



2021 G20 Rome Summit Final Compliance Report

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**Feedback, as always, is welcome and is kept anonymous.
We encourage readers to send comments to
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“In this endeavour, informed by the IPCC assessments, we will accelerate our actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.”

G20 Rome Leader’s Declaration

Assessment

	No Compliance	Partial Compliance	Full Compliance
Argentina			+1
Australia			+1
Brazil			+1
Canada			+1
China			+1
France			+1
Germany			+1
India			+1
Indonesia		0	
Italy			+1
Japan			+1
Korea			+1
Mexico		0	
Russia		0	
Saudi Arabia		0	
South Africa		0	
Turkey		0	
United Kingdom			+1
United States			+1
European Union			+1
Average		+0.70 (85%)	

Background

As defined by the United Nations, climate change is the long-term shift in temperatures and weather patterns.⁴⁸²³ Due to the increased burning of fossil fuels, and as a result, the emission of greenhouse gasses has steadily contributed to the rapid rise in the Earth’s temperature.⁴⁸²⁴ This has and will continue to threaten health and safety, agriculture, housing, and economic development on a global and unprecedented scale.⁴⁸²⁵ The first official acknowledgement and global commitment against climate change was held in Stockholm, Sweden in June 1972, known as the First Earth Summit, which introduced and “adopted a declaration that set our principles for the preservation and enhancement of the human environment.”⁴⁸²⁶ More recently, in the 21st century, there has been an evolution in the

⁴⁸²³ Climate Change, United Nations (New York) n.d. Access Date: 5 December 2021.

<https://www.un.org/en/climatechange/what-is-climate-change>

⁴⁸²⁴ Climate Change, United Nations (New York) n.d. Access Date: 5 December 2021.

<https://www.un.org/en/climatechange/what-is-climate-change>

⁴⁸²⁵ Climate Change, United Nations (New York) n.d. Access Date: 5 December 2021.

<https://www.un.org/en/climatechange/what-is-climate-change>

⁴⁸²⁶ From Stockholm to Kyoto: A Brief History of Climate Change, United Nations (New York) n.d. Access Date: 5 December 2021. <https://www.un.org/en/chronicle/article/stockholm-kyoto-brief-history-climate-change>

commitments and response against climate change, such as the 2015 Paris Climate Change Agreement. The Paris Agreement is an international treaty that legally binds signatory countries to implementing change in order to limit global warming.⁴⁸²⁷ In accordance, the G20 summits began addressing climate change at some capacity since the inaugural summit in 2008.⁴⁸²⁸ The G20 economies combined account for around 80 per cent of the greenhouse gasses emitted,⁴⁸²⁹ and thus bear a large responsibility in climate action. The UN has projected a profit of USD26 trillion in comparison to the current business and fuel models being followed.⁴⁸³⁰ Therefore, it is not only viable for the G20 to promote the implementations of climate action for the future of economic prosperity, but also to reach their primary goal of the promotion of “international financial stability.”⁴⁸³¹

At the 2008 inaugural summit in Washington, D.C., there was an acknowledgement and intent to address various issues including climate change. The summit recognized climate change as a “critical challenge.”⁴⁸³² However, there was no further indication of how or what commitments will be made towards addressing this challenge.⁴⁸³³

At the 2009 London Summit, the G20 reaffirmed their “commitment to address the threat of irreversible climate change,” with plans to reach an agreement at the UN Climate Change conference in Copenhagen in their commitment dedicated towards climate change.⁴⁸³⁴ 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.⁴⁸³⁵

At the 2009 Pittsburgh Summit, the conference dedicated a significant portion of its time discussing energy security and climate change, recognizing climate change as a multi-faceted issue, needing to be addressed through different avenues. The members discussed the involvement of The World Bank as well as other multilateral development banks having a role to play in addressing climate change.⁴⁸³⁶ 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.”⁴⁸³⁷ Members also identified

⁴⁸²⁷ The Paris Agreement, United Nations Framework Convention on Climate Change (Bonn) n.d. Access Date: 5 December 2021. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

⁴⁸²⁸ 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>

⁴⁸²⁹ G20 economies are pricing more carbon emissions but stronger globally more coherent policy action is needed to meet climate goals, says OECD, Organization for Economic Co-operation and Development (Paris) 21 October 2021. Access Date: 5 December 2021. <https://www.oecd.org/tax/g20-economies-are-pricing-more-carbon-emissions-but-stronger-globally-more-coherent-policy-action-is-needed-to-meet-climate-goals-says-oecd.htm>

⁴⁸³⁰ Climate Action Fast Facts, United Nations (New York) n.d. Access Date: 5 December 2021. <https://www.un.org/en/climatechange/science/key-findings>

⁴⁸³¹ G20 Information Centre, G20 Information Centre (Toronto) 30 November 1999. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/g20whatisit.html>

⁴⁸³² Declaration of the Summit on Financial Markets and the World Economy, G20 Information Centre (Toronto) 15 November 2008. Access Date: 6 December 2021 <http://www.g20.utoronto.ca/2008/2008declaration1115.html>

⁴⁸³³ Declaration of the Summit on Financial Markets and the World Economy, G20 Information Centre (Toronto) 15 November 2008. Access Date: 6 December 2021 <http://www.g20.utoronto.ca/2008/2008declaration1115.html>

⁴⁸³⁴ London Summit - Leader’s Statement, G20 Information Centre (Toronto) 2 April 2009. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2009/2009communique0402.pdf>

⁴⁸³⁵ London Summit - Leader’s Statement, G20 Information Centre (Toronto) 2 April 2009. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2009/2009communique0402.pdf>

⁴⁸³⁶ G20 Leaders Statement: The Pittsburgh Summit, G20 Information Centre (Toronto) 25 September 2009. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2009/2009communique0925.html#energy>

⁴⁸³⁷ G20 Leaders Statement: The Pittsburgh Summit, G20 Information Centre (Toronto) 25 September 2009. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2009/2009communique0925.html#energy>

specific steps to address climate change, including “increasing clean and renewable energy supplies, improving energy efficiency, and promoting conservation.”⁴⁸³⁸

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.⁴⁸³⁹ 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. 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.”⁴⁸⁴⁰

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.”⁴⁸⁴¹ Additionally, G20 members committed to “fostering clean energy, green growth and sustainable development [through] promot[ing] low-carbon development strategies.”

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-18.⁴⁸⁴² 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.”

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.⁴⁸⁴³ 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 CO₂ emissions in addressing climate change.

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.⁴⁸⁴⁴ 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

⁴⁸³⁸ G20 Leaders Statement: The Pittsburgh Summit, G20 Information Centre (Toronto) 25 September 2009. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2009/2009communiqued0925.html#energy>

⁴⁸³⁹ The G20 Toronto Summit Declaration, G20 Information Centre (Toronto) 27 June 2010. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2010/to-communiqued.html>

⁴⁸⁴⁰ G20 Seoul Summit, G20 Information Centre (Seoul) 12 November 2010. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/summits/2010seoul.html>

⁴⁸⁴¹ 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: 6 December 2021. <http://www.g20.utoronto.ca/2011/2011-cannes-declaration-111104-en.html>

⁴⁸⁴² G20 Leaders Declaration, G20 Information Centre (Toronto) 19 June 2012. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html>

⁴⁸⁴³ G20 Leaders’ Declaration, G20 Information Centre (Toronto) 6 September 2013. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2013/2013-0906-declaration.html>

⁴⁸⁴⁴ G20 Leaders’ Communiqué, G20 Information Centre (Toronto) 16 November 2014. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2014/2014-1116-communiqued.html>

vehicles; networked devices; buildings; industrial processes; and electricity generation; as well as work on financing for energy efficiency.”

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 degrees Celsius goal in the Lima Call for Action, as well as the commitments made in the “ambitious agreement in Paris.”⁴⁸⁴⁵ The members at the time also instructed their individual negotiators to “engage constructively and flexibility.”

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.”⁴⁸⁴⁶ 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.” The members declared they will continue their cooperation when facing climate change, specifically to implement the Paris Agreement.

At the 2017 Hamburg Summit, the G20 members recognized that “a strong economy and a healthy planet are mutually reinforcing” and reaffirmed their commitment to reducing greenhouse gas emissions. Members also acknowledged the importance of a collaborative effort as stipulated with the 2030 Agenda for Sustainable Development and the Paris Agreement, identifying “energy security as one of the guiding principles for the transformation of our energy systems.”⁴⁸⁴⁷ With the adoption of the Paris Agreement, the G20 reaffirmed their pledge towards the Paris Agreement with the goal to limit global temperature to 2 degree Celsius, with an ideal of 1.5 Celsius. They also noted the official linkage of climate and energy policy in order to ensure a reliable investment climate. 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.⁴⁸⁴⁸ Members also reaffirmed the importance of “energy security, sustainability, resilience, efficiency, affordability and stability” in achieving the broader goal of reduced emissions. Signatories to the Paris Agreement reaffirmed that their signatures and commitments are irreversible, with “common but differentiated responsibilities,” while the United States reiterated their withdrawal from the Paris Agreement.

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 environmental quality; and other environmental issues.” Key areas of focus on this topic were reducing emissions and fostering resilient development. In accordance with the Paris Agreement, the members

⁴⁸⁴⁵ G20 Leaders’ Communiqué, G20 Information Centre (Toronto) 16 November 2015. Access Date: 6 December 2021. <http://www.g20.utoronto.ca/2015/151116-communiqué.html>

⁴⁸⁴⁶ G20 Leaders’ Communiqué: Hangzhou Summit, G20 Information Centre (Toronto) 5 September 2016. Access Date: 7 December 2021. <http://www.g20.utoronto.ca/2016/160905-communiqué.html>

⁴⁸⁴⁷ G20 Leaders’ Declaration: Shaping an Interconnected World, G20 Information Centre (Toronto) 8 July 2017. Access Date: 7 February 2021. <http://www.g20.utoronto.ca/2017/2017-G20-leaders-declaration.html>

⁴⁸⁴⁸ G20 Leaders’ Declaration: Building Consensus for Fair and Sustainable Development, G20 Information Centre (Buenos Aires) 1 December 2018. Access Date: 7 December 2021. <http://www.g20.utoronto.ca/2018/2018-leaders-declaration.html>

emphasized the importance of providing financial resources in order to assist developing members with a green transition.⁴⁸⁴⁹

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 change” as being among the most “pressing issues of our time.”⁴⁸⁵⁰ They also reaffirmed the importance of international cooperation in addressing climate change, in accordance with the UNFCCC and the Paris Agreement.

At the 2021 Rome Summit, the G20 members reaffirmed their commitment “to the full and effective implementation of the UNFCCC and of the Paris Agreement.”⁴⁸⁵¹ Through actions of mitigation, adaptation and finance, the members continue to pursue efforts to limit the global temperature below 2 degrees Celsius. The leaders also committed to scale up adaptation finance in order to address the needs of developing countries. Recalling the Paris Agreement’s aim towards sustainable development, and the eradication of poverty, the members introduced different possible implementations and goals towards reducing greenhouse gases.

Commitment Features

On 31 November 2021, G20 leaders adopted the present commitment at the summit hosted by Rome, Italy. The commitment reads as the following: “In this endeavour, informed by the IPCC assessments, we will accelerate our actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.”⁴⁸⁵²

The term “endeavour” is to be understood as a “serious determined effort” as well as “activity directed toward a goal.”⁴⁸⁵³

The term “informed” is to be understood as being “based on the possession of information” or “educated.”⁴⁸⁵⁴ In this context, the “information” in question is the IPCC assessments, indicating that actions contributing to compliance on this commitment will be aligned with the IPCC assessments. Actions should coincide with the information in the assessments, as well as with the options outlined relating to climate adaptation and mitigation.

The IPCC assessments refer to the assessments made by the United Nations Intergovernmental Panel on Climate Change (IPCC) which “determine the state of knowledge on climate change.”⁴⁸⁵⁵ The IPCC was established with the goal of “provid[ing] policymakers with regular scientific assessments on

⁴⁸⁴⁹ G20 Osaka Leaders’ Declaration, G20 Information Centre (Osaka) 29 June 2019. Access Date: 7 December 2021. <http://www.g20.utoronto.ca/2019/2019-g20-osaka-leaders-declaration.html>

⁴⁸⁵⁰ Leader’s Declaration, G20 Information Centre (Riyadh) 21 November 2020. Access Date: 7 December 2021. <http://www.g20.utoronto.ca/2020/2020-g20-leaders-declaration-1121.html>

⁴⁸⁵¹ G20 Rome Leaders’ Declaration (Rome) 31 October 2021. Access Date: 7 December 2021. <http://www.g20.utoronto.ca/2021/211031-declaration.html>

⁴⁸⁵² G20 Rome Leaders’ Declaration, G20 Information Centre (Toronto) 31 October 2021. Access Date: 5 December 2021. <http://www.g20.utoronto.ca/2021/211031-declaration.html>

⁴⁸⁵³ Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/endeavor>

⁴⁸⁵⁴ Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/informed>

⁴⁸⁵⁵ The Intergovernmental Panel on Climate Change, United Nations IPCC (Geneva) n.d. Access Date: 5 December 2021. <https://www.ipcc.ch/>

climate change, its implications and potential future risks, as well as put[ting] forward adaptation and mitigation options.”⁴⁸⁵⁶

To “accelerate” is understood as the act of “hasten[ing] the progress or development of” a given goal of effort.⁴⁸⁵⁷ The definition of this term echoes the sense of urgency that surrounds action on climate change goals, as it signifies a commitment to increase the pace at which members seek to address climate change.

The term “actions” is to be understood as a deed, behaviour, or conduct.⁴⁸⁵⁸ In this context, the “actions” in question refer to actions relating to climate change, specifically in the three identified categories of [climate change] mitigation, [climate change] adaptation, and [climate] finance.

The term “mitigation” is to be understood as “the process or result of making something less severe, dangerous, painful, harsh, or damaging.”⁴⁸⁵⁹ In this context, “mitigation” refers to climate change mitigation, meaning it is to be understood as the process or result of making climate change and its impacts less severe, dangerous, painful, harsh, and damaging. The United Nations Environment Programme defines climate change mitigation as “efforts to reduce or prevent emission of greenhouse gases.”⁴⁸⁶⁰ Examples of actions that contribute to climate change mitigation include, but are not limited to, investing in renewable energy, establishing carbon sinks, and placing restrictions on the emissions of greenhouse gases of corporations.

The term “adaptation” is to be understood as “the process of changing to fit some purpose or situation.”⁴⁸⁶¹ In this context, “adaptation” refers to climate change adaptation, which is defined by the United Nations Framework Convention on Climate Change as “adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts.”⁴⁸⁶² The phrase refers to “changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.” Examples of actions that contribute to climate change adaptation include, but are not limited to, investing in infrastructure that is less vulnerable to climate-related disasters, allocating funding to regions that are particularly vulnerable to climate-related disasters, and implementing strategies to address health concerns related to climate change.

The term “finance,” in this context, is to be understood as “money or other liquid resources of a government, business, group, or individual.”⁴⁸⁶³ In this context, “finance” refers to climate finance, which refers to money or other liquid resources allocated to “support critical infrastructure for

⁴⁸⁵⁶ The Intergovernmental Panel on Climate Change, United Nations IPCC (Geneva) n.d. Access Date: 5 December 2021. <https://www.ipcc.ch/>

⁴⁸⁵⁷ Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/accelerate>

⁴⁸⁵⁸ Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/actions>

⁴⁸⁵⁹ Mitigation, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/mitigation>

⁴⁸⁶⁰ Mitigation, United Nations Environment Programme (Nairobi) n.d. Access Date: 5 December 2021. <https://www.unep.org/explore-topics/climate-action/what-we-do/mitigation>

⁴⁸⁶¹ Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/adaptation>

⁴⁸⁶² What do adaptation to climate change and climate resilience mean?, United Nations Framework Convention on Climate Change (Bonn) n.d. Access Date: 5 December 2021. <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/what-do-adaptation-to-climate-change-and-climate-resilience-mean>

⁴⁸⁶³ Finance, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/finance>

adaptation, resilience and the new renewable energy-based economy.”⁴⁸⁶⁴ In this context, relevant actions towards climate finance include government funding or government incentivized funding by non-state actors. Therefore, examples of actions that contribute to climate finance include, but are not limited to, allocating funding towards renewable energy, allocating funding to support climate action in developing countries, or creating incentives for corporations to allocate funding to climate action.

