Access Date: 8 May 2021. <https://www.minambiente.it/comunicati/circularita-strumento-essenziale-il-futuro-della-societa>

<sup>9346</sup> “Circularity Essential Tool for the Future of Society,” Ministry of Ecological Transition (Rome) 23 March 2021. Access Date: 8 May 2021. <https://www.minambiente.it/comunicati/circularita-strumento-essenziale-il-futuro-della-societa>

<sup>9347</sup> Environment: Deliver 50 Electric Cars to the Port Authorities – Coast Guard, Ministry of Ecological Transition (Rome) 21 April 2021. Access Date: 8 May 2021. <https://www.minambiente.it/comunicati/ambiente-consegnate-50-auto-elettriche-alle-capitanerie-di-porto-guardia-costiera>

<sup>9348</sup> Environment: Deliver 50 Electric Cars to the Port Authorities – Coast Guard, Ministry of Ecological Transition (Rome) 21 April 2021. Access Date: 8 May 2021. <https://www.minambiente.it/comunicati/ambiente-consegnate-50-auto-elettriche-alle-capitanerie-di-porto-guardia-costiera>

<sup>9349</sup> Environment: Deliver 50 Electric Cars to the Port Authorities – Coast Guard, Ministry of Ecological Transition (Rome) 21 April 2021. Access Date: 8 May 2021. <https://www.minambiente.it/comunicati/ambiente-consegnate-50-auto-elettriche-alle-capitanerie-di-porto-guardia-costiera>

<sup>9350</sup> Urban Reforestation: From Mite 15 Million for Metropolitan Cities (Rome) 13 July 2021. Access Date: 9 August 2021. <https://www.mite.gov.it/comunicati/riforestazione-urbana-dal-mite-15-milioni-le-citta-metropolitane>

<sup>9351</sup> Urban Reforestation: From Mite 15 Million for Metropolitan Cities (Rome) 13 July 2021. Access Date: 9 August 2021. <https://www.mite.gov.it/comunicati/riforestazione-urbana-dal-mite-15-milioni-le-citta-metropolitane>

<sup>9352</sup> The decree-law on forest fires has been approved to strengthen the prevention and fight against fires (Rome) 2 September 2021. Access Date: 23 September 2021.

<https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/17306>

forest fires, as well as an increase in the severity of punishments for crimes that contribute to the high rates of forest fires.<sup>9353</sup>

Italy has taken actions to address two out of the four Rs framework and to endorse the CCE platform. This has been done through actions to reuse textiles and mattresses, as well as through efforts to reduce emissions. However, Italy has not taken significant action on removing or recycling, nor has it taken into consideration hydrogen or enabling policies.

Thus, Italy receives a score of 0.

*Analyst: Aisha Shafaqat*

### **Japan: 0**

Japan has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 4 December 2020, Prime Minister Yoshihida Suga announced that Japan will establish a fund of JPY2 trillion for environmental investment that it “will provide continuing assistance to companies taking up the challenge of ambitious innovations.” Additionally, Japan will develop hydrogen powered airplanes, hydrogen powered cargo ships, and low-cost storage batteries, contributing to the goal of decarbonization<sup>9354</sup>

On 14 December 2020, the Ministry of the Environment announced three projects to be selected for the Joint Crediting Mechanism Model Projects. The projects will introduce solar power systems at factories and universities in Vietnam, Indonesia and Thailand. The purpose of this programme is “to achieve the GHG emission reduction target by the Japanese government.”<sup>9355</sup>

On 25 December 2020, the Ministry of Economy, Trade and Industry formulated a “Green Growth Strategy Through Achieving Carbon Neutrality,” an industrial policy that will support lead the challenging goal of achieving carbon neutrality by 2050. It includes “action plans covering comprehensive policies in areas such as budgets, taxes, regulatory reform, standardization and international collaboration.”<sup>9356</sup> The strategy is also projected to increase Japan’s electricity demand by 30 to 50 per cent and sets an installation target for offshore wind power of up to 45 gigawatts by 2040.<sup>9357</sup>

On 8 April 2021, State Minister of Economy, Trade and Industry Ejima Kiyoshi signed a Memorandum of Cooperation on hydrogen with the Minister of Energy and Infrastructure of the

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<sup>9353</sup> The decree-law on forest fires has been approved to strengthen the prevention and fight against fires (Rome) 2 September 2021. Access Date: 23 September 2021.

<https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/17306>

<sup>9354</sup> Press Release: Press Conference by the Prime Minister, Prime minister and his cabinet (Tokyo) 4 December 2020. Access Date: 17 March 2021. [http://japan.kantei.go.jp/99\\_suga/statement/202012/\\_00003.html](http://japan.kantei.go.jp/99_suga/statement/202012/_00003.html)

<sup>9355</sup> Preliminary selection result for financing programme for JCM Model projects in FY2020 (3<sup>rd</sup> selection), Ministry of the Environment, Government of Japan (Tokyo) 14 December 2020. Access Date: 20 March 2021. <https://www.env.go.jp/en/headline/2484.html>

<sup>9356</sup> Press Release: Green Growth Strategy through Achieving carbon neutrality, Ministry of Economy, Trade and Industry (Tokyo) 25 December 2020. Access Date: 17 March 2021. [https://www.meti.go.jp/english/press/2020/1225\\_001.html](https://www.meti.go.jp/english/press/2020/1225_001.html)

<sup>9357</sup> Press Release: Green Growth Strategy through Achieving carbon neutrality, Ministry of Economy, Trade and Industry (Tokyo) 25 December 2020. Access Date: 17 March 2021. [https://www.meti.go.jp/english/press/2020/1225\\_001.html](https://www.meti.go.jp/english/press/2020/1225_001.html)

United Arab Emirates Suhail Mohamed Al Mazrouei.<sup>9358</sup> This will facilitate the construction of hydrogen supply chains and the exchange of information between Japan and the United Arab Emirates.<sup>9359</sup>

On 22 April 2021, Prime Minister Suga declared at the Leaders Summit on Climate, that Japan aims to “reduce its greenhouse gas emissions by 46 per cent in fiscal year 2030 from its fiscal year 2013 levels.”<sup>9360</sup> Suga also announced that to achieve this, Japan is committed to utilizing decarbonized power sources and assisting other countries in decarbonization.<sup>9361</sup>

On 28 May 2021, the Ministry of Economy, Trade and Industry, announced the Asia Energy Transition Initiative which aims to promote sustainability and carbon neutrality in Asia.<sup>9362</sup> To achieve this goal, Japan will present ASEAN countries with a package of concrete support measures based on five pillars: support for the development of energy transition roadmaps; presentation and promotion of the Asian version of the transition finance; USD10 billion financial support for renewable energy, energy efficiency, liquified natural gas and other projects; support for technology development and demonstration using the benefits of the JPY2 trillion fund; and human resource development on decarbonisation technologies and knowledge sharing through the Asia Carbon Capture Utilization and Storage network.<sup>9363</sup>

On 8 June 2021, the government of Japan announced at the International Atomic Energy Agency board of governors meeting a funding commitment of EUR1 million for the NUTECS plastics project, which stands for NUClear TEChnology, for controlling plastic pollution.<sup>9364</sup> The project aims to promote nuclear techniques to monitor and reduce marine plastic pollution.<sup>9365</sup>

Japan has taken action to address two of the four key commitment areas within the four Rs framework, partially complying with its commitment to endorsing the CCE platform. It has taken actions on both reducing and removing emissions through policies aimed at growing renewable energy usage and decarbonization. Further, it has done so through employing hydrogen policies. Nevertheless, Japan has not contributed to reusing or recycling.

Thus, Japan receives a score of 0.

*Analyst: Meryem Althani*

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<sup>9358</sup> State Minister Ejima Signs MOC on Hydrogen with H.E. Suhail Mohamed Al Mazrouei, Minister of Energy and Infrastructure, UAE, Ministry of Economy, Trade and Industry (Tokyo) 9 April 2021. Access Date: 28 April 2021. [https://www.meti.go.jp/english/press/2021/0409\\_001.html](https://www.meti.go.jp/english/press/2021/0409_001.html)

<sup>9359</sup> State Minister Ejima Signs MOC on Hydrogen with H.E. Suhail Mohamed Al Mazrouei, Minister of Energy and Infrastructure, UAE, Ministry of Economy, Trade and Industry (Tokyo) 9 April 2021. Access Date: 28 April 2021. [https://www.meti.go.jp/english/press/2021/0409\\_001.html](https://www.meti.go.jp/english/press/2021/0409_001.html)

<sup>9360</sup> Prime Minister Suga’s attendance at the Leaders’ Summit on Climate, Ministry of Foreign Affairs of Japan (Tokyo) 22 April 2021. Access Date: 28 April 2021. [https://www.mofa.go.jp/ic/ch/page6e\\_000236.html](https://www.mofa.go.jp/ic/ch/page6e_000236.html)

<sup>9361</sup> Prime Minister Suga’s attendance at the Leaders’ Summit on Climate, Ministry of Foreign Affairs of Japan (Tokyo) 22 April 2021. Access Date: 28 April 2021. [https://www.mofa.go.jp/ic/ch/page6e\\_000236.html](https://www.mofa.go.jp/ic/ch/page6e_000236.html)

<sup>9362</sup> Minister Kajiyama announced the Asia Energy Transition Initiative (AETI), Ministry of Economy, Trade and Industry (Tokyo) 28 May 2021. Access Date: 24 July 2021. [https://www.meti.go.jp/english/press/2021/0528\\_002.html](https://www.meti.go.jp/english/press/2021/0528_002.html)

<sup>9363</sup> Minister Kajiyama announced the Asia Energy Transition Initiative (AETI), Ministry of Economy, Trade and Industry (Tokyo) 28 May 2021. Access Date: 24 July 2021. [https://www.meti.go.jp/english/press/2021/0528\\_002.html](https://www.meti.go.jp/english/press/2021/0528_002.html)

<sup>9364</sup> Japan’s financial contribution to the IAEA’s NUTEC Plastics, Ministry of Foreign Affairs of Japan (Tokyo) 11 June 2021. Access Date: 24 July 2021. [https://www.mofa.go.jp/press/release/press6e\\_000299.html](https://www.mofa.go.jp/press/release/press6e_000299.html)

<sup>9365</sup> Japan’s financial contribution to the IAEA’s NUTEC Plastics, Ministry of Foreign Affairs of Japan (Tokyo) 11 June 2021. Access Date: 24 July 2021. [https://www.mofa.go.jp/press/release/press6e\\_000299.html](https://www.mofa.go.jp/press/release/press6e_000299.html)

## **Korea: +1**

Korea has fully complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

In December 2020, Korea submitted its Carbon Neutrality Strategy 2050 to the United Nations, where it pledged net-zero emissions for 2050. The strategy outlines key steps for a “sustainable and green society,” which include expanding the use of clean energy and clean hydrogen. The strategy also outlines mitigation measures which “will provide an opportunity for sustainable development.” Improving carbon efficiency, deployment of carbon removal technologies, and enhancing carbon sinks are among the planned efforts outlined in the strategy, as is either phasing out coal plants or converting them into liquified natural gas.<sup>9366</sup>

On 24 December 2020, the Ministry of Environment announced its plans for reducing plastic waste through increasing the recycling rate of plastic products.<sup>9367</sup> The Ministry plans to reduce greenhouse gas emission from plastic by 30 per cent by 2030 through reducing production of plastic and reusing plastic waste for extracting oil. It also announced banning overseas plastic waste from Korea entirely by 2022, replacing petroleum plastics with bioplastics by 2050 and decreasing the usage of plastic containers to 38 per cent from 47 per cent.<sup>9368</sup>

On 21 January 2021, the Ministry of Environment announced its plans for supplying more than 300,000 electric and hydrogen vehicles for reducing pollution and carbon emissions. It has estimated 136,185 pollution-free vehicles with high air quality improvement effects to be supplied by the end of 2021, which will aim to advance plans for carbon neutrality in transportation.<sup>9369</sup>

On 5 February 2021, President Moon Jae-in signed a USD48 billion deal for building the “world’s biggest offshore wind power farm,” “moving more actively towards carbon neutrality, accelerating the transition to eco-friendly energy.”<sup>9370</sup> As 40 per cent of electricity in Korea is provided by coal, this project is a step towards developing cleaner energy and reducing carbon emissions.<sup>9371</sup>

On 2 March 2021, the Ministry of Environment announced its planned initiatives for achieving the 2050 carbon neutrality goal, which includes the transition from combustion vehicles to zero-emission vehicles. According to the strategy, the government will supply zero-emission and eco-friendly vehicles and increase research facilities for their development. The Ministry will “promote transition in all sectors of society and set a foundation to achieve the carbon neutrality goal.”<sup>9372</sup>

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<sup>9366</sup> South Korea 2050 net zero pledge spurs renewables investment (Broadstairs) 14 January 2021. Access Date: 15 March 2021. <https://www.climatechangenews.com/2021/01/14/south-korea-2050-net-zero-pledge-spurs-renewables-investment/>

<sup>9367</sup> South Korea’s Ministry of Environment: Plan to reduce plastic waste by 20% by 2025 (London) 24 December 2020. Access Date: 19 March 2021. <https://ynews.com/south-koreas-ministry-of-environment-plan-to-reduce-plastic-waste-by-20-by-2025/>

<sup>9368</sup> S. Korea aims to reduce plastic waste 20 pct by 2025 (Seoul) 24 December 2020. Access Date: 19 March 2021. <https://en.yna.co.kr/view/AEN20201224005700315>

<sup>9369</sup> Devoting in the era of pollution-free vehicles...First on-site trip of newly appointed Minister of Environment (Sejong) 28 January 2021. Access Date: 13 March 2021. <https://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1431520&boardMasterId=522&boardCategoryId=&decorator=>

<sup>9370</sup> Moon pledges full support for new sea wind energy project (Seoul) 5 February 2021. Access Date: 19 March 2021. [https://www.koreatimes.co.kr/www/nation/2021/02/371\\_303662.html](https://www.koreatimes.co.kr/www/nation/2021/02/371_303662.html)

<sup>9371</sup> \$43 billion deal inked for ‘world’s biggest’ offshore wind farm in South Korea (Scarborough) 5 February 2021. Access Date: 19 March 2021. <https://www.ctvnews.ca/business/43-billion-deal-inked-for-world-s-biggest-offshore-wind-farm-in-south-korea-1.5296978>

<sup>9372</sup> All vehicles in Korea to be emission-free by 2050: ministry (Seoul) 4 March 2021. Access Date: 20 March 2021. <https://www.korea.net/NewsFocus/Sci-Tech/view?articleId=195541>

On 31 March 2021, the Technology Innovation Strategy for Carbon Neutrality was established which presented goals and strategies for meeting the carbon neutrality goal of 2050. These include presentation of strategies for the development of carbon neutral technologies like wind and solar power, hydrogen, and bioenergy.<sup>9373</sup> These also included planning and promoting large scale carbon emitters for developing low carbon processing methods, funding and accelerating new technologies, and providing tax exemptions for carbon neutral research and development projects to attract more private investments.<sup>9374</sup>

On 22 April 2021, President Moon announced Korea's pledge of ending all public financing for building coal-fired power plants overseas during the Leaders Summit on Climate.<sup>9375</sup> This action will aim to further reduce emission levels and Korea's reliance on power generated by goal. Korea will also increase the production of renewable energy which will include solar and wind power.<sup>9376</sup>

On 27 April 2021, the Ministry of Trade, Industry and Energy announced the approved amendments to the "Enforcement Decree of the Act on Promotion of Development and Distribution of Environment-friendly Motor Vehicles."<sup>9377</sup> Under these amendments, public institutions, and private vehicles for the heads of public institutions are required to purchase and use only environment-friendly vehicles which include electric vehicles or hydrogen-fueled vehicles.<sup>9378</sup>

On 25 May 2021, Deputy Prime Minister and Minister of Economy and Finance Hong Nam-ki announced Korea's plan to invest KRW73.4 trillion—3.8 per cent of its GDP—in Green New Deal projects, including renewable energy technologies, green infrastructure, and sustainable mobility.<sup>9379</sup> The government's public investment scheme will be complemented by a new USD4 billion fund to promote and support large-scale private investments in Green New Deal projects.<sup>9380</sup> Together, these programs aim to accelerate Korea's transition to a low carbon economy, developing technologies for carbon neutrality and reducing greenhouse gas emissions.<sup>9381</sup>

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<sup>9373</sup> Establishment of the Strategy for Technology Innovation for Carbon Neutrality, Ministry of Culture, Sports and Tourism and Korean Culture and Information Service (Seoul) 28 April 2021. Access Date: 29 April 2021.

<https://www.korea.net/Government/Briefing-Room/Press-Releases/view?articleId=5483>

<sup>9374</sup> Establishment of the Strategy for Technology Innovation for Carbon Neutrality, Ministry of Culture, Sports and Tourism and Korean Culture and Information Service (Seoul) 28 April 2021. Access Date: 29 April 2021.

<https://www.korea.net/Government/Briefing-Room/Press-Releases/view?articleId=5483&>

<sup>9375</sup> President Announces Higher Targets for CO2 Emissions at Climate Summit, Ministry of Culture, Sports and Tourism and Korean Culture and Information Service (Sejong-si) 23 April 2021. Access Date: 26 April 2021.

<https://www.korea.net/NewsFocus/policies/view?articleId=197349>

<sup>9376</sup> President Announces Higher Targets for CO2 Emissions at Climate Summit, Ministry of Culture, Sports and Tourism and Korean Culture and Information Service (Sejong-si) 23 April 2021. Access Date: 26 April 2021.

<https://www.korea.net/NewsFocus/policies/view?articleId=197349>

<sup>9377</sup> Amendments to the Enforcement Decree of the Environment-friendly Vehicles Act Accepted at Cabinet Meeting, Ministry of Trade, Industry and Energy (Sejong-si) 30 April 2021. Access Date: 1 May 2021.

[http://english.motie.go.kr/en/pc/pressreleases/bbs/bbsView.do?bbs\\_seq\\_n=844&bbs\\_cd\\_n=2](http://english.motie.go.kr/en/pc/pressreleases/bbs/bbsView.do?bbs_seq_n=844&bbs_cd_n=2)

<sup>9378</sup> Amendments to the Enforcement Decree of the Environment-friendly Vehicles Act Accepted at Cabinet Meeting, Ministry of Trade, Industry and Energy (Sejong-si) 30 April 2021. Access Date: 1 May 2021.

[http://english.motie.go.kr/en/pc/pressreleases/bbs/bbsView.do?bbs\\_seq\\_n=844&bbs\\_cd\\_n=2](http://english.motie.go.kr/en/pc/pressreleases/bbs/bbsView.do?bbs_seq_n=844&bbs_cd_n=2)

<sup>9379</sup> Investment in Green New Deal to Reach 3.8 per cent of GDP by 2025, Ministry of Culture, Sports and Tourism and Korean Culture and Information Service (Seoul) 26 May 2021. Access Date: 18 July 2021.

<https://www.korea.net/NewsFocus/policies/view?articleId=198621>

<sup>9380</sup> Investment in Green New Deal to Reach 3.8 per cent of GDP by 2025, Ministry of Culture, Sports and Tourism and Korean Culture and Information Service (Seoul) 26 May 2021. Access Date: 18 July 2021.

<https://www.korea.net/NewsFocus/policies/view?articleId=198621>

<sup>9381</sup> Investment in Green New Deal to Reach 3.8 per cent of GDP by 2025, Ministry of Culture, Sports and Tourism and Korean Culture and Information Service (Seoul) 26 May 2021. Access Date: 18 July 2021.

