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THE RUSSIAN PRESIDENTIAL ACADEMY  
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# 2020 G20 Riyadh Summit Interim Compliance Report

Prepared by

Kaylin Dawe, Mary Noh and the G20 Research Group

University of Toronto

Toronto

and

Alexander Ignatov and the Center for International Institutions Research

Russian Presidential Academy of National Economy and Public Administration,

Moscow

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

**We encourage readers to send comments to**

**[G20@utoronto.ca](mailto:G20@utoronto.ca)**

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## 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		0	
France			+1
Germany		0	
India		0	
Indonesia	-1		
Italy		0	
Japan		0	
Korea		0	
Mexico	-1		
Russia		0	
Saudi Arabia		0	
South Africa		0	
Turkey			+1
United Kingdom			+1
United States			+1
European Union			+1
Average		+0.30 (65%)	

### Background

According to the United Nations, “the impacts of climate change are global in scope and unprecedented in scale,”<sup>5395</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>5396</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>5397</sup> Accounting for nearly 80 per cent of global emissions, the G20 member states have a

<sup>5395</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>5396</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>5397</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>5398</sup> Additionally, bold action on climate change has the potential to produce USD26 trillion in economic benefits, as is cited by the UN.<sup>5399</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>5400</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>5401</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>5402</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>5403</sup> Members also identified specific steps to address climate change, including “increasing clean and renewable energy supplies, improving energy efficiency, and promoting conservation.”<sup>5404</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>5405</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>5406</sup>

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<sup>5398</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>5399</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>5400</sup> G20 Information Centre, G20 Information Centre (Toronto) 30 November 1999. Access Date: 26 February 2021. <http://www.g20.utoronto.ca/g20whatisit.html>

<sup>5401</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>5402</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>5403</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>5404</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>5405</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>5406</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>5407</sup> Additionally, G20 members committed to “fostering clean energy, green growth and sustainable development [through] promot[ing] low-carbon development strategies.”<sup>5408</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>5409</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>5410</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>5411</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>5412</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>5413</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>5414</sup> Additionally, members emphasized

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<sup>5407</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>5408</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>5409</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>5410</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>5411</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>5412</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>5413</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>5414</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>5415</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>5416</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>5417</sup>

At the 2017 Hamburg Summit, the G20 members recognized that “a strong economy and a healthy planet are mutually reinforcing”<sup>5418</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>5419</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>5420</sup> Members also reaffirmed the importance of “energy security, sustainability, resilience, efficiency, affordability and stability” in achieving the broader goal of reduced emissions.<sup>5421</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>5422</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>5415</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>5416</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>5417</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>5418</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>5419</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>5420</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>5421</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>5422</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>5423</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>5424</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>5425</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>5423</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>5424</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>5425</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>5426</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>5427</sup> This verb constitutes a weak politically binding commitment, meaning, this term signifies a firm commitment but is a weak catalyst for compliance.<sup>5428</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>5429</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>5430</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>5431</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>5432</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>5426</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>5427</sup> Cambridge Dictionary (Cambridge) n.d. Access Date: 26 February 2021.

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

<sup>5428</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>5429</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>5430</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>5431</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>5432</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>5433</sup> To “remove” refers to carbon capture and storage,<sup>5434</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>5435</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>5436</sup> Enabling policies that support the CCE are overcoming barriers to financing the carbon capture, utilization and storage (“remove”) and accelerating innovation.<sup>5437</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>5438</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>5433</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>5434</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>5435</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>5436</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>5437</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>5438</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>5439</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>5440</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>5441</sup> The President stated: “Argentina reaffirms its commitment to the Paris Agreement and adopts climate change as a State policy.”<sup>5442</sup> It was also announced that Argentina

<sup>5439</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-del-n>

<sup>5440</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>5441</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>5442</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>5443</sup>

On 14 December 2020, Minister of Environment and Sustainable Development Juan Cabandié presented the new Nationally Determined Contribution to the year 2030.<sup>5444</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>5445</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>5446</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>5447</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>5443</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>5444</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>5445</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>5446</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>5447</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>5448</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>5449</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>5450</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>5451</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>5452</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>5453</sup>

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<sup>5448</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>5449</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>5450</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>5451</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>5452</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>5453</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 Gualeguaychú Ecopark of Entre Ríos. The plant will reduce greenhouse gas emissions while converting the biogas into electrical energy.<sup>5454</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>5455</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>5456</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>5457</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>5458</sup> The Ministry of Environment and Sustainable Development will receive EUR200,000 as a result.<sup>5459</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>5460</sup> The goal of the protocol is to strengthen cooperation on education

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<sup>5454</sup> The Ministry will install a biogas plant in the Gualeguaychú Ecopark, Ministry of Environment and Sustainable Development (Buenos Aires) 22 February 2021. Access Date: 12 March 2021.