To “acknowledge” is to be understood as the act of “recognizing [something] as genuine or valid.”⁴⁸⁶⁵

The term “relevance” refers to “the degree to which something is related or useful to what is happening or being talked about.”⁴⁸⁶⁶ In this context, the commitment is discussing the degree to which achieving global net zero emissions or carbon neutrality by mid-century is useful for addressing climate change. The term “key” is to be understood as “extremely or crucially important.”⁴⁸⁶⁷ Therefore, the phrase “key relevance” in this context, indicates that achieving global net zero emissions or carbon neutrality by mid-century is crucially important and useful for addressing climate change.

To “achieve” is to be understood as “reach[ing] a goal.”⁴⁸⁶⁸ In this context, the goal to be reached is global net zero greenhouse gas emissions or carbon neutrality by or around mid-century as outlined by the Paris Agreement.

The phrase “global net zero greenhouse gas emissions or carbon neutrality” refers to “balancing a measured amount of carbon released with an equivalent amount sequestered or offset.”⁴⁸⁶⁹ Meaning, the overall levels of emissions in the atmosphere are not increasing.

The phrase “mid-century” is to be understood as the year 2050, as that is the year that falls in the middle of the 21st century. This phrase indicates the timeline of the goal of achieving global net zero greenhouse gas emissions or carbon neutrality. In this context, it is evident the phrase “mid-century” refers to a specific year, rather than a larger period of time, as the United Nations has stated that “net zero by 2050 is the goal.”⁴⁸⁷⁰

To “strengthen” is to be understood as “to make stronger.”⁴⁸⁷¹

The phrase “global efforts” can be broken down into the two words “global” and “efforts.” The term “global” refers to “involving the entire world” and the term “efforts” refers to “the total work done to achieve a particular end.”^{4872,4873} Therefore, the phrase “global efforts” refers to the total work done to

⁴⁸⁶⁴ Key Findings, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.un.org/en/climatechange/science/key-findings>

⁴⁸⁶⁵ Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/acknowledge>

⁴⁸⁶⁶ Cambridge Dictionary (Cambridge) n.d. Access Date: 7 December 2021.

⁴⁸⁶⁷ Merriam-Webster Dictionary (Springfield) n.d. Access Date: 7 December 2021. <https://www.merriam-webster.com/dictionary/key>

⁴⁸⁶⁸ Achieve, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/achieve>

⁴⁸⁶⁹ UN Environment “walks the talk” on carbon neutrality, United Nations Environment Programme (Nairobi) 31 January 2019. Access Date: 5 December 2021. <https://www.unep.org/news-and-stories/story/un-environment-walks-talk-carbon-neutrality>

⁴⁸⁷⁰ The race to zero emissions and why the world depends on it, United Nations (New York) 2 December 2020. Access Date: 5 December 2021. <https://news.un.org/en/story/2020/12/1078612>

⁴⁸⁷¹ Strengthen, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/strengthen>

⁴⁸⁷² Global, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/global>

⁴⁸⁷³ Efforts, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/efforts>

achieve a particular end involving the entire world. In this context, the “particular end” is the goal of the Paris Agreement. Therefore, “global efforts” can refer to any collective action taken by a G20 member that contributes to the goals outlined in the Paris Agreement. As the phrase “global efforts” indicates a requirement for collective action, G20 members must include at least one action that involves another state. Examples of such actions include, but are not limited to, granting climate funding to developing countries, engaging in joint climate initiatives, working with another state to address the impact of climate change on a shared environmental resource, such as an ocean. An example of an action that would not contribute to compliance of this requirement is engaging in conversations surrounding climate change with the leader of another state; however, any tangible and actionable outcomes of the conversation would be relevant.

The term “required” describes something that is “stipulated as necessary to be done.”⁴⁸⁷⁴ In this context, the adjective “required” describes the global efforts that are necessary to be done to achieve the goals outlined in the Paris Agreement.

The Paris Agreement is a “legally binding international treaty on climate change [which was] adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016.”⁴⁸⁷⁵ Thus, the “goals of the Paris Agreement” refers to the goals outlined in this treaty. The primary goal of the Paris Agreement is “to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.” There are two other principle goals of the Paris Agreement which are the following: “increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.”

In this commitment, both instruments and outcomes are outlined which indicates a more ambitious commitment.⁴⁸⁷⁶ Nevertheless, both are broad, particularly the outcomes which cannot be achieved, nor are they meant to be achieved, within this G20 cycle. Therefore, the instruments outlined in the commitment are intended to contribute to achieving the outcomes rather than achieve them. The first set of instruments identified in the commitment are [climate] actions across mitigation, adaptation, and finance. The corresponding outcomes are achieving global net zero greenhouse gas emissions or carbon neutrality by mid-century. The second set of instruments identified in the commitment are stronger global efforts, and the corresponding outcomes are the goals of the Paris Agreement.

This commitment can be characterized as a multiyear “other” commitment, as they declare they are going to accomplish a non-monetary goal over a set number of years. In this case, the goal in question is achieving net zero emissions or carbon neutrality and the set number of years is now until the year 2050. While climate finance is mentioned in this commitment, it nonetheless does not constitute a multiyear financial commitment because there is no specific monetary goal set in the commitment. As well, the mention of climate finance is an instrument to meet the outcome, and thus is not the goal itself.

Addressing the breadth of this commitment, to achieve full compliance, G20 members must take actions on all three identified categories of climate action: mitigation, adaptation, and finance. Further, there is the requirement for some international action due to the mention of global efforts. To achieve partial compliance, the G20 member must take action in one or two of the aforementioned categories,

⁴⁸⁷⁴ Required, Merriam-Webster Dictionary (Springfield) n.d. Access Date: 4 December 2021. <https://www.merriam-webster.com/dictionary/required>

⁴⁸⁷⁵ The Paris Agreement, United Nations Framework Convention on Climate Change (Bonn) n.d. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

⁴⁸⁷⁶ Compliance Coding Manual for International Institutional Commitments, G7, G20, and BRICS Research Groups (Toronto) 12 November 2020. Access Date: 5 December 2021. https://docs.google.com/document/d/17lvFnX1j-koOirFJFz-1tPGnDyX09VxzpreQgF_cQIQ/edit

but without an action constituting a global, collective action. For instances of non-compliance, the G20 member has failed to address any of the three categories and has not taken any global, collective actions.

Additionally, addressing the depth of this commitment, relevant items must be actionable. Meaning, complaint actions require something to come into effect and discussions on climate change do not suffice. This is indicated by the use of the word “action” in the commitment. Relevant actions can also include the continuation of past commitments, rather than exclusively focusing on new initiatives. This is evident through the use of the word “accelerate.”

Scoring Guidelines

-1	G20 member has taken strong action in none of the three identified categories of climate action: mitigation, adaptation, and finance, without including at least one action constituting international, collective action.
0	G20 member has taken strong action in one or two of the three identified categories of climate action: mitigation, adaptation, and finance, without including at least one action constituting international, collective action.
+1	G20 member has taken strong action in all three identified categories of climate action: mitigation, adaptation, and finance, with at least one action constituting international, collective action involving at least other state.

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Lead Analyst: Surabhi Pradhan*

Argentina: +1

Argentina has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the Ministry of Foreign Affairs, International Trade and Worship announced that Argentina joined the Global Methane Pledge.⁴⁸⁷⁷ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁴⁸⁷⁸ Due to the fact methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the Ministry of Foreign Affairs, International Trade and Worship announced that Argentina joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁴⁸⁷⁹ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

⁴⁸⁷⁷ Argentina signed two agreements to reverse deforestation and reduce methane emission, Energía Online (Buenos Aires) 2 November 2021. Translation provided by Analyst. Access Date: 12 February 2022. <https://www.energiaonline.com.ar/cop26-argentina-firmo-dos-acuerdos-para-revertir-la-deforestacion-y-reducir-las-emisiones-de-metano/>

⁴⁸⁷⁸ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁴⁸⁷⁹ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

On 9 November 2021, the Ministry of Foreign Affairs, International Trade and Worship announced that Argentina joined a multilateral commitment of 50 countries to develop climate-resilient and low-carbon healthcare systems.⁴⁸⁸⁰ The plan seeks to improve the readiness of health systems in the face of the threats posed by climate change while also reducing the dependence of said systems on fossil fuels.

On 9 December 2021, the Minister of Environment and Sustainable Development Juan Cabandié; the Minister of Science, Technology and Innovation Daniel Filmus; the president of the National Parks Administration Lautaro Erratchú; and the Minister of the Interior Wado de Pedro, signed an agreement which outlines the creation of six regional research centres in protected areas across Argentina.⁴⁸⁸¹ These research centres will support existing National Parks in their conservation efforts, as well as with providing environmental education and development activities. The overall goal is to have greater investments in science and technology, and to prioritize the health of future generations.

On 15 December 2021, Minister Cabandié and Governor of San Luis, Alberto Rodríguez Saá announced the signing of an agreement that commits to an investment of ARS67 million by the national Ministry of the Environment to set up the headquarters of the Central National Brigade.⁴⁸⁸² The objective of this agreement is to improve fire management efforts in the region by centralizing the base of operations for forest fires. The new headquarters will be located in San Luis, and will thus better address fires in the region as well.

On 10 February 2022, the Ministry of the Environment and Sustainable Development announced that the National Fire Management Service would receive an additional ARS4 billion to strengthen the fight against forest fires.⁴⁸⁸³ This increased funding comes from Argentina's National Executive Power and is part of the updated budget for 2022.

On 15 February 2022, Minister Cabandié and Chief of the Cabinet of Ministers Juan Manzur announced the creation of the Federal Campo San Juan Park, specifically protecting an area of more than 5,000 hectares.⁴⁸⁸⁴ This is the first park created in a program designed to increase total protected land and maritime areas to 17 million hectares.

On March 14 2022, Minister Cabandié and the mayor of Morón Lucas Ghi signed two agreements concerning the enhancement of a sustainable public space and the equipment of urban solid waste

⁴⁸⁸⁰Countries commit to develop climate smart health care at COP26 UN Climate Conference, World Health Organization (Glasgow) 9 November 2021. Access Date: 12 February 2021. <https://www.who.int/news/item/09-11-2021-countries-commit-to-develop-climate-smart-health-care-at-cop26-un-climate-conference>

⁴⁸⁸¹Cabandié and Filmus signed an agreement for the creation of regional research centers in protected areas, Argentine Ministry of the Environment and Sustainable Development (Buenos Aires) 9 December 2021. Translation provided by Google Chrome. Access Date: 21 February 2022. <https://www.argentina.gob.ar/noticias/cabandie-y-filmus-firmaron-un-convenio-para-la-creacion-de-centros-regionales-de>

⁴⁸⁸²Cabandié and Rodríguez Saá signed the agreement to install the new headquarters of the Central National Brigade, Argentine Ministry of the Environment and Sustainable Development (Buenos Aires) 15 December 2021. Translation provided by Google Chrome. Access Date: 21 February 2022. <https://www.argentina.gob.ar/noticias/cabandie-y-rodriguez-saa-firmaron-el-convenio-para-instalar-la-nueva-sede-de-la-brigada>

⁴⁸⁸³The Ministry of the Environment received a budget increase for fire management of \$4,000 million, Argentine Ministry of the Environment and Sustainable Development (Buenos Aires) 10 February 2022. Translation provided by Google Chrome. Access Date: 21 February 2022. <https://www.argentina.gob.ar/noticias/el-ministerio-de-ambiente-recibio-un-aumento-presupuestario-para-el-manejo-del-fuego-por>

⁴⁸⁸⁴The creation of the Campo San Juan Federal Park was announced in Misiones, Argentine Ministry of the Environment and Sustainable Development (Buenos Aires) 15 February 2022. Translation provided by: Analyst. Access Date: 4 May 2022. <https://www.argentina.gob.ar/noticias/se-anuncio-la-creacion-del-parque-federal-campo-san-juan-en-misiones>

management.⁴⁸⁸⁵ Included in these agreements is a commitment to invest ARS34.3 million into the project.

On 21 March 2022, the Ministry of the Environment and Sustainable Development, through its Secretary of Climate Change, announced the creation of an ecopark in the municipality of Federación, Entre Ríos.⁴⁸⁸⁶ This project will receive an investment of ARS28 million to build the ecopark as part of the Common House initiative, which funds projects that improve and preserve the environment and the local standard of living.

On 5 April 2022, the Ministry of the Environment and Sustainable Development announced the creation of the National Program of Non-Timber Forest Products, an instrument meant to manage and plan at a national level the sustainable usage of renewable natural resources found in forests and other areas.⁴⁸⁸⁷ The initiative is aimed at promoting the usage of the country's biodiversity in a sustainable manner.

On 27 May 2022, Minister Cabandié announced a ten-fold increase in the forest protection budget for the Great North region of the country, which accounts for 53 per cent of the nation's forests.⁴⁸⁸⁸ This initiative is aimed at both improving preservation efforts while also providing the financing to provide the means to achieve said goal.

On 22 June 2022, the budget of the Ministry of the Environment and Sustainable Development's national parks initiative was augmented by ARP6.7 billion, an increase of 142 per cent.⁴⁸⁸⁹ Furthermore, new areas designated for protection were announced. Collectively, this will help the ministry better fulfill its duties in preserving the environment and promoting sustainable economic development.

On 6 July 2022, the Ministry of the Environment and Sustainable Development signed an agreement with the province of Misiones to improve coordination on fire-fighting efforts.⁴⁸⁹⁰ The goal of this initiative is to help the local authorities better adapt to the coming adverse climate events that may affect the province of Misiones.

On 1 August 2022, the Ministry of the Environment and Sustainable Development signed agreements with the province of Neuquen to improve coordination on fire-fighting efforts and strengthening

⁴⁸⁸⁵ Cabandié signed agreements with Ghi for a sustainable public space and waste management in Morón, Argentine Ministry of the Environment and Sustainable Development (Buenos Aires) 14 March 2022. Translation provided by: Google Chrome. Access Date: 22 June, 2022. <https://www.argentina.gob.ar/noticias/cabandie-firmo-convenios-con-ghi-para-un-espacio-publico-sostenible-y-la-gestion-de>

⁴⁸⁸⁶ Environment announced the creation of an ecopark in Federación, Entre Ríos, Argentine Ministry of the Environment and Sustainable Development (Buenos Aires) 21 March 2022. Translation provided by: Analyst. Access Date: 4 May 2022. <https://www.argentina.gob.ar/noticias/ambiente-anuncio-la-creacion-de-un-ecoparque-en-federacion-entre-rios>

⁴⁸⁸⁷ Environment Created a National Program of Non-Timber Forest Products, Argentine Ministry of the Environment and Sustainable Development (Buenos Aires) 5 April 2022. Translation provided by: Analyst. Access Date: 4 May 2022. <https://www.argentina.gob.ar/noticias/ambiente-creo-un-programa-nacional-de-productos-forestales-no-madereros>

⁴⁸⁸⁸ Cabandié announced an increase in funding for forests at the 10th Assembly of the Governors of the Great North (Buenos Aires) 27 May 2022. Translation provided by: Analyst. Access Date: 5 June 2022. <https://www.argentina.gob.ar/noticias/cabandie-anuncio-un-aumento-de-inversiones-para-bosques-nativos-en-la-10a-asamblea-de>

⁴⁸⁸⁹ Larger budget for national parks, new protected areas, Ministry of Environment and Sustainable Development (Buenos Aires) 22 June 2022. Translation provided by: Analyst. Access Date: 23 September 2022 <https://www.argentina.gob.ar/noticias/parques-nacionales-mas-presupuesto-y-nuevas-areas-protegidas-0>

⁴⁸⁹⁰ Cabandie signed a collaborative agreement with the province of Misiones to strengthen coordination on fire-fighting efforts, Ministry of Environment and Sustainable Development (Buenos Aires) 6 July 2022. Translation provided by: Analyst. Access Date: 23 September 2022 <https://www.argentina.gob.ar/noticias/cabandie-firmo-con-la-provincia-de-misiones-un-convenio-para-fortalecer-tareas-de-manejo>

implementation of the Law of the Forests.⁴⁸⁹¹ Annual transfers of ARP175M will go towards this initiative that seeks to improve climate adaptation and preservation of forests.