<https://www.korea.net/NewsFocus/policies/view?articleId=198621>

On 28 May 2021, the government of Korea signed a pact with the African Development Bank to invest USD600 million in Africa's energy sector to develop renewable energy and accelerate a transition to clean consumption, with funds to support projects like solar home systems and off-grid solutions.<sup>9382</sup>

On 14 July 2021, the government of Korea announced the Korean New Deal 2.0, which will expand on the Green New Deal.<sup>9383</sup> Under this deal, Korea announced a further investment of USD191 billion for green energy projects, which include increasing hydrogen vehicle use.<sup>9384</sup> A new category of carbon neutrality was also added, under which investments will be made to develop sectoral carbon reduction programs and measurement systems for emission monitoring.<sup>9385</sup>

On 25 August 2021, the Ministry of Trade, Industry and Energy announced Korea's plans to invest USD1.07 billion to establish five hydrogen clusters across the country.<sup>9386</sup> This project will facilitate Korea's goal of having 6.2 million hydrogen-powered vehicles on the road by 2040.<sup>9387</sup> An electrolysis facility will be constructed in the North Jeolla Province cluster, with most of the national solar farms for conversion of water to hydrogen using clean solar-generated electricity.<sup>9388</sup> Biogases from landfills will be collected for hydrogen production in the Incheon cluster, and a liquid hydrogen plant will be built in the Gangwon Province cluster.<sup>9389</sup>

On 31 August 2021, the National Assembly of Korea passed the Framework Act on Carbon Neutrality and Green Growth, also called the Carbon Neutrality Act.<sup>9390</sup> According to the bill, the government will be required to cut 35 per cent of gas emissions by 2030.<sup>9391</sup> To meet this goal, industries are required to increase the use of renewable energy.<sup>9392</sup> To facilitate this change, the

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<sup>9382</sup> Africa: Korea to Invest USD600 Million in Renewable Energy Through AfDB (Paris) 2 July 2021. Access Date: 18 July 2021. <https://www.afrik21.africa/en/africa-korea-to-invest-600-million-in-renewable-energy-through-afdb/>

<sup>9383</sup> Government Announces Korean New Deal 2.0, Ministry of Economy and Finance (Seoul) 14 July 2021. Access Date: 22 July 2021. <https://www.korea.net/Government/Briefing-Room/Press-Releases/view?articleId=5173&type=N&insttCode=A260122&categoryId=109&language=A020101&pageIndex=3&gov=>

<sup>9384</sup> South Korea Unveils USD190 Billion 'New Deal 2.0' Economic Plan, United Press International (Seoul) 14 July 2021. Access Date: 22 July 2021. [https://www.upi.com/Top\\_News/World-News/2021/07/14/skorea-Korean-New-Deal-Moon-Jae-In-initiative-investment/2721626252358/](https://www.upi.com/Top_News/World-News/2021/07/14/skorea-Korean-New-Deal-Moon-Jae-In-initiative-investment/2721626252358/)

<sup>9385</sup> Government Announces Korean New Deal 2.0, Ministry of Economy and Finance (Seoul) 14 July 2021. Access Date: 22 July 2021. <https://www.korea.net/Government/Briefing-Room/Press-Releases/view?articleId=5173&type=N&insttCode=A260122&categoryId=109&language=A020101&pageIndex=3&gov=>

<sup>9386</sup> Korea to Build Five Hydrogen Clusters with WON1.2 Trillion (Yonhap) 25 August 2021. Access Date: 8 September 2021. <http://www.koreaherald.com/view.php?ud=20210825000848>

<sup>9387</sup> Korea to Build Five Hydrogen Clusters with WON1.2 Trillion (Yonhap) 25 August 2021. Access Date: 8 September 2021. <http://www.koreaherald.com/view.php?ud=20210825000848>

<sup>9388</sup> Korea to Build Five Hydrogen Clusters with WON1.2 Trillion (Yonhap) 25 August 2021. Access Date: 8 September 2021. <http://www.koreaherald.com/view.php?ud=20210825000848>

<sup>9389</sup> Korea to Build Five Hydrogen Clusters with WON1.2 Trillion (Yonhap) 25 August 2021. Access Date: 8 September 2021. <http://www.koreaherald.com/view.php?ud=20210825000848>

<sup>9390</sup> Carbon Neutrality Act Passed by National Assembly Heraldng Economic and Social Transition Towards 2050 Carbon Neutrality (Seoul) 2 September 2021. Access Date: 8 September 2021.

<https://www.me.go.kr/eng/web/board/read.do?jsessionId=KdoLoNSf+2Mxx0ohslGR0dJ.mehome1?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1473610&boardMasterId=522&boardCategoryId=&decorator=>

<sup>9391</sup> Korea Becomes 14<sup>th</sup> in World to Legislate Carbon Neutrality Act (Yonhap) 1 September 2021. Access Date: 8 September 2021. [http://www.koreaherald.com/view.php?ud=20210728000563&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20210728000563&ACE_SEARCH=1)

<sup>9392</sup> Drastic Carbon Neutrality Drive to Hurt Korean Firms (Seoul) 13 September 2021. Access Date: 13 September 2021. [https://www.koreatimes.co.kr/www/tech/2021/09/693\\_315447.html](https://www.koreatimes.co.kr/www/tech/2021/09/693_315447.html)

Ministry of Trade, Industry and Energy announced a funding of KRW6.7 trillion to thirteen carbon-intensive industries for assistance in developing technologies to reduce their carbon emissions.<sup>9393</sup>

On 9 September 2021, Korea's Industry Ministry announced an investment of USD81.5 million for developing new solutions to reduce carbon emissions in factories and industries.<sup>9394</sup> These projects will include technologies for carbon capture before being released into the air, their utilization and storage for later use, and technologies for developing solutions for storing carbon dioxide indefinitely.<sup>9395</sup>

Korea has taken actions to address three of the four Rs framework (Reduce, Reuse, Recycle and Remove) and endorse the Circular Carbon Economy platform. It has complied with its commitment to reduce carbon emissions through investing in technologies for renewable energy production like wind, solar and hydrogen. It has complied with its commitment to reuse and reduce through investments and production of electric and hydrogen power and sources. It has complied with its commitment to remove and reduce carbon emissions by limiting investments and reliance on coal-generated power. Further, Korea has demonstrated its commitment to hydrogen policies through investments into hydrogen clusters. However, it has not sufficiently complied with its commitment to recycle.

Thus, Korea receives a score of +1.

*Analyst: Minahil Iftikhar*

### **Mexico: 0**

Mexico has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 2 February 2021, the Ministry of Energy released the National Electricity System Development Program for the 2020-2034 period. This program outlines a plan to increase the capacity of hydroelectric power generation by 6.8 per cent by 2024. This is done with the goal of achieving 35 per cent clean energy generation by 2024 and 43 per cent by 2030.<sup>9396</sup> Nevertheless, the plan outlines intent to more natural gas builds after 2024, a non-renewable form of energy.<sup>9397</sup>

On 23 February 2021, the Lower House of Congress passed a bill that would increase state control of the electricity market.<sup>9398</sup> This bill has been criticized by environmental groups as the bill is seen as

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<sup>9393</sup> Drastic Carbon Neutrality Drive to Hurt Korean Firms (Seoul) 13 September 2021. Access Date: 13 September 2021. [https://www.koreatimes.co.kr/www/tech/2021/09/693\\_315447.html](https://www.koreatimes.co.kr/www/tech/2021/09/693_315447.html)

<sup>9394</sup> South Korea to Spend WON95 Billion on Research of Carbon-Reduction Technologies (Seoul) 9 September 2021. Access Date: 11 September 2021. <https://en.yna.co.kr/view/AEN20210908006700320>

<sup>9395</sup> South Korea to Spend WON95 Billion on Research of Carbon-Reduction Technologies (Seoul) 9 September 2021. Access Date: 11 September 2021. <https://en.yna.co.kr/view/AEN2021090800670032>

<sup>9396</sup> Ministry of Energy Releases Energy Sector Development Plan (Mexico City) 2 February 2021. Access Date: 21 March 2021. <https://mexicobusiness.news/energy/news/ministry-energy-releases-energy-sector-development-plan>

<sup>9397</sup> Natural Gas Dominates Capacity Additions in Mexico's Energy Ministry Power Plans (Sterling) 2 February 2021. Access Date: 21 March 2021. <https://www.naturalgasintel.com/natural-gas-dominates-capacity-additions-for-mexicos-energy-ministry-power-plants/>

<sup>9398</sup> Mexico's lower house approves divisive electricity bill (Mexico City) 23 February 2021. Access Date: 21 March 2021. <https://www.reuters.com/article/mexico-energy-electricity-idINL1N2KU01E>

a reversal to Mexico's endeavors in energy transition in the past decade—putting renewable energy supply to the “back of the queue.”<sup>9399</sup>

On 28 May 2021, the board of directors of the North American Development Bank, which is equally governed by both the American and the Mexican Governments, approved three new water projects to expand environmental infrastructure.<sup>9400</sup> The three projects consist of implementing a new water distribution system in El Paso County, Texas, as well as expanding and improving the wastewater collection systems in Doña Ana County, New Mexico and Camargo, Chihuahua.<sup>9401</sup> The goals of these projects are to reduce greenhouse gas emissions and the impacts of climate change, as well as support the region in its transition to a green economy by allowing the Bank to invest in more varied environmental projects.<sup>9402</sup>

On 12 August 2021, the Mexican government reached multiple agreements with the Mennonite community in which the Mennonite communities committed to stop all activities that contribute to the deforestation of areas in the Mayan jungle.<sup>9403</sup> As well, a permanent working table was implemented between the Mexican government and the Mennonite communities to solve any future matters related to deforestation.<sup>9404</sup> The goal of these agreements is to reduce and revert the deforestation that has occurred in the region, as the Mayan forest acts as a carbon sink, thus removing emissions.<sup>9405</sup>

Mexico has taken actions to address two of the four Rs framework (Reduce, Reuse, Recycle, Remove) and endorse the Circular Carbon Economy platform. Through a variety of initiatives including investments into water projects, Mexico has taken action to reduce emissions. Further, through agreements to reverse deforestation, Mexico has demonstrated its commitment to removing emissions. Nevertheless, there has been a failure to address the commitment to reuse or recycle. As well, Mexico has not taken into consideration or attempted to employ hydrogen or enabling policies.

Thus, Mexico receives a score of 0.

*Analysts: Angelo Wijaya and Zhenyi Tsai*

## **Russia: 0**

Russia has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key

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<sup>9399</sup> Mexico urged to 'restore clean energy progress' (Winchester) 25 February 2021. Access Date: 21 March 2021. <https://renews.biz/66709/mexico-urged-to-restore-clean-energy-progress/>

<sup>9400</sup> NADB approves three water projects on the Mexico-United States border (Mexico City) 28 May 2021. Access Date: 9 August 2021. <https://www.gob.mx/semarnat/prensa/aprueba-el-bdan-tres-proyectos-de-agua-en-la-frontera-mexico-estados-unidos?idiom=es>

<sup>9401</sup> NADB approves three water projects on the Mexico-United States border (Mexico City) 28 May 2021. Access Date: 9 August 2021. <https://www.gob.mx/semarnat/prensa/aprueba-el-bdan-tres-proyectos-de-agua-en-la-frontera-mexico-estados-unidos?idiom=es>

<sup>9402</sup> NADB approves three water projects on the Mexico-United States border (Mexico City) 28 May 2021. Access Date: 9 August 2021. <https://www.gob.mx/semarnat/prensa/aprueba-el-bdan-tres-proyectos-de-agua-en-la-frontera-mexico-estados-unidos?idiom=es>

<sup>9403</sup> Historic agreement with the Mennonite community to stop deforestation in the state of Campeche (Mexico City) 12 August 2021. Access Date: September 24 2021. <https://www.gob.mx/semarnat/prensa/acuerdo-historico-con-la-comunidad-menonita-para-frenar-deforestacion-en-el-estado-de-campeche?idiom=es>

<sup>9404</sup> Historic agreement with the Mennonite community to stop deforestation in the state of Campeche (Mexico City) 12 August 2021. Access Date: September 24 2021. <https://www.gob.mx/semarnat/prensa/acuerdo-historico-con-la-comunidad-menonita-para-frenar-deforestacion-en-el-estado-de-campeche?idiom=es>

<sup>9405</sup> Historic agreement with the Mennonite community to stop deforestation in the state of Campeche (Mexico City) 12 August 2021. Access Date: September 24 2021. <https://www.gob.mx/semarnat/prensa/acuerdo-historico-con-la-comunidad-menonita-para-frenar-deforestacion-en-el-estado-de-campeche?idiom=es>



importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 27 January 2021, Russia presented a project for the processing of batteries. These solutions are aiming at solving issues of battery recycling within the framework of the federal project “Infrastructure for Waste Management of the I-II classes” as part of the national project “Ecology” and were presented by JSC Rusatom Gateway.<sup>9406</sup>

On 12 February 2021, Russia finalized amendments to the methodological guidelines aiming at the creation of a national system for accounting for greenhouse gas emissions. The new methodological guidelines make it possible to calculate the absorbing capacity of all-natural ecosystems within the Russian Federation and also determine the methods for accounting for the absorption and emissions of greenhouse gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O) by natural ecosystems (forests, steppes, tundra, swamps, freshwater bodies).<sup>9407</sup>

On 11 March 2021, Russian state-owned company, Novatek PJSC agreed on tripling the clean output of energy by the end of the decade, which includes installing carbon capture and storage in one of its Arctic fields and exploring hydrogen opportunities.<sup>9408</sup>

On 18 March 2021, Russia supported the initiative of the Khanty-Mansi Autonomous Okrug to create carbon polygons, assessing the carbon absorptive capacity of forests and other ecosystems on the territory of the district jointly by specialized federal departments.<sup>9409</sup>

On 20 April 2021, the State Duma, the lower chamber of the Russian parliament, approved the law that creates a framework for climate projects in the country, and allows trading carbon units from emissions cuts or absorption.<sup>9410</sup> The law also requires companies to report their emission levels to regulators. From 2025, the legally mandated threshold of emissions will be lowered from 150,000 tons to 50,000 tons.<sup>9411</sup>

On 20 April 2021 Russia and German signed a Declaration of Intent. The document stipulated the creation of the High-level working group on sustainable energy and its constituent Sub-group on cooperation in the field of hydrogen energy. The Sub-group’s goals include the exchange of experience in studying the technology of hydrogen production, storage, use, and transportation.<sup>9412</sup>

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<sup>9406</sup> Within the framework of the national project "Ecology" presented a project for the processing of batteries, Russia Ministry of Natural Resources (Moscow) 27 January 2021. Access Date: 20 March 2021. [http://www.mnr.gov.ru/press/news/v\\_ramkakh\\_natsproekta\\_ekologiya\\_predstavlen\\_proekt\\_po\\_pererabotke\\_akkumulyatornykh\\_batarey/](http://www.mnr.gov.ru/press/news/v_ramkakh_natsproekta_ekologiya_predstavlen_proekt_po_pererabotke_akkumulyatornykh_batarey/)

<sup>9407</sup> The Ministry of Natural Resources of Russia has developed an order on amendments to the Methodological Guidelines for the quantitative determination of the volume of absorption of greenhouse gases, Russia Ministry of Natural Resources (Moscow) 12 February 2021. Access Date: 20 March 2021. [http://www.mnr.gov.ru/press/news/minprirody\\_rossii\\_razrabotalo\\_rasporyazhenie\\_o\\_vnesenii\\_izmeneniy\\_v\\_metodicheskie\\_ukazaniya\\_po\\_kolich/](http://www.mnr.gov.ru/press/news/minprirody_rossii_razrabotalo_rasporyazhenie_o_vnesenii_izmeneniy_v_metodicheskie_ukazaniya_po_kolich/)

<sup>9408</sup> Russia’s biggest LNG producer joins race to make fuel greener, JNW (Toronto) 11 March 2021. Access Date: 21 March 2021. <https://www.jwnenergy.com/article/2021/3/11/russias-biggest-lng-producer-joins-race-to-make-fu/>

<sup>9409</sup> Ministry of Natural Resources Supported the Initiative of the Khanty – Mansy Autonomous Okrug to create “carbon polygons,” Russia Ministry of Natural Resources (Moscow) 18 March 2021. Access Date: 19 March 2021. [http://www.mnr.gov.ru/press/news/rosleskhoz\\_podderzhal\\_initsiativu\\_khmao\\_po\\_sozdaniyu\\_karbonovykh\\_poligonov](http://www.mnr.gov.ru/press/news/rosleskhoz_podderzhal_initsiativu_khmao_po_sozdaniyu_karbonovykh_poligonov)

<sup>9410</sup> Russian lawmakers back the nation’s first ever climate law, Bloomberg (New York) 20 April 2021. Access Date: 26 April 2021. <https://www.bloomberg.com/news/articles/2021-04-20/russian-lawmakers-back-the-nation-s-first-ever-climate-law>

<sup>9411</sup> Russian lawmakers back the nation’s first ever climate law, Bloomberg (New York) 20 April 2021. Access Date: 26 April 2021. <https://www.bloomberg.com/news/articles/2021-04-20/russian-lawmakers-back-the-nation-s-first-ever-climate-law>

<sup>9412</sup> The Ministry of Energy of Russia and the Ministry of Economy and Energy of Germany Signed a Joint Declaration of Intent on Cooperation in the Field of Sustainable Energy, Russian Ministry of Energy (Moscow) 20 April 2021. Access Date: 28 May 2021. <https://minenergo.gov.ru/node/20562>

On 3 August 2021, the Chairman of the Government of the Russian Federation Mikhail Mishustin approved a law to provide subsidies to regions for the purchase of containers for the separate accumulation of municipal solid waste.<sup>9413</sup> This is deemed to be an important step towards a circular economy, where waste becomes the raw material for new products.<sup>9414</sup>

Russia has taken action to address all four components of the four Rs framework (Reduce, Reuse, Recycle and Remove). Through projects that support green processing of batteries and regulations towards reducing greenhouse gas emissions, Russia has complied with reducing emissions and recycling batteries. The agreements made to proceed with carbon capture and storage projects demonstrate their compliance with removing emissions. Finally, Russia's decision to fund containers for the accumulation of waste shows a commitment to reusing raw materials for new products. Nevertheless, Russia has not taken into consideration hydrogen or enabling policies.

Thus, Russia receives a score of 0.

*Analyst: Dimitris Symeonidis*

### **Saudi Arabia: 0**

Saudi Arabia has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 16 December 2020, the Ministry of Environment, Water and Agriculture signed a memorandum of cooperation with Japan's Ministry of Environment to strengthen cooperation in the field of environmental protection. It aims to enhance collaboration on environmental protection and preservation and strategic planning and to promote environmental technology studies and capacity-building. It seeks to improve methods and techniques to monitor and control air pollution, develop methods and techniques to treat and dispose of contaminated soil and to reduce noise pollution and control vibration, improve environmental impact assessment procedures through studying the current status and management of waste including chemicals and hazardous waste.<sup>9415</sup>

On 11 March 2021, the Ministry of Energy signed a memorandum of understanding (MoU) with Germany on the production and exploitation of hydrogen. This memorandum of understanding comes in the context of cooperation between the two countries in the field of hydrogen, in order to enhance development sustainability and prosperity, job opportunities in the two countries, protect the environment, and work to achieve the goals of the Paris Agreement on climate change, especially with regard to reducing emissions.<sup>9416</sup>

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<sup>9413</sup> The government approved the rules of granting subsidies to regions for the purchase of containers for separate waste collection, Russia Ministry of Natural Resources (Moscow) 3 August 2021. Access Date: 11 September 2021. [http://www.mnr.gov.ru/press/news/pravitelstvo\\_utverdilo\\_pravila\\_predostavleniya\\_subsidii\\_regionam\\_na\\_zakupku\\_konteynerov\\_dlya\\_razdeln/](http://www.mnr.gov.ru/press/news/pravitelstvo_utverdilo_pravila_predostavleniya_subsidii_regionam_na_zakupku_konteynerov_dlya_razdeln/)

<sup>9414</sup> The government approved the rules of granting subsidies to regions for the purchase of containers for separate waste collection, Russia Ministry of Natural Resources (Moscow) 3 August 2021. Access Date: 11 September 2021. [http://www.mnr.gov.ru/press/news/pravitelstvo\\_utverdilo\\_pravila\\_predostavleniya\\_subsidii\\_regionam\\_na\\_zakupku\\_konteynerov\\_dlya\\_razdeln/](http://www.mnr.gov.ru/press/news/pravitelstvo_utverdilo_pravila_predostavleniya_subsidii_regionam_na_zakupku_konteynerov_dlya_razdeln/)

<sup>9415</sup> MEWA, Japan's Ministry of Environment sign MoC on environmental protection, Kingdom of Saudi Arabia Ministry of Environment, Water & Agriculture (Riyadh) 16 December 2020. Access Date: 17 March 2021. <https://www.mewa.gov.sa/en/MediaCenter/News/Pages/News16122020.aspx>

<sup>9416</sup> Minister of Energy signs the Saudi – German Memorandum of Understanding on Hydrogen Cooperation, Kingdom of Saudi Arabia Ministry of Energy (Riyadh) 11 March 2021. Access Date: 17 March 2021. <https://www.moenergy.gov.sa/arabic/mediacenter/press-releases/Pages/Saudi-German-Memorandum.aspx>

On 3 February 2021, the Ministry of Energy announced the readiness of small solar photovoltaic systems, which allow consumer electricity production from home or work and link it to the public electrical grid distribution systems in the country. These systems include a calculator to determine the economic feasibility of the installation of the energy system of a small solar photovoltaic system, to clarify the estimated costs and to determine the procedures for a secure connection to the network.<sup>9417</sup>

On 2 December 2020, the Ministry of Energy, in cooperation with King Abdullah University of Science and Technology, inaugurated the university's Circular Carbon Initiative. The ultimate goal of the initiative is to harness the strength of the university's research and innovations, in order to support the circular carbon economy agenda.<sup>9418</sup>

On 11 January 2021, Saudi Arabia unveiled plans to build an emissions-free city, known as "The Line," powered entirely by clean energy and designed to function without cars or roads. The 170-kilometre belt of "hyper-connected future communities" will be part of the country's Neom urban mega-project—the USD500 billion centrepiece of the Saudi Vision 2030 scheme, which Crown Prince Mohammed bin Salman hopes will drive the kingdom's long-term diversification away from oil.<sup>9419</sup>

On 28 March 2021, Crown Prince Mohammed bin Salman announced the "Saudi Green Initiative." The initiative will include, among others, planting over 10 billion trees, which, among other functions, will act as carbon sinks, but it will also work to reduce carbon emissions as it will include an ambitious renewable energy program that will generate 50 per cent of Saudi Arabia's energy from renewables by 2030, and several other projects in the field of clean hydrocarbons, estimated to eliminate more than 130 MT of carbon emissions.<sup>9420</sup>

On 24 April 2021, the Ministry of Energy announced that Saudi Arabia would join the US, Canada, Norway and Qatar to establish the net-zero producers' forum, a platform to discuss on finding ways to further support the Paris Convention on Climate Change goals.<sup>9421</sup> In this forum, Saudi Arabia, together the other member states will develop practical strategies to bring emissions to zero neutrality, including limiting methane emissions and promoting the circular carbon economy approach, developing and disseminating clean energy technologies, carbon capture and storage, diversifying sources of income that do not depend on hydrocarbon revenues, and other measures that are compatible with the national conditions of each country.<sup>9422</sup>

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<sup>9417</sup> Ministry of Energy announces the readiness to operate with small solar PV systems, Kingdom of Saudi Arabia Ministry of Energy (Riyadh) 3 February 2021. Access Date: 18 March 2021.