<sup>5455</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>5456</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>5457</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>5458</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>5459</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>5460</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>5461</sup> This commitment aims to increase awareness surrounding recycling and waste management.<sup>5462</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>5463</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>5464</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>5465</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>5466</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>5467</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>5468</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>5461</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>5462</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>5463</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.

<sup>5464</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.

<sup>5465</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.

<sup>5466</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>5467</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>5468</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>5469</sup> These measures focus on encouraging and increasing the use of renewable energy to lower the country's emissions.

Argentina has fully complied with its commitment to endorse the CCE platform with its 4Rs framework. 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 emissions through its investments in educational campaigns and activities towards forest protection.

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>5470</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>5471</sup>

On 17 February 2021, Australia's Entrepreneurs' Programme financed research and projects to motivate environmental action through seven grants.<sup>5472</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

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<sup>5469</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>5470</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>5471</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>5472</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>

million.<sup>5473</sup> UPower, 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>5474</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 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>5475</sup>

On 4 March 2021, Australia launched the National Plastics Plan.<sup>5476</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>5477</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>5478</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>5479</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>5480</sup>

On 18 April 2021, the Australian government, in collaboration with the state of South Australia, signed an AUS1.1 billion deal to finance measures aimed at making energy more affordable and to

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<sup>5473</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>5474</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>5475</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>5476</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>5477</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>5478</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>5479</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>5480</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/ley/media-releases/australia-joins-coalition-climate-adaptation-action>

help curb carbon emissions.<sup>5481</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>5482</sup>

On 21 April 2021, Prime Minister Morrison pledged to spend AUD417 million on hydrogen and carbon capture.<sup>5483</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>5484</sup> The funding is part of the government's economic blueprint for 2022's fiscal year, and is yet to receive Parliament approval.<sup>5485</sup> This expenditure is part of the government's pledge to spend AUS18 billion over the next 10 years to meet climate goals.<sup>5486</sup>

On 23 April 2021, the Australian government announced a AUS100 million initiative to protect the Australian oceans.<sup>5487</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>5488</sup>

Australia has taken actions to address three out of the four Rs framework and endorse the CCE 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.

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<sup>5481</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>5482</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>5483</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/pmnbusiness/pmnbusiness/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

<sup>5484</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/pmnbusiness/pmnbusiness/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

<sup>5485</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/pmnbusiness/pmnbusiness/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

<sup>5486</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/pmnbusiness/pmnbusiness/australia-to-spend-420-mln-on-hydrogen-carbon-capture-projects-pm-to-say>

<sup>5487</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>5488</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>

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>5489</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>5490</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>5491</sup>

On 14 April 2021, President Jair Bolsonaro signed a decree to include nine national parks in the Investment Partnership Program.<sup>5492</sup> This was done with the goal of promoting and improving efforts to conserve and protect the environment in these regions.<sup>5493</sup>

On 20 April 2021, the National Energy Policy Council approved the resolution to institute the Fuel of the Future program.<sup>5494</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>5495</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>5496</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>5497</sup> More specifically, USD40 million will be allocated towards water security and increased resilience to extreme weather events.<sup>5498</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

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<sup>5489</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>5490</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>5491</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>5492</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>5493</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>5494</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>5495</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>5496</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>5497</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>5498</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>

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.

*Analyst: Aadi Thulasingham*

**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>5499</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>5500</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>5501</sup>

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>2e</sub>/MJ in 2022, increasing to 12 gCO<sub>2e</sub>/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>5502</sup>

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<sup>5499</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>5500</sup> Regulations Amending the Canadian Aviation Regulations (Parts I and X — Offsetting of CO<sub>2</sub> 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>5501</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)

<sup>5502</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>

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>5503</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>5504</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>5505</sup> The projects will help advance organic bioplastics replacing petroleum-based plastics.<sup>5506</sup>

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>5507</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