On 19 August 2022, the Ministers of Economy and the Environment and Sustainable Development signed an agreement with the Development Bank of Latin America for USD75 million that will go to the strengthening of ecosystems and promotion of the circular economy.⁴⁸⁹² This aims to help finance the various initiatives that are part of the Argentine government's climate agenda to adhere to the Paris Agreement.

On 6 September 2022, Minister Cabandie met with the governor of Salta to sign an accord that strengthens prevention and treatment of forest fires in the province.⁴⁸⁹³ In doing so, this promotes better adaptation to the changing climate in Salta.

On 6 September 2022, Minister Cabandie and the Minister of Science, Technology, and Innovation, Daniel Filmus, announced the creation of regional research centres to conduct studies in national parks.⁴⁸⁹⁴ Through studies and other research on parks, this initiative will lead to better management of protected areas.

On 12 September 2022, Minister Cabandie and the governor of Morales announced investments in combatting forest fires that amounted to ARP87 million.⁴⁸⁹⁵ Through this, the region of Morales will be better equipped to contain fires within its jurisdiction.

Argentina has taken strong actions to address climate mitigation, adaptation, and finance, while also taking actions constituting international collective actions. The decision to sign the Global Methane Pledge acts as an action towards climate mitigation and constitutes an international collective action, as 102 other countries are signatories. Committing to the development of a climate-resistant, low-carbon healthcare system acts as an action towards climate adaptation. Finally, the increased budget of the National Fire Management Service supports the goal of climate finance, as forest fires are a common consequence of climate change.

Thus, Argentina receives a score of +1.

Analyst: Mateo Larrazabal

⁴⁸⁹¹ Minister Cabandie and Governor Gutierrez secure the climate agenda in Nequina, Ministry of Environment and Sustainable Development (Buenos Aires) 1 August 2022. Translation provided by: Analyst. Access Date: 23 September 2022 <https://www.argentina.gob.ar/noticias/el-ministro-cabandie-y-el-gobernador-omar-gutierrez-afianzan-la-agenda-ambiental-nequina>

⁴⁸⁹² Cabandie and Massa promote international financing of USD \$75M, Ministry of Environment and Sustainable Development (Buenos Aires) 19 August 2022. Translation provided by: Analyst. Access Date: 23 September 2022 <https://www.argentina.gob.ar/noticias/cabandie-y-massa-promueven-financiamiento-internacional-por-usd-75-millones>

⁴⁸⁹³ Cabandie and Saenz sign an agreement to strengthen the prevention and combat of forest fires in Salta, Ministry of Environment and Sustainable Development (Buenos Aires) 6 September 2022. Translation provided by: Analyst. Access Date: 23 September 2022. <https://www.argentina.gob.ar/noticias/cabandie-y-saenz-firmaron-un-convenio-para-fortalecer-la-prevencion-y-el-combate-de>

⁴⁸⁹⁴ Cabandie and Filmus announce the creation of regional research centres in national parks, Ministry of Environment and Sustainable Development (Buenos Aires) 6 September 2022. Translation provided by: Analyst. Access Date: 23 September 2022 <https://www.argentina.gob.ar/noticias/cabandie-y-filmus-anunciaron-la-creacion-de-centros-regionales-de-investigacion-en-los>

⁴⁸⁹⁵ Cabandie and Morales announce in Jujuy \$87M worth of investments to combat forest fires, Ministry of Environment and Sustainable Development (Buenos Aires) 12 September 2022. Translation provided by: Analyst. Access Date: 23 September 2022 <https://www.argentina.gob.ar/noticias/cabandie-y-morales-anunciaron-en-jujuy-inversiones-para-el-combate-de-los-incendios>

Australia: +1

Australia has fully complied with its commitment to accelerate its actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Australia joined 141 other countries in committing to the Declaration on Forests and Land Use at the 26th United Nations Climate Change Conference.⁴⁸⁹⁶ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 9 November 2021, Prime Minister Scott Morrison and Minister for Industry, Energy and Emissions Reduction Angus Taylor announced the new national Future Fuels and Vehicles Strategy, which aims to reduce emissions in Australia's transportation sector.⁴⁸⁹⁷ Included in this strategy is a AUD250 million expansion of the Future Fuels Fund, which will be invested into four key areas: public electric vehicle charging and hydrogen refueling infrastructure; heavy and long-distance vehicle technologies; commercial fleets; and household smart charging.

On 10 November 2021, Prime Minister Morrison announced a new AUD1 billion Low Emissions Technology Commercialisation Fund, which will combine AUD500 million of new capital for the Clean Energy Finance Corporation with AUD500 million from private sector investors.⁴⁸⁹⁸ The purpose of this fund is to support and encourage the development of new low emissions technology, with the broader goal of achieving net zero emissions by the year 2050.

On 13 December 2021, Prime Minister Morrison announced a new deal with Korea to commit to a zero emissions future through strengthening cooperation on low emission technology.⁴⁸⁹⁹ Australia has made an initial pledge of AUD50 million to the partnership, with the goal of collectively investing up to AUD100 million. The two countries plan to collaborate on developing a wide range of new technologies, with a specific focus on clean hydrogen and other derivatives.

On 23 December 2021, the National Indigenous Australians Agency announced an AUD75 million funding agreement with the Torres Strait Regional Authority to invest in supporting the locals in caring for the land and the sea.⁴⁹⁰⁰ This investment would be delivered over the course of seven years and would support actions under the Land and Sea Management Strategy for Torres Strait, a guiding framework for enabling Torres Strait communities to continue to sustainably manage and benefit from

⁴⁸⁹⁶Glasgow Leaders' Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁴⁸⁹⁷ Driving consumer choice & uptake of low-emissions vehicles, Prime Minister of Australia (Canberra) 9 November 2021. Access Date: 21 February 2021. <https://www.pm.gov.au/media/driving-consumer-choice-uptake-low-emissions-vehicles>

⁴⁸⁹⁸ Billion dollar fund to drive low emissions technology investment, Prime Minister of Australia (Canberra) 10 November 2021. Access Date: 21 February 2022. <https://www.pm.gov.au/media/billion-dollar-fund-drive-low-emissions-technology-investment>

⁴⁸⁹⁹ Australia and Republic of Korea sign new deals on clean energy tech and critical minerals, Prime Minister of Australia (Canberra) 13 December 2021. Access Date: 21 February 2022. <https://www.pm.gov.au/media/australia-and-republic-korea-sign-new-deals-clean-energy-tech-and-critical-minerals>

⁴⁹⁰⁰ \$75 million funding boost for Torres Strait Land and Sea Rangers (Canberra) 23 December 2021. Access Date: 21 February 2021. <https://www.indigenous.gov.au/news-and-media/announcements/75-million-funding-boost-torres-strait-land-and-sea-rangers>

their land, sea and cultural resources into the future. The overall purpose of this agreement is to support the people of Torres Strait in protecting and preserving the environment, now and in the future.

On 6 January 2022, Prime Minister Morrison announced a new AUD150 million initiative called the Australian Clean Hydrogen Trade Program, which is aimed at attracting overseas investment into clean hydrogen supply chains originating in Australia.⁴⁹⁰¹ The first round of the program will be concerned with the export of clean hydrogen to Japan, which falls under the Japan-Australia Partnership on Decarbonisation through Technology. The goal of this initiative is to meet Australia's emission targets through collaborating with international partners.

On 28 January 2022, Prime Minister Morrison announced an investment of AUD1 billion to protect the Great Barrier Reef, which will be distributed throughout the next nine years.⁴⁹⁰² This investment will fund the deployment of new climate adaptation technology, major investments in water quality programs, and state of the art on-water management practices to reduce threats from Crown of Thorns Starfish, protect key species and prevent illegal fishing. More specifically, AUD579.9 million will be allocated to improve water quality; AUD252.9 million will be for reef management and conservation; AUD92.7 million will go towards research and the deployment of world leading reef resilience science and adaptation strategies; and AUD74.4 million will be allocated to community-led projects including species protection, habitat restoration, citizen science programs and marine debris.

On 29 January 2022, Prime Minister Morrison announced an AUD50 million investment into protection and recovery efforts for Australia's koalas.⁴⁹⁰³ This investment, which will be allocated throughout the next four years, will support the restoration of the koala's natural habitat, improve understanding of koala populations, support training in koala treatment and care, and strengthen research into koala health outcomes. More specifically, AUD20 million will go towards habitat and health protection projects; AUD10 million will go towards community-led initiatives; AUD10 million will extend the National Koala Monitoring Program; AUD2 million will go towards improving koala health outcomes; and AUD1 million will go towards koala care, treatment and triage.

On 31 January 2022, Department of Agriculture, Water and the Environment Deputy Secretary Andrew Tongue announced a new policy concerned with the management of biofouling and international shipping.⁴⁹⁰⁴ This new policy will require all vessels subject to biosecurity control to provide information relating to biofouling management practices before they arrive in Australia. The purpose of this change in policy is to reduce the risk of marine pests establishing themselves in Australia, which would thus disrupt Australian ecosystems. This policy also has the purpose of bringing Australia in accordance with the International Maritime Organization's 2011 biofouling guidelines.

On 3 February 2022, a new round of funding was provided under the National Soil Carbon Innovation Challenge.⁴⁹⁰⁵ AUD20 million in grants was made available to reduce the cost of soil carbon

⁴⁹⁰¹ Australia Japan clean hydrogen trade partnership, Prime Minister of Australia (Canberra) 6 January 2022. Access Date: 21 February 2022. <https://www.pm.gov.au/media/australia-japan-clean-hydrogen-trade-partnership>

⁴⁹⁰² Billion Dollar Reef investment backs Queensland communities (Canberra) 28 January 2022. Access Date: 21 February 2022. <https://www.pm.gov.au/media/billion-dollar-reef-investment-backs-queensland-communities>

⁴⁹⁰³ Record \$50 million for koalas, Prime Minister of Australia (Canberra) 29 January 2022. Access Date: 21 February 2022. <https://www.pm.gov.au/media/record-50-million-koalas>

⁴⁹⁰⁴ Policy puts the brakes on biofouling, Australian Department of Agriculture, Water and the Environment (Canberra) 31 January 2022. Access Date: 21 February 2022. <https://www.awe.gov.au/about/news/media-releases/policy-puts-brakes-biofouling>

⁴⁹⁰⁵ National Soil Carbon Innovation Challenge offers grants of up to \$20 million to reduce the cost of soil carbon measurement, Department of Climate Change, Energy, the Environment (Canberra) 3 February 2022. Access Date: 20 September 2022. <https://www.dcccew.gov.au/about/news/national-soil-carbon-innovation-challenge-offers-grants-of-up-to-20-million-to-reduce-the-cost-of-soil-carbon-measurement>

measurement.⁴⁹⁰⁶ The funding will improve carbon stocks that can improve farm productivity and crop yields through better nutrient and water retention, and boost resilience against drought and erosion.

On 16 February 2022, Minister Angus Taylor of Australia and the Honourable Minister Raj Kumar Singh signed a Letter of Intent on New and Renewable Energy Technology.⁴⁹⁰⁷ This letter of intent demonstrates the two nations' collaboration on new and renewable energy technology. The collaborative efforts will focus on tangible actions and projects such as manufacturing and the deployment of ultra-low-cost solar and clean hydrogen.

On 17 February 2022, the Methane Emissions Reduction in Livestock program awarded AUD4 million to support low-emissions livestock feed research and development.⁴⁹⁰⁸ Six projects have been chosen to share AUD4 million in grants. The chosen projects will measure emissions reduction and the productivity benefits of new livestock feed supplements.

On 21 February 2022, the Australian Government announced that AUD20 million in funding would be available as part of the next stages of the Methane Emissions Reduction in Livestock program.⁴⁹⁰⁹ The goal of this program is to use technology to reduce emissions from cattle and sheep as livestock is approximately 10 per cent of Australia's emissions.

On 9 March 2022, Australia and India announced that they will fund six collaborative research projects using the AUD5.2 million in grants provided by the Australia-India Strategic Research Fund.⁴⁹¹⁰ Projects will focus on “quantum technologies; groundwater resources management; downstream processing, recycling and tailings reclamation of critical minerals; infection prevention and control; digital health and telemedicine; biomaterials (including bioplastics).” The funding will go towards: “low cost, portable and solar-powered optical sensing technology to monitor groundwater contaminants; research into the structural dynamics of SARS-CoV-2; a versatile protein mimicry platform to deliver bioadhesives for mending soft tissues; advanced recovery of battery materials and rare earth elements from ores and wastes; digital technologies at primary care centres to prevent blindness; [and] quantum-enhanced atomic gravimetry to improve sensing capabilities.”

On 10 March 2022, the Australian Renewable Energy Agency (ARENA) opened applications for German-Australian Hydrogen Innovation and Technology Incubator (HyGATE).⁴⁹¹¹ HyGATE will

⁴⁹⁰⁶ National Soil Carbon Innovation Challenge offers grants of up to \$20 million to reduce the cost of soil carbon measurement, Department of Climate Change, Energy, the Environment (Canberra) 3 February 2022. Access Date: 20 September 2022. <https://www.dcceew.gov.au/about/news/national-soil-carbon-innovation-challenge-offers-grants-of-up-to-20-million-to-reduce-the-cost-of-soil-carbon-measurement>

⁴⁹⁰⁷ Australia-India to collaborate on new and renewable energy technology, Department of Climate Change, Energy, the Environment and Water (Canberra) 16 February 2022. Access Date: 20 September 2022. <https://www.dcceew.gov.au/about/news/australia-india-to-collaborate-on-new-and-renewable-energy-technology>

⁴⁹⁰⁸ Validating low emissions feed technologies in real-world production environments, Department of the Department of Industry, Science and Resources (Canberra) 17 February 2022. Access Date: 20 September 2022. <https://www.minister.industry.gov.au/ministers/taylor/media-releases/validating-low-emissions-feed-technologies-real-world-production-environments#main-content>

⁴⁹⁰⁹ Funding available for technologies to reduce livestock emissions, the Department of Industry, Sciences, Energy and Resources (Canberra) 21 February 2022. Access Date: 21 June 2022. <https://www.industry.gov.au/news/funding-available-for-technologies-to-reduce-livestock-emissions>

⁴⁹¹⁰ Australia-India collaborative research projects share \$5.2 million in grants, Department of Industry, Science, Energy and Resources (Canberra) 9 March 2022. Access Date: 18 June 2022. <https://www.industry.gov.au/news/australia-india-collaborative-research-projects-share-52-million-in-grants>

⁴⁹¹¹ Funding available for collaborative German-Australian renewable hydrogen projects, Department of Industry, Science, Energy and Resources (Canberra) 10 March 2022. Access Date: 18 June 2022. <https://www.industry.gov.au/news/funding-available-for-collaborative-german-australian-renewable-hydrogen-projects>

provide EUR50 million and AUD50 million to fund initiatives that bring down the cost of hydrogen generation from renewables.