<https://www.moenergy.gov.sa/arabic/mediacenter/press-releases/Pages/readiness-work-small-solar-PV-systems.aspx>

<sup>9418</sup> Minister of Energy confirms readiness of KAUST to activate their circular carbon economy initiative, Kingdom of Saudi Arabia Ministry of Energy (Riyadh) 2 December 2020. Access Date: 18 March 2021.

<https://www.moenergy.gov.sa/arabic/mediacenter/press-releases/Pages/kaust-cce-initiative-participation.aspx>

<sup>9419</sup> Saudi Arabia announces 'The Line': A futuristic zero-carbon city without cars, NS Energy Business (London) 11 January 2021. Access Date: 20 March 2021. <https://www.nsenergybusiness.com/news/industry-news/the-line-saudi-arabia-neom/>

<sup>9420</sup> Crown Prince announces: "The Saudi Green Initiative and the Middle East Green Initiative," Kingdom of Saudi Arabia (Riyadh) 28 March 2021. Access Date: 30 April 2021.

<https://www.my.gov.sa/wps/portal/snp/content/news/newsDetails/CONT-news-280320211>

<sup>9421</sup> The Kingdom will join the USA, Canada, Norway and Qatar to establish the "Net-zero producers' forum," Kingdom of Saudi Arabia Ministry of Energy (Riyadh) 24 April 2021. Access Date: 28 April 2021.

<https://www.moenergy.gov.sa/arabic/mediacenter/press-releases/Pages/Zero-Neutrality-Producers-Forum.aspx>

<sup>9422</sup> The Kingdom will join the USA, Canada, Norway and Qatar to establish the "Net-zero producers' forum," Kingdom of Saudi Arabia Ministry of Energy (Riyadh) 24 April 2021. Access Date: 28 April 2021.

<https://www.moenergy.gov.sa/arabic/mediacenter/press-releases/Pages/Zero-Neutrality-Producers-Forum.aspx>

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On 19 August 2021, the Ministry of Energy announced that two pieces of land, located in the third industrial city of Jeddah and the industrial city of Rabigh, with an aggregate area of 12 million square metres, have been allocated to the development of two renewable energy plants by the Saudi Authority for Industrial Cities and Technology Zones (MODON).<sup>9423</sup> The Ministry in this way plans to diversify its energy mix, including the addition of gas and renewables, with the objective of reducing CO<sub>2</sub> emissions.<sup>9424</sup>

Saudi Arabia has taken actions to address two of the four Rs framework (Reduce, Reuse, Recycle, Remove). Through policies contributing to renewable energy, as well as through investments into carbon sinks, Saudi Arabia has demonstrated a commitment to reducing and removing emissions. Further, with its memorandum of understanding with the German government, there is a demonstrated commitment to hydrogen policies. Nevertheless, there have been no actions contributing to reusing or recycling.

Thus, Saudi Arabia receives a score of 0.

*Analyst: Dimitris Symeonidis*

### **South Africa: 0**

South Africa has partially complied with its commitment to endorse the Circular Carbon Economy (CCE) Platform, with its 4Rs framework (Reduce, Reuse, Recycle and Remove), recognizing the key importance and ambition of reducing emissions, taking into account system efficiency and national circumstances.

On 24 November 2020, the Green Economy unit of the Department of Economic Development and Tourism announced a three-year Municipal Energy Resilience Project in collaboration with Western Cape Economic Development and Tourism.<sup>9425</sup> This project aims to work with the national government to explore how new energy regulations could lead to renewable energy generations within Western Cape.<sup>9426</sup>

On 2 December 2020, South Africa received a USD305,000 World Bank grant to “develop a study on sustainable financial mechanisms for demand-side energy efficiency market.” The beneficiaries of the study, the National Energy Development Institute and the Department of Mineral Resources and Energy, will “identify and develop appropriate financing mechanisms and associated institutional structures for implementing energy efficiency measures at scale, focusing on the public, agriculture and industrial sectors.”<sup>9427</sup>

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<sup>9423</sup> Ministry of Energy announces allocation of two pieces of land in the industrial cities of Jeddah and Rabigh with an aggregate area of 12 million sqm to renewable energy projects, Kingdom of Saudi Arabia Ministry of Energy (Riyadh) 19 August 2021. Access Date: 11 September 2021. <https://www.moenergy.gov.sa/en/MediaCenter/News/Pages/ministry-of-energy-announces-allocation-of-2-lands-for-renewable-energy-projects-in-jeddah-and-rabegh.aspx>

<sup>9424</sup> Ministry of Energy announces allocation of two pieces of land in the industrial cities of Jeddah and Rabigh with an aggregate area of 12 million sqm to renewable energy projects, Kingdom of Saudi Arabia Ministry of Energy (Riyadh) 19 August 2021. Access Date: 11 September 2021. <https://www.moenergy.gov.sa/en/MediaCenter/News/Pages/ministry-of-energy-announces-allocation-of-2-lands-for-renewable-energy-projects-in-jeddah-and-rabegh.aspx>

<sup>9425</sup> Western Cape Economic Development and Tourism launches Municipal Energy Resilience Project, South African Government (Cape Town) 24 November 2020. Access date: 20 March 2021. <https://www.gov.za/speeches/more-energy-secure-future-24-nov-2020-0000>

<sup>9426</sup> MEC David Meynier Announces Municipalities Participating in the Municipal Energy Resilience Project, South African Government (Cape Town) 17 March 2021. Access date: 20 March 2021. <https://www.gov.za/speeches/mec-david-maynier-announces-municipalities-participating-municipal-energy-resilience>

<sup>9427</sup> South Africa Receives World Bank Support to Stimulate Demand-Side Energy Efficiency Market, Department of Mineral Resources and Energy. (Cape Town) 02 December 2020. Access date: 20 March 2021. <https://www.dmr.gov.za/news-room/post/1883/south-africa-receives-world-bank-support-to-stimulate-demand-side-energy-efficiency-market>

On 13 December 2020, the Department of Environment, Forest and Fisheries approved the Antarctic and Southern Ocean Strategy. This project aims “for the coordination and implementation of the Antarctic Treaties Act, relating to research, conservation, sustainable resource use and environmental management in support of the African agenda.” The Southern Ocean is a significant sink for heat and carbon dioxide, meaning action towards its preservation will have significant results in reducing and mitigating climate change.<sup>9428</sup>

On 19 January 2021, the Department of Water and Sanitation pledged to strategically intervene to minimize the impact of raw sewer spillage into the Vaal River and waters in the southern Gauteng region. The department promised to improve local infrastructure and “would refurbish the wastewater treatment works and repair reservoirs, pump stations and rising mains.” To support this initiative, Deputy President Mabuza has dedicated R1.8 billion.<sup>9429</sup>

On 17 March 2021, Member of Executive Council David Maynier announced over R48.8 million over the medium term and R20 million in provincial reserves for the Municipal Energy Resilience (MER) Project in the Western Cape.<sup>9430</sup>

South Africa has taken actions to address three out of the four Rs framework, partially complying with its commitment to endorse the CCE platform. This was achieved through policies to reduce emissions through renewable energy, removal of emissions by protecting carbon sinks, and reuse of wastewater treatment works through infrastructure. Nevertheless, South Africa has not taken any actions towards recycling, or towards implementing hydrogen or enabling policies.

Thus, South Africa receives a score of 0.

*Analyst: Aisha Shafaqat*

### **Turkey: +1**

Turkey has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove).

On 23 November 2020, Minister of Energy and Natural Resources Fatih Dönmez announced that Turkey expects to increase its capacity for solar and wind energy. Also, the Minister stated that the production of wind energy surpassed the total production of other renewable resources for the first time in Turkey’s history. The goal is to reduce carbon emissions and invest in clean energy.<sup>9431</sup>

On 25 November 2020, Minister Dönmez announced that Turkey would establish a wind turbine and research and development factory in Izmir in line with the Renewable Energy Resource Areas project. The aim is to lead the world in wind energy innovation and increase the use of renewable energy.<sup>9432</sup>

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<sup>9428</sup> Environment, Forestry and Fisheries approves Antarctic and Southern Ocean Strategy for South Africa, South African Government (Cape Town) 13 December 2020. Access date: 20 March 2021. <https://www.gov.za/speeches/cabinet-approves-antarctic-and-southern-ocean-strategy-south-africa-13-dec-2020-0000>

<sup>9429</sup> Water and Sanitation commits to deal with Vaal River pollution Crisis, South African Government (Cape Town) 19 January 2021. Access date: 20 March 2021. <https://www.gov.za/speeches/water-and-sanitation-commits-deal-vaal-river-pollution-crisis-12-mar-2021-0000>

<sup>9430</sup> MEC David Meynier Announces Municipalities Participating in the Municipal Energy Resilience Project, South African Government (Cape Town) 16 March 2021. Access date: 22 March 2021. <https://www.gov.za/speeches/mec-david-meynier-announces-municipalities-participating-municipal-energy-resilience>

<sup>9431</sup> Turkey has left behind the European countries in renewable energy, The Ministry of Energy and Natural Resources (Ankara) 23 November 2020. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=732>

<sup>9432</sup> Wind power "light" 9.6 million households, The Ministry of Energy and Natural Resources (Ankara) 25 November 2020. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=733>

On 10 December 2020, the Ministry of Energy and Natural Resources committed to increasing electricity generation that uses domestic and renewable energy to 65 per cent of all total installed power by 2023, compared to 50 per cent for the past 2 years. The goal is to increase Turkey's use of domestic and renewable energy.<sup>9433</sup>

On 10 December 2020, Minister Dönmez announced that Turkey's carbon dioxide emissions will be reduced by 66 million tonnes by 2023. The goal is to lessen Turkey's carbon emissions.<sup>9434</sup>

On 10 December 2020, Minister Dönmez announced that the Ministry of Energy and Natural Resources has implemented the Renewable Energy Resource Areas model that aims to accelerate Turkey's renewable energy investments. The model "requires domestic production, domestic engineers, domestic R&D and innovation in the field of renewable energy," with the goal of supporting energy and export technologies.<sup>9435</sup>

On 10 December 2020, Minister Dönmez announced that the Ministry of Energy and Natural Resources will launch the Renewable Energy Source Guarantee Document in 2021.<sup>9436</sup> It will certify that a certain proportion of electricity is produced from renewable energy sources. The goal is to provide transparency for consumers and encourage the consumption of renewable electricity.<sup>9437</sup>

On 6 January 2021, Minister Dönmez stated that Turkey increased its solar power capacity from 40 megawatts in 2014 to 6,630 megawatts. The goal is to increase Turkey's use of renewable energy.<sup>9438</sup>

On 17 February 2021, the Ministry of Environment and Urban Planning announced that it strives to conduct projects to combat climate change on national and global levels. The Ministry outlined 541 actions and institutions to collaborate with, including other ministries, local governments and universities. Turkey will also be conducting climate research with the National Climate Change Platform and establishing the National Climate Change Research Center "where we will have our professors, local governments, non-governmental organizations in these scientific researches, and where policies will be determined and followed."<sup>9439</sup>

On 17 February 2021, the Ministry of Environment and Urban Planning highlighted that it aims to increase the recovery rate of waste to 60 per cent by 2035 as part of the Zero Waste Project. The Zero Waste project is expected to expand across Turkey by 2023. The goal is to increase recycling within Turkey.<sup>9440</sup>

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<sup>9433</sup> Minister Dönmez made evaluations on the activities and budget of the ministry, The Ministry of Energy and Natural Resources (Ankara) 10 December 2020. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=742>

<sup>9434</sup> Minister Dönmez made evaluations on the activities and budget of the ministry, The Ministry of Energy and Natural Resources (Ankara) 10 December 2020. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=742>

<sup>9435</sup> Minister Dönmez made evaluations on the activities and budget of the ministry, The Ministry of Energy and Natural Resources (Ankara) 10 December 2020. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=742>

<sup>9436</sup> Minister Dönmez made evaluations on the activities and budget of the ministry, The Ministry of Energy and Natural Resources (Ankara) 10 December 2020. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=742>

<sup>9437</sup> Minister Dönmez made evaluations on the activities and budget of the ministry, The Ministry of Energy and Natural Resources (Ankara) 10 December 2020. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=742>

<sup>9438</sup> Applications for mini YEKA competitions in the sun will be received within 2 months, The Ministry of Energy and Natural Resources (Ankara) 6 January 2021. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=753>

<sup>9439</sup> Ministerial Institution: "We Will Submit The Combating Climate Change Report to the Assembly," The Ministry of Environment and Urbanization (Ankara) 17b February 2021. Access Date: 12 March 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligiyle-mucadele-raporunu-meclise-sunacagiz-bakanlik-faaliyetleri-30881>

<sup>9440</sup> Ministerial Institution: "We Will Submit The Combating Climate Change Report to the Assembly," The Ministry of Environment and Urbanization (Ankara) 17b February 2021. Access Date: 12 March 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligiyle-mucadele-raporunu-meclise-sunacagiz-bakanlik-faaliyetleri-30881>

On 17 February 2021, the Ministry of Environment and Urban Planning also said it will work to install solar energy systems and construct energy-efficient buildings that have strong insulation. The Ministry also announced its aim to reduce fossil fuel usage in its buildings by 25 per cent by 2023. The goal is to reduce carbon emissions through more energy-efficient buildings.<sup>9441</sup>

On 17 February 2021, the Ministry of Environment and Urban Planning announced its plans to expand protected areas and ecological corridors through the creation of new national gardens across Turkey. The goal is to increase carbon sinks, in line with Turkey's greenhouse gas emissions reduction targets.<sup>9442</sup>

On 10 March 2021, Minister Dönmez announced that the Akkuyu Nuclear Power Plant is commissioned for 2023 where it will generate electricity with zero emission value, which contributes to Turkey's green energy target. The goal is to reduce Turkey's carbon dioxide emissions using more sustainable energy sources.<sup>9443</sup>

On 24 March 2021, the Ministry of Environment and Urbanization announced plans to update the Turkish National Climate Change Strategy and National Climate Action Plan.<sup>9444</sup> The update will include the goal of increasing electricity production from solar energy to 10 gigawatts and from wind energy to 16 gigawatts, along with the implementation of the Emission Trading System for clean energy production.<sup>9445</sup> The Ministry of Environment and Urbanization also stated that by 2023, it will reduce fossil fuel usage in buildings by 25 per cent and ensure that all buildings have an energy identity certificate by 2030.<sup>9446</sup> The goal is to increase the use of renewable energy sources and better manage energy consumption.<sup>9447</sup>

On 2 April 2021, Minister Dönmez announced that the Ministry of Energy and Natural Resources aims to achieve 1000 megawatts of installed power within two years at the Karapınar Solar Power Plant that is currently under construction.<sup>9448</sup> This power plant is to be "the world's largest solar power plant," after receiving TRY1.042 billion from the Ministry of Energy and Natural Resources in 2020.<sup>9449</sup> The Ministry plans to invest an additional TRY612 million in the power plant in 2021.<sup>9450</sup>

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<sup>9441</sup> Ministerial Institution: "We Will Submit The Combating Climate Change Report to the Assembly," The Ministry of Environment and Urbanization (Ankara) 17b February 2021. Access Date: 12 March 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligiyle-mucadele-raporunu-meclise-sunacagiz-bakanlik-faaliyetleri-30881>

<sup>9442</sup> Ministerial Institution: "We Will Submit The Combating Climate Change Report to the Assembly," The Ministry of Environment and Urbanization (Ankara) 17b February 2021. Access Date: 12 March 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligiyle-mucadele-raporunu-meclise-sunacagiz-bakanlik-faaliyetleri-30881>

<sup>9443</sup> The groundbreaking ceremony of the third unit of Akkuyu NGS was held, The Ministry of Energy and Natural Resources (Ankara) 10 March 2021. Access Date: 12 March 2021. <https://enerji.gov.tr/haber-detay?id=788>

<sup>9444</sup> Ministerial Institution: "We Update the Climate Change Action Plan with the 2050 Target," The Ministry of Environment and Urbanization (Ankara) 24 March 2021. Access Date: 27 April 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligi-eylem-planini-2050-hedefi-ile-guncelliyoruz-bakanlik-faaliyetleri-30890>

<sup>9445</sup> Ministerial Institution: "We Update the Climate Change Action Plan with the 2050 Target," The Ministry of Environment and Urbanization (Ankara) 24 March 2021. Access Date: 27 April 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligi-eylem-planini-2050-hedefi-ile-guncelliyoruz-bakanlik-faaliyetleri-30890>

<sup>9446</sup> Ministerial Institution: "We Update the Climate Change Action Plan with the 2050 Target," The Ministry of Environment and Urbanization (Ankara) 24 March 2021. Access Date: 27 April 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligi-eylem-planini-2050-hedefi-ile-guncelliyoruz-bakanlik-faaliyetleri-30890>

<sup>9447</sup> Ministerial Institution: "We Update the Climate Change Action Plan with the 2050 Target," The Ministry of Environment and Urbanization (Ankara) 24 March 2021. Access Date: 27 April 2021. <https://csb.gov.tr/bakan-kurum-iklim-degisikligi-eylem-planini-2050-hedefi-ile-guncelliyoruz-bakanlik-faaliyetleri-30890>

<sup>9448</sup> "We aim to reach an installed power of 1000 megawatts in 2 years", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=802>

<sup>9449</sup> "We aim to reach an installed power of 1000 megawatts in 2 years", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=802>

The power plant can increase Turkey's solar power capacity, which is an important renewable energy source for the country.