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<sup>5503</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>5504</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>5505</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>5506</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>5507</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>

industries.”<sup>5508</sup> The goal of the Lipid-to-Hydrocarbon technology is to reduce emissions from the aviation sector by 90 per cent.<sup>5509</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>5510</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>5511</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>5512</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>5513</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>5514</sup> The goal of the project is to eliminate greenhouse gas emissions by using hydroelectricity and waste industrial heat.<sup>5515</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 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>5516</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

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<sup>5508</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>5509</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>5510</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>5511</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>5512</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>5513</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>5514</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>5515</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>5516</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>

funding in the next five years to projects that include reductions of energy waste and installations of energy efficient windows.<sup>5517</sup>

On 15 April 2021, Minister O'Regan announced a CAD500,000 investment in Compressed Air Energy Storage technology.<sup>5518</sup> The goal of this is to decrease greenhouse gas emissions by transitioning to a cleaner electricity grid.<sup>5519</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>5520</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>5521</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>5522</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>5523</sup>

On 16 April 2021, Special Representative Carr announced CAD41.1 million for 11 green infrastructure projects.<sup>5524</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>5525</sup>

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<sup>5517</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>5518</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>5519</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>5520</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>5521</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>5522</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>5523</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>5524</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>5525</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>

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>5526</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>5527</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>5528</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>5529</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>5530</sup>

Canada has taken action to address three out of the four commitment features of the four Rs framework, partially complying with its commitment to endorse the CCE platform. It has complied with its commitment to reduce carbon emissions by investing in renewable energy like wind turbines, and solar power plants. It has also complied with its commitment to reuse by investing in lipid-to-hydrocarbon technology, while additionally taking into consideration hydrogen policies. Additionally, Canada has complied with its commitment to recycling by promoting the use of bioenergy as feedstock and investing in recycling projects.

Thus, Canada receives a score of +1.

*Analyst: Meryem Althani*

### **China: 0**

China 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.

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<sup>5526</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>5527</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>5528</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>5529</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>5530</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>

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>5531</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>5532</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>5533</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>5534</sup>

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>5535</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>5536</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>5537</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>5538</sup> Reservoirs are one of the crucial engineering measures to support the development and

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<sup>5531</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>5532</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>5533</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>5534</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>5535</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>5536</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>5537</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>5538</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)

utilization of water resources, including flood control, water supply, and power generation<sup>5539</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>5540</sup> This will be done with the goal of preserving the environmental rights of Chinese citizens and achieving a better-quality environment.<sup>5541</sup>

China has taken action to address two of the four key commitment areas within the four Rs framework of the CCE Economy, namely reducing carbon emissions and reusing emission quotas. Further, they have done so while taking into consideration hydrogen policies through efforts to preserve reservoirs. Nevertheless, China has not taken actions towards recycling or removing.

Thus, China receives a score of 0.

*Analyst: Aadi Thulasingham*

### **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.

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>5542</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>5543</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

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<sup>5539</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>5540</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>5541</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>5542</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>5543</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>

recycled plastics by 2025. The funds will be distributed by the French Ecological Transition Agency.<sup>5544</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>5545</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>5546</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>5547</sup> At the summit, France, Spain, and Monaco launched the Coalition for an Exemplary Mediterranean in 2030. The coalition intends to develop a network of protected areas, fight marine pollution, ban single-use plastics and reduce the environmental impact of maritime transport.<sup>5548</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>5549</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>5550</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>5551</sup>

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<sup>5544</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>5545</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>5546</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>5547</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>5548</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>5549</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>5550</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>5551</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>

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>5552</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>5553</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>5554</sup>

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>5555</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>5556</sup>

On 9 April 2021, Secretary of State for Biodiversity Bérandère Abba announced the creation of a new nature reserve “Étangs et Rigoles d’Yveline.”<sup>5557</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

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<sup>5552</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>5553</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>5554</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>

<sup>5555</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>5556</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-eur-50-million-support-serbia-reform-agenda-climate-change>

<sup>5557</sup> Bérandère 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>

hectares under strong protection.<sup>5558</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>5559</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>5560</sup> This action aims to achieve France's decarbonization goals by promoting construction of wood buildings which will serve as carbon sinks.<sup>5561</sup> To this end, environmental regulations for new buildings will also be modified, promoting the use of mixed materials in buildings.<sup>5562</sup>

On 22 April 2021, the French Development Agency announced funding for sustainable and green development projects in Montenegro<sup>5563</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 funding green investment projects undertaken by Montenegrin municipalities and small and medium sized businesses.<sup>5564</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>5565</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>5566</sup>