On 24 May 2022, Australia, India, Japan and the United States met in Tokyo to “renew [their] steadfast commitment to a free and open Indo-Pacific that is inclusive and resilient.”⁴⁹¹² At this meeting, they launched the “Quad Climate Change Adaptation and Mitigation Package (Q-CHAMP)” where they will be focusing on the themes of adaptation and mitigation. Alongside Q-CHAMP, the Quad Climate Working Group will work on: “green shipping and ports aiming for a shared green corridor framework building on each Quad country’s input; clean energy cooperation in clean hydrogen and methane emissions from the natural gas sector; strengthening clean energy supply chains, welcoming the contribution of the Sydney Energy Forum; climate information services for developing an engagement strategy with Pacific island countries; and disaster risk reduction, including disaster and climate resilient infrastructure such as the efforts through the Coalition for Disaster Resilient Infrastructure (CDRI). Its coverage includes new cooperation in clean fuel ammonia, CCUS/Carbon Recycling, cooperation and capacity building support to advance high integrity carbon markets under Article 6 of the Paris Agreement, climate-smart agriculture, knowledge sharing on subnational climate actions, and ecosystem-based adaptation.”

On 6 June 2022, Australia released its joint communiqué from its Indonesia-Australia Annual Leaders’ Meeting.⁴⁹¹³ In this communiqué, newly elected Prime Minister Anthony Albanese affirmed “Australia’s new commitment to a AUD200 million climate and infrastructure partnership with Indonesia. The content of the partnership will be developed between officials and launched as soon as mutually agreed.”

On 16 June 2022, Prime Minister Albanese and Minister for Climate Change and Energy Chris Bowen released Australia’s “updated NDC under the Paris Agreement,” to reduce emissions by 43 per cent below 2005 levels by 2030, and reach net zero emissions by 2050.⁴⁹¹⁴ This includes “AU20 billion investment in Australia’s electricity grid to accelerate the decarbonisation of the grid; An additional AU300 million to deliver community batteries and solar banks across Australia; Up to AUD3 billion investment of from the new National Reconstruction Fund to support renewables manufacturing and low emissions technologies; Powering the Regions Fund to support the development of new clean energy industries and the decarbonisation priorities of existing industry; A further AUD100 million to train 10,000 New Energy Apprentices in the jobs of the future; AUD10 million New Energy Skills Program to provide additional training pathways; The introduction of declining emission baselines for Australia’s major emitters, under the existing Safeguard Mechanism; Australia’s first National Electric Vehicle Strategy, to reduce emissions and accelerate the uptake of electric vehicle; Double existing investment in electric vehicle charging and establish hydrogen refuelling infrastructure – to AUD500 million; The application of new standardised and internationally-aligned reporting requirements for climate risks and opportunities for large businesses; A commitment to reduce the emissions of Commonwealth Government agencies to net zero by 2030; Restoring the role of the Climate Change Authority, while keeping decision-making and accountability with Government and introducing new annual Parliamentary reporting by the Minister; [and] bid to host a future Conference of the Parties in Australia with an offer to Pacific partner countries to co-host.” Australia has fully complied with its commitment to accelerate our actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around

⁴⁹¹² Quad Join Leaders’ Statement, Prime Minister of Australia (Canberra) 24 May 2022. Access Date: 17 June 2022. <https://www.pm.gov.au/media/quad-joint-leaders-statement>

⁴⁹¹³ Joint Communiqué: Indonesia-Australia Annual Leaders’ Meeting, Prime Minister of Australia (Canberra) 6 June 2022. Access Date: 17 June 2022. <https://www.pm.gov.au/media/joint-communique-indonesia-australia-annual-leaders-meeting>

⁴⁹¹⁴ Stronger Action on Climate Change, Prime Minister of Australia (Canberra) 16 June 2022. Access Date: 17 June 2022. <https://www.pm.gov.au/media/stronger-action-climate-change>

mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 28 July 2022, the Australian Government introduced the Climate Change Bill 2022.⁴⁹¹⁵ The Bill legislates the commitment the country has made towards reducing greenhouse gas emissions by 43 per cent below 2005 levels by 2030, and net zero by 2050. The Bill calls to action different agencies within the government, and will require the Minister to prepare and table annual statements and future targets. Targets will also automatically increase every five years in order to stay within the line of the Paris Agreement.

On 25 October 2022, the Australian Government released its 2022-2023 Budget.⁴⁹¹⁶ Its key goals include “supporting the transformation of Australia’s economy to net-zero emissions by 2050; transforming energy to net zero emissions while maintaining security, reliability and affordability; [and] supporting actions to promote adaptation and strengthen resilience in Australia’s economy, society and environment.” The spending in the budget includes, but is not limited to, “AUD275.4 million over 6 years from 2022–23 to establish the Driving the Nation Fund to invest in cheaper, cleaner transport, bringing total investment for electric and hydrogen vehicle infrastructure to over AUD500 million; AUD47.1 million for restoring the Climate Change Authority to provide independent climate change advice and delivering new annual climate change statements to Parliament, supporting integrity and greater transparency in emissions reduction; AUD45.8 million over 6 years from 2022–23 to restore Australia's reputation and increase international engagement on climate change and energy transformation issues; AUD15.9 million for engaging First Nations Peoples on Climate Change; AUD9.3 million to set up the Commonwealth Climate Risk and Opportunity Management Program and AUD20.3 million to support carbon farming.”⁴⁹¹⁷

Australia has fully complied with its commitment to accelerate its actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. Australia has taken strong actions to address climate mitigation, adaptation, and finance, while also taking actions constituting international collective actions. The new national Future Fuels and Vehicles Strategy serves as an example of climate mitigation, as the goal is to reduce emissions and thus mitigate the effects of climate change. The AUD50 million investment into the protection of koalas contributes to climate adaptation and the AUD1 billion investment to protect the Great Barrier Reef contributes to climate finance. Finally, the joint efforts with the Republic of Korea to collaborate on low emissions technology serves as an example of an international collective action.

Thus, Australia receives a score of +1.

Analysts: Sylvia Mursbed, Surabhi Pradhan and Jenna Im

Brazil: +1

Brazil has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions

⁴⁹¹⁵ Climate Change Bill 2022, Department of Climate Change, Energy, the Environment and Water (Canberra) 28 July 2022. Access Date: 20 September 2022. <https://www.dcceew.gov.au/about/news/climate-change-bill-2022>

⁴⁹¹⁶ Climate Change, Energy, the Environment and Water Portfolio, Department of Climate Change, Energy, the Environment and Water (Canberra) 25 October 2022. Access Date: 6 November 2022. <https://www.dcceew.gov.au/sites/default/files/documents/dcceew-2022-23-pbs.PDF>

⁴⁹¹⁷ Budget 2022-2023, Department of Climate Change, Energy, the Environment and Water (Canberra) 25 October 2022. Access Date: 6 November 2022. <https://www.dcceew.gov.au/sites/default/files/documents/oct-budget-2022-23-climate-change-fs.pdf>

or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Brazil joined the Global Methane Pledge.⁴⁹¹⁸ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁴⁹¹⁹ Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that Brazil joined 141 other countries in committing to the Declaration on Forests and Land Use at the COP26.⁴⁹²⁰ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 2 November 2021, the Minister of the Environment Joaquim Leite, in participation of COP26 negotiations, announced that the Brazilian government increased their target of reducing the emission of greenhouse gases from 43 per cent to 50 per cent by 2030.⁴⁹²¹ He also confirmed the goal of zero-emission would be achieved between 2050 to 2060 and illegal deforestation will be terminated in 2028.

On 12 January 2022, Brazil published Presidential Decree No. 10936 to announce the revisions on the National Solid Waste Policy.⁴⁹²² The Decree announced the creation of the National Reverse Logistics Program which extends reuse and disposal efforts for commercial goods. This system would be effective in reducing the emission of greenhouse gases.

On 10 February 2022, Minister of the Environment Joaquim Leite, attended an interview with a Brazil Communication Company.⁴⁹²³ He stated that the Federal Government would initiate the Methane Zero program within a month. The program would allow public banks to fund the industries to replace methane gas with biofuel. This is a measure to achieve the target of reducing methane emissions by 30 per cent before 2030 which was set during COP26.

On 21 March 2022, the Federal Government attended a conference with the Ministries of Mines and Energy and the Environment to announce the launch of a new series of measures to enhance the use

⁴⁹¹⁸ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁴⁹¹⁹ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁴⁹²⁰ Glasgow Leaders' Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁴⁹²¹ Brazil starts negotiations with good prospects, Ministry of the Environment (Brasilia) 2 November 2021. Translation provided by Google Translate. Access Date: 15 December 2021. <https://www.gov.br/mma/pt-br/noticias/brasil-inicia-agenda-de-negociacoes-com-boas-perspectivas>

⁴⁹²² Federal Government improves National Solid Waste Policy and creates National Reverse Logistics Program, Ministry of the Environment (Brasilia) 13 January 2022. Translation provided by Google Translate. Access Date: 5 February 2022. <https://www.gov.br/mma/pt-br/noticias/governo-federal-aperfeicoa-politica-nacional-de-residuos-solidos-e-cria-programa-nacional-de-logistica-reversa>

⁴⁹²³ Minister Joaquim Leite announces program to transform methane into biofuel, Ministry of the Environment (Brasilia) 10 February 2022. Translation provided by Google Translate. Access Date: 10 February 2022. <https://www.gov.br/mma/pt-br/noticias/ministro-joaquim-leite-anuncia-programa-para-transformar-metano-em-biocombustivel>

of biomethane.⁴⁹²⁴ President Jair Bolsonaro signed a proclamation along with Ministers Bento Albuquerque and Joaquim Leite to implement strategies to incentivize the use of Biogas and Biomethane. The goal of the measures is to replace the use of fossil fuels with renewable energy sources in the future. The Initiatives include actions such as increasing the number of biodigesters and sites for purifying biogas, funding scientific research on biofuel and fostering international cooperation toward a green economy.

On 10 May 2022, the Ministry of Science, Technology, and Innovations attended the 14th Meeting of the Executive Committee of the Brazil-Sweden Working Group on Innovative High Technology.⁴⁹²⁵ They announced that Brazil will cooperate with Sweden on developing the technology for bioproducts and sustainable forest management. The development of bioproduct will help to reduce the emission of ethanol from the sugar cane production in Brazil. The planning of the project timeline will be started after the Sweden-Brazil Innovation Week.

On 19 May 2022, the Federal Government published Decree No. 11075.⁴⁹²⁶ This provides a blueprint for the action to mitigate climate change and reduce Greenhouse gas emissions. The plan mainly focuses on regulating the carbon market with measures such as exporting credits to countries and companies. The revenue generated from the regulated carbon market would be spent on the projects that encourage the development of the green economy.

On 20 May 2022, the Ministry of the Environment signed a decree with five private sectors to agree on taking actions to reduce carbon emissions.⁴⁹²⁷ The signing of the protocol allows the government to cooperate with the energy industry in mitigating climate change. The collaborative measures include allocating methane credits and recording the carbon footprint of any economic activities.

On 29 August 2022, the Ministry of Mines and Energy announced the establishment of the National Hydrogen Program.⁴⁹²⁸ The program aims to expand the hydrogen market with green technological development to decarbonize energy use. This effort will help address the technological and economic issues of transitioning to a decarbonized economy.

Brazil has fully complied with its commitment to take strong action in all three identified categories of climate action: mitigation, adaptation, and finance, and at least 1 of action constituting international, collective action involving other states. Brazil addressed climate mitigation by increasing the target range of reducing greenhouse gasses emission. It addressed adaptation by implementing a new waste management policy and initiatives to regulate the carbon market. It addressed climate finance by funding scientific research on biofuel. Lastly, it took collective action by joining the global methane

⁴⁹²⁴ Federal Government launches measures to encourage the production and sustainable use of biomethane, Ministry of the Environment (Brasilia) 21 March 2022. Translation provided by Google Translate. Access Date: 5 May 2022. <https://www.gov.br/mma/pt-br/noticias/governo-federal-lanca-medidas-de-incentivo-a-producao-e-ao-uso-sustentavel-do-biometano>

⁴⁹²⁵ Brazil and Sweden will propose joint projects for bioproducts and sustainable forest management, Ministry of the Science, Technology and Innovations (Brasilia) 10 May 2022. Translation provided by Google Translate. Access Date: 11 May 2022. <https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2022/05/brasil-e-suecia-vaopropor-projetos-conjuntos-para-bioproductos-e-manejo-florestal-sustentavel>

⁴⁹²⁶ Federal Government issues decree that creates a regulated Brazilian carbon market, Ministry of the Environment (Brasilia) 19 May 2022. Translation provided by Google Translate. Access Date: 28 June 2022. <https://www.gov.br/mma/pt-br/assuntos/noticias/governo-federal-edita-decreto-que-cria-mercado-regulado-brasileiro-de-carbono>

⁴⁹²⁷ MMA signs agreement with five sectors to reduce carbon emissions, Ministry of the Environment (Brasilia) 19 May 2022. Translation provided by Google Translate. Access Date: 28 June 2022. <https://www.gov.br/mma/pt-br/assuntos/noticias/mma-assina-acordo-com-cinco-setores-para-reduzir-emissao-de-carbono>

⁴⁹²⁸ Brazil publishes National Hydrogen Program, Government of Brail (Brasilia) 29 August 2022. Translation provided by Google Translate. Access Date: 20 September 2022. <https://www.gov.br/en/government-of-brazil/latest-news/2022/brazil-publishes-national-hydrogen-program>

pledge and cooperating with the Sweden government on developing bioproducts to decrease the emission of ethanol.

Thus, Brazil receives a score of +1.

Analyst: Wesley Cheung

Canada: +1

Canada has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 1 November 2021, Prime Minister Justin Trudeau, announced investments of up to CAD1 billion for the Climate Investment Funds Accelerated Coal Transition Investment Program to help developing countries transition away from coal-powered electricity, and CAD25 million to the Energy Sector Management Assistance Program, in partnership with the World Bank, to develop green energy alternatives in low-income countries at the 26th United Nations Climate Change Conference (COP26) in Glasgow.⁴⁹²⁹ Prime Minister Trudeau also pledged that Canada will be the first major oil-producing country to reach net zero in the oil sector by 2050.

On 2 November 2021, the United Nations announced that Canada joined the Global Methane Pledge.⁴⁹³⁰ The Global Methane Pledge, signed at COP26, is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁴⁹³¹ Because methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that Canada joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁴⁹³² The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 2 November 2021, Prime Minister Trudeau concluded his attendance at the 26th United Nations Climate Change Summit by announcing the implementation of Canada’s Climate Action Incentive, which financially incentivizes businesses and individuals to transition to a green economy.⁴⁹³³ He also pledged additional investments up to CAD57.5 million to the poorest developing countries to increase preparedness for climate events.

⁴⁹²⁹ Prime Minister Trudeau Announces Enhanced and Ambitious Climate Action to Cut Pollution at the COP26 Summit, Prime Minister of Canada (Glasgow) 1 November 2021. Access Date: 7 February 2022. <https://pm.gc.ca/en/news/news-releases/2021/11/01/prime-minister-trudeau-announces-enhanced-and-ambitious-climate>

⁴⁹³⁰ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁴⁹³¹ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁴⁹³² Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁴⁹³³ Prime Minister Trudeau Concludes Productive United Nations Climate Summit, Prime Minister of Canada (Glasgow) 2 November 2021. Access Date: 7 February 2022. <https://pm.gc.ca/en/news/news-releases/2021/11/02/prime-minister-trudeau-concludes-productive-united-nations-climate>

On 4 November 2021, Canada joined 24 countries in pledging to decrease subsidies to oil and gas companies that have overseas operations and redirecting the funds to clean energy.⁴⁹³⁴ Canada has also announced ending funding to overseas coal plants in addition to oil and gas.