On 2 April 2021, Minister Dönmez stated that in 2021, the Ministry of Energy and Natural Resources will build Turkey's hydrogen strategy after consulting industry experts and the public.<sup>9451</sup> Turkey will continue its intensive research and development on alternative energy sources, especially hydrogen and the potential of mixing hydrogen into the existing natural gas network.<sup>9452</sup> The Turkish Energy, Nuclear and Mining Research Council is conducting studies on hydrogen and transportation manufacturers are considering transforming diesel trains to being hydrogen-powered.<sup>9453</sup> Minister Dönmez noted 4 key advantages of the transition to hydrogen: the increased use of renewable energy sources; the ability to decarbonize the heat industry; the ability to produce hydrogen from domestic coal; and increased use of boron to store hydrogen.<sup>9454</sup> Minister Dönmez stated that Turkey's goal is to produce hydrogen from renewable sources, also known as "green hydrogen."<sup>9455</sup>

On 9 April 2021, the Ministry of Energy and Natural Resources and the Rectorate of Marmara University in Istanbul signed the "Cooperation Protocol for the Development of National and International Projects within the Scope of Energy Efficiency."<sup>9456</sup> The protocol includes developing studies, organizing events and conducting joint projects to promote and increase energy efficiency.<sup>9457</sup> Minister Dönmez stated that the Marmara University campus will be focusing on maintaining zero-waste facilities that operate using renewable energy-efficient sources.<sup>9458</sup> The goal is to reduce energy usage in public buildings by 15 per cent compared to last year.<sup>9459</sup>

On 21 April 2021, the Ministry of Energy and Natural Resources announced its goal of producing a yearly minimum of 1000 megawatts of wind power and 1000 megawatts of solar power within the framework of the National Energy and Mining Policy.<sup>9460</sup> Minister Dönmez stated that investments in renewable energy are expected to double in the next five years and electricity using renewable energy is expected to surpass coal electricity in the next five to 10 years.<sup>9461</sup> Minister Dönmez noted

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<sup>9450</sup> "We aim to reach an installed power of 1000 megawatts in 2 years", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=802>

<sup>9451</sup> "We will form the hydrogen strategy of Turkey", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=803>

<sup>9452</sup> "We will form the hydrogen strategy of Turkey", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=803>

<sup>9453</sup> "We will form the hydrogen strategy of Turkey", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=803>

<sup>9454</sup> "We will form the hydrogen strategy of Turkey", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=803>

<sup>9455</sup> "We will form the hydrogen strategy of Turkey", The Ministry of Energy and Natural Resources (Ankara) 2 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=803>

<sup>9456</sup> 870 million lira savings will be achieved by 2023 with energy efficiency in public buildings, The Ministry of Energy and Natural Resources (Ankara) 9 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=807>

<sup>9457</sup> 870 million lira savings will be achieved by 2023 with energy efficiency in public buildings, The Ministry of Energy and Natural Resources (Ankara) 9 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=807>

<sup>9458</sup> 870 million lira savings will be achieved by 2023 with energy efficiency in public buildings, The Ministry of Energy and Natural Resources (Ankara) 9 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=807>

<sup>9459</sup> 870 million lira savings will be achieved by 2023 with energy efficiency in public buildings, The Ministry of Energy and Natural Resources (Ankara) 9 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=807>

<sup>9460</sup> Mini YEKA competitions in solar energy will start on Monday., The Ministry of Energy and Natural Resources (Ankara) 21 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=10811>

<sup>9461</sup> Mini YEKA competitions in solar energy will start on Monday., The Ministry of Energy and Natural Resources (Ankara) 21 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=10811>



that legal regulations and incentives such as the European Union's carbon tax will "reinforce the dominance of carbon-free production resources in the coming period."<sup>9462</sup>

On 22 May 2021, the Ministry of Environment and Urbanization announced that it will be creating at least one national garden in every province until 2023.<sup>9463</sup> The national gardens require the planting of trees, which act as carbon sinks that help remove carbon emissions.<sup>9464</sup>

On 24 June 2021, Minister Kurum announced Turkey's plans to expand Zero-Waste and Smart City practices throughout the country.<sup>9465</sup> These practices entail more effective use of resources, protection of nature, making buildings Zero-Waste compatible and expanding smart technologies on a regional and national level.<sup>9466</sup> The goal is to reduce waste in Turkey and use more energy-efficient practices to reduce the country's carbon footprint.<sup>9467</sup> The Ministry aims to implement Zero-Waste across public institutions and buildings including airports, malls and markets by the end of 2023 using regulations to reduce plastic waste and emissions.<sup>9468</sup>

Turkey has fully complied with its commitment to endorse the CCE platform with its 4Rs framework. It has complied with its commitment to reduce carbon emissions with its investments in solar, nuclear and wind energy, installation of energy-efficient buildings and the introduction of 3D software to detect sources of air pollution. It has also complied with its commitment to recycle and reduce waste through the Zero Waste Project. Additionally, Turkey has made efforts to remove carbon emissions through the expansion of national gardens and protected ecological areas. Turkey has also committed to research and development on hydrogen and the creation of Turkey's hydrogen strategy to help the country work towards decarbonization and accelerate hydrogen innovation.

Thus, Turkey receives a score of +1.

*Analyst: Amanda Wang*

### **United Kingdom: +1**

The United Kingdom has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove).

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<sup>9462</sup> Mini YEKA competitions in solar energy will start on Monday., The Ministry of Energy and Natural Resources (Ankara) 21 April 2021. Access Date: 27 April 2021. <https://enerji.gov.tr/haber-detay?id=10811>

<sup>9463</sup> Bursa Gökdere National Garden, The First Seeds Meet With the Soil, The Ministry of Environment and Urbanization (Ankara) 22 May 2021. Access Date: 22 July 2021. <https://csb.gov.tr/bursa-gokdere-millet-bahcesi-nde-ilk-fidanlar-toprakla-bulustu-bakanlik-faaliyetleri-31918>

<sup>9464</sup> Bursa Gökdere National Garden, The First Seeds Meet With the Soil, The Ministry of Environment and Urbanization (Ankara) 22 May 2021. Access Date: 22 July 2021. <https://csb.gov.tr/bursa-gokdere-millet-bahcesi-nde-ilk-fidanlar-toprakla-bulustu-bakanlik-faaliyetleri-31918>

<sup>9465</sup> The Minister Meets UN Habitat Executive Director Sharif, The Ministry of Environment and Urbanization (Ankara) 24 June 2021. Access Date: 22 July 2021. <https://csb.gov.tr/bakan-kurum-un-habitat-icra-direktoru-sharif-ile-gorustu-bakanlik-faaliyetleri-31933>

<sup>9466</sup> The Minister Meets UN Habitat Executive Director Sharif, The Ministry of Environment and Urbanization (Ankara) 24 June 2021. Access Date: 22 July 2021. <https://csb.gov.tr/bakan-kurum-un-habitat-icra-direktoru-sharif-ile-gorustu-bakanlik-faaliyetleri-31933>

<sup>9467</sup> The Minister Meets UN Habitat Executive Director Sharif, The Ministry of Environment and Urbanization (Ankara) 24 June 2021. Access Date: 22 July 2021. <https://csb.gov.tr/bakan-kurum-un-habitat-icra-direktoru-sharif-ile-gorustu-bakanlik-faaliyetleri-31933>

<sup>9468</sup> Minister Speaks At The Global Climate Change Research Commission, The Ministry of Environment and Urbanization (Ankara) 30 June 2021. Access Date: 22 July 2021. <https://csb.gov.tr/bakan-kurum-kuresel-iklim-degisikligi-arastirma-komisyonunda-konustu-bakanlik-faaliyetleri-31936>

On 25 November 2020, Chancellor of the Exchequer Rishi Sunak announced the government's 2020 Spending Review forecasting government spending for 2021 to 2022.<sup>9469</sup> The government announced, in line with its aims to reduce emissions in the transport sector, GBP1.9 billion in funding for electric vehicle charging infrastructure and consumer incentives. Further, the government will provide GBP1.1 billion to make homes and buildings more energy efficient. The government also announced the allocation of GBP1 billion for a Carbon Capture and Storage Infrastructure Fund as well as GBP92 million to the Nature for Climate Fund to increase tree-planting and peatland restoration, both key sources of carbon sequestration. This funding is conducive to the UK's goal of planting 30,000 hectares of trees a year by 2025.<sup>9470</sup>

On 4 December 2020, Prime Minister Boris Johnson announced new emissions targets aiming for a 68 per cent reduction in greenhouse gas emissions by 2030 compared to 1990 levels. This is an increase from the previous commitment of 53 per cent. With this increase the UK commits to reducing emissions at the fastest rate of any major economy.<sup>9471</sup>

On 5 December 2020, the UK announced increased funding for tree planting measures. The GBP3.9 million in funding includes GBP2.5 million for pilot studies to develop new and efficient methods for planting trees in towns, cities and the countryside. The other GBP1.4 million has been given to the Environment Agency to fund 15 projects that will plant 850,000 trees along rivers. These initiatives contribute towards the government's goal of planting 30,000 hectares of trees per year by 2025.<sup>9472</sup>

On 6 December 2020, the UK launched Trees for Climate, funded by a GBP12.1 million, which will the planting of over 500 hectares of trees. When matured these trees will store 100,000 tons of carbon and will help the government reach its zero net emissions by 2050 target.<sup>9473</sup>

On 10 December 2020, the UK announced nearly GBP40 million in funding to 68 projects that will plant over 800,000 trees and create over 300 hectares of woodland. The funding is part of the Green Recovery Challenge Fund and will help create green industries and sequester carbon.<sup>9474</sup>

On 12 December 2020, the UK communicated its Nationally Determined Contribution under the Paris Agreement to the United Nations Framework Convention on Climate Change. The updated contribution plan commits the UK to reducing greenhouse gas emissions by at least 68 per cent of 1990 levels by 2030.<sup>9475</sup>

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<sup>9469</sup> Spending Review to fight virus, deliver promises and invest in UK's recovery, HM Treasury (London) 25 November 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/news/spending-review-to-fight-virus-deliver-promises-and-invest-in-uks-recovery>

<sup>9470</sup> Spending Review 2020, HM Treasury (London) 15 December 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/publications/spending-review-2020-documents/spending-review-2020>

<sup>9471</sup> UK sets ambitious new climate target ahead of UN Summit, Department for Business, Energy & Industrial Strategy (London) 3 December 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/news/uk-sets-ambitious-new-climate-target-ahead-of-un-summit>

<sup>9472</sup> £3.9 million to drive innovative tree planting, Department for Environment, Food & Rural Affairs (London), 5 December 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/news/39-million-to-drive-innovative-tree-planting>

<sup>9473</sup> 500 hectare planting boost for England's Community Forests, Department for Environment, Food & Rural Affairs (London) December 6 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/news/500-hectare-planting-boost-for-englands-community-forests>

<sup>9474</sup> 800,000 trees set to be planted as Green Recovery Challenge Fund projects announced, Department for Environment, Food & Rural Affairs (London) 10 December 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/news/800000-trees-set-to-be-planted-as-green-recovery-challenge-fund-projects-announced>

<sup>9475</sup> Formal submission of the UK's Nationally Determined Contribution (NDC) to the UNFCCC under the Paris Agreement, Department for Business, Energy & Industrial Strategy (London) 12 December 2020. 20 March 2021. <https://www.gov.uk/government/publications/the-uks-nationally-determined-contribution-communication-to-the-unfccc>

On 12 December 2020, the UK co-convened the Climate Ambition Summit with the United Nations and France.<sup>9476</sup> At the summit, Prime Minister Johnson announced that the UK will end taxpayer support of international fossil fuel projects “as soon as possible” after a period of consultation and before COP26 in November 2021. This will accelerate the transition to green technology and renewable energy and the government will work with the UK oil and gas sector to facilitate the transition to low carbon energy sources.<sup>9477</sup>

On 14 December 2020, the UK set out the Energy White Paper, a plan to clean up energy systems. Within this plan includes steps to reduce emissions by 230 million metric tons by shifting away from fossil fuels with a GBP6.7 billion investment. While the timeline of this reduction was not specified, it supports a broader goal of achieving net-zero emissions by 2050. Additionally, this plan establishes a UK emissions trading scheme to come into effect 1 January 2021, to increase ambition on reducing emissions. The plan also includes the decision to invest GBP1 billion into carbon-capture storage in four industrial clusters by 2030 and at least one fully net-zero cluster by 2040. Finally, the plan outlines steps to stimulate the hydrogen economy by working with industry to aim for 5GW of production by 2030, backed up by a new GBP240 million net-zero Hydrogen Fund for low carbon hydrogen production.<sup>9478</sup>

On 6 January 2021, Science Minister Amanda Solloway announced an investment of GBP213 million to upgrade the UK’s scientific infrastructure. Some of the funding, although it is unclear how much, will go towards funding wind turbine testing facilities at the University of Plymouth and an X-ray facility at the University of Liverpool which will help scientists understand how carbon dioxide interacts with sandstone rocks aiding the development of improved methods of carbon capture and storage in order to reduce greenhouse gas emissions.<sup>9479</sup>

On 27 January 2021, Business Minister Paul Scully announced the investment of GBP42.3 million matched by the aviation industry for a total of GBP84.6 million in three projects seeking to develop green technology in the aviation industry with the goal of powering zero-emission flights by 2023.<sup>9480</sup>

On 29 January 2021, the UK announced that it will present legislation regarding the protection of vegetation on bog habitats. The burning of vegetation on blanket bogs is damaging to the habitat and complicates restoration efforts. The UK has 13 per cent of the world’s blanket bogs and they are a natural carbon sink making them crucial to the UK’s emission reduction goals.<sup>9481</sup>

On 4 February 2021, Energy Minister Anne-Marie Trevelyan announced the latest round of the Energy Entrepreneurs Fund which will provide GBP11 million in funding to small and medium sized

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<sup>9476</sup> Summit shows new surge in action and ambition on road to Glasgow Climate Conference, Department for Business, Energy & Industrial Strategy (London) 12 December 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/news/summit-shows-new-surge-in-action-and-ambition-on-road-to-glasgow-climate-conference>

<sup>9477</sup> PM announces the UK will end support for fossil fuel sector overseas, Prime Minister’s Office (London), 12 December 2020. Access Date: 21 March 2021. <https://www.gov.uk/government/news/pm-announces-the-uk-will-end-support-for-fossil-fuel-sector-overseas>

<sup>9478</sup> Government sets out plans for clean energy system and green jobs boom to build back greener, Department for Business, Energy & Industrial Strategy (London) 14 December 2020. Access Date: 22 March 2021. <https://www.gov.uk/government/news/government-sets-out-plans-for-clean-energy-system-and-green-jobs-boom-to-build-back-greener>

<sup>9479</sup> Over £200 million boost to upgrade UK labs to help scientists tackle COVID-19 and cut emissions, Department for Business, Energy & Industrial Strategy (London) 6 January 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/over-200-million-boost-to-upgrade-uk-labs-to-help-scientists-tackle-covid-19-and-cut-emissions>

<sup>9480</sup> £84 million boost for technology to power a green aviation revolution, Department for Business, Energy & Industrial Strategy (London) 27 January 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/84-million-boost-for-technology-to-power-a-green-aviation-revolution>

<sup>9481</sup> Legislation will be brought forward to prevent the burning of heather and other vegetation on protected blanket bog habitats, Department for Environment, Food & Rural Affairs (London) 29 January 2021. Access Date: 22 March 2021. <https://www.gov.uk/government/news/englands-national-rainforests-to-be-protected-by-new-rules>

businesses for the development of green technologies that reduce carbon emissions. The fund will support up to 15 projects and is part of the GBP1 billion Net Zero Innovation Portfolio seeking to reduce emissions in line with the UK's 2030 goals.<sup>9482</sup>

On 7 February 2021, the UK announced an investment of GBP40 million to help the UK's most polluting industries cut their carbon emissions. This announcement marks the start of the second funding window for the government's Industrial Energy Transformation Fund which will give between GBP100,000 and GBP14 million to single applicants and will provide a total GBP289 million in funding through to 2024. As a result of these projects, carbon emissions will be reduced by an estimated 2.6 million tons.<sup>9483</sup>

On 15 February 2021, Minister Trevelyan announced the creation of the UK Centre for Greening Finance and Investment funded by a GBP10 million government investment. The Centre, which is set to begin operations in April 2021, has physical hubs in Leeds and London and provides data and analytics to businesses that are looking to consider the impact of their investments and business decisions on the climate and the environment.<sup>9484</sup>

On 1 March 2021, the UK introduced updated energy labels which simplify the way energy efficiency is represented on products. The new system raises the standards for each class of energy efficiency (scale of A to G) making it so that few products will receive an A classification (whereas, under the old system, most products were classified as A+, A++ or A+++). The new labels will provide clarification on energy efficiency and incentivize producers to make their products more energy efficient.<sup>9485</sup>

On 9 March 2021, the UK announced a GBP92 million investment for the development of green technologies as part of the GBP1 billion Net Zero Innovation Portfolio. GBP68 million of this investment is dedicated to improving storage capacity technology which will improve the reliability of clean energy and accelerate commercialization. GBP20 million will fund floating offshore wind turbines, allowing them to be situated in areas where the water is too deep for them to be embedded in the sea floor or by advancing the development of dynamic high voltage cable systems and moorings. This is in line with the government's commitment to power every home in the country with wind by 2030. The final GBP4 million is dedicated to increasing the production of sustainably sourced biomass.<sup>9486</sup>

On 10 March 2021, the UK announced legislation on energy efficiency and "premature obsolescence" standards. Manufacturers of items such as washing machines, fridges and televisions will now have to adhere to stricter energy consumption standards and will also be required to make spare parts

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<sup>9482</sup> £11 million boost for energy entrepreneurs to turn green dreams into reality, Department for Business, Energy & Industrial Strategy (London) 4 February 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/11-million-boost-for-energy-entrepreneurs-to-turn-green-dreams-into-reality>

<sup>9483</sup> £40 million government funding to help polluting businesses clean up, Department for Business, Energy & Industrial Strategy (London) 7 February 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/40-million-government-funding-to-help-polluting-businesses-clean-up>

<sup>9484</sup> Leeds and London set to become global centres of green finance, Department for Business, Energy & Industrial Strategy (London) 15 February 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/leeds-and-london-set-to-become-global-centres-of-green-finance>

<sup>9485</sup> Electrical appliances to be cheaper to run and last longer with new standards, Department for Business, Energy & Industrial Strategy (London) 10 March 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/electrical-appliances-to-be-cheaper-to-run-and-last-longer-with-new-standards>

<sup>9486</sup> Over £90 million government funding to power green technologies, Department for Business, Energy & Industrial Strategy (London) 9 March 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/over-90-million-government-funding-to-power-green-technologies>

available in order to extend the lifespan of products. The new standards will reduce 8 million tons of carbon emissions and improve the lifespan of certain products by up to 10 years.<sup>9487</sup>

On 12 March 2021, the UK launched the Mobilizing Finance for Forests Programme through which it will invest GBP150 million in order to fund sustainable land-use projects and rainforest protection and reforestation projects in Africa, Asia and Latin America. The fund will also attract private financial investment. The funding will help remove 28 million tons of carbon from the atmosphere over the next 15 years. This funding is part of the UK's commitment to provide GBP11.6 billion in international climate financing.<sup>9488</sup>

On 12 March 2021, the UK announced that an allocation of GBP2.7 million, as part of the Local Authority Treescapes fund, will go towards planting trees in previously neglected landscapes such as urban centers and beside roads and footpaths. The planting of these trees, particularly in urban areas or along roads, will help with carbon sequestration.<sup>9489</sup>

On 15 March 2021, Prime Minister Johnson announced the government's new bus strategy. The strategy, backed by GBP3 billion investment, will deliver 4,000 electric or hydrogen buses providing zero-emission travel. As part of the measures, the government also announced that they will end the sale of new diesel buses and launched a consultation period to determine an appropriate end date.<sup>9490</sup>

On 16 March 2021, the UK announced the launch of the Green Fuel, Green Skies competition which will see GBP15 million allocated to the development of facilities capable of turning everyday waste into jet fuel. Companies will bid for a portion of the funding to put towards projects that are seeking to develop technologies to convert household waste, wood and excess electricity into aviation fuel. This fuel is made of recycled materials and also emits up to 70 per cent less than conventional jet fuel.<sup>9491</sup>

On 17 March 2021, Business and Energy Secretary Kwasi Kwarteng announced the government's new Industrial Decarbonization Strategy which outlines the government's plans for creating a low carbon industrial sector. In line with the strategy, the government announced funding of GBP171 million from the Industrial Decarbonization Challenge to green technology projects for the purpose of aiding the rollout of decarbonization infrastructure (carbon capture, usage and storage and hydrogen). Further funding of GBP932 million in from the Public Sector Decarbonization Scheme will also be directed to reduce carbon emissions from public buildings. The government also announced its intent to introduce new rules on measuring the energy and carbon performance of large commercial and industrial buildings which includes office buildings and factories in England and Wales which could lead to a reduction in annual carbon emissions by over 2 million tons.<sup>9492</sup>

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<sup>9487</sup> Electrical appliances to be cheaper to run and last longer with new standards, Department for Business, Energy & Industrial Strategy (London) 10 March 2021. Access Date: 21 March 2021.