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<sup>5558</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>5559</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>5560</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>5561</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>5562</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>5563</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>

<sup>5564</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>

<sup>5565</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>5566</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>

On 28 April 2021, France announced the fifth phase of the Energy Saving Certificate scheme.<sup>5567</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>5568</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>5569</sup> This fifth phase of the scheme will help France meet its energy reduction goals outlined in the National Low Carbon Strategy (SNBC).<sup>5570</sup>

On 29 April 2021, the Ministry of the Economy, Finance and Recovery presented its climate action plan.<sup>5571</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>5572</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 million.<sup>5573</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>5574</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>5575</sup>

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<sup>5567</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>5568</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>5569</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>5570</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>5571</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>5572</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>

<sup>5573</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>5574</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>5575</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>

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: 0**

Germany 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, 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>5576</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>5577</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>5578</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 Germany protected areas. The goal is to protect biological diversity, as well as the indigenous

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<sup>5576</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>5577</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>5578</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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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>5579</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>5580</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>5581</sup> In return, energy companies will remove any barriers preventing the phaseout of nuclear power.<sup>5582</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>5583</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>5584</sup> The various investments into climate action outlined in this plan amount to roughly EUR28 billion.<sup>5585</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>5586</sup>

Germany has taken actions to address two out of the four Rs framework, partially complying with its commitment to endorse the CCE platform. Their actions towards reducing emissions, as well as removing harm through investments in biodiversity contribute to their commitment. However, they have not taken sufficient action on reusing or recycling, or enabling policies.

Thus, Germany receives a score of 0.

*Analyst: Angelo Wijaya*

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<sup>5579</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>5580</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>5581</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>5582</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>5583</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>5584</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>5585</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>5586</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)

## 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>5587</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>5588</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>5589</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>5590</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>5591</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>5592</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 pilot plants by the end of the current financial year.<sup>5593</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>5594</sup>

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<sup>5587</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>5588</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>5589</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>5590</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>5591</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>5592</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>5593</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>5594</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/>

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>5595</sup> In his address, he reaffirmed India's commitment to achieving its renewable energy target of 450 GW by 2030.<sup>5596</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>5597</sup>

India has taken actions to address two out of the four Rs framework of the CCE, 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.

*Analyst: Aadi Thulasingham*

### **Indonesia: -1**

Indonesia has not 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>5598</sup> The extension implements President Joko Widodo's commitment and efforts for peatland ecosystem recovery.<sup>5599</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>5600</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>5601</sup> Through this program, Indonesia 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>5602</sup>

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<sup>5595</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>5596</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>5597</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>5598</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>5599</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>5600</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>5601</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-idUSKBN1YROD2>

<sup>5602</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>

On 15 March 2021, Indonesia committed to offering tax incentives on electric vehicles.<sup>5603</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>5604</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>5605</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>5606</sup> The group has stated that the country will stop both liquefied petroleum gas and fuel imports by 2030.<sup>5607</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>5608</sup> This action will contribute towards the nation reducing their emissions with the introduction of biodiesel.

Indonesia has taken actions to address one out of the four Rs framework and endorse the CCE platform. Indonesia has implemented many policies and actions towards reducing their carbon emissions, but has not taken actions towards reusing, recycling, or removing. Further, they have not taken into consideration hydrogen or enabling policies.

Thus, Indonesia receives a score of -1.

*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>5609</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”

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<sup>5603</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>5604</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>5605</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>5606</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>5607</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>5608</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>5609</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>

and contributes to the “reuse” aspect of the four Rs framework through improving the ability to reuse textiles and mattresses.<sup>5610</sup>

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>5611</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>5612</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>5613</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>5614</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>5615</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>5616</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>5617</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>5618</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*

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<sup>5610</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/>

<sup>5611</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>5612</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>5613</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>5614</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>5615</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>5616</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>5617</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>5618</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>

## 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>5619</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>5620</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>5621</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>5622</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 United Arab Emirates Suhail Mohamed Al Mazrouei.<sup>5623</sup> This will facilitate the construction of hydrogen supply chains and the exchange of information between Japan and the United Arab Emirates.<sup>5624</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

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<sup>5619</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>5620</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>5621</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>5622</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>5623</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>5624</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)

levels.”<sup>5625</sup> Suga also announced that to achieve this, Japan is committed to utilizing decarbonized power sources and assisting other countries in decarbonization.<sup>5626</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*

### **Korea: 0**

Korea 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.