On 5 November 2021, Minister of Natural Resources Jonathan Wilkinson announced an investment of CAD500,000 in collaboration with the International Renewable Energy Agency to support remote communities in the transition to clean energy.⁴⁹³⁵ The federal government will work with Indigenous leaders and the Commission for Environmental Cooperation as part of the Canada-United States-Mexico agreement to deliver models for other countries with similar challenges.

On 9 November 2021, the Ministry of Environment and Climate Change announced an investment of CAD10 million over five years to the Climate and Clean Air Coalition.⁴⁹³⁶ The investment will be used to fund the necessary actions as listed by the mandate and to support the 2030 Strategy for sustainable development, as well as the Global Methane Pledge to decrease emissions.

On 17 December 2021, Minister Wilkinson joined Minister Guilbeault to announce two new resources aimed at helping the Atlantic provinces respond to climate change.⁴⁹³⁷ The project recognizes the unique circumstances faced by the Atlantic provinces on climate-related disasters and joined forces with them to launch CLIMAtlantic, providing CAD1.65 million over three years to support the mitigation and adaptation in those provinces, as well as providing education and resources to residents.

On 28 January 2022, Canada joined the Sustainable Productivity Growth for Food Security and Resource Conservation Coalition along with 15 countries and organizations.⁴⁹³⁸ The Coalition works in collaboration with its members to accelerate the transition into a more sustainable agricultural process.

On 8 February 2022, Minister Wilkinson announced an investment totaling CAD450,000 to two Canadian organizations and their zero-emission vehicle projects, providing the education, tools, and information to support Canadians in their transition to electric vehicles.⁴⁹³⁹ The funding is part of Natural Resources Canada's Zero-Emission Vehicle Awareness Initiative.

On 12 February 2022, Prime Minister Trudeau attended the One Ocean Summit hosted in France to announce Canada's membership in several new global initiatives on waste reduction and ocean

⁴⁹³⁴ Canada to Stop Financing Fossil Fuel Projects Abroad by End of 2022, CBC (Calgary) 4 November 2021. Access Date: 12 February 2022. <https://www.cbc.ca/news/business/bakx-cop26-fossil-fuel-subsidies-1.6236636>

⁴⁹³⁵ Canada Invests in a New Global Initiative for Transitioning Remote Communities to Renewable Energy, Natural Resources Canada (Glasgow) 5 November 2021. Access Date: 12 February 2022. <https://www.canada.ca/en/natural-resources-canada/news/2021/11/canada-invests-in-a-new-global-initiative-for-transitioning-remote-communities-to-renewable-energy.html>

⁴⁹³⁶ The Government of Canada Supports Climate and Clean Air Initiatives that will Help Developing Countries Reduce Methane Emissions, Environment and Climate Change Canada (Glasgow) 9 November 2021. Access Date: 12 February 2022. <https://www.canada.ca/en/environment-climate-change/news/2021/11/the-government-of-canada-supports-climate-and-clean-air-initiatives-that-will-help-developing-countries-reduce-methane-emissions.html>

⁴⁹³⁷ Government of Canada Announces New Resources to Strengthen Adaptation and Resilience to Climate Change in the Atlantic Provinces, Natural Resources Canada (Ottawa) 17 December 2021. Access Date: 12 February 2022. <https://www.canada.ca/en/natural-resources-canada/news/2021/12/government-of-canada-announces-new-resources-to-strengthen-adaptation-and-resilience-to-climate-change-in-the-atlantic-provinces.html>

⁴⁹³⁸ Canada Joins International Sustainable Agriculture Production and Food Systems Coalition, Agriculture and Agri-Food Canada (Ottawa) 28 January 2022. Access Date: 12 February 2022. <https://www.canada.ca/en/agriculture-agri-food/news/2022/01/canada-joins-international-sustainable-agriculture-production-and-food-systems-coalition.html>

⁴⁹³⁹ Canada Raising Awareness on Zero-Emission Vehicles in Canada, Natural Resources Canada (Toronto) 8 February 2022. Access Date: 8 February 2022 <https://www.canada.ca/en/natural-resources-canada/news/2022/02/canada-raising-awareness-on-zero-emission-vehicles-in-canada.html>

protection, including the New Plastics Economy Global Commitment.⁴⁹⁴⁰ As one of over 500 businesses and governments, Canada will support a “legally binding global agreement” at the United Nations to reduce plastic pollution, in addition to existing domestic policies on the accountability of major plastic waste producers.

On 22 February 2022, Minister Wilkinson announced a CAD20 million investment to the Steel Reef Infrastructure Corporation in Saskatchewan to reduce methane emissions from oil and gas productions.⁴⁹⁴¹ The funding will be used in new technologies to capture and transfer the methane emissions to prevent them from being released into the atmosphere, and is expected to “permanently avoid” approximately 410,000 tonnes of CO₂ equivalent.

On 24 March 2022, Minister Wilkinson attended and pledged CAD8 million at an International Energy Agency meeting in Paris. The investment will be directed towards the Agency’s Clean Energy Transition Programme to help developing countries with their transitions to renewable energy and aid in their current energy demands.⁴⁹⁴²

On 1 April 2022, Minister of Environment and Climate Change Steven Guilbeault, and Minister Wilkinson, attended the GLOBE Forum 2022 along with other government ministers and announced an investment of CAD12 million through Natural Resources Canada’s Clean Growth and Energy Innovation Programs to support the development of clean technologies.⁴⁹⁴³

On 1 April 2022, Minister of Innovation, Science and Industry Francois-Philippe Champagne announced an investment of over CAD27 million through Sustainable Development Technology Canada to fund the development of green climate technology at the GLOBE Forums. The investment will also support the decarbonization of Canada’s economy.⁴⁹⁴⁴

On 7 April 2022, the government released the 2022 budget, including new investments to aid the development of alternative energy sources and carbon capture. The Government highlights a CAD3 billion investment to build a national network of charging stations and making zero-emission vehicles more affordable for Canadians.⁴⁹⁴⁵ CAD1.7 billion will go to the electric vehicle purchase incentive program, and CAD400 million is planned over the next five years to improve the accessibility of zero-emission vehicles in remote communities.⁴⁹⁴⁶

⁴⁹⁴⁰ Canada Joins International Initiatives to Cut Plastic Pollution and Protect our Oceans, Prime Minister of Canada (Ottawa) 11 February 2022. Access Date: 12 February 2022. <https://pm.gc.ca/en/news/news-releases/2022/02/11/canada-joins-international-initiatives-cut-plastic-pollution-and>

⁴⁹⁴¹ Minister Wilkinson Marks Progress in Reducing Methane Emissions in Saskatchewan, Natural Resources Canada (Ottawa) 22 February 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/02/minister-wilkinson-marks-progress-in-reducing-methane-emissions-in-saskatchewan.html>

⁴⁹⁴² Minister Wilkinson Advances Energy Security and the Global Transition to Net Zero at the International Energy Agency Ministerial, Natural Resources Canada (Paris) 24 March 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/03/minister-wilkinson-advances-energy-security-and-the-global-transition-to-net-zero-at-the-international-energy-agency-ministerial.html>

⁴⁹⁴³ Government of Canada Advances Climate Action at GLOBE Forum, Environment and Climate Change Canada (Vancouver) 1 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/04/government-of-canada-advances-climate-action-at-globe-forum.html>

⁴⁹⁴⁴ Government of Canada Advances Climate Action at GLOBE Forum, Environment and Climate Change Canada (Vancouver) 1 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/04/government-of-canada-advances-climate-action-at-globe-forum.html>

⁴⁹⁴⁵ Government of Canada Releases Budget 2022, Department of Finance Canada (Ottawa) 7 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/department-finance/news/2022/04/government-of-canada-releases-budget-2022.html>

⁴⁹⁴⁶ Making Electric Vehicles More Affordable for Quebeckers and Quebec Businesses, Environment and Climate Change Canada (Saint-Jérôme) 14 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/04/making-electric-vehicles-more-affordable-for-quebeckers-and-quebec-businesses0.html>

On 11 April 2022, Minister Wilkinson, announced a CAD32.2 million investment through the Low Carbon Economy Fund to support the expansion of two Indigenous-owned hydro power plants in British Columbia. The completed project will increase energy production by 8.5 megawatts, and will be transferred to Yukon through a new transmission line, built to deliver clean energy in the northern territories.⁴⁹⁴⁷

On 28 April 2022, Minister Wilkinson announced a CAD5 million investment to the Deep Retrofit Challenge, which makes residential and commercial buildings in Toronto more energy efficient. The project aims to reduce energy consumption and greenhouse gas emissions by 50 per cent. Builders and owners in Toronto will also receive guidance from the federal government on the technical processes of achieving low-emissions standards.⁴⁹⁴⁸

On 29 April 2022, Environment and Climate Change Canada announced a joint investment with the Government of Quebec to support the construction of an energy-efficient cement plant in the province. The federal investment of CAD17.5 million is delivered through the Low Carbon Economy Fund, a national initiative aimed at reducing carbon emissions and implementing green technologies.⁴⁹⁴⁹

On 29 April 2022, Minister of the Federal Economic Development Agency for Southern Ontario Helena Jaczek announced a CAD10 million contribution to Innovation Guelph to support the i.d.e.a. fund, which supports local businesses in the innovation and implementation of green technologies. The fund covers over 240 businesses and will create 840 jobs in the southern Ontario area.⁴⁹⁵⁰

On 5 May 2022, Minister Guilbeault announced a CAD2.8 million investment through the federal Low Carbon Economy Fund to support the Northern First Nations Home Retrofit Program. The Program aims to increase energy affordability to the Northern First Nations by replacing and improving existing structures in individual households. The project is expected to reduce 16,000 tonnes of greenhouse gas.⁴⁹⁵¹

On 24 May 2022, Minister Guilbeault announced an investment of CAD20 million over the next four years to support the west African countries of Ghana, Liberia, The Gambia and Togo with their systems of climate change measurements. The measurement, reporting and verification systems are

⁴⁹⁴⁷ Minister Wilkinson Announces \$32.2 Million to Support the Atlin Hydro Expansion Project, Natural Resources Canada (Whitehorse) 11 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/04/minister-wilkinson-announces-322-million-to-support-the-atlin-hydro-expansion-project.html>

⁴⁹⁴⁸ Canada Invests in Deep Energy Retrofits for Buildings in Toronto, Natural Resources Canada (Toronto) 28 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/04/canada-invests-in-deep-energy-retrofits-for-buildings-in-toronto.html>

⁴⁹⁴⁹ Canada and the Government of Quebec Invest in Climate Action Project by Ciment Quebec, Environment and Climate Change Canada (Saint-Basile) 29 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/04/canada-and-the-government-of-quebec-invest-in-climate-action-project-by-ciment-quebec.html>

⁴⁹⁵⁰ Government of Canada Invests \$10 Million to Support Green Innovators Across Southwestern Ontario, Federal Economic Development Agency for Southern Ontario (Guelph) 29 April 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/economic-development-southern-ontario/news/2022/04/government-of-canada-invests-10-million-to-support-green-innovators-across-southwestern-ontario.html>

⁴⁹⁵¹ \$2.2-billion Expansion of the Low Carbon Economy Fund to Support Projects Like Northern First Nations Home Retrofit Program, Environment and Climate Change Canada (Regina) 5 May 2022. Access Date: 15 May 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/05/22-billion-expansion-of-the-low-carbon-economy-fund-to-support-projects-like-northern-first-nations-home-retrofit-program.html>

designed to help countries to better track climate activities and allow for timely mitigation and adaptation, a process essential in the fight against climate change.⁴⁹⁵²

On 31 May 2022, Minister Guilbeault hosted over 30 leaders in the sixth Ministerial on Climate Action in Sweden. At the conference, Canada confirmed the goal of reaching CAD100 billion in climate finance to developing countries by 2023 and committed to donating at least 20 per cent of the recently doubled climate finance fund to this initiative. MoCA6 aimed to help less developed countries with their climate transition by encouraging financing from major economies.⁴⁹⁵³

On 1 June 2022, the Ministry of Natural Resources and Ministry of Northern Affairs announced an investment of CAD21.6 million to 14 Indigenous communities as part of the Indigenous Off-Diesel Initiative. Each project will receive up to CAD1.6 million to fund their clean energy projects and create new opportunities within the field of renewable energy for Indigenous Canadians.⁴⁹⁵⁴

On 2 June 2022, Minister Guilbeault, joined the Honourable Bhupender Yadav, India's Minister of Environment, Forest and Climate Change, to sign a memorandum of understanding. Both sides committed to mutual collaboration and exchange of information on decarbonization, zero-emissions, pollution and renewable energy.⁴⁹⁵⁵

On 13 July 2022, Prime Minister Trudeau joined federal and provincial ministers in announcing a new partnership with Umicore to increase the production of electric vehicle batteries in Ontario. The partnership includes a CAD1.5 billion investment to construct a net-zero facility, with the goal to produce enough components to supply 1 million electric vehicles annually by the end of the decade.⁴⁹⁵⁶

On 14 July 2022, the Honourable Steven Guilbeault, Minister of Environment and Climate Change Canada, announced an investment of CAD4.5 million dollars over the next four years to the Pacific Alliance Countries of Mexico, Peru, Chile, and Colombia at the North American Commission for Environmental Cooperation's annual meeting.⁴⁹⁵⁷

On 17 August 2022, the Honourable Daniel Vandal, Minister of Northern Affairs, announced a CAD15.5 million investment to the White River First Nation in Yukon. The investment will be used

⁴⁹⁵² Minister Guilbeault Travels to Ghana and Announces \$20 Million to Help Four African Countries with Data Systems Needed to Fight Climate Change, Environment and Climate Change Canada (Accra) 24 May 2022. Access Date: 5 June 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/05/minister-guilbeault-travels-to-ghana-and-announces-20-million-to-help-four-african-countries-with-data-systems-needed-to-fight-climate-change.html>

⁴⁹⁵³ Canada Hosts Over Thirty Climate Leaders in Sweden to Make Progress on the Environmental Goals Set Out in the Paris Agreement, Environment and Climate Change Canada (Stockholm) 31 May 2022. Access Date: 5 June 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/05/canada-hosts-over-thirty-climate-leaders-in-sweden-to-make-progress-on-the-environmental-goals-set-out-in-the-paris-agreement.html>

⁴⁹⁵⁴ Canada Announces Continued Support for Indigenous-Led Clean Energy Projects, Natural Resources Canada (Ottawa) 1 June 2022. Access Date: 5 June 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/06/canada-announces-continued-support-for-indigenous-led-clean-energy-projects.html>

⁴⁹⁵⁵ Canada and India Sign Memorandum of Understanding to Establish Stronger Cooperation on Environmental Protection and Climate Action, Environment and Climate Change Canada (Stockholm) 2 June 2022. Access Date: 5 June 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/06/canada-and-india-sign-memorandum-of-understanding-to-establish-stronger-cooperation-on-environmental-protection-and-climate-action.html>

⁴⁹⁵⁶ Delivering Good Jobs and Clean Air with a New Electric Vehicle Battery Components Facility in Ontario, Prime Minister of Canada (Kingston) 13 July 2022. Access Date: 29 July 2022. <https://pm.gc.ca/en/news/news-releases/2022/07/13/delivering-good-jobs-and-clean-air-new-electric-vehicle-battery>

⁴⁹⁵⁷ Canada Announces \$4.5 Million to Help Mexico, Peru, Chile and Colombia with Data Systems Needed to Fight Climate Change, Environment and Climate Change Canada (Merida, Mexico) 14 July 2022. Access Date: 26 July 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/07/canada-announces-45-million-to-help-mexico-peru-chile-and-colombia-with-data-systems-needed-to-fight-climate-change.html>

to replace diesel-fueled electricity with solar power in the community, decreasing an average of 1,100 tonnes of CO₂ annually.⁴⁹⁵⁸