<https://www.gov.uk/government/news/electrical-appliances-to-be-cheaper-to-run-and-last-longer-with-new-standards>

<sup>9488</sup> £150 million government investment to save the world's rainforests Department for Business, Energy & Industrial Strategy, Department for Environment, Food & Rural Affairs (London) 12 March 2021. Access Date: 21 March 2021.

<https://www.gov.uk/government/news/150-million-government-investment-to-save-the-worlds-rainforests>

<sup>9489</sup> New tree fund for local communities announced, Department for Environment, Food & Rural Affairs (London) 12 March 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/new-tree-fund-for-local-communities-announced>

<sup>9490</sup> Prime Minister launches £3 billion bus revolution, Department for Transport (London) 15 March 2021. Access Date: 20 March 2021. <https://www.gov.uk/government/news/prime-minister-launches-3-billion-bus-revolution>

<sup>9491</sup> Jet Zero launches £15 million competition to reduce aviation emissions, Department for Transport (London) 16 March 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/jet-zero-launches-15-million-competition-to-reduce-aviation-emissions>

<sup>9492</sup> Major blueprint to create green jobs and slash emissions from industry, schools and hospitals, Department for Business, Energy & Industrial Strategy (London) 17 March 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/major-blueprint-to-create-green-jobs-and-slash-emissions-from-industry-schools-and-hospitals>

On 18 March 2021, the UK announced the opening of a consultation period for the formation of a new Waste Prevention Programme for England. This programme would guide government and industry action across key sectors including textiles, packaging and plastic (including single-use items) in order to reduce waste and repair and reuse products more efficiently.<sup>9493</sup>

On 19 March 2021, Forestry Minister Lord Frank Zacharias Robin Goldsmith announced GBP120,000 in funding from the Nature for Climate Fund to support the new partnership between the Department for Environment, Food & Rural Affairs (DEFRA) and Forest for Cornwall. DEFRA and Forest for Cornwall will conduct a pilot called National Woodland Creation Partnership to support and increase regional planting.<sup>9494</sup>

On 20 March 2021, the UK announced a second wave of funding totaling GBP8.9 million, in order to meet its goal of decarbonizing the UK's distilleries. The production of whiskey was responsible for approximately 530,000 tons of carbon and carbon equivalents in 2018 and the industry grew by 20 per cent in 2019. The generation of heat for the distillation process primarily utilizes fossil fuels and accounts for more than 80 per cent of the industry's fuel consumption, this makes it a prime sector for the introduction of low carbon alternatives. The allotted funding to help accelerate the adaptation of low-carbon technologies is part of the GBP1 billion Net Zero Innovation Portfolio.<sup>9495</sup>

On 22 March 2021, the UK announced funding of GBP20 million for a competition for green maritime projects. The goal of the competition is to provide funding for development and testing of new green technologies for sea vessels and port infrastructure such as hydrogen powered vessels and e-charging stations.<sup>9496</sup>

On 22 March 2021, Secretary Kwarteng announced GBP54 million in funding for three electric truck and hydrogen-powered bus projects.<sup>9497</sup> The funded projects deal with improving travel range and energy efficiency for electric trucks and the development and manufacturing of low-cost hydrogen fuel cell technology.<sup>9498</sup> These projects are expected to save up to 45 million tonnes of carbon emissions.<sup>9499</sup>

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<sup>9493</sup> Government unveils plans for wide-ranging Waste Prevention Programme, Department for Environment, Food & Rural Affairs (London) 18 March 2021. Access Date: 21 March 2021.

<https://www.gov.uk/government/news/government-unveils-plans-for-wide-ranging-waste-prevention-programme>  
<sup>9494</sup> Defra announces funding boost and new partnership with Forest for Cornwall, Department for Environment, Food & Rural Affairs (London) 17 March 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/defra-announces-funding-boost-and-new-partnership-with-forest-for-cornwall>

<sup>9495</sup> Distilleries ready to raise a toast and go green, Department for Business, Energy & Industrial Strategy (London) 20 March 2021. Access Date: 21 March 2021. <https://www.gov.uk/government/news/distilleries-ready-to-raise-a-toast-and-go-green>

<sup>9496</sup> £20 million fund to propel green shipbuilding launched, Department for Transport (London) 22 March 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/20-million-fund-to-propel-green-shipbuilding-launched>

<sup>9497</sup> Emissions-cutting trucks and next-gen hydrogen buses closer to hitting the road with £54 million government-led funding, Department for Business, Energy & Industrial Strategy, Department for Transport (London) 22 March 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/emissions-cutting-trucks-and-next-gen-hydrogen-buses-closer-to-hitting-the-road-with-54-million-government-led-funding>

<sup>9498</sup> Emissions-cutting trucks and next-gen hydrogen buses closer to hitting the road with £54 million government-led funding, Department for Business, Energy & Industrial Strategy, Department for Transport (London) 22 March 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/emissions-cutting-trucks-and-next-gen-hydrogen-buses-closer-to-hitting-the-road-with-54-million-government-led-funding>

<sup>9499</sup> Emissions-cutting trucks and next-gen hydrogen buses closer to hitting the road with £54 million government-led funding, Department for Business, Energy & Industrial Strategy, Department for Transport (London) 22 March 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/emissions-cutting-trucks-and-next-gen-hydrogen-buses-closer-to-hitting-the-road-with-54-million-government-led-funding>

On 24 March 2021, the UK announced the North Sea Transition Deal which will aid the oil and gas industry in their transition to net zero emissions.<sup>9500</sup> Through this deal the government will emphasize the use of carbon captures, hydrogen production and offshore wind farming.<sup>9501</sup> The deal outlines the government's intention to cut the North Sea's oil and gas industry by 10 per cent based on a 2018 baseline by 2025, rising to 50 per cent by 2030.<sup>9502</sup> The goal is to reach net zero by 2050. To this end, an investment of GBP14 to 16 billion will be allocated to the industry by 2030, with up to GBP10 billion being directed towards hydrogen production and GBP3 billion towards carbon captures and stores. Further, the government is introducing a Climate Compatibility Checkpoint in order to ensure that all licenses awarded to companies are compatible with the UK's emission targets.<sup>9503</sup>

On 24 March 2021, the UK announced that it would end support for overseas fossil fuel sectors on 31 March 2021.<sup>9504</sup> This announcement provides an official end to the support for overseas fossil fuels, which Prime Minister Johnson had announced at the Climate Ambition Summit on 12 December 2020.<sup>9505</sup> In ending support for overseas fossil fuel sectors, the government will no longer fund or promote new crude oil, natural gas or thermal coal projects.<sup>9506</sup>

On 27 March 2021, the UK announced an additional GBP300 million in funding to the Green Home Grant voucher scheme.<sup>9507</sup> This increased funding is part of the government's commitment to provide GBP9 billion in funding for improvements to energy efficiency and lower carbon emissions in buildings.<sup>9508</sup> The funds will enable the replacement of gas boilers with low carbon alternatives such as heat pumps and will also allow for houses to receive updated insulation and solar panels.<sup>9509</sup>

On 20 April 2021, the UK presented its sixth Carbon Budget in which it committed to reducing the country's carbon emissions by 78 per cent of 1990 levels by 2035, this announcement builds on the

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<sup>9500</sup> North Sea deal to protect jobs in green energy transition, Department for Business, Energy & Industrial Strategy (London) 24 March 2021. Access Date 29 April 2021. <https://www.gov.uk/government/news/north-sea-deal-to-protect-jobs-in-green-energy-transition>

<sup>9501</sup> North Sea deal to protect jobs in green energy transition, Department for Business, Energy & Industrial Strategy (London) 24 March 2021. Access Date 29 April 2021. <https://www.gov.uk/government/news/north-sea-deal-to-protect-jobs-in-green-energy-transition>

<sup>9502</sup> North Sea Transition Deal, Department for Business, Energy & Industrial Strategy (London) 24 March 2021. Access Date: 1 May 2021. <https://www.gov.uk/government/publications/north-sea-transition-deal>

<sup>9503</sup> North Sea deal to protect jobs in green energy transition, Department for Business, Energy & Industrial Strategy (London) 24 March 2021. Access Date 29 April 2021. <https://www.gov.uk/government/news/north-sea-deal-to-protect-jobs-in-green-energy-transition>

<sup>9504</sup> North Sea deal to protect jobs in green energy transition, Department for Business, Energy & Industrial Strategy (London) 24 March 2021. Access Date 29 April 2021. <https://www.gov.uk/government/news/north-sea-deal-to-protect-jobs-in-green-energy-transition>

<sup>9505</sup> PM announces the UK will end support for fossil fuel sector overseas, Prime Minister's Office (London), 12 December 2020. Access Date: 29 April 2021. <https://www.gov.uk/government/news/pm-announces-the-uk-will-end-support-for-fossil-fuel-sector-overseas>

<sup>9506</sup> North Sea deal to protect jobs in green energy transition, Department for Business, Energy & Industrial Strategy (London) 24 March 2021. Access Date 29 April 2021. <https://www.gov.uk/government/news/north-sea-deal-to-protect-jobs-in-green-energy-transition>

<sup>9507</sup> Government boosts energy efficiency spending to £1.3 billion with extra funding for green homes, Department for Business, Energy & Industrial Strategy (London) 27 March 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/government-boosts-energy-efficiency-spending-to-13-billion-with-extra-funding-for-green-homes>

<sup>9508</sup> Government boosts energy efficiency spending to £1.3 billion with extra funding for green homes, Department for Business, Energy & Industrial Strategy (London) 27 March 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/government-boosts-energy-efficiency-spending-to-13-billion-with-extra-funding-for-green-homes>

<sup>9509</sup> Government boosts energy efficiency spending to £1.3 billion with extra funding for green homes, Department for Business, Energy & Industrial Strategy (London) 27 March 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/government-boosts-energy-efficiency-spending-to-13-billion-with-extra-funding-for-green-homes>

previously announced goal of reducing the UK's carbon emissions by 68 per cent of 1990 levels by 2030.<sup>9510</sup> The Carbon Budget will now also track the UK's share of international aviation and shipping, allowing for more accurate and consistent tracking of emissions.<sup>9511</sup>

On 18 May 2021, the UK Government released its England Trees Action Plan, which aims to plant 30,000 hectares of trees per year.<sup>9512</sup> The plan will operate with GBP500 million set aside by the Nature for Climate Fund and will create new community forests around England as well as increasing tree cover in cities and towns to help with carbon sequestration.<sup>9513</sup>

On 24 May 2021, the UK Government announced a funding package of GBP166.5 million for the development of green technology such as carbon capturing methods, greenhouse gas removal and hydrogen utilization and for the decarbonization of polluting sectors of the economy.<sup>9514</sup> GBP60 million will be dedicated towards low carbon hydrogen technology as well as increasing the efficiency of hydrogen energy creation, GBP37.5 million will be dedicated to greenhouse gas removal methods and GBP20 million will be directed towards researching new carbon capture, usage and storage technologies among other initiatives.<sup>9515</sup>

On 24 May 2021, the UK Environmental Agency released its roadmap for cutting its own carbon emissions by 45 per cent and reaching net zero by 2030.<sup>9516</sup> In order to reach this goal the Environmental Agency pledges to use low carbon concrete for flood defences as well as energy-efficient water pumps, and to switch entirely to electric vehicles by 2023.<sup>9517</sup>

On 28 May 2021, the UK Government announced funding of GBP44 million to reduce carbon emissions in homes and public buildings by creating low carbon heat networks, reducing emissions in areas serviced by the new heat networks by up to 22 per cent and energy costs by up to 15 per cent.<sup>9518</sup>

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<sup>9510</sup> UK enshrines new target in law to slash emissions by 78% by 2035, Department for Business, Energy & Industrial Strategy (London) 20 April 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>

<sup>9511</sup> UK enshrines new target in law to slash emissions by 78% by 2035, Department for Business, Energy & Industrial Strategy (London) 20 April 2021. Access Date: 29 April 2021. <https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>

<sup>9512</sup> Nature for people, climate and wildlife, Department for Environment, Food & Rural Affairs (London) 18 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/publications/nature-for-people-climate-and-wildlife/nature-for-people-climate-and-wildlife>

<sup>9513</sup> Nature for people, climate and wildlife, Department for Environment, Food & Rural Affairs (London) 18 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/publications/nature-for-people-climate-and-wildlife/nature-for-people-climate-and-wildlife>

<sup>9514</sup> £166 million cash injection for green technology and 60,000 UK jobs, Department for Business, Energy & Industrial Strategy (London) 24 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/166-million-cash-injection-for-green-technology-and-60000-uk-jobs>

<sup>9515</sup> £166 million cash injection for green technology and 60,000 UK jobs, Department for Business, Energy & Industrial Strategy (London) 24 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/166-million-cash-injection-for-green-technology-and-60000-uk-jobs>

<sup>9516</sup> Low-carbon concrete flood defences to help Environment Agency hit net zero by 2030, Environment Agency (London) 24 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/low-carbon-concrete-flood-defences-to-help-environment-agency-hit-net-zero-by-2030>

<sup>9517</sup> Low-carbon concrete flood defences to help Environment Agency hit net zero by 2030, Environment Agency (London) 24 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/low-carbon-concrete-flood-defences-to-help-environment-agency-hit-net-zero-by-2030>

<sup>9518</sup> £44 million cash boost to cut emissions from buildings and help households save on energy bills, Department for Business, Energy & Industrial Strategy (London) 28 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/44-million-cash-boost-to-cut-emissions-from-buildings-and-help-households-save-on-energy-bills>



On 9 June 2021, the UK Government announced plans to end the sale of hydrogen light bulbs from September 2021 as well as high-energy fluorescent light bulbs by September 2023.<sup>9519</sup> Ending the sale of these light bulbs will reduce carbon emissions by 1.26 million tonnes per year.<sup>9520</sup>

On 30 June 2021, Energy Trevelyan announced plans to end the use of coal power by 1 October 2024, a year earlier than previously planned.<sup>9521</sup> The purpose of this is to further accelerate the decarbonisation of the country's energy system.<sup>9522</sup>

On 19 July 2021, Highways England released its roadmap to net zero carbon emissions on all roads under its purview by 2050.<sup>9523</sup> The plan commits to a 75 per cent reduction in carbon emissions compared to 2017 and 2018 levels by 2025 as well as achieving net zero emissions for Highways England corporate emissions by 2030, and maintenance and construction emissions by 2040.<sup>9524</sup> The plan also commits to planting 3 million trees by 2030 as well as the creation of roadmaps for zero-carbon cement, concrete and asphalt.<sup>9525</sup>

On 21 July 2021, the Department for Environment, Food and Rural Affairs along with England Community Forests and local councils announced the creation of the North East Community Forest.<sup>9526</sup> This initiative will plant up to 500 hectares of trees by 2025 and has a long term goal to increase canopy cover in England's north east to 30 per cent by 2050.<sup>9527</sup> The trees will be planted in urban locations as well and will help sequester carbon.<sup>9528</sup> This initiative contributes towards the government's goal of planting 30,000 hectares of trees per year by 2025 in accordance with the England Trees Action Plan.<sup>9529</sup>

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<sup>9519</sup> End of halogen light bulbs spells brighter and cleaner future, Department for Business, Energy & Industrial Strategy (London) 9 June 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/end-of-halogen-light-bulbs-spells-brighter-and-cleaner-future>

<sup>9520</sup> End of halogen light bulbs spells brighter and cleaner future, Department for Business, Energy & Industrial Strategy (London) 9 June 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/end-of-halogen-light-bulbs-spells-brighter-and-cleaner-future>

<sup>9521</sup> End to coal power brought forward to October 2024, Department for Business, Energy & Industrial Strategy (London) 30 June 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/end-to-coal-power-brought-forward-to-october-2024>

<sup>9522</sup> End to coal power brought forward to October 2024, Department for Business, Energy & Industrial Strategy (London) 30 June 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/end-to-coal-power-brought-forward-to-october-2024>

<sup>9523</sup> Highways England lays out roadmap to net zero by 2050, Highways England (London) 19 July 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/highways-england-lays-out-roadmap-to-net-zero-by-2050>

<sup>9524</sup> Highways England lays out roadmap to net zero by 2050, Highways England (London) 19 July 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/highways-england-lays-out-roadmap-to-net-zero-by-2050>

<sup>9525</sup> Highways England lays out roadmap to net zero by 2050, Highways England (London) 19 July 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/highways-england-lays-out-roadmap-to-net-zero-by-2050>

<sup>9526</sup> New Community Forest created in the North East to support a greener future, Department for Environment, Food & Rural Affairs (London) 21 July 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/new-community-forest-created-in-the-north-east-to-support-a-greener-future>

<sup>9527</sup> New Community Forest created in the North East to support a greener future, Department for Environment, Food & Rural Affairs (London) 21 July 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/new-community-forest-created-in-the-north-east-to-support-a-greener-future>

<sup>9528</sup> New Community Forest created in the North East to support a greener future, Department for Environment, Food & Rural Affairs (London) 21 July 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/news/new-community-forest-created-in-the-north-east-to-support-a-greener-future>

<sup>9529</sup> Nature for people, climate and wildlife, Department for Environment, Food & Rural Affairs (London) 18 May 2021. Access Date: 23 July 2021. <https://www.gov.uk/government/publications/nature-for-people-climate-and-wildlife/nature-for-people-climate-and-wildlife>

On 27 July 2021, the UK Government announced a funding boost of GBP20 million to accelerate the transition to zero-emission road freight.<sup>9530</sup> Through this funding, field-testing and feasibility studies will be conducted in order to help facilitate the design and development of cost-effective zero emission heavy goods vehicles.<sup>9531</sup> This includes studying the feasibility of hydrogen fuel cells in heavy goods vehicles and new refuelling infrastructure, and is conducive both to the promotion of hydrogen energy and the reduction of emissions for the transport sector.<sup>9532</sup>

On 27 July 2021, Foreign Secretary Dominic Raab announced GBP3.6 million in funding from the UK to Kenya in order to accelerate Kenya's climate transition, including projects supporting renewable energy and forest restoration.<sup>9533</sup> The UK will also provide GBP34 million for the creation of 10,000 green homes and GBP439,000 toward procuring policy advice and technical assistance for the purpose of developing green manufacturing in Kenya.<sup>9534</sup>

On 2 August 2021, the UK announced an increase of GBP17 million to the funding of the Catchment Sensitive Farming programme over the next three years.<sup>9535</sup> The increase in funding will allow Natural England to provide this service to 100 per cent of England's farmland, providing farmers with direct consultation with advisors on ways to reduce water and air pollution on their farms.<sup>9536</sup>

On 6 August 2021, the UK announced funding of GBP5 million for the creation of the Climate Services for a Net Zero Resilient World research program.<sup>9537</sup> In addition to providing data and transformative advice to help meet the government's net zero emissions plan, the program will also engage with local authorities to create local climate action plans in order to help households identify low-cost, low-carbon measures for coping with extreme temperatures and weather events.<sup>9538</sup> The

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<sup>9530</sup> Road freight goes green with £20 million funding boost, Department for Transport (London) 27 July 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/road-freight-goes-green-with-20-million-funding-boost>

<sup>9531</sup> Road freight goes green with £20 million funding boost, Department for Transport (London) 27 July 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/road-freight-goes-green-with-20-million-funding-boost>

<sup>9532</sup> Road freight goes green with £20 million funding boost, Department for Transport (London) 27 July 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/road-freight-goes-green-with-20-million-funding-boost>

<sup>9533</sup> UK mobilises KES 20 billion investment into Kenya's Big Four projects, Foreign, Commonwealth & Development Office (London) 27 July 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/uk-mobilises-kes-20-billion-investment-into-kenyas-big-four-projects>

<sup>9534</sup> UK mobilises KES 20 billion investment into Kenya's Big Four projects, Foreign, Commonwealth & Development Office (London) 27 July 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/uk-mobilises-kes-20-billion-investment-into-kenyas-big-four-projects>

<sup>9535</sup> Funding boost for farmers to tackle water pollution, Department for Environment, Food & Rural Affairs (London) 2 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/funding-boost-for-farmers-to-tackle-water-pollution>

<sup>9536</sup> Funding boost for farmers to tackle water pollution, Department for Environment, Food & Rural Affairs (London) 2 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/funding-boost-for-farmers-to-tackle-water-pollution>

<sup>9537</sup> Government boosts UK resilience against climate change, Department for Business, Energy & Industrial Strategy (London) 6 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/government-boosts-uk-resilience-against-climate-change>