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>5627</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>5628</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>5629</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>5630</sup>

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<sup>5625</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>5626</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>5627</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>5628</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://ycnews.com/south-koreas-ministry-of-environment-plan-to-reduce-plastic-waste-by-20-by-2025/>

<sup>5629</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>5630</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=>

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>5631</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>5632</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>5633</sup>

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>5634</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>5635</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>5636</sup> This action will aim to further reduce emission levels and Korea’s reliance on power generated by coal. Korea will also increase the production of renewable energy which will include solar and wind power.<sup>5637</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>5638</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>5639</sup>

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<sup>5631</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>5632</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>5633</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>

<sup>5634</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>5635</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>5636</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>5637</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>5638</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>5639</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)

Korea has taken actions to address three of the four Rs framework and endorse the CCE 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. It has also partially complied with its commitment to reuse by investing in carbon capture technologies. However, it has not sufficiently complied with its commitment of recycle and remove.

Thus, Korea receives a score of 0.

*Analyst: Minabil Iftikbar*

### **Mexico: -1**

Mexico has not 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>5640</sup> Nevertheless, the plan outlines intent to more natural gas builds after 2024, a non-renewable form of energy.<sup>5641</sup>

On 23 February 2021, the Lower House of Congress passed a bill that would increase state control of the electricity market.<sup>5642</sup> This bill has been criticized by environmental groups as the bill is seen as a reversal to Mexico's endeavors in energy transition in the past decade—putting renewable energy supply to the “back of the queue.”<sup>5643</sup>

Mexico has not taken actions to address the four Rs framework and endorse the CCE platform.

Thus, Mexico receives a score of -1.

*Analyst: Angelo Wijaya*

### **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 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

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<sup>5640</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>5641</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>5642</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>

<sup>5643</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/>

“Infrastructure for Waste Management of the I-II classes” as part of the national project “Ecology” and were presented by JSC Rusatom Gateway.<sup>5644</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>5645</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>5646</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>5647</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>5648</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>5649</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>5650</sup>

Russia has taken action to address two out of the four Rs framework (Recycle and Reduce) through projects that support green processing of batteries and regulations towards reducing greenhouse gas emissions, and partially address two out of the four Rs framework through agreements to proceed with carbon capture and storage projects (Remove and Reuse). However, Russia has not taken significant enough action on all 4Rs.

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<sup>5644</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>5645</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>5646</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>5647</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>5648</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>5649</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>5650</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>

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>5651</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>5652</sup>

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>5653</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>5654</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

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<sup>5651</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>5652</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>

<sup>5653</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>5654</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>

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>5655</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>5656</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>5657</sup>

On 28 March 2021, Crown Prince 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>5658</sup>

Saudi Arabia has taken actions to address three of the four Rs. The Kingdom has been consistently implementing green policies such as the installation of solar power plants, cooperating on environmentally friendly policies on an international level, such as the MoU with Germany, but also has been conducting research, in cooperation with the country’s academic community, to address the circular carbon economy issue.<sup>5659</sup> These actions have led Saudi Arabia to partially comply with its commitment to endorse the CCE platform.

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

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<sup>5655</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.nsenerybusiness.com/news/industry-news/the-line-saudi-arabia-neom/>

<sup>5656</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>5657</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>5658</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>5659</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>

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Western Cape Economic Development and Tourism.<sup>5660</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>5661</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>5662</sup>

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>5663</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>5664</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>5665</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.

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<sup>5660</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>5661</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-meynier-announces-municipalities-participating-municipal-energy-resilience>

<sup>5662</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>

<sup>5663</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>5664</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>5665</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>

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>5666</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>5667</sup>

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>5668</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>5669</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>5670</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>5671</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>5672</sup>

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<sup>5666</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>5667</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>

<sup>5668</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>5669</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>5670</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>5671</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>5672</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>

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>5673</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>5674</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>5675</sup>

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>5676</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>5677</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>5678</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>5679</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

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<sup>5673</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>5674</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>5675</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>5676</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>5677</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>5678</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>5679</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>

energy production.<sup>5680</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>5681</sup> The goal is to increase the use of renewable energy sources and better manage energy consumption.<sup>5682</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>5683</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>5684</sup> The Ministry plans to invest an additional TRY612 million in the power plant in 2021.<sup>5685</sup> 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>5686</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>5687</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>5688</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>5689</sup> Minister Dönmez stated that Turkey’s goal is to produce hydrogen from renewable sources, also known as “green hydrogen.”<sup>5690</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>5691</sup> The protocol includes developing