On 23 August 2022, Canada signed a Joint Declaration of Intent on the export of clean Canadian hydrogen with Germany. The declaration will support investments and developments of clean hydrogen projects, and establish a trans-Atlantic export chain by 2025.⁴⁹⁵⁹

On 25 August 2022, Natural Resources Canada announced a CAD815,115 investment to the Smart Grid Innovation Network as part of their CAD1.56 billion investment into the Smart Renewables and Electrification Pathways Program. The project will expand on the decarbonization of Canada's electricity grid and reduce greenhouse gas emissions.⁴⁹⁶⁰

On 29 August 2022, Minister Guilbeault announced a CAD30 million for over 80 Indigenous climate change initiatives. The First Nations, Metis and Inuit Guardians will collaborate closely to address climate change and biodiversity loss in Canada, incorporating traditional knowledge with conservation efforts against global warming.⁴⁹⁶¹

On 8 September 2022, Natural Resources Canada announced a CAD11.5 million investment through the Green Municipal Fund to support the construction of a net-zero ready Royal Canadian Mounted Police facility in British Columbia. The model has been adapted to the climate in North Cowichan, where the facility will be located, and is expected to reduce cooling demands by 45 per cent and lighting costs by 25 per cent.⁴⁹⁶²

On 21 September 2022, Minister Wilkinson announced a CAD5.3 million federal investment to Student Energy to encourage youth participation in the clean energy sector. Student Energy's project aims to develop programs for youth aged 18 to 30 in skill development and entrepreneurial programs, with a special focus on traditionally underrepresented groups such as Indigenous peoples and women. The investment includes CAD5 million from the Smart Renewables and Electrification Pathways Program.⁴⁹⁶³

⁴⁹⁵⁸ Minister Vandal Announces a \$15.5-Million Investment in the Yukon's Largest Solar Project, Natural Resources Canada (Yukon) 17 August 2022. Access Date: 30 August 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/08/minister-vandal-announces-a-155-million-investment-in-the-yukons-largest-solar-project.html>

⁴⁹⁵⁹ Canada and Germany Sign Agreement to Enhance German Energy Security with Clean Canadian Hydrogen, Natural Resources Canada (Stephenville) 23 August 2022. Access Date: 30 August 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/08/canada-and-germany-sign-agreement-to-enhance-german-energy-security-with-clean-canadian-hydrogen.html>

⁴⁹⁶⁰ Canada Invests in Smart Energy Benchmarking to Decarbonize Electricity Grid, Natural Resources Canada (Saint John) 25 August 2022. Access Date: 30 August 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/08/canada-invests-in-smart-energy-benchmarking-to-decarbonize-electricity-grid.html>

⁴⁹⁶¹ The Government of Canada Supports Indigenous Guardians Nature Conservation with \$30M Fund, Environment and Climate Change Canada (Whitehorse) 29 August 2022. Access Date: 30 August 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/08/the-government-of-canada-supports-indigenous-guardians-nature-conservation-with-30m-fund.html>

⁴⁹⁶² New Investments of Net-Zero RCMP Building in North Cowichan, Natural Resources Canada (North Cowichan) 8 September 2022. Access Date: 23 September 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/09/new-investments-for-net-zero-rcmp-building-in-north-cowichan.html>

⁴⁹⁶³ Government of Canada Contributes \$5.3 Million to Promote Youth Participation in the Clean Energy Sector, Natural Resources Canada (Pittsburgh) 21 September 2022. Access Date: 23 September 2022. <https://www.canada.ca/en/natural-resources-canada/news/2022/09/government-of-canada-contributes-53-million-to-promote-youth-participation-in-the-clean-energy-sector.html>

On 29 September 2022, the Canadian Government invested CAD11.4 million into climate actions that aim to reduce food waste, and thus decrease greenhouse gas emissions.⁴⁹⁶⁴ The investments include “up to CAD1.4 million and CAD10 million to support Redcliff Cypress Regional Waste Management Authority and PurEnergy Inc.’s waste emissions reduction initiatives.” These initiatives will see to the “cumulative reduction of about 77,000 tonnes of greenhouse gas emissions, equivalent to removing approximately 23,600 cars off the road for an entire year.”

Canada has fully complied with its commitment to accelerate our actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. Canada has taken strong actions to address climate mitigation, adaptation, and finance. Progressive climate plans such as their investment into the clean air coalition contribute towards climate mitigation. The resources to support the Atlantic provinces adapt to climate change contribute to climate adaptation. The investment of CAD450,000 into zero-emissions vehicles contributes towards climate finance. Finally, the decision to join the global methane pledge and investments to help developing countries in their adaptation to climate change constitute international collective actions.

Thus, Canada receives a score of +1.

Analyst: Katherine Zhang

China: +1

China has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that China joined 141 other countries in committing to the Declaration on Forests and Land Use at the 26th United Nations Climate Change Conference.⁴⁹⁶⁵ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 29 November 2021, the National Energy Administration signed 15 documents on clean energy, green financial investments, and nuclear power at the 3rd China-Russia Energy Business Forum in Beijing.⁴⁹⁶⁶ The two sides proposed and committed to continued Chinese-Russian cooperation on the energy sector.

On 30 December 2021, the National Energy Administration signed a cooperation agreement with the Chinese Meteorological Administration on the development of wind and solar energy resources, to improve extreme weather warning systems, and maintain stable energy supply using renewable

⁴⁹⁶⁴ Government of Canada invests \$11.4 million in climate action projects to reduce emissions from food waste, Environment and Climate Canada (Gatineau) 29 September 2022. Access Date: 7 November 2022. <https://www.canada.ca/en/environment-climate-change/news/2022/09/government-of-canada-invests-114million-in-climate-action-projects-to-reduce-emissions-from-food-waste.html>

⁴⁹⁶⁵ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁴⁹⁶⁶ The 3rd China-Russia Energy Business Forum Held in Beijing, National Energy Administration (Beijing) 29 November 2021. Access Date: 12 February 2022. Translation provided by Google Translate. http://www.nea.gov.cn/2021-11/29/c_1310340869.htm

sources.⁴⁹⁶⁷ The agreement aims to expand the promotion of carbon peaking and carbon neutrality through the integration of energy and meteorological research.

On 24 January 2022, the National Energy Administration signed an agreement with the Agricultural Bank of China to establish a collaborative partnership, which will seek to improve and accelerate green energy within the energy sector.⁴⁹⁶⁸ Included in this agreement, is a CNY3 trillion investment by the Agricultural Bank of China into the energy sector, over the next five years. The National Energy Administration will focus on industrial planning within the energy sector while the Agricultural Bank of China will focus on high level finances.

On 22 February 2022, the Ministry of Commerce issued a joint document with the National Development and Reform Commission and the Ministry of Industry and Information Technology, outlining 22 key areas in promoting sustainable lifestyles in the Chinese economy.⁴⁹⁶⁹ The Implementation Plan for Promoting Green Consumption is designed to strengthen green technologies, provide institutional reforms on related policies, and certify commercial products that meet the evaluation criteria.

On 25 March 2022, the People's Bank of China announced the establishment of carbon emission reduction support for commercial banks.⁴⁹⁷⁰ The toolkit includes financial aid to existing green and low-carbon industries, as well as further support to promote the transition into a green economy.

On 19 April 2022, Minister of the Ministry of Ecology and Environment Huang Renqiu signed a Memorandum of Understanding on Cooperation between China and the state of California.⁴⁹⁷¹ The memorandum included joint agreements on strengthening bilateral cooperation on addressing climate change.

On 19 April 2022, the Ministry of Education issued a comprehensive plan to enhance the higher education system's capacity to provide adequate training regarding carbon peaking and carbon neutrality.⁴⁹⁷² The plan incorporates green energy and low-emission education into the teaching system and provides new opportunities for research and innovation in post-secondary institutions.

On 30 May 2022, the State Council released the Notice of High-Quality Development Implementation Plan, which gave in-depth directions on the incorporation of hydro and wind energy into the power

⁴⁹⁶⁷ The National Energy Administration and the China Meteorological Administration signed a strategic cooperation framework agreement, National Energy Administration (Beijing) 3 December 2021. Access Date: 12 February 2022. Translation provided by Google Translate. http://www.nea.gov.cn/2021-12/03/c_1310350071.htm

⁴⁹⁶⁸ The National Energy Administration and the Agricultural Bank of China signed a strategic cooperation agreement, National Energy Administration (Beijing) 24 January 2022. Access Date: 12 February 2022. Translation provided by Google Translate. http://www.nea.gov.cn/2022-01/24/c_1310438493.htm

⁴⁹⁶⁹ By 2025, the Market Share of Green and Low-Carbon Products Will Increase Significantly, Green Consumption Will Accelerate to the Mainstream, Government of the People's Republic of China (Beijing) 22 February 2022. Translation provided by Google Translate. Access Date: 15 May 2022. http://www.gov.cn/zhengce/2022-02/22/content_5674933.htm

⁴⁹⁷⁰ The Central Bank Will Set Up Carbon Emission Reduction Support Tools to Guide the Flow of Financial Resources to Green and Low-Carbon Industries, State council Information Office (Beijing) 26 March 2022. Translation provided by Google Translate. Access Date: 15 May 2022. <http://www.scio.gov.cn/xwfbh/xwfbh/wqfbh/44687/45192/xgbd45199/Document/1701326/1701326.htm>

⁴⁹⁷¹ The Ministry of Ecology and Environment Signed a Memorandum of Understanding and Cooperation with California, Ministry of Ecology and Environment (Beijing) 19 April 2022. Translation provided by Google Translate. Access Date: 15 May 2022. https://www.mee.gov.cn/ywdt/hjywnews/202204/t20220419_975182.shtml

⁴⁹⁷² Notice of the Ministry of Education on Printing and Distributing the Work Plan for Strengthening the Construction of the Talent Training System for Higher Education with Carbon Peaking and Carbon Neutrality, Ministry of Education (Beijing) 24 April 2022. Translation provided by Analyst. Access Date: 15 May 2022. http://www.moe.gov.cn/srcsite/A08/s7056/202205/t20220506_625229.html

grid. The Plan committed to accelerating the construction of new green power plants to adapt to the evolving demand of clean energy, as well as strengthening international cooperation in the industry.⁴⁹⁷³

On 3 June 2022, Chinese ambassador to Fiji Qian Bo joined Prime Minister of Fiji Frank Bainimarama to sign a memorandum of mutual understanding. China promised to invest in Fiji's climate adaptation and mitigation capacities and construct solar projects. The memorandum is a continuation of the south-south cooperation between the two countries started in 2014.⁴⁹⁷⁴

On 26 July 2022, the Ministry of Ecology and Environment met with their Egyptian counterparts in a videoconference to deliver aid materials as part of China's South-South Cooperation Program on Climate Change. This first instalment of materials includes energy-saving street lamps, household solar generators and energy-efficient air conditioners, and will help promote sustainable lifestyles for low-income Egyptians.⁴⁹⁷⁵

China has fully complied with its commitment to accelerate our actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. China has taken strong actions to address climate mitigation, adaptation, and finance, while also taking actions constituting international collective actions. By signing the Declaration on Forests and Land Use, China has contributed to climate mitigation. Cooperative relationships with developing countries in the Pacific Island region constitute a collective action. The agreement with the Chinese Meteorological Administration to improve extreme weather warning signs contributes to climate adaptation. The CNY3 trillion into the energy sector contributes to climate finance.

Thus, China receives a score of +1.

Analyst: Katherine Zhang

France: +1

France has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that France joined the Global Methane Pledge.⁴⁹⁷⁶ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per

⁴⁹⁷³ National Energy Administration on Promoting New Energy in the New Era, Notice of High-Quality Development Implementation Plan, National Energy Administration (Beijing) 30 May 2022. Translation provided by Google Translate. Access Date: 5 June 2022.

⁴⁹⁷⁴ China and Fiji Sign a Memorandum of Understanding on Material Assistance for South-South Cooperation on Climate Change, Ministry of Ecology and Environment (Beijing) 3 June 2022. Translation provided by Google Translate. Access Date: 5 June 2022.

⁴⁹⁷⁵ China and Egypt Hold Aid Delivery Ceremony for South-South Cooperation Project on Climate Change, Ministry of Ecology and Environment (Beijing) 26 July 2022. Translation provided by Google Translate. Access Date: 29 July 2022. https://www.mee.gov.cn/ywdt/hjywnews/202207/t20220726_989875.shtml.

⁴⁹⁷⁶ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

cent by 2030, using a 2020 baseline.”⁴⁹⁷⁷ Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that France joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁴⁹⁷⁸ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 3 November 2021, Minister of Ecological Transition Barbara Pompili announced an action plan to accelerate the development of photovoltaics, to reduce reliance on fossil fuels.⁴⁹⁷⁹ Measures include placing additional solar projects on buildings and unused land, including mandatory solar panels on warehouses and parking lots. The action sets a target of 1,000 solar projects on public land by 2025.

On 4 November 2021, Minister Pompili signed a new sector contract for energy transition industries for 2021-2023.⁴⁹⁸⁰ The contract aims to accelerate the energy transition while developing French industry and jobs in this sector, through bringing together various energy transition industries to work collaboratively on renewable energy.

On 5 November 2021, Minister of Agriculture and Food Julien Denormandie announced the launch of a new seeds and plants plan for sustainable agriculture.⁴⁹⁸¹ The plan outlines various measures aimed to increase the diversity of plant varieties, produce sustainable and environmentally friendly produce, support the development of new agricultural techniques to adapt to climate change, and provide scientific advice to the Government.

On 8 November 2021, Minister Pompili announced 10 measures to accelerate the development of renewable energy projects with local governance, including the development of 1,000 new local governance projects, and working with financial players to simplify access to bank financing within the framework of these projects.⁴⁹⁸² France aims to increase the share of renewable energy as a portion of the total energy consumption to 33 per cent by 2030.

On 15 November 2021, Minister Pompili announced the installation of the National Council for the Circular Economy, which will provide information, consultations, and monitoring of progress on

⁴⁹⁷⁷ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021.

Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁴⁹⁷⁸ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁴⁹⁷⁹ Barbara Pompili presents 10 measures to accelerate the development of photovoltaics, Ministry of Ecological Transition (Paris) 3 November 2021. Translation provided by Analyst. Access Date: 11 February 2022.

<https://www.ecologie.gouv.fr/barbara-pompili-presente-10-mesures-accelerer-developpement-du-photovoltaique>

⁴⁹⁸⁰ New energy systems: a new sector contract signed by Barbara Pompili, Agnès Pannier-Runacher and all the players in the sector, Ministry of Ecological Transition (Paris) 4 November 2021. Translation provided by Analyst. Access Date: 11 February 2022. <https://www.ecologie.gouv.fr/nouveaux-systemes-energetiques-nouveau-contrat-filiere-signe-barbara-pompili-agnes-pannier-runacher>

⁴⁹⁸¹ Launch of the new plan Seeds and plants for sustainable agriculture: a new version of the plan at the service of agroecology, adaptation to climate change and food sovereignty, Ministry of Agriculture and Food Sovereignty (Paris) 8 November 2021. Translation provided by Analyst. Access Date: 1 June 2022. <https://agriculture.gouv.fr/lancement-du-nouveau-plan-semences-et-plants-pour-une-agriculture-durable>

⁴⁹⁸² Citizen renewable energies: Barbara Pompili announces 10 measures to accelerate the development of local governance projects, Ministry of Ecological Transition (Paris) 8 November 2021. Translation provided by Analyst. Access Date: 11 February 2022. <https://www.ecologie.gouv.fr/energies-renouvelables-citoyennes-barbara-pompili-annonce-10-mesures-accelerer-developpement-des>

issues related to climate resilience and national waste.⁴⁹⁸³ The Council will also support a national strategy to ban single-use plastic packaging.