<sup>9538</sup> Government boosts UK resilience against climate change, Department for Business, Energy & Industrial Strategy (London) 6 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/government-boosts-uk-resilience-against-climate-change>

program will also provide models on how the UK can reduce carbon emissions globally, informing and building on the UK's current work helping countries develop decarbonization strategies.<sup>9539</sup>

On 17 August 2021, Business and Energy Secretary Kwasi Kwarteng announced the UK's Hydrogen Strategy, which presents the government's plan to meet its hydrogen production target of 5GW electrolyzer capacity by 2030, as well as introducing low carbon hydrogen energy into the UK's energy system.<sup>9540</sup> An increase in low carbon hydrogen energy production will allow for the decarbonization of energy-heavy, polluting industries as well as reducing the overall carbon emissions from the UK's energy consumption, potentially representing 20-35 per cent of the UK's energy consumption by 2050.<sup>9541</sup> This is conducive to the UK reaching its goal of net zero carbon emissions by 2050.<sup>9542</sup>

On 17 August 2021, the UK announced GBP105 million in funding to help industries develop low carbon alternatives for industrial fuels, such as hydrogen energy.<sup>9543</sup> This funding allows industries to research and develop low-carbon energy alternatives which will help reduce carbon emissions, ensuring both the UK and individual industries reach net zero emissions by 2050.<sup>9544</sup>

On 2 September 2021, the UK, in cooperation with India, announced a GBP1.2 billion investment in climate-related projects in India between 2022 and 2026, with GBP1 billion of this investment coming from the UK's development finance institution, the CDC Group.<sup>9545</sup> The goal of this investment is to both support adaptation and mitigation to climate change and to encourage private investment in the development of green infrastructure in India.<sup>9546</sup> This will help reduce carbon emissions through the development of greener industries, businesses and infrastructure.<sup>9547</sup>

The UK has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove), while also taking into consideration hydrogen and hydrogen enabling policies. It has complied with its commitment to reduce carbon emissions with its investments in renewable energy, green technology and transportation as well as

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<sup>9539</sup> Government boosts UK resilience against climate change, Department for Business, Energy & Industrial Strategy (London) 6 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/government-boosts-uk-resilience-against-climate-change>

<sup>9540</sup> UK government launches plan for a world-leading hydrogen economy, Department for Business, Energy & Industrial Strategy (London) 17 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/uk-government-launches-plan-for-a-world-leading-hydrogen-economy>

<sup>9541</sup> UK government launches plan for a world-leading hydrogen economy, Department for Business, Energy & Industrial Strategy (London) 17 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/uk-government-launches-plan-for-a-world-leading-hydrogen-economy>

<sup>9542</sup> UK government launches plan for a world-leading hydrogen economy, Department for Business, Energy & Industrial Strategy (London) 17 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/uk-government-launches-plan-for-a-world-leading-hydrogen-economy>

<sup>9543</sup> UK government launches plan for a world-leading hydrogen economy, Department for Business, Energy & Industrial Strategy (London) 17 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/uk-government-launches-plan-for-a-world-leading-hydrogen-economy>

<sup>9544</sup> UK government launches plan for a world-leading hydrogen economy, Department for Business, Energy & Industrial Strategy (London) 17 August 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/news/uk-government-launches-plan-for-a-world-leading-hydrogen-economy>

<sup>9545</sup> 11th UK-India Economic and Financial Dialogue Joint Statement, HM Treasury (London) 2 September 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/publications/uk-india-11th-economic-and-financial-dialogue-joint-statement/11th-uk-india-economic-and-financial-dialogue-joint-statement>

<sup>9546</sup> 11th UK-India Economic and Financial Dialogue Joint Statement, HM Treasury (London) 2 September 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/publications/uk-india-11th-economic-and-financial-dialogue-joint-statement/11th-uk-india-economic-and-financial-dialogue-joint-statement>

<sup>9547</sup> 11th UK-India Economic and Financial Dialogue Joint Statement, HM Treasury (London) 2 September 2021. Access Date: 6 September 2021. <https://www.gov.uk/government/publications/uk-india-11th-economic-and-financial-dialogue-joint-statement/11th-uk-india-economic-and-financial-dialogue-joint-statement>

through consumer awareness initiatives. It has complied with its commitment to reuse and recycle through supporting initiatives to extend product life as well as innovative recycling projects. Additionally, the UK has promoted the removal of carbon emissions through conservation of forests and bogs and the planting of trees as well as through investment in the development and deployment of carbon capturing and storage initiatives. The UK has also enacted policy in support of hydrogen, setting energy production targets for the industry, creating a fund to stimulate the hydrogen economy, including hydrogen projects in the Industrial Decarbonisation Challenge and by promoting transportation infrastructure that uses hydrogen.

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

*Analyst: Karči Aldridge Végi*

### **United States: +1**

The United States has fully complied with its commitment of endorsing the Circular Carbon Economy platform with its 4 Rs framework (Reduce, Reuse, Recycle, and Remove).

On 27 December 2020, Congress authorized USD35 billion for funding solar, wind and other clean energy and sustainable energy technologies over the next five years. By extending federal tax credits, the bill will incentivize development and construction of clean energy technologies, which also surpasses the total dollar amount of investments for renewable energy in 2020.<sup>9548</sup> The bill outlines extensions of investments to new fuel cells, for waste heat energy recovery and for offshore wind energy development. Tax credits will also be extended for carbon capture, utilization and storage, and for the development of carbon capture facilities under this bill, which will reduce carbon emissions.<sup>9549</sup>

On 20 January 2021, the US rejoined the Paris Climate Agreement, aiming to focus on the climate crisis and take quick actions. This is seen as a step towards achieving its net-zero emissions goal by 2050.<sup>9550</sup>

On 5 February 2021, the US reintroduced the Growing Renewable Energy and Efficiency Now Act (GREEN Act), which was first introduced in June 2020.<sup>9551</sup> This Act is part of President Joseph Biden's "rescue and recovery" plan, which will aim to further enhance developments for clean energy, including solar and wind technologies. The GREEN Act will also include proposals for electric and zero-emission vehicles and modifying the existing limitations on the credits available for electric vehicles. The bill will expand and enhance the use of renewable energy by promoting clean energy technologies and deploying zero-emission vehicles.<sup>9552</sup> Incentives will also be provided through this act for the conservation of energy in homes and buildings.

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<sup>9548</sup> Big stimulus for clean energy: Covid relief bill to include bipartisan support for Green Tax credits () 21 December 2020. Access Date: 12 March 2021. <https://www.forbes.com/sites/allanmarks/2020/12/21/clean-energy-investments-get-a-bipartisan-boost-from-congress-in-relief-bill/?sh=53df99fa36f2>

<sup>9549</sup> Big stimulus for clean energy: Covid relief bill to include bipartisan support for Green Tax credits () 21 December 2020. Access Date: 12 March 2021. <https://www.forbes.com/sites/allanmarks/2020/12/21/clean-energy-investments-get-a-bipartisan-boost-from-congress-in-relief-bill/?sh=53df99fa36f2>

<sup>9550</sup> Paris climate accord: Biden announces US will rejoin landmark agreement (Washington DC) 20 January 2021. Access Date: 14 March 2021. <https://www.cnn.com/2021/01/20/politics/paris-climate-biden/index.html>

<sup>9551</sup> KPMG report: Outlook for what's ahead for energy tax incentives (Amstelveen) 26 February 2021. Access Date: 15 March 2021. <https://home.kpmg/us/en/home/insights/2021/02/tnf-kpmg-report-outlook-for-whats-ahead-for-energy-tax-incentives-green-act.html>

<sup>9552</sup> Chairman Thompson, Ways and Means democrats introduce GREEN Act (Washington) 5 February, 2021. Access Date: 14 March 2021. <https://mikethompson.house.gov/newsroom/press-releases/chairman-thompson-ways-and-means-democrats-introduce-green-act>

On 8 March 2021, the Department of Energy announced up to USD52.5 million for university-based training programs of Industrial Assessment Centres, which help the manufacturers and wastewater treatment facilities in reducing their carbon footprint.<sup>9553</sup> According to the Secretary of Energy, “This new funding is an investment in both the infrastructure and next generation clean energy workforce we need to tackle climate emergency.”<sup>9554</sup>

On 10 March 2021, the Department of Energy announced the construction of the Grid Storage Launchpad, which will increase the adaptation of clean energy, and the development of low-duration energy storage. According to the Secretary of Energy, “Developing new grid technologies means we can get more renewable power on the system, support a growing fleet of electric vehicles, make our grid more reliable and resilient and secure our clean energy future.” The Washington State Department of Commerce also announced the allotment of USD8.3 million for any required advanced research and equipment.<sup>9555</sup>

On 15 March 2021, the Department of Energy awarded USD2 million to four clean-hydrogen production technologies projects. These projects aim to reduce carbon emissions and create more clean energy sources. As natural gas usage in industrial facilities is the main source of hydrogen production in the US, these projects will use the process of co-gasification as a different way to produce cleaner hydrogen as a clean energy source.<sup>9556</sup>

On 8 April 2021, the Department of Energy announced an investment of USD81 million for the development of technologies for producing low cost and low carbon biofuels and for sustainable aviation fuel.<sup>9557</sup> This initiative is a step towards decarbonizing the transportation sector which include heavy duty vehicles like airplanes and ships which are difficult to convert to current electric technologies.<sup>9558</sup> They will further develop technologies for converting waste resources into biofuels and bioproducts for reducing transportation emissions.<sup>9559</sup>

On 21 April 2021, Department of Agriculture (USDA) Secretary Tom Vilsack announced investments in projects for increasing climate-smart agriculture.<sup>9560</sup> The open enrolment to the

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<sup>9553</sup> U.S Department of Energy announces \$52.5 million to support U.S manufacturers and industrial workers (Washington) 8 March 2021. Access Date: 20 March 2021. <https://www.energy.gov/eere/articles/us-department-energy-announces-525-million-support-us-manufacturers-and-industrial>

<sup>9554</sup> U.S Department of Energy announces \$52.5 million to support U.S manufacturers and industrial workers (Washington) 8 March 2021. Access Date: 20 March 2021. <https://www.energy.gov/eere/articles/us-department-energy-announces-525-million-support-us-manufacturers-and-industrial>

<sup>9555</sup> DOE launches design and construction of \$75 million Grid Energy Storage research facility (Washington) 10 March 2021. Access Date: 20 March 2021. <https://www.energy.gov/articles/doe-launches-design-construction-75-million-grid-energy-storage-research-facility>

<sup>9556</sup> U.S. Department of Energy awards \$2 million to develop clean hydrogen technologies (Washington) 15 March 2021. Access Date: 20 March 2021. <https://www.energy.gov/articles/us-department-energy-awards-2-million-develop-clean-hydrogen-technologies>

<sup>9557</sup> U.S Department of Energy Announces \$61 Million for Biofuels Research to Reduce Transmission, Office of Energy Efficiency and Renewable Energy (Washington) 8 April 2021. Access Date: 15 April 2021. <https://www.energy.gov/eere/bioenergy/articles/us-department-energy-announces-61-million-biofuels-research-reduce>

<sup>9558</sup> U.S Department of Energy Announces \$61 Million for Biofuels Research to Reduce Transmission, Office of Energy Efficiency and Renewable Energy (Washington) 8 April 2021. Access Date: 15 April 2021. <https://www.energy.gov/eere/bioenergy/articles/us-department-energy-announces-61-million-biofuels-research-reduce>

<sup>9559</sup> U.S Department of Energy Announces \$61 Million for Biofuels Research to Reduce Transmission, Office of Energy Efficiency and Renewable Energy (Washington) 8 April 2021. Access Date: 15 April 2021. <https://www.energy.gov/eere/bioenergy/articles/us-department-energy-announces-61-million-biofuels-research-reduce>

<sup>9560</sup> USDA Expands and Renews Conservation Reserve Program in Effort to Boost Enrollment and Address Climate Change, U.S Department of Agriculture (Washington) 21 April 2021. Access Date: 28 April 2021. <https://www.fsa.usda.gov/news-room/news-releases/2021/usda-expands-and-renews-conservation-reserve-program-in-effort-to-boost-enrollment-and-address-climate-change>

Conservation Reserve Program was announced allowing up to 4 million new acres, which will allow an increased reduction in nitrogen runoff and sequestering carbon.<sup>9561</sup> For increased enrollment and implementation of conservation practices by producers, the USDA announced a further investment of USD140 million for technical assistance.<sup>9562</sup> The Natural Resources Conservation Service will further invest USD330 million in 85 local partnerships for addressing natural resources challenges.<sup>9563</sup>

On 22 April 2021, President Biden announced a new target of reducing 50 to 52 per cent of greenhouse gas pollution from the 2005 levels by the end of 2030.<sup>9564</sup>

On 22 April 2021, the US announced seven new clean energy programs for USD200 million for a net-zero energy grid in Asia.<sup>9565</sup> These programs will also aim to support transition to electric vehicles, and reforming of power sectors, which will be a step towards clean energy development and net-zero carbon emissions.<sup>9566</sup>

On 22 April 2021, the US announced the cooperation of USAID for supporting programs and initiatives for decarbonization during the Leaders Summit on Climate.<sup>9567</sup> This will include supporting the development of the largest solar-generation project in Southern Africa which is estimated to reduce 6.5 million tons of carbon dioxide annually and replacing coal-generated electricity from South Africa, estimating to remove 1.5 million cars off roads.<sup>9568</sup>

On 23 April 2021, the Department of Energy announced a funding of USD109.5 million energy development projects.<sup>9569</sup> These included USD75 million for engineering and installing carbon

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<sup>9561</sup> USDA Expands and Renews Conservation Reserve Program in Effort to Boost Enrollment and Address Climate Change, U.S Department of Agriculture (Washington) 21 April 2021. Access Date: 28 April 2021.

<https://www.fsa.usda.gov/news-room/news-releases/2021/usda-expands-and-renews-conservation-reserve-program-in-effort-to-boost-enrollment-and-address-climate-change>

<sup>9562</sup> USDA Expands and Renews Conservation Reserve Program in Effort to Boost Enrollment and Address Climate Change, U.S Department of Agriculture (Washington) 21 April 2021. Access Date: 28 April 2021.

<https://www.fsa.usda.gov/news-room/news-releases/2021/usda-expands-and-renews-conservation-reserve-program-in-effort-to-boost-enrollment-and-address-climate-change>

<sup>9563</sup> USDA Expands and Renews Conservation Reserve Program in Effort to Boost Enrollment and Address Climate Change, U.S Department of Agriculture (Washington) 21 April 2021. Access Date: 28 April 2021.

<https://www.fsa.usda.gov/news-room/news-releases/2021/usda-expands-and-renews-conservation-reserve-program-in-effort-to-boost-enrollment-and-address-climate-change>

<sup>9564</sup> Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S Leadership on Clean Energy Technologies, The White House (Washington) 22 April 2021.

Access Date: 27 April 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

<sup>9565</sup> Leaders Summit on Climate Change: USAID Announcements, U.S Agency for International Development (Washington) 23 April 2021. Access Date: 27 April 2021. <https://www.usaid.gov/news-information/fact-sheets/apr-2021-leaders-summit-climate-usaid-announcements>

<sup>9566</sup> Leaders Summit on Climate Change: USAID Announcements, U.S Agency for International Development (Washington) 23 April 2021. Access Date: 27 April 2021. <https://www.usaid.gov/news-information/fact-sheets/apr-2021-leaders-summit-climate-usaid-announcements>

<sup>9567</sup> Leaders' Summit on Climate: USAID Announcements, U.S Agency for International Development (Washington) 22 April 2021. Access Date: 27 April 2021. <https://www.usaid.gov/news-information/fact-sheets/apr-2021-leaders-summit-climate-usaid-announcements>

<sup>9568</sup> Leaders' Summit on Climate: USAID Announcements, U.S Agency for International Development (Washington) 22 April 2021. Access Date: 27 April 2021. <https://www.usaid.gov/news-information/fact-sheets/apr-2021-leaders-summit-climate-usaid-announcements>

<sup>9569</sup> Fact Sheet: Biden Administration Outlines Key Resources to Invest in Coal and Power Plant Community Economic Revitalization, The White House (Washington) 23 April 2021. Access Date: 25 April 2021.

<https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/23/fact-sheet-biden-administration-outlines-key-resources-to-invest-in-coal-and-power-plant-community-economic-revitalization/>

capture and storage technologies for power plants and USD19.5 million for the extraction of critical minerals from coal waste streams for manufacturing batteries and other necessary components of electric vehicles and clean energy technology.<sup>9570</sup>

On 26 April 2021, the Agency for International Development announced two investments to assist Vietnam in addressing their climate crisis.<sup>9571</sup> These projects include investments of USD36 million for the Sustainable Forest Management Project for reducing carbon emission from deforestation and forest degradation and an investment of USD38 million for the Biodiversity Conservation Project for increasing forest quality.<sup>9572</sup> Through the protection of forests and biodiversity, both these projects will aim to reduce greenhouse gas emissions.<sup>9573</sup>

On 27 April 2021, the Department of Energy announced the availability of financial tools which will provide up to USD8.2 billion in loans for improving and modernizing the nation's transmission grid and for increasing access to more reliable and clean power.<sup>9574</sup> These include up to USD5 billion in loans from the Loans Program Office which will support innovative transmission projects including transmissions to connect offshore wind and facilities which are sited alongside rail and highway routes.<sup>9575</sup> They also include up to USD3.25 billion from the Western Area Power Administration's Transmission Infrastructure Program for supporting and facilitative infrastructure projects for the delivery of reliable and clean power in the West.<sup>9576</sup> These initiatives are part of the US' goal of reaching 100 per cent clean energy by 2035 and President Biden's American Job Plan.<sup>9577</sup>

On 11 May 2021, the Secretaries of the Interior and Commerce announced the approval of the development of the 800-megawatt Vineyard Wind energy project—the first large-scale offshore wind project in the United States.<sup>9578</sup> This energy project aims to generate 30 gigawatts of energy derived

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<sup>9570</sup> Fact Sheet: Biden Administration Outlines Key Resources to Invest in Coal and Power Plant Community Economic Revitalization, The White House (Washington) 23 April 2021. Access Date: 25 April 2021.