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<sup>5680</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>5681</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>5682</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>5683</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>5684</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>5685</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>5686</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>5687</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>5688</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>5689</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>5690</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>5691</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>

studies, organizing events and conducting joint projects to promote and increase energy efficiency.<sup>5692</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>5693</sup> The goal is to reduce energy usage in public buildings by 15 per cent compared to last year.<sup>5694</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>5695</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>5696</sup> Minister Dönmez noted 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>5697</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).

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>5698</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,

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<sup>5692</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>5693</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>5694</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>5695</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>5696</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>5697</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>5698</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>

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>5699</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>5700</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>5701</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>5702</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>5703</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>5704</sup>

On 12 December 2020, the UK co-convened the Climate Ambition Summit with the United Nations and France.<sup>5705</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

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<sup>5699</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>5700</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>5701</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>5702</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>5703</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>5704</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>

<sup>5705</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>

renewable energy and the government will work with the UK oil and gas sector to facilitate the transition to low carbon energy sources.<sup>5706</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>5707</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>5708</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>5709</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>5710</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 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>5711</sup>

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<sup>5706</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>5707</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>5708</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>5709</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>5710</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>

<sup>5711</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>

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>5712</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>5713</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>5714</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>5715</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 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>5716</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

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<sup>5712</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>5713</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>5714</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>5715</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>

<sup>5716</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>

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>5717</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>5718</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>5719</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>5720</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>5721</sup>

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>5722</sup>

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<sup>5717</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>5718</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>5719</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>5720</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>5721</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>

<sup>5722</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>

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>5723</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>5724</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>5725</sup>

On 22 March 2021, Secretary Kwarteng announced GBP54 million in funding for three electric truck and hydrogen-powered bus projects.<sup>5726</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>5727</sup> These projects are expected to save up to 45 million tonnes of carbon emissions.<sup>5728</sup>

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>5729</sup> Through this deal the government will emphasize the use of carbon captures, hydrogen production and offshore wind farming.<sup>5730</sup> The deal

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<sup>5723</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>5724</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>5725</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>5726</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>5727</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>5728</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>5729</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>5730</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>

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>5731</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>5732</sup>

On 24 March 2021, the UK announced that it would end support for overseas fossil fuel sectors on 31 March 2021.<sup>5733</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>5734</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>5735</sup>

On 27 March 2021, the UK announced an additional GBP300 million in funding to the Green Home Grant voucher scheme.<sup>5736</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>5737</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>5738</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 previously announced goal of reducing the UK's carbon emissions by 68 per cent of 1990 levels by 2030.<sup>5739</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>5740</sup>

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<sup>5731</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>5732</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>5733</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>5734</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>5735</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>5736</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>5737</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>5738</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>5739</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>5740</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>

The United Kingdom 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 with its investments in renewable energy, green technology and transportation as well as 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 United Kingdom 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 United Kingdom 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 Decarbonization 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>5741</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>5742</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>5743</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>5744</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

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<sup>5741</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>5742</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>5743</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>5744</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>

technologies and deploying zero-emission vehicles.<sup>5745</sup> Incentives will also be provided through this act for the conservation of energy in homes and buildings.

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>5746</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>5747</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>5748</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>5749</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>5750</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>5751</sup> They will further develop technologies for converting waste resources into biofuels and bioproducts for reducing transportation emissions.<sup>5752</sup>

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<sup>5745</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>

<sup>5746</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>5747</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>5748</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>5749</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>5750</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>5751</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>5752</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>

On 21 April 2021, Department of Agriculture (USDA) Secretary Tom Vilsack announced investments in projects for increasing climate-smart agriculture.<sup>5753</sup> The open enrolment to the 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>5754</sup> For increased enrollment and implementation of conservation practices by producers, the USDA announced a further investment of USD140 million for technical assistance.<sup>5755</sup> The Natural Resources Conservation Service will further invest USD330 million in 85 local partnerships for addressing natural resources challenges.<sup>5756</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>5757</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>5758</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>5759</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>5760</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>5761</sup>

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<sup>5753</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>5754</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>5755</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>5756</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>5757</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>5758</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>5759</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>5760</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>5761</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>