On 7 December 2021, Minister Pompili launched the French branch of the Space Climate Observatory.⁴⁹⁸⁴ This agency will examine and monitor the impacts of climate change at the local level by combining data from satellite observations with other sources.

On 10 December 2021, Minister Pompili announced EUR420 million to accelerate the development of industrial biotechnologies and the manufacture of biosourced products for use as sustainable fuels.⁴⁹⁸⁵ Industrial biotechnologies and biosourced products can be a solution to environmental degradation and climate change by helping to reduce dependence on fossil fuels, act as a carbon sink by absorbing carbon from the atmosphere, act as a substitute for other harmful compounds, and be more recyclable and reusable.

On 14 December 2021, Minister Pompili launched the call for projects to support innovation in building energy systems and air treatment. This aims to reduce the energy consumption of buildings and decrease the carbon output.⁴⁹⁸⁶

On 15 December 2021, Minister Delegate for Transport Jean-Baptiste Djebbari launched the National Observatory for Daily Carpooling.⁴⁹⁸⁷ This aims to allow France to track data on carpooling practices, assess the impact of government measures, and allow local authorities to rapidly adapt their public policies to reduce carbon emissions from the total number of vehicles on the road.

On 23 December 2021, Minister Denormandie, Minister Delegate for Industry Agnès Pannier-Runacher, and Secretary General for Investment Guillaume Boudy announced the launch of the opening three new calls for projects to support the deployment of innovative food systems solutions, funded by EUR207 million.⁴⁹⁸⁸ These projects will help develop more climate change resilient crops and livestock, the development of eco-friendly agricultural infrastructure, and agricultural practices that preserve soil and water.

⁴⁹⁸³ Installation of the National Circular Economy Council by Barbara Pompili, Ministry of Ecological Transition (Paris) 15 November 2021. Translation provided by Analyst. Access Date: 11 February 2022. <https://www.ecologie.gouv.fr/installation-du-conseil-national-leconomie-circulaire-barbara-pompili-lundi-15-novembre-2021>

⁴⁹⁸⁴ Acting against climate change from space, Government of France (Paris) 7 December 2021. Translation provided by Analyst. Access Date: 1 June 2022. <https://www.gouvernement.fr/actualite/agir-contre-le-changement-climatique-depuis-l-espace>

⁴⁹⁸⁵ Investments for the future: Barbara Pompili and Agnès Pannier-Runacher announce 420 million euros to accelerate the development of industrial biotechnologies and the manufacture of biosourced products in France, Ministry of Ecological Transition (Paris) 10 December 2021. Translation provided by Analyst. Access Date: 11 February 2022. <https://www.ecologie.gouv.fr/investissements-davenir-barbara-pompili-et-agnes-pannier-runacher-annoncent-420-millions-deuros>

⁴⁹⁸⁶ Investing in the France of 2030: launch of the call for projects "Support for innovation in building energy systems and air treatment", Ministry of Ecological Transition (Paris) 14 December 2021. Translation provided by Analyst. Access Date: 11 February 2022. <https://www.ecologie.gouv.fr/investir-dans-france-2030-lancement-lappel-projets-soutien-innovation-dans-systemes-energetiques-et>

⁴⁹⁸⁷ Jean-Baptiste Djebbari launches the National Observatory of Daily Carpooling, Ministry of Ecological Transition (Paris) 15 December 2021. Translation provided by Analyst. Access Date: 11 February 2022. <https://www.ecologie.gouv.fr/jean-baptiste-djebbari-lance-lobservatoire-national-du-covoiturage-quotidien>

⁴⁹⁸⁸ Investing in the France of 2030: 3 new calls for projects to accelerate agricultural and food transitions, Ministry of Agriculture and Food Sovereignty (Paris) 23 December 2022. Translation provided by Analyst. Access Date: 1 June 2022. <https://agriculture.gouv.fr/investir-dans-la-france-de-2030-3-nouveaux-appels-projets-pour-acceler-les-transitions-agricoles>

On 6 January 2022, France declared that in order to reduce greenhouse gas emissions, the installation of heating or hot water production equipment running on fuel oil will be prohibited from July 2022.⁴⁹⁸⁹ Any new equipment installed for heating or hot water production in residential or commercial buildings using other energy sources must also comply with a greenhouse gas emissions ceiling.

On 10 January 2022, France announced an additional EUR100 million to depollute and reconvert wasteland from industrial or urban development sites, to reduce consumption of natural, agricultural and forest areas by 2032, and mitigate the contributions to climate change.⁴⁹⁹⁰

On 19 January 2022, the French Development Agency announced four new projects in collaboration with Vietnam, aimed to help adapt farmers to the effects of climate change and increase agricultural resiliency.⁴⁹⁹¹

On 8 February 2022, the French Development Agency announced EUR800,000 to support the development of sustainable fisheries in Indonesia.⁴⁹⁹² The agreements include preliminary studies in four ports, including environmental, social, economic and climatic studies, as part of efforts to adapt fisheries to climate change.

On 10 February 2022, President Emmanuel Macron announced France's new energy strategy, based on renewable energies and nuclear energy.⁴⁹⁹³ France announced its intention to increase wind and solar energy. France announced that it would no longer close any active nuclear reactors, with the exception for safety reasons, and would extend the life cycle of all currently active nuclear power plants beyond 50 years. In addition, 6 new reactors will be built by 2050, and studies will be launched for the construction of an additional 8 reactors.

On 10 February 2022, President Macron announced EUR500 million for several projects aimed at supporting new research and models of nuclear reactors, including in nuclear fission and fusion.⁴⁹⁹⁴ These projects are aimed at improving the production, efficiency, and cleanliness of nuclear power plants. President Emmanuel Macron also announced EUR50 million for a research program on technology for energy systems, and EUR400 million to support industry adoption of renewable energies through the launch of call for projects.⁴⁹⁹⁵

⁴⁹⁸⁹ The end of new oil or coal boilers from July 1, 2022, French Republic Public Service (Paris) 10 January 2022.

Translation provided by Analyst. Access Date: 11 February 2022. service-public.fr/particuliers/actualites/A15413

⁴⁹⁹⁰ The Government adds an additional 100 million euros to the wasteland recycling fund and announces 30 new winners of two calls for projects, Ministry of Ecological Transition (Paris) 10 January 2022. Translation provided by Analyst. Access Date: 11 February 2022. <https://www.ecologie.gouv.fr/gouvernement-abonde-100-millions-deuros-supplementaires-fonds-recyclage-des-friches-et-devoile-30>

⁴⁹⁹¹ France And Vietnam: Boosting Farmers' Resilience In The Face Of Climate Change, French Development Agency (Paris) 8 February 2022. Access Date: 11 February 2022. <https://www.afd.fr/en/actualites/france-and-vietnam-boosting-farmers-resilience-face-climate-change>

⁴⁹⁹² Oceans: A New Franco-Indonesian Partnership For More Sustainable Fisheries, French Development Agency (Paris) 8 February 2022. Access Date: 11 February 2022. <https://www.afd.fr/en/actualites/oceans-new-franco-indonesian-partnership-more-sustainable-fisheries>

⁴⁹⁹³ France's new energy strategy, Government of France (Paris) 2 February 2022. Translation provided by Analyst. Access Date: 1 June 2022. <https://www.gouvernement.fr/actualite/la-nouvelle-strategie-energetique-de-la-france>

⁴⁹⁹⁴ FRANCE BY 2030 | OPENING OF THE CALL FOR "INNOVATIVE NUCLEAR REACTORS" PROJECTS, Government of France (Paris) 9 March 2022. Translation provided by Analyst. Access Date: 1 June 2022. <https://www.gouvernement.fr/france-de-2030-ouverture-de-l-appel-a-projets-reacteurs-nucleaires-innovants>

⁴⁹⁹⁵ FRANCE 2030: the President of the Republic announces €2 billion to support breakthrough innovation and its industrialization in the field of renewable energies and new nuclear power in France, Government of France (Paris) 10 February 2022. Translation provided by Analyst. Access Date: 1 June 2022. <https://www.gouvernement.fr/france-2030-le-president-de-la-republique-annonce-2-mdeu-pour-le-soutien-a-l-innovation-de-rupture>

On 11 February 2022, at the One Ocean Summit, the President Macron announced that the French Southern Territories' nature reserve would be extended.⁴⁹⁹⁶ While protecting the biodiversity of the area, the nature reserve areas also absorb carbon dioxide, helping combat climate change.

On 14 February 2022, Minister Djebbari announced EUR65 million in aid for subsidising the use of heavy electric vehicles, including the construction of electric charging stations for electric vehicles.⁴⁹⁹⁷ The subsidy can cover up to 65 per cent of the cost difference between an electric vehicle and its diesel equivalent, as well as up to 60 per cent of the cost of electric recharging stations. Transport is amongst the sectors that contribute the most to climate change, and this measure is aimed at reducing the carbon output of the logistics and freight transport industry.

On 17 February 2022, Minister Pompili announced EUR100 million in new funding for new energy saving projects, under the Energy Savings Certificates program.⁴⁹⁹⁸ These programs include reducing energy consumption caused by the use of digital technology, providing support to small and medium sized enterprises to reduce their energy use, supporting municipalities with renovating public lighting to save electricity.

On 17 February 2022, Minister of Ecological Transition, Barbara Pompili, announced EUR100 million in new funding for new energy saving projects, under the Energy Savings Certificates program. These programs include reducing energy consumption caused by the use of digital technology, providing support to small and medium sized enterprises to reduce their energy use, supporting municipalities with renovating public lighting to save electricity.⁴⁹⁹⁹ On 1 March 2022, Minister Delegate for Transport, Jean-Baptiste Djebbari, announced funding for two more projects under the Energy Savings Certificates program. Projects will support the use of artificial intelligence in the transport sector, thus improving logistics and saving on fuel use, as well as a project to support the transition to transporting goods by river, sea, and rail, rather than road.⁵⁰⁰⁰

On 2 March 2022, Minister Pompili issued a decree that government subsidies for connecting biomethane production facilities to natural gas networks would be increased from 40 per cent to 60 per cent.⁵⁰⁰¹ This effort will facilitate the development of new biomethane production facilities. This measure is aimed to reduce reliance on fossil fuels and transition to more sustainable sources of energy.

⁴⁹⁹⁶ One Ocean Summit, Ministry of Ecological Transition (Paris) 11 February 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/one-ocean-summit-president-republique-annonce-extension-reserve-naturelle-nationale-des-terres>

⁴⁹⁹⁷ Energy Transition in Road Transportation, Ministry of Ecological Transition (Paris) 14 February 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/transition-energetique-du-transport-routier-annonce-du-nouveau-dispositif-soutien-poids-lourds>

⁴⁹⁹⁸ Barbara Pompili announces an investment of nearly 100 million euros in 5 new energy saving programs, Ministry of Ecological Transition (Paris) 17 February 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/barbara-pompili-annonce-investissement-pres-100-millions-deuros-dans-5-nouveaux-programmes>

⁴⁹⁹⁹ Barbara Pompili announces an investment of nearly 100 million euros in 5 new energy saving programs, Ministry of Ecological Transition (Paris) 17 February 2022. Translation provided by analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/barbara-pompili-annonce-investissement-pres-100-millions-deuros-dans-5-nouveaux-programmes>

⁵⁰⁰⁰ Jean-Baptiste Djebbari announces several measures in favor of modal shift and river transport, Ministry of Ecological Transition (Paris) 1 March 2022. Translation provided by analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/jean-baptiste-djebbari-annonce-plusieurs-mesures-en-faveur-du-report-modal-et-du-transport-fluvial>

⁵⁰⁰¹ The Government facilitates the development of renewable gas production, Ministry of Ecological Transition (Paris) 15 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/gouvernement-facilite-developpement-production-gaz-renouvelable>

On 4 March 2022, Minister Denormandie signed a contract with the President of the Board of Directors of the National Center for Forest Property, Marie Bateau.⁵⁰⁰² The contract aims to strengthen the actions of private forest owners in the sustainable management of wood and the transition to low-carbon production and energy use.

On 9 March 2022, Minister Pompili announced EUR450 million for a call for projects to develop new solutions to improve the recyclability of materials, such as paper and cardboard, textiles, and composite materials.⁵⁰⁰³ This call for projects aims to develop solutions that improve the design of materials to make them easier to recycle and to develop new technologies to make recycled materials easier to incorporate into new manufactured goods. These measures are aimed at helping France transition to a circular economy and reduce energy consumption.

On 11 March 2022, France issued a decree that allows for new uses of treated wastewater, such as cleaning roads and replenishing groundwater.⁵⁰⁰⁴ This measure is aimed at conserving water, which is becoming scarce as a result of climate change, as well as helping France transition to a circular economy.

On 14 March 2022, Prime Minister Jean Castex announced the launch of two wind turbine farms in the Mediterranean.⁵⁰⁰⁵ The Prime Minister launched a competitive bidding process for the development of these wind turbine farms. These wind turbine farms are expected to eventually produce enough electricity to support 2.9 million people, reducing reliance on non-renewable sources of energy.

On 15 March 2022, Secretary of State for Biodiversity, Bérangère Abba, outlined the first stage of France's National Biodiversity Strategy. Actions under the strategy include 500 operations by 2025 to combat invasive species, restore degraded ecological areas, preservation of 50,000 hectares of wetlands by 2026, restore 55 coastal areas in danger of erosion by 2030, and mobilizing youth through 1,000 educational initiatives by 2025. Protecting biodiversity in the face of climate change will mitigate the effects of environmental damage.⁵⁰⁰⁶

On 16 March 2022, Minister Pompili announced EUR150 million to support the increased heat fund intervention credits by 40 per cent.⁵⁰⁰⁷ This will allow local authorities and companies to finance the replacement of heating systems running on natural gas with renewable energies (e.g. biomass, geothermal energy).

⁵⁰⁰² Signing of the 2022-2026 Objectives and Performance Contract of the National Forest Property Center, Ministry of Agriculture and Food Sovereignty (Paris) 4 March 2022. Translation provided by Analyst. Access Date: 1 June 2022. <https://agriculture.gouv.fr/signature-du-contrat-dobjectifs-et-de-performance-2022-2026-du-centre-national-de-la-proprieete>

⁵⁰⁰³ Investing in the France of 2030, Ministry of Ecological Transition (Paris) 9 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/investir-dans-france-2030-developper-et-soutenir-linnovation-toutes-etapes-chaine-du-recyclage-des>

⁵⁰⁰⁴ Better sharing of water resources: the Government allows new uses for treated wastewater, Ministry of Ecological Transition (Paris) 11 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/mieux-partager-ressource-en-eau-gouvernement-permet-nouveaux-usages-des-eaux-usees-traitees>

⁵⁰⁰⁵ The Prime Minister launches offshore wind power in the Mediterranean and announces France 2030 measures to strengthen our energy sovereignty, Ministry of Ecological Transition (Paris) 14 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/premier-ministre-lance-leolien-en-mer-en-mediterranee-et-annonce-des-mesures-france-2030-renforcer>

⁵⁰⁰⁶ Bérangère Abba presents the first part of the National Biodiversity Strategy 2030, Ministry of Ecological Transition (Paris) 15 March 2022. Translation provided by analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/berangere-abba-presente-premier-volet-strategie-nationale-biodiversite-2030>

⁵⁰⁰⁷ A Resilience Plan to secure our supplies and get out of our dependence on fossil fuels, Ministry of Ecological Transition (Paris) 17 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/plan-resilience-securiser-nos-approvisionnements-et-sortir-notre-dependance-aux-energies-fossiles>

On 17 March 2022, France announced an increase in the MaPrimeRénov grant by EUR1,000.⁵⁰⁰⁸ This grant subsidizes individuals who wish to replace their gas or oil powered boiler with a renewable powered heater. An increase in the grant will make it more affordable to purchase a renewable heating system, thus reducing reliance on fossil fuels.