<https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/23/fact-sheet-biden-administration-outlines-key-resources-to-invest-in-coal-and-power-plant-community-economic-revitalization/>

<sup>9571</sup> USAID Launches Two Projects Worth \$74 Million To Help Vietnam Address the Climate Crisis, U.S Agency for International Development (Washington) 26 April 2021. Access Date: 29 April 2021. <https://www.usaid.gov/news-information/press-releases/apr-26-2021-usaid-launches-two-projects-worth-74-million-help-vietnam-address-climate-crisis>

<sup>9572</sup> USAID Launches Two Projects Worth \$74 Million To Help Vietnam Address the Climate Crisis, U.S Agency for International Development (Washington) 26 April 2021. Access Date: 29 April 2021. <https://www.usaid.gov/news-information/press-releases/apr-26-2021-usaid-launches-two-projects-worth-74-million-help-vietnam-address-climate-crisis>

<sup>9573</sup> USAID Launches Two Projects Worth \$74 Million To Help Vietnam Address the Climate Crisis, U.S Agency for International Development (Washington) 26 April 2021. Access Date: 29 April 2021. <https://www.usaid.gov/news-information/press-releases/apr-26-2021-usaid-launches-two-projects-worth-74-million-help-vietnam-address-climate-crisis>

<sup>9574</sup> Loans Will Support Projects to Widen Clean Electricity Reach and Enhance Grid Reliability, U.S Department of Energy (Washington) 27 April 2021. Access Date: 29 April 2021. <https://www.energy.gov/articles/doe-announces-825-billion-loans-enhance-electrical-transmission-nationwide>

<sup>9575</sup> Loans Will Support Projects to Widen Clean Electricity Reach and Enhance Grid Reliability, U.S Department of Energy (Washington) 27 April 2021. Access Date: 29 April 2021. <https://www.energy.gov/articles/doe-announces-825-billion-loans-enhance-electrical-transmission-nationwide>

<sup>9576</sup> Loans Will Support Projects to Widen Clean Electricity Reach and Enhance Grid Reliability, U.S Department of Energy (Washington) 27 April 2021. Access Date: 29 April 2021. <https://www.energy.gov/articles/doe-announces-825-billion-loans-enhance-electrical-transmission-nationwide>

<sup>9577</sup> Loans Will Support Projects to Widen Clean Electricity Reach and Enhance Grid Reliability, U.S Department of Energy (Washington) 27 April 2021. Access Date: 29 April 2021. <https://www.energy.gov/articles/doe-announces-825-billion-loans-enhance-electrical-transmission-nationwide>

<sup>9578</sup> Biden-Harris Administration Approves First Major Offshore Wind Project in U.S Waters, U.S Department of the Interior (Washington) 11 May 2021. Access Date: 12 July 2021. <https://www.doi.gov/pressreleases/biden-harris-administration-approves-first-major-offshore-wind-project-us-waters>

from offshore wind and provide enough power for 400,000 businesses and homes, moving the United States closer to cleaner energy generation.<sup>9579</sup>

On 25 May 2021, Secretary of the Interior Deb Haaland, National Climate Advisor Gina McCarthy, Under Secretary of Defense for Policy Dr. Colin Kahl and Governor of California Gavin Newsom announced an agreement for advancing and developing offshore wind on the country's Pacific coast, aiming to develop up to 4.6 gigawatts of clean energy.<sup>9580</sup> These energy projects are a further step towards developing the United States's clean energy resources.<sup>9581</sup>

On 24 June 2021, the United States Department of Energy announced funding of USD30 million for 68 projects to accelerate the commercialization of clean energy technologies and resources, with the aim of achieving the United States's net-zero carbon emission goals.<sup>9582</sup>

On 15 July 2021, President Biden announced the United States-Germany Climate and Energy Partnership, under which the two countries will develop policies for reduced carbon emissions, advance the development and production of renewable energy technologies, including sustainable hydrogen technologies, and increase the production and adoption of electric vehicles.<sup>9583</sup> They will also provide investments in Central and Eastern Europe for mobilizing sustainable energy, including specific investments supporting Ukraine's energy transformation, efficiency, and security.<sup>9584</sup>

On 24 June 2021, the United States Department of Energy announced funding of USD30 million for 68 projects to accelerate the commercialization of clean energy technologies and resources, with the aim of achieving the United States' net-zero carbon emission goals.<sup>9585</sup> The projects will range from clean energy and advanced manufacturing, to building efficiency and next-generation materials.<sup>9586</sup>

On 15 July 2021, President Biden announced the United States-Germany Climate and Energy Partnership, under which the two countries will develop policies for reduced carbon emissions, advance the development and production of renewable energy technologies, including sustainable

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<sup>9579</sup> Biden-Harris Administration Approves First Major Offshore Wind Project in U.S Waters, U.S Department of the Interior (Washington) 11 May 2021. Access Date: 12 July 2021. <https://www.doi.gov/pressreleases/biden-harris-administration-approves-first-major-offshore-wind-project-us-waters>

<sup>9580</sup> Biden-Harris Administration Advances Offshore Wind in the Pacific, U.S. Department of the Interior (Washington) 25 May 2021. Access Date: 20 July 2021. <https://www.doi.gov/pressreleases/biden-harris-administration-advances-offshore-wind-pacific>

<sup>9581</sup> Biden Administration Opens Pacific Coast to New Jobs and Clean Energy Production with Offshore Wind Development, The White House (Washington) 25 May 2021. Access Date: 20 July 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/25/fact-sheet-biden-administration-opens-pacific-coast-to-new-jobs-and-clean-energy-production-with-offshore-wind-development/>

<sup>9582</sup> Department of Energy Announces Over USD65 Million in Public and Private Funding to Commercialize Promising Energy Technologies (Washington) 24 June 2021. Access Date: 18 July 2021. <https://www.energy.gov/articles/doe-announces-over-65-million-public-and-private-funding-commercialize-promising-energy>

<sup>9583</sup> U.S.-Germany Climate and Energy Partnership, The White House (Washington) 15 July 2021. Access Date: 22 July 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/15/fact-sheet-u-s-germany-climate-and-energy-partnership/>

<sup>9584</sup> U.S.-Germany Climate and Energy Partnership, The White House (Washington) 15 July 2021. Access Date: 22 July 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/15/fact-sheet-u-s-germany-climate-and-energy-partnership/>

<sup>9585</sup> Department of Energy Announces Over USD65 Million in Public and Private Funding to Commercialize Promising Energy Technologies (Washington) 24 June 2021. Access Date: 18 July 2021. <https://www.energy.gov/articles/doe-announces-over-65-million-public-and-private-funding-commercialize-promising-energy>

<sup>9586</sup> Department of Energy Announces Over USD65 Million in Public and Private Funding to Commercialize Promising Energy Technologies (Washington) 24 June 2021. Access Date: 18 July 2021. <https://www.energy.gov/articles/doe-announces-over-65-million-public-and-private-funding-commercialize-promising-energy>



hydrogen technologies, and increase the production and adoption of electric vehicles.<sup>9587</sup> They will also provide investments in Central and Eastern Europe for mobilizing sustainable energy, including specific investments supporting Ukraine's energy transformation, efficiency, and security.<sup>9588</sup>

On 17 August 2021, the United States Department of Energy announced funding of USD24 million for research projects for the development and production of methods for capturing carbon emissions directly from the air.<sup>9589</sup> These technologies will allow for extraction of carbon dioxide from air, and the effective storage of captured carbon emissions.<sup>9590</sup>

On 9 September 2021, the United States Secretary of Energy Jennifer Granholm and Indian Minister of Petroleum and Gas Hardsheep Puri relaunched the U.S-India Strategic Clean Energy Partnership for meeting climate and clean energy targets of both countries.<sup>9591</sup> The initiative focuses on the electrification and decarbonization processes and an accelerated deployment of clean energy technologies.<sup>9592</sup> The power sector will be modernized through integration of new electric smart grids and energy storage, and programs for smart, energy efficient buildings will be expanded.<sup>9593</sup> The initiative will support India's goal of installing 450 gigawatts of renewable energy by 2030 by assisting in deployment of clean, affordable and sustainable energy technologies.<sup>9594</sup> Furthermore, the initiative will aim to reduce consumption of high-polluting fuels and greenhouse gas emissions through ensuring decarbonization and clean energy technologies.<sup>9595</sup>

On 13 September 2021, United States climate envoy John Kerry announced plans for more ambitious emission reduction targets for India during his visit there.<sup>9596</sup> He also announced plans for

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<sup>9587</sup> U.S.-Germany Climate and Energy Partnership, The White House (Washington) 15 July 2021. Access Date: 22 July 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/15/fact-sheet-u-s-germany-climate-and-energy-partnership/>

<sup>9588</sup> U.S.-Germany Climate and Energy Partnership, The White House (Washington) 15 July 2021. Access Date: 22 July 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/15/fact-sheet-u-s-germany-climate-and-energy-partnership/>

<sup>9589</sup> Department of Energy Announces USD24 Million to Capture Carbon Emissions Directly from Air (Washington) 17 August 2021. Access Date: 10 September 2021. <https://www.energy.gov/articles/doe-announces-24-million-capture-carbon-emissions-directly-air>

<sup>9590</sup> Department of Energy Announces USD24 Million to Capture Carbon Emissions Directly from Air (Washington) 17 August 2021. Access Date: 10 September 2021. <https://www.energy.gov/articles/doe-announces-24-million-capture-carbon-emissions-directly-air>

<sup>9591</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9592</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9593</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9594</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9595</sup> Secretary Granholm and Minister Puri Relaunch the US-India Strategic Clean Energy Partnership (Washington) 9 September 2021. Access Date: 13 September 2021. <https://www.energy.gov/articles/secretary-granholm-and-minister-puri-relaunch-us-india-strategic-clean-energy-partnership>

<sup>9596</sup> In India, Kerry Pushes for Modi to Set Net-Zero Goals (New Delhi) 13 September 2021. Access Date: 13 September 2021. <https://www.washingtonpost.com/world/2021/09/13/india-climate-emissions-kerry/>

a financing program with USD4 trillion to assist India in meeting its target of deploying 450 gigawatts of renewable energy.<sup>9597</sup>

The United States has taken actions to fully address all four Rs framework (Reduce, Reuse, Recycle and Remove) and endorse the Circular Carbon Economy platform. It has complied with its commitment to reduce carbon emissions through investments in the development of renewable energy technology and production, including wind energy, solar energy, and hydrogen and to produce clean and reliable power through initiatives like production of electric vehicles. It has complied with its commitment to remove emissions and recycle through investments in biofuel production and hydrogen technologies, as well as biodiversity and forest protection. It has complied with its commitment to reuse through initiatives of conversion to cleaner energy and energy sources which include electric and hydrogen. It has complied with its commitment to remove emissions through carbon capture and storage technologies.

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

*Analyst: Minahil Iftikhar*

### **European Union: +1**

The European Union has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove).

On 1 December 2020, the European Commission initiated its second call for projects for the Innovation Fund, a funding program that supports low-carbon technological innovations. The program provides financial aid to projects focused in addressing “in renewable energy, energy-intensive industries, including substitute products, energy storage, and carbon capture, use and storage.”<sup>9598</sup> The goal is to support and encourage sustainable technological innovations.<sup>9599</sup>

On 8 December 2020, the European Parliament voted that all member states must become climate neutral by 2050. It also increased the EU’s emissions reduction target to 60 per cent by 2030, in accordance with the Paris Agreement, and called for ambitious 2030 and 2040 emissions reduction goals. This sought to reduce emissions by enshrining these objectives in legislation. The European Parliament announced that “the EU and member states must also phase out all direct and indirect fossil fuel subsidies by 31 December 2025.” The goal is to decrease emissions by investing less in fossil fuels.<sup>9600</sup>

On 8 December 2020, the European Parliament and the European Council agreed on a provisional deal regarding the future of regional and cohesion funds. The deal says that a significant portion of the European Regional Development Fund will be invested in “smart growth and the green economy.” A minimum of 30 per cent of regional funding will go towards supporting climate action.

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<sup>9597</sup> In India, Kerry Pushes for Modi to Set Net-Zero Goals (New Delhi) 13 September 2021. Access Date: 13 September 2021. <https://www.washingtonpost.com/world/2021/09/13/india-climate-emissions-kerry/>

<sup>9598</sup> Second Innovation Fund call for projects: Commission to invest €100 million in innovative small-scale clean technologies, European Commission (Brussels) 1 December 2020. Access Date: 12 March 2021. [https://ec.europa.eu/clima/news/second-innovation-fund-call-projects-commission-invest-100-million-innovative-small-scale\\_en](https://ec.europa.eu/clima/news/second-innovation-fund-call-projects-commission-invest-100-million-innovative-small-scale_en)

<sup>9599</sup> Second Innovation Fund call for projects: Commission to invest €100 million in innovative small-scale clean technologies, European Commission (Brussels) 1 December 2020. Access Date: 12 March 2021. [https://ec.europa.eu/clima/news/second-innovation-fund-call-projects-commission-invest-100-million-innovative-small-scale\\_en](https://ec.europa.eu/clima/news/second-innovation-fund-call-projects-commission-invest-100-million-innovative-small-scale_en)

<sup>9600</sup> EU climate law: MEPs want to increase 2030 emissions reduction target to 60%, European Parliament (Brussels) 8 December 2020. Access Date: 12 March 2021. <https://www.europarl.europa.eu/news/en/press-room/20201002IPR88431/eu-climate-law-meps-want-to-increase-2030-emissions-reduction-target-to-60>

The deal will respect climate, circular economy and biodiversity goals. The goal is to encourage sustainability through economic, social and territorial cohesion.<sup>9601</sup>

On 15 December 2020, the European Commission adopted an implementing decision regarding annual emission allocations for 2021-2030 under the Effort Sharing Regulation. The Commission Implementing Decision will translate emissions limits “in tons of CO<sub>2</sub> equivalent for each year and Member State along a linear trajectory between 2021 and 2030.” The goal is to reduce emissions through the implementation of a binding emissions target.<sup>9602</sup>

On 16 December 2020, the European Parliament approved a seven-year EU budget ranging from 2021-2027. The budget states that there will be increased tracking to ensure 30 per cent of the EU budget and Next Generation EU expenditures will go towards climate action initiatives, and 7.5 per cent of the yearly budget will support biodiversity objectives. The goal is to increase various actions to combat climate change.<sup>9603</sup>

On 8 January 2021, the European Investment Bank signed a EUR150 million loan to shift a paper mill in Oulu, Finland, from producing printing paper to instead making packaging materials composed of unbleached pulp. The European Investment Bank claims the project has an “important climate change mitigation angle,” because it favours the use of sustainable raw materials over fossil-based materials while generating renewable energy.<sup>9604</sup>

On 27 January 2021, the European Parliament adopted policy recommendations from the EU Circular Carbon Economy Plan for a “carbon-neutral, sustainable, toxic-free and fully circular economy by 2050 at the latest.” Members of Parliament highlighted the need for a genuine circular economy through waste prevention and the reduction of energy and resource usage. Members of Parliament endorse the Commission’s focus on ensuring that products placed on the EU market are “durable, reusable, can be easily repaired, are not toxic, can be upgraded and recycled, contain recycled content, and are resource- and energy-efficient.” The goal is to decrease waste through extending the life of products and making them recyclable.<sup>9605</sup>

On 5 February 2021, the European Parliament adopted the resolution to implement a World Trade Organization-compatible carbon border adjustment mechanism that would impose a carbon price on certain imports. The goal is to incentivize the EU and non-EU trade industries to lessen their carbon emissions in accordance with the Paris Agreement.<sup>9606</sup>

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<sup>9601</sup>Agreement reached on the 2021-2027 EU regional and cohesion funding, European Parliament (Brussels) 8 December 2020. Access Date: 12 March 2021. <https://www.europarl.europa.eu/news/en/press-room/20201207IPR93206/agreement-reached-on-the-2021-2027-eu-regional-and-cohesion-funding>

<sup>9602</sup> State aid: Commission approves €30 billion Dutch scheme to support projects reducing greenhouse gas emissions, European Commission (Brussels) 14 December 2020. Access Date: 12 March 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_2410](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2410).

<sup>9603</sup>Parliament approves seven-year EU budget 2021-2027, European Parliament (Brussels) 16 December 2020. Access Date: 12 March 2021. <https://www.europarl.europa.eu/news/en/press-room/20201207IPR93206/agreement-reached-on-the-2021-2027-eu-regional-and-cohesion-funding>

<sup>9604</sup> Finland: EIB supports environmental conversion of Stora Enso mill, European Investment Bank (Luxembourg) 8 January 2021. Access Date: 12 March 2021. <https://www.eib.org/en/press/all/2021-005-eib-supports-environmental-conversion-of-stora-enso-mill-in-finland>

<sup>9605</sup> MEPs call for binding 2030 targets for materials use and consumption footprint, European Parliament (Brussels) 27 January 2021. Access Date: 12 March 2021. <https://www.europarl.europa.eu/news/en/press-room/20210122IPR96214/meps-call-for-binding-2030-targets-for-materials-use-and-consumption-footprint>

<sup>9606</sup> Carbon levy on EU imports needed to raise global climate ambition, European Parliament (Brussels) 27 January 2021. <https://www.europarl.europa.eu/news/en/press-room/20210201IPR96812/carbon-levy-on-eu-imports-needed-to-raise-global-climate-ambition>

On 10 February 2021, the European Investment Bank approved a EUR600 million package for automotive supplier Valeo to finance its emissions reduction research initiatives. The goal is to support “research and innovation, as well as the transition to a low-carbon, environmentally friendly economy.”<sup>9607</sup>

On 11 February 2021, the European Investment Bank invested EUR1.3 billion into Czech Republic for “businesses, regional infrastructure, climate adaptation, the energy transition and sustainable transport.”<sup>9608</sup> Within this investment includes a EUR190 million loan to the Czech Transmission System Operator, partly to increase renewable energy in the electricity network.<sup>9609</sup>

On 17 February 2021, the EU increased its funding by 20 per cent, investing EUR121 million in new projects under the LIFE program for the Environment and Climate Action. The goal is to support various climate projects in several member states. This includes an initiative to decarbonize the Mátra Power Plant in Hungary, the restoration of 10,000 hectares of peatlands with high carbon storage capacity in Ireland, and the reduction of plastic waste in Belgium.<sup>9610</sup>

On 24 February 2021, the European Commission adopted a new EU strategy on Adaptation to Climate Change to “shift the focus from understanding the problem to developing solutions, and to move from planning to implementation.”<sup>9611</sup> The EU plans to do this by improving its knowledge of climate issues, working on climate risk assessments and propelling adaptation solutions.<sup>9612</sup>

On 11 March 2021, the European Investment Bank approved financing to accelerate the transition to clean energy and increase solar and wind power generation. It said it will dedicate EUR688 million with the goal to implement renewable energy across Europe.<sup>9613</sup>

On 18 March 2021, the European Investment Bank financed EUR500 million to support sustainable urban investment and EUR375 million towards cutting energy costs and increasing energy efficiency

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<sup>9607</sup> France: EIB approves 600 million euros in financing for Valeo's research projects related to technologies designed to reduce CO2 emissions and improve active safety, European Investment Bank (Luxembourg) 10 February 2021. Access Date: 12 March 2021. <https://www.eib.org/en/press/all/2021-051-eib-approves-600-million-euros-in-financing-for-valeo-s-research-projects-related-to-technologies-designed-to-reduce-co2-emissions-and-improve-active-safety>

<sup>9608</sup> EIB Group supported €1.4 billion of investments in 2020 in the Czech Republic for businesses, regional infrastructure, climate adaptation, the energy transition and sustainable transport, European Investment Bank (Luxembourg) 11 February 2021. Access Date: 12 March 2021. <https://www.eib.org/en/press/all/2021-053-eib-group-supported-eur1-4-billion-of-investments-in-2020-in-the-czech-republic-for-businesses-regional-infrastructure-climate-adaptation-the-energy-transition-and-sustainable-transport>

<sup>9609</sup> EIB Group supported €1.4 billion of investments in 2020 in the Czech Republic for businesses, regional infrastructure, climate adaptation, the energy transition and sustainable transport, European Investment Bank (Luxembourg) 11 February 2021. Access Date: 12 March 2021. <https://www.eib.org/en/press/all/2021-053-eib-group-supported-eur1-4-billion-of-investments-in-2020-in-the-czech-republic-for-businesses-regional-infrastructure-climate-adaptation-the-energy-transition-and-sustainable-transport>

<sup>9610</sup> LIFE Programme: EU invests €121 million in environment, nature and climate action projects, European Commission (Brussels) 17 February 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_501](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_501)

<sup>9611</sup> Building a Climate-Resilient Future – A new EU Strategy on Adaptation to Climate Change, European Commission (Brussels) 24 February 2021. [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_663](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_663)

<sup>9612</sup> Building a Climate-Resilient Future – A new EU Strategy on Adaptation to Climate Change, European Commission (Brussels) 24 February 2021. [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_663](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_663)

<sup>9613</sup> EIB backs EUR 3.7 billion COVID-19 business support, renewable energy, internet, health, education and sustainable urban investment, European Investment Bank (Luxembourg) 11 March 2021. Access Date: 12 March 2021. <https://www.eib.org/en/press/all/2021-092-eib-backs-eur-3-7-billion-covid-19-business-support-renewable-energy-internet-health-education-and-sustainable-urban-investment>

in public buildings. The goal is “accelerating climate action and sustainable urban investment across Greece.”<sup>9614</sup>

On 30 March 2021, the European Commission and the International Energy Agency agreed to deepen their collaboration to accelerate efforts to achieve climate neutrality.<sup>9615</sup> More specifically, the two organizations also agreed to: cultivate an international net-zero campaign to raise awareness and call other countries to action; collaborate with willing partners to support the development of sustainable energy services and clean technologies in African countries; and expand the net-zero movement through the energy sector.<sup>9616</sup>

On 23 March 2021, the European Investment Bank granted a consortium consisting of EDF Renewables, Enbridge and a EUR350 million credit line to finance the construction of a wind farm off the coast of Courseulles-sur-Mer, France.<sup>9617</sup> The project’s total cost is estimated at EUR2 billion and involves the building of 64 wind turbines.<sup>9618</sup> The capacity will be 450 megawatts and will produce enough annual electricity to be used by 630,000 people.<sup>9619</sup> The wind turbines are a step towards increasing the EU’s use of more sustainable energy sources.