On 23 April 2021, the Department of Energy announced a funding of USD109.5 million energy development projects.<sup>5762</sup> These included USD75 million for engineering and installing carbon 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>5763</sup>

On 26 April 2021, the Agency for International Development announced two investments to assist Vietnam in addressing their climate crisis.<sup>5764</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>5765</sup> Through the protection of forests and biodiversity, both these projects will aim to reduce greenhouse gas emissions.<sup>5766</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>5767</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>5768</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>5769</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>5770</sup>

The United States has taken actions to fully address three out of four Rs framework and endorse the CCE platform. It has complied with its commitment to reduce carbon emissions through investing in

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<sup>5762</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>5763</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>5764</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>5765</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>5766</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>5767</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>5768</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>5769</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>5770</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>

the development of renewable energy technology and production, including wind and solar energy, and hydrogen and to produce clean and reliable power through initiatives like production of electric vehicles. The United States 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 technologies.

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

*Analyst: Minabil 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>5771</sup> The goal is to support and encourage sustainable technological innovations.<sup>5772</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>5773</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. The deal will respect climate, circular economy and biodiversity goals. The goal is to encourage sustainability through economic, social and territorial cohesion.<sup>5774</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 CO2 equivalent for each year and

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<sup>5771</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>5772</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>5773</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>

<sup>5774</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>

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>5775</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>5776</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>5777</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>5778</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>5779</sup>

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>5780</sup>

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<sup>5775</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>5776</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>5777</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>5778</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>5779</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>

<sup>5780</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>

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>5781</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>5782</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>5783</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>5784</sup> The EU plans to do this by improving its knowledge of climate issues, working on climate risk assessments and propelling adaptation solutions.<sup>5785</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>5786</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 in public buildings. The goal is “accelerating climate action and sustainable urban investment across Greece.”<sup>5787</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>5788</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

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<sup>5781</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>5782</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>5783</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>5784</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>5785</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>5786</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>

<sup>5787</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>5788</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)

sustainable energy services and clean technologies in African countries; and expand the net-zero movement through the energy sector.<sup>5789</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>5790</sup> The project's total cost is estimated at EUR2 billion and involves the building of 64 wind turbines.<sup>5791</sup> The capacity will be 450 megawatts and will produce enough annual electricity to be used by 630,000 people.<sup>5792</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>5793</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>5794</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>5795</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 as "Greece 2.0."<sup>5796</sup> The European Investment Bank's technical, financial and environmental experts

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<sup>5789</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>5790</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>5791</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>5792</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>5793</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>5794</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>5795</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>5796</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>

will help ensure the best use of the new grant in Greece.<sup>5797</sup> A central focus of the plan will be supporting climate action, digital transformation, and green energy transition.<sup>5798</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>5799</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>5800</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>5801</sup> EUR2 billion will be dedicated to increasing renewable energy developments in the form of wind and solar power investments.<sup>5802</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>5803</sup> Projects include increasing renewable energy at airports in Spain; the acquisition of hydrogen powered trains; the installation of hydrogen refuelling facilities in the Netherlands; and improvements to regional rail services in Germany.<sup>5804</sup>

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<sup>5797</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>5798</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>5799</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>5800</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>5801</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>5802</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>5803</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>5804</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>

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>5805</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>5806</sup> The study will act as a guide for public and private actors to increase carbon farming initiatives.<sup>5807</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>5808</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>5809</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>5810</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>5811</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>5812</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>5813</sup> A minimum of half of the new line will go towards projects dedicated to mitigating the effects of climate change.<sup>5814</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

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<sup>5805</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>5806</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>5807</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>5808</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>5809</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>5810</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>5811</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>5812</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>5813</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>5814</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)

environmental and climate-related initiatives.<sup>5815</sup> LIFE will become the most ambitious EU-wide environmental and climate program in EU's history.<sup>5816</sup> The program will work towards building a more "clean, circular, energy-efficient, low-carbon and climate-resilient economy."<sup>5817</sup> EUR3.9 billion will be directed towards environmental activities and EUR1.9 billion will go towards climate action.<sup>5818</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 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.

*Analyst: Amanda Wang*

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<sup>5815</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/20210422IPR02614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>

<sup>5816</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/20210422IPR02614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>

<sup>5817</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/20210422IPR02614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>

<sup>5818</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/20210422IPR02614/meps-approve-deal-to-invest-EU5-4-billion-in-climate-and-environmental-projects>