On 7 April 2021, the European Investment Bank and Portugal signed a memorandum of understanding aimed at fostering cooperation in the development of the hydrogen sector in Portugal.<sup>9620</sup> The hydrogen sector is expected to play a key role in the decarbonization of Europe and accelerate the use of sustainable energy sources.<sup>9621</sup> This collaboration between the two entities is in line with the European Hydrogen Strategy of 2020, which works towards installing 40 gigawatts of green hydrogen capacity by 2030.<sup>9622</sup>

On 12 April 2021, the European Investment Bank formally agreed to help Greece in managing up to EUR5 billion in its implementation of the country’s National Recovery and Resilience Plan, known

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<sup>9614</sup> Greece: Prime Minister Mitsotakis welcomes EIB backing for EUR 3 billion urban development and energy efficiency investment across Greece, European Investment Bank (Luxembourg) 18 March 2021. Access Date: 20 March 2021. <https://www.eib.org/en/press/all/2021-098-prime-minister-mitsotakis-welcomes-eib-backing-for-eur-3-billion-urban-development-and-energy-efficiency-investment-across-greece>

<sup>9615</sup> European Commission and IEA pull together for net-zero, European Commission (Brussels) 3 March 2021. Access Date: 27 April 2021. [https://ec.europa.eu/clima/news/european-commission-and-iea-pull-together-net-zero\\_en](https://ec.europa.eu/clima/news/european-commission-and-iea-pull-together-net-zero_en)

<sup>9616</sup> European Commission and IEA pull together for net-zero, European Commission (Brussels) 3 March 2021. Access Date: 27 April 2021. [https://ec.europa.eu/clima/news/european-commission-and-iea-pull-together-net-zero\\_en](https://ec.europa.eu/clima/news/european-commission-and-iea-pull-together-net-zero_en)

<sup>9617</sup> France: Investment Plan – EIB co-finances the construction of an offshore wind farm in Calvados for €350 million, European Investment Bank (Luxembourg) 23 March 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-102-plan-d-investissement-la-banque-europeenne-d-investissement-cofinance-la-construction-du-parc-eolien-en-mer-du-calvados-a-hauteur-de-350-millions-d-euros>

<sup>9618</sup> France: Investment Plan – EIB co-finances the construction of an offshore wind farm in Calvados for €350 million, European Investment Bank (Luxembourg) 23 March 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-102-plan-d-investissement-la-banque-europeenne-d-investissement-cofinance-la-construction-du-parc-eolien-en-mer-du-calvados-a-hauteur-de-350-millions-d-euros>

<sup>9619</sup> France: Investment Plan – EIB co-finances the construction of an offshore wind farm in Calvados for €350 million, European Investment Bank (Luxembourg) 23 March 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-102-plan-d-investissement-la-banque-europeenne-d-investissement-cofinance-la-construction-du-parc-eolien-en-mer-du-calvados-a-hauteur-de-350-millions-d-euros>

<sup>9620</sup> Portugal: The EIB partners up with the Portuguese Republic to accelerate investments in the hydrogen sector, European Investment Bank (Luxembourg) 7 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-117-the-eib-partners-up-with-the-portuguese-republic-to-accelerate-investments-in-the-hydrogen-sector>

<sup>9621</sup> Portugal: The EIB partners up with the Portuguese Republic to accelerate investments in the hydrogen sector, European Investment Bank (Luxembourg) 7 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-117-the-eib-partners-up-with-the-portuguese-republic-to-accelerate-investments-in-the-hydrogen-sector>

<sup>9622</sup> Portugal: The EIB partners up with the Portuguese Republic to accelerate investments in the hydrogen sector, European Investment Bank (Luxembourg) 7 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-117-the-eib-partners-up-with-the-portuguese-republic-to-accelerate-investments-in-the-hydrogen-sector>

as “Greece 2.0.”<sup>9623</sup> The European Investment Bank’s technical, financial and environmental experts will help ensure the best use of the new grant in Greece.<sup>9624</sup> A central focus of the plan will be supporting climate action, digital transformation, and green energy transition.<sup>9625</sup>

On 21 April 2021, the European Commission welcomed a provisional agreement on the European Climate Law, working to enshrine the EU’s climate neutrality target into binding legislation and serve to guide future environmental policies for the next 30 years.<sup>9626</sup> The agreement entails several measures to strengthen the EU’s climate change mitigation efforts, including: greater clarity on emission reductions and removals; plans to make proposals in June 2021 to enhance the EU’s carbon sink through Land Use, Land Use Change and Forestry regulation; a process for establishing a 2040 climate target; plans to publish a greenhouse gas budget for 2030-2050; a commitment to negative emissions following 2050; the creation of the independent European Scientific Advisory Board on Climate Change that will offer scientific advice; stronger adherence to climate neutrality objectives across EU policies; and a commitment to establish sector-specific plans to encourage climate neutrality efforts in various sectors of the economy.<sup>9627</sup>

On 22 April 2021, the European Investment Bank approved EUR3.4 billion of new financing to support sustainable transport and shifts towards renewable energy across the EU, among other social and economic concerns.<sup>9628</sup> EUR2 billion will be dedicated to increasing renewable energy developments in the form of wind and solar power investments.<sup>9629</sup> Renewable energy projects include: developments in France and Germany; the scaling up of solar power across Spain; wind power in Ireland; improving energy distribution in Italy; and a photovoltaic plant that is hydrogen and battery powered. EUR700 million will be directed towards sustainable transportation initiatives.<sup>9630</sup> Projects include increasing renewable energy at airports in Spain; the acquisition of

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<sup>9623</sup>Greece: EIB to help manage EUR 5 billion of investments as part of Greek National Recovery and Resilience Plan: “Greece 2.0,” European Investment Bank (Luxembourg) 12 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-120-eib-to-help-manage-eur-5-billion-of-investments-as-part-of-greek-national-recovery-and-resilience-plan-greece-2-0>

<sup>9624</sup>Greece: EIB to help manage EUR 5 billion of investments as part of Greek National Recovery and Resilience Plan: “Greece 2.0,” European Investment Bank (Luxembourg) 12 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-120-eib-to-help-manage-eur-5-billion-of-investments-as-part-of-greek-national-recovery-and-resilience-plan-greece-2-0>

<sup>9625</sup>Greece: EIB to help manage EUR 5 billion of investments as part of Greek National Recovery and Resilience Plan: “Greece 2.0,” European Investment Bank (Luxembourg) 12 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-120-eib-to-help-manage-eur-5-billion-of-investments-as-part-of-greek-national-recovery-and-resilience-plan-greece-2-0>

<sup>9626</sup> Commission welcomes provisional agreement on the European Climate Law, European Commission (Brussels) 21 April 2021. Access Date: 27 April 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_1828](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_1828)

<sup>9627</sup> Commission welcomes provisional agreement on the European Climate Law, European Commission (Brussels) 21 April 2021. Access Date: 27 April 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_1828](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_1828)

<sup>9628</sup> EIB backs € 3.4 billion investment for climate action and clean energy, sustainable transport, communications, water and private sector, European Investment Bank (Luxembourg) 22 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-135-eib-backs-eur-3-4-billion-investment-for-climate-action-and-clean-energy-sustainable-transport-communications-water-and-private-sector>

<sup>9629</sup> EIB backs € 3.4 billion investment for climate action and clean energy, sustainable transport, communications, water and private sector, European Investment Bank (Luxembourg) 22 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-135-eib-backs-eur-3-4-billion-investment-for-climate-action-and-clean-energy-sustainable-transport-communications-water-and-private-sector>

<sup>9630</sup> EIB backs € 3.4 billion investment for climate action and clean energy, sustainable transport, communications, water and private sector, European Investment Bank (Luxembourg) 22 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-135-eib-backs-eur-3-4-billion-investment-for-climate-action-and-clean-energy-sustainable-transport-communications-water-and-private-sector>

hydrogen powered trains; the installation of hydrogen refuelling facilities in the Netherlands; and improvements to regional rail services in Germany.<sup>9631</sup>

On 27 April 2021, the European Commission published the two-year study titled “Technical Guidance Handbook – setting up and implementing result-based carbon farming mechanisms in the EU,” that explores how to implement carbon farming in the EU.<sup>9632</sup> This study will serve as a basis for the European Commission’s plans to launch carbon farming initiatives by the end of 2021.<sup>9633</sup> The study will act as a guide for public and private actors to increase carbon farming initiatives.<sup>9634</sup> By the end of 2021, the European Commission plans to establish an action plan to promote carbon farming and create a regulatory framework to certify and verify the authenticity of carbon removals.<sup>9635</sup> Carbon farming allows for the capture and storage of carbon and contributes to the EU’s climate neutrality objective.

On 27 April 2021, the European Parliament adopted a resolution on operational and technical measures for more environmentally sustainable and efficient maritime transport.<sup>9636</sup> The resolution is in line with the European Parliament’s calls for emissions reductions, clean ports, and the gradual elimination of heavy fuel oil.<sup>9637</sup> The European Parliament advocated for adequate funding, research and innovation in clean fuels and technologies to transition the maritime transportation industry to climate neutrality by 2050.<sup>9638</sup> Members of the European Parliament urged the European Commission to invest in the automation and digitalization of ports and ships, vessel speed optimization, innovation in hydrodynamics and tax exemptions to encourage the use of alternatives to heavy fuels.<sup>9639</sup>

On 29 April 2021, the European Investment Bank and France’s Deposits and Consignments Fund agreed to introduce a new EUR1 billion credit line to support small-scale investments particularly in “energy-efficiency measures for buildings, water supply and sewerage networks, sustainable mobility and clean public transport.”<sup>9640</sup> A minimum of half of the new line will go towards projects dedicated

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<sup>9631</sup> EIB backs € 3.4 billion investment for climate action and clean energy, sustainable transport, communications, water and private sector, European Investment Bank (Luxembourg) 22 April 2021. Access Date: 27 April 2021. <https://www.eib.org/en/press/all/2021-135-eib-backs-eur-3-4-billion-investment-for-climate-action-and-clean-energy-sustainable-transport-communications-water-and-private-sector>

<sup>9632</sup> Commission sets the carbon farming initiative in motion, European Commission (Brussels) 27 April 2021. Access Date: 27 April 2021. [https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion\\_en](https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion_en)

<sup>9633</sup> Commission sets the carbon farming initiative in motion, European Commission (Brussels) 27 April 2021. Access Date: 27 April 2021. [https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion\\_en](https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion_en)

<sup>9634</sup> Commission sets the carbon farming initiative in motion, European Commission (Brussels) 27 April 2021. Access Date: 27 April 2021. [https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion\\_en](https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion_en)

<sup>9635</sup> Commission sets the carbon farming initiative in motion, European Commission (Brussels) 27 April 2021. Access Date: 27 April 2021. [https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion\\_en](https://ec.europa.eu/clima/news/commission-sets-carbon-farming-initiative-motion_en)

<sup>9636</sup> MEPs call for a cleaner maritime transport, European Parliament (Brussels) 28 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2632/meps-call-for-a-cleaner-maritime-transport>

<sup>9637</sup> MEPs call for a cleaner maritime transport, European Parliament (Brussels) 28 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2632/meps-call-for-a-cleaner-maritime-transport>

<sup>9638</sup> MEPs call for a cleaner maritime transport, European Parliament (Brussels) 28 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2632/meps-call-for-a-cleaner-maritime-transport>

<sup>9639</sup> MEPs call for a cleaner maritime transport, European Parliament (Brussels) 28 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2632/meps-call-for-a-cleaner-maritime-transport>

<sup>9640</sup> France: Partnership between the EIB and Caisse des Dépôts – €1 billion for local authorities and their energy transition, European Investment Bank (Luxembourg) 29 April 2021. Access Date: 30 April 2021. [https://www.eib.org/en/press/all/2021-142-partenariat-beicaisse-des-depots-1-milliard-d-euros-pour-les-collectivites-locales-et-leur-transition-ecologique#\\_ftnref1](https://www.eib.org/en/press/all/2021-142-partenariat-beicaisse-des-depots-1-milliard-d-euros-pour-les-collectivites-locales-et-leur-transition-ecologique#_ftnref1)

to mitigating the effects of climate change.<sup>9641</sup> These projects will aid the EU in its emissions reduction and climate neutrality goals.

On 29 April 2021, the European Parliament approved a deal on the 2021-2027 program for Environment and Climate Action (LIFE), which includes a total budget of EUR5.4 billion for environmental and climate-related initiatives.<sup>9642</sup> LIFE will become the most ambitious EU-wide environmental and climate program in EU's history.<sup>9643</sup> The program will work towards building a more “clean, circular, energy-efficient, low-carbon and climate-resilient economy.”<sup>9644</sup> EUR3.9 billion will be directed towards environmental activities and EUR1.9 billion will go towards climate action.<sup>9645</sup>

On 2 June 2021, the European Commission and Breakthrough Energy Catalyst announced a new partnership to boost investments of up to EUR820 million between 2022-2026 in clean technologies.<sup>9646</sup> The goal is to support low-carbon industries and enable a net-zero economy that is in line with the Paris Agreement.<sup>9647</sup> This partnership is planned to invest in four sectors critical to the European Green Deal's climate ambitions: green hydrogen; sustainable aviation fuels; long-duration energy storage; and direct air capture.<sup>9648</sup>

On 11 June 2021, the Council of the European Union approved conclusions on a renovation wave strategy aiming to create green buildings in line with the EU's 2050 climate neutrality goal.<sup>9649</sup> Member states endorsed the aim of doubling energy-related renovation rates in the EU by 2030 while promoting resource efficiency and circular economy.<sup>9650</sup> The strategy encourages renovations that

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<sup>9641</sup> France: Partnership between the EIB and Caisse des Dépôts – €1 billion for local authorities and their energy transition, European Investment Bank (Luxembourg) 29 April 2021. Access Date: 30 April 2021.

[https://www.eib.org/en/press/all/2021-142-partenariat-beicaisse-des-depots-1-milliard-d-euros-pour-les-collectivites-locales-et-leur-transition-ecologique#\\_ftnref1](https://www.eib.org/en/press/all/2021-142-partenariat-beicaisse-des-depots-1-milliard-d-euros-pour-les-collectivites-locales-et-leur-transition-ecologique#_ftnref1)

<sup>9642</sup> MEPs approve deal to invest €5.4 billion in climate and environmental projects, European Parliament (Brussels) 29 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>

<sup>9643</sup> MEPs approve deal to invest €5.4 billion in climate and environmental projects, European Parliament (Brussels) 29 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>

<sup>9644</sup> MEPs approve deal to invest €5.4 billion in climate and environmental projects, European Parliament (Brussels) 29 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>

<sup>9645</sup> MEPs approve deal to invest €5.4 billion in climate and environmental projects, European Parliament (Brussels) 29 April 2021. Access Date: 30 April 2021. <https://www.europarl.europa.eu/news/en/press-room/20210422IPRO2614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>

<sup>9646</sup> Commission and Breakthrough Energy Catalyst announce new partnership to support investments in clean technologies for low-carbon industries, European Commission (Brussels) 2 June 2021. Access Date: 24 July 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_2746](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2746)

<sup>9647</sup> Commission and Breakthrough Energy Catalyst announce new partnership to support investments in clean technologies for low-carbon industries, European Commission (Brussels) 2 June 2021. Access Date: 24 July 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_2746](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2746)

<sup>9648</sup> Commission and Breakthrough Energy Catalyst announce new partnership to support investments in clean technologies for low-carbon industries, European Commission (Brussels) 2 June 2021. Access Date: 24 July 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_2746](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2746)

<sup>9649</sup> Council approves conclusions on an EU renovation wave, Consilium (Brussels) 11 June 2021. Access Date: 24 July 2021. <https://www.consilium.europa.eu/en/press/press-releases/2021/06/11/council-approves-conclusions-on-an-eu-renovation-wave/>

<sup>9650</sup> Council approves conclusions on an EU renovation wave, Consilium (Brussels) 11 June 2021. Access Date: 24 July 2021. <https://www.consilium.europa.eu/en/press/press-releases/2021/06/11/council-approves-conclusions-on-an-eu-renovation-wave/>



emit lower emissions and are energy efficient by replacing carbon intensive heating and cooling technologies.<sup>9651</sup>

On 11 June 2021, the Council of the European Union agreed on the general approach of the revised Trans-European Networks for Energy Regulation.<sup>9652</sup> The revised regulation includes a new focus on offshore electricity grids, hydrogen infrastructure and smart grids.<sup>9653</sup> The goal is to help the EU reach its 2050 climate neutrality objectives by modernizing and decarbonizing the EU's cross-border energy infrastructure.<sup>9654</sup>

On 17 June 2021, the European Investment Bank approved EUR1.4 billion for financing of renewable energy efforts.<sup>9655</sup> The financing will support large scale solar power projects across Spain, small scale renewable energy generation in Germany, investment in clean energy and energy efficiency in Austria, and geothermal power in East Africa.<sup>9656</sup>

On 29 July 2021, the European Investment Bank and Hydrogen Europe, an association representing Europe's hydrogen and fuel cell sector, signed an advisory services agreement.<sup>9657</sup> Under the agreement, the European Investment Bank will provide financing advisory support for Hydrogen Europe's green hydrogen initiatives.<sup>9658</sup> The agreement will help facilitate the introduction of clean hydrogen technologies in the EU.<sup>9659</sup>

The European Union has fully complied with its commitment to endorse the Circular Carbon Economy platform with its 4Rs framework (Reduce, Reuse, Recycle and Remove). It has complied with its commitment to reduce carbon emissions with its investments in renewable energy and decarbonization research initiatives, as well as the introduction of binding emissions targets and carbon taxes on imports. It has also complied with its commitment to recycle by supporting initiatives to extend product life and recycling projects. The European Union has also committed to the productive

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<sup>9651</sup> Council approves conclusions on an EU renovation wave, Consilium (Brussels) 11 June 2021. Access Date: 24 July 2021. <https://www.consilium.europa.eu/en/press/press-releases/2021/06/11/council-approves-conclusions-on-an-eu-renaissance-wave/>

<sup>9652</sup> Council agrees on new rules for cross-border energy infrastructure, Consilium (Brussels) 11 June 2021. Access Date: 24 July 2021. <https://www.consilium.europa.eu/en/press/press-releases/2021/06/11/council-agrees-on-new-rules-for-cross-border-energy-infrastructure/>

<sup>9653</sup> Council agrees on new rules for cross-border energy infrastructure, Consilium (Brussels) 11 June 2021. Access Date: 24 July 2021. <https://www.consilium.europa.eu/en/press/press-releases/2021/06/11/council-agrees-on-new-rules-for-cross-border-energy-infrastructure/>

<sup>9654</sup> Council agrees on new rules for cross-border energy infrastructure, Consilium (Brussels) 11 June 2021. Access Date: 24 July 2021. <https://www.consilium.europa.eu/en/press/press-releases/2021/06/11/council-agrees-on-new-rules-for-cross-border-energy-infrastructure/>

<sup>9655</sup> EIB approves EUR 4.1 billion financing for renewable energy, clean transport, COVID recovery, social housing and education, European Investment Bank (Luxembourg) 17 June 2021. Access Date: 24 July 2021. <https://www.eib.org/en/press/all/2021-204-eib-approves-eur-4-1-billion-financing-for-renewable-energy-clean-transport-covid-recovery-social-housing-and-education>

<sup>9656</sup> EIB approves EUR 4.1 billion financing for renewable energy, clean transport, COVID recovery, social housing and education, European Investment Bank (Luxembourg) 17 June 2021. Access Date: 24 July 2021. <https://www.eib.org/en/press/all/2021-204-eib-approves-eur-4-1-billion-financing-for-renewable-energy-clean-transport-covid-recovery-social-housing-and-education>

<sup>9657</sup> EIB signs advisory agreement with Hydrogen Europe, European Investment Bank (Luxembourg) 29 July 2021. Access Date: 9 September 2021. <https://www.eib.org/en/press/all/2021-284-eib-signs-advisory-agreement-with-hydrogen-europe>

<sup>9658</sup> EIB signs advisory agreement with Hydrogen Europe, European Investment Bank (Luxembourg) 29 July 2021. Access Date: 9 September 2021. <https://www.eib.org/en/press/all/2021-284-eib-signs-advisory-agreement-with-hydrogen-europe>

<sup>9659</sup> EIB signs advisory agreement with Hydrogen Europe, European Investment Bank (Luxembourg) 29 July 2021. Access Date: 9 September 2021. <https://www.eib.org/en/press/all/2021-284-eib-signs-advisory-agreement-with-hydrogen-europe>

reusing of emissions through carbon farming and carbon capture and storage projects. Additionally, the European Union has also complied with its commitment to remove carbon emissions by promoting the conservation of biodiversity. The European Union has also committed to the development of the hydrogen sector, as well as hydrogen-powered transportation and refueling facilities.

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

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