On 17 March 2022, France announced the launch of a new national plan for the protection of wetlands from 2022 to 2026. Measures under the plan include doubling the protected wetlands area in mainland France by 2030, preserving wetlands by acquiring 8,500 hectares by 2026, accelerating the extension of the Ramsar network for protected wetlands in France, restoring 50,000 hectares of wetlands by 2026, developing economic and leisure practices that preserve wetlands, and developing low-carbon label methods that promote wetland protection and restoration projects. These measures will help preserve wetlands, which play an important role in regulating the climate and mitigating the impacts of climate change.⁵⁰⁰⁹

On 18 March 2022, France adopted a decree approving the National Strategy for the Development of Rail Freight.⁵⁰¹⁰ The National Strategy aims to improve and expand on rail travel, which produces less carbon emissions and pollution than road transportation. The National Strategy outlines 72 concrete measures which aim to improve the service of rail networks, improve the infrastructure of rail freight development, and develop connections with ports and rivers.

On 25 March 2022, France launched a compensation program of EUR63 million to support farmers insured against climate risks. The compensation program provides financial support to farmers, and is intended to supplement any compensation they have already received under private insurance policies.⁵⁰¹¹

On 29 March 2022, Minister Pompili signed a new contract between the government and the Electricity Transport Network.⁵⁰¹² The contract will support France's transition to net carbon energy consumption, and outlines 40 strategic objectives to help the Electricity Transport Network adapt to renewable energy. Measures include long-term planning for future renewable energy projects at sea, supporting the decarbonization of the Network, and increasing the resiliency of the electrical network.

On 30 March 2022, France issued a decree that bans heated or air-conditioned terraces.⁵⁰¹³ Infringements can be fined up to a maximum of EUR1,500. This measure is aimed at reducing energy waste from heating or cooling outdoor spaces.

⁵⁰⁰⁸ The Government announces a €1,000 increase in MaPrimeRénov, Ministry of Ecological Transition (Paris) 17 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/gouvernement-annonce-1000-eu-daugmentation-maprimerenov-partir-du-15-avril-tout-changement-systeme>

⁵⁰⁰⁹ Launch of the National Wetlands Plan 2022-2026, Government of France (Paris) 17 March 2022. Translation provided by analyst. Access Date: 14 May 2022. <https://www.gouvernement.fr/actualite/lancement-du-plan-national-milieus-humides-2022-2026>

⁵⁰¹⁰ Publication of the decree approving the National Strategy for the Development of Rail Freight, Ministry of Ecological Transition (Paris) 23 March 2022. Translation provided by Analyst. Access Date: 14 May 2022.

⁵⁰¹¹ Freeze Plan 2021: opening of the additional compensation scheme for farmers insured against climate risks (Paris) 25 March 2022. Translation provided by analyst. Access Date: 1 June 2022. <https://agriculture.gouv.fr/plan-gel-2021-le-dispositif-dindemisation-complementaire-des-agriculteurs-assures-contre-les>

⁵⁰¹² Signature of the new public service contract between the State and RTE, Ministry of Ecological Transition (Paris) 29 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/signature-du-nouveau-contrat-service-public-entre-letat-et-rte>

⁵⁰¹³ Decree No. 2022-452 of March 30, 2022 relating to the ban on the use of heating or air conditioning systems in the public domain outdoors, Légifrance (Paris) 30 March 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045442336>

On 5 April 2022, France issued a decree that requires delivery platforms with more than 50 workers to use a set amount of low emissions vehicles with two or three wheels, bicycles and electrically assisted bicycles.⁵⁰¹⁴ The share of the platforms' vehicles that must be low emissions vehicles with two or three wheels, bicycles and electrically assisted bicycles must be a minimum of 20 per cent by 2023, increasing over time until it reaches 100 per cent by 2030.

On 6 April 2022, France issued an ordinance to help adapt housing to coastal erosion caused in part by climate change and rising sea levels. The ordinance creates a new type of lease for buildings located by a coastline, which allows for early termination of leases in case the safety of individuals and property cannot be guaranteed.⁵⁰¹⁵ The ordinance allows for deviation from existing construction and zoning law in coastal areas if existing measures conflict with relocating property to safer conditions in the case of coastline erosion.

On 13 April 2022, Minister Pompili, Minister Denormandie, Minister Pannier-Runacher, and Secretary of State for Biodiversity Bérangère Abba announced an additional EUR100 million for the 6 water management agencies in France.⁵⁰¹⁶ The additional funding will help support agricultural sectors to adapt to climate change, help local authorities reduce the risk of water shortages, and help build the resiliency of natural environments by reducing water pollution and promoting the refill of groundwater.

On 13 April 2022, France issued a decree that prohibits advertisers from marketing a product or service as carbon neutral, unless they present a graph of greenhouse gas emissions over the entire life cycle of the product or service, as well as the methods of offsetting residual emissions.⁵⁰¹⁷ These elements must be easily accessible to the public and updated on an annual basis. This measure is aimed to inform the public on carbon neutral products and services, and prevent greenwashing.

On 14 April 2022, France issued a decree that outlines the steps that private companies, local authorities, organisations, and the Government need to take for the reduction, reuse and recycling of single-use plastic packaging. France aims for 100 per cent of single use plastic packaging to be recyclable by 2025, in support of a circular economy.⁵⁰¹⁸

On 22 April 2022, France announced a zero-interest rate loan to purchase new or used vehicles, electric or rechargeable hybrids, in low mobility emission zones that exceed acceptable levels of air quality standards.⁵⁰¹⁹ Loans of up to EUR30,000 for purchases and EUR10,000 for rentals can be offered to

⁵⁰¹⁴ Climate and resilience law: a new decree for the greening of vehicles used in connection by delivery platforms, Ministry of Ecological Transition (Paris) 6 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/loi-climat-et-resilience-nouveau-decret-verdissement-des-vehicules-utilises-dans-mise-en-relation>

⁵⁰¹⁵ Climate and Resilience Law: publication of the ordinance governing the development of coastal territories exposed to the retreat of the coastline, Ministry of Ecological Transition (Paris) 7 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/loi-climat-et-resilience-publication-lordonnance-encadrant-lamenagement-des-territoires-littoraux>

⁵⁰¹⁶ Risk of drought, Ministry of Ecological Transition (Paris) 29 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/risque-secheresse>

⁵⁰¹⁷ Decree No. 2022-539 of April 13, 2022 relating to carbon offsetting and claims of carbon neutrality in advertising (Paris) 13 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045570611>

⁵⁰¹⁸ Decree No. 2022-549 of April 14, 2022 relating to the national strategy for the reduction, reuse, re-use and recycling of single-use plastic packaging, Légifrance (Paris) 14 April 2022. Translation provided by analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045582284>

⁵⁰¹⁹ Decree No. 2022-615 of April 22, 2022 relating to the experimentation of an interest-free loan to finance the acquisition of a vehicle whose carbon dioxide emissions are less than or equal to 50 grams per kilometer, Légifrance (Paris) 22 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045640111>

individuals as well as small businesses. Low mobility emissions zones in Paris and the Metropolises of Greater Paris, Lyon, Aix-Marseille and Rouen are eligible for the program.

On 22 April 2022, France announced a zero-interest rate loan to purchase new or used vehicles, electric or rechargeable hybrids, in low mobility emission zones that exceed acceptable levels of air quality standards.⁵⁰²⁰ Loans of up to EUR30,000 for purchases and EUR10,000 for rentals can be offered to individuals as well as small businesses. Low mobility emissions zones in Paris and the Metropolises of Greater Paris, Lyon, Aix-Marseille and Rouen are eligible for the program.

On 25 April 2022, France issued a decree that requires natural gas suppliers to contribute to the production of biogas.⁵⁰²¹ Natural gas suppliers can fulfill these requirements by directly producing biogas injected into a natural gas network, or by acquiring certificates from biogas producers.

On 25 April 2022, Minister of the Armed Forces Florence Parly approved a Climate & Defense ministerial strategy.⁵⁰²² The Ministry of the Armed Forces will commit to developing knowledge and forecasting capabilities for the strategic challenges posed by climate change, adapt defense tools to challenges caused by climate change, and collaborate with other ministries and governments on defense issues related to climate change.

On 26 April 2022, France issued a decree that domestic flights for aircraft operators subject to the EU Emissions Trading System are required to offset greenhouse gas emissions from flights.⁵⁰²³ For the year 2022, operators must offset 50 per cent of their emissions, increasing to 100 per cent of their emissions from 2024. Operators of aircraft generating more than 1,000 tonnes of carbon dioxide per year are required to report to the Ministry of Ecological Transition their emissions from previous year, as well as an offset report outlining the reductions and sequestrations of these declared emissions.

On 26 April 2022, France issued a decree that changes the rules for the classification of heating and cooling networks.⁵⁰²⁴ This decree helps promote the networks' development in priority areas, and thus encourage local authorities to pursue the development of renewable energies and the fight against greenhouse gas emissions. This classification makes it possible to connect new buildings to a heating or cooling network or to replace a heating or cooling installation located in the priority area perimeter of the network.

On 26 April 2022, France issued a decree that changes the rules for the classification of heating and cooling networks. This decree helps promote the networks' development in priority areas, and thus encourage local authorities to pursue the development of renewable energies and the fight against greenhouse gas emissions. This classification makes it possible to connect new buildings to a heating

⁵⁰²⁰ Decree No. 2022-615 of April 22, 2022 relating to the experimentation of an interest-free loan to finance the acquisition of a vehicle whose carbon dioxide emissions are less than or equal to 50 grams per kilometer, Légifrance (Paris) 22 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045640111>

⁵⁰²¹ Decree No. 2022-640 of April 25, 2022 relating to the system of biogas production certificates, Légifrance (Paris) 25 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045653118>

⁵⁰²² Climate & defence: a draft ministerial strategy proposed by the armed forces staff, Ministry of the Armed Forces (Paris) 29 April 2022. Access Date: 1 June 2022. <https://www.defense.gouv.fr/actualites/climat-defense-projet-strategie-ministerielle-propose-letat-major-armees>

⁵⁰²³ Decree No. 2022-667 of April 26, 2022 relating to the offsetting of greenhouse gas emissions, Légifrance (Paris) 26 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045667400>

⁵⁰²⁴ Decree No. 2022-666 of April 26, 2022 relating to the classification of heating and cooling networks, Légifrance (Paris) 26 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045667347>

or cooling network or to replace a heating or cooling installation located in the priority area perimeter of the network.⁵⁰²⁵

On 28 April 2022, Minister of Ecological Transition, Barbara Pompili, launched a new call for bids to support the development of biomethane producing facilities in France. France will issue a contract to purchase biomethane gas from the winning bidders over a period of 15 years. This measure is aimed to reduce France's reliance on fossil fuels.⁵⁰²⁶

On 29 April 2022, France issued a decree that regulates the environmental claims of companies and makes consumer information on the environmental claims required on products.⁵⁰²⁷ This information needs to be available at the time of purchase of the products, and will need to let consumers know the proportion of recycled material, their recyclability, the presence of hazardous substances, precious metals or rare earths, or their compostability or their reusability. This measure is aimed at reducing product waste and energy usage, and thus contributing to a circular economy.

From 9 May to 20 May 2022, France participated in the COP15 on Desertification.⁵⁰²⁸ France announced a contribution of EUR155 to the Abidjan initiative launched by Côte d'Ivoire, which will support sustainable agricultural production practices, especially in the production of cocoa beans.

On 26 May 2022, Prime Minister Élisabeth Borne announced several measures to help farmers with drought and economic hardship.⁵⁰²⁹ Measures include policies on preserving water resources, organizing drought committees at local levels, EUR400 million for farmers to help mitigate the consequences of the war in Ukraine, and setting up a crop insurance project. The Prime Minister also announced that the funding for crop protection materials and irrigation equipment would be doubled to EUR40 million.

On 3 June 2022, Minister of State for Development, Francophonie and International Partnerships, Chrysoula Zacharopoulou, attended the Stockholm+50 Summit to address issues on climate, biodiversity and pollution. The Minister proposed a plan that would call for protecting 30 per cent of the land and oceans.⁵⁰³⁰

On 21 June 2022, France launched FR-Alert, a system for sending warning notifications on mobile phones of people located in an area facing serious danger, such as natural disaster, biological, chemical

⁵⁰²⁵ Decree No. 2022-666 of April 26, 2022 relating to the classification of heating and cooling networks, Légifrance (Paris) 26 April 2022. Translation provided by analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045667347>

⁵⁰²⁶ The Government is accelerating the development of biomethane production with the launch of a new support system through calls for tenders, Ministry of Ecological Transition (Paris) 28 April 2022. Translation provided by analyst. Access Date: 14 May 2022. <https://www.ecologie.gouv.fr/gouvernement-accelere-developpement-production-biomethane-lancement-dun-nouveau-dispositif-soutien>

⁵⁰²⁷ Decree No. 2022-748 of April 29, 2022 relating to consumer information on the environmental qualities and characteristics of waste-generating products, Légifrance (Paris) 29 April 2022. Translation provided by Analyst. Access Date: 14 May 2022. <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045726094>

⁵⁰²⁸ France participating in COP15 on Desertification, Government of France (Paris) 9 May 2022. Access Date: 1 June 2022. <https://www.gouvernement.fr/actualite/les-mesures-du-gouvernement-pour-faire-face-a-la-secheresse>

⁵⁰²⁹ Government measures for farmers against drought, Government of France (Paris) 26 May 2022. Translation provided by Analyst. Access Date: 1 June 2022. <https://www.gouvernement.fr/actualite/les-mesures-du-gouvernement-pour-faire-face-a-la-secheresse>

⁵⁰³⁰ Environment – Participation of Chrysoula Zacharopoulou in the Stockholm+50 summit, France Diplomacy (Paris) 23 June 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate-and-environment/news/article/environment-participation-of-chrysoula-zacharopoulou-in-the-stockholm-50-summit>

or industrial accident, terrorist act. This warning system will be helpful in informing people of forest fires, floods, and other natural disasters made more likely by climate change.⁵⁰³¹

On 28 June 2022, France approved new legislation to limit the consumption of products that contribute to deforestation or forest degradation, including due diligence regulators for traders of palm oil, beef, wood, coffee, cocoa and soya. The new legislation will be supported by the development of a benchmarking system for third party countries, where high risk countries will be subject to higher controls and monitoring.⁵⁰³²

On 29 June 2022, France led the European Commission to adopt a legislative package on climate change, which aims to reduce the EU's net greenhouse gas emissions by at least 55 per cent by 2030, and achieve net neutrality by 2050. The legislative package included adopting a common agreement on EU emissions trading system, emissions and removals from land use, land-use change and forestry, the creation of a social climate fund, and new CO2 emission performance standards for road vehicles.⁵⁰³³

On 30 June 2022, France announced the extension of the subsidy to purchase low-emissions vehicles until 31 December 2022. France also announced an increase in the maximum purchase cost of the vehicle, from EUR45,000 to EUR47,000.⁵⁰³⁴

On 13 July 2022, France announced the launch of a call for Frugal Artificial Intelligence projects to support ecological transition, in particular to find solutions for sustainable cities and innovative buildings. The call is funded with EUR40 million over a period of five years.⁵⁰³⁵

On 13 July 2022, Minister Delegate for Transport, Clément Beaune, announced the launch of the call for projects for autonomous, carbon-free boat prototypes, intended to transport people during the 2024 Olympic Games. These prototypes are intended as a step forward in environmentally sustainable water transportation, and serve as an alternative to carbon-heavy road transportation.⁵⁰³⁶

On 14 July 2022, President Emmanuel Macron announced an “energy sobriety” plan aimed at reducing gas and electricity consumption by 10 per cent compared to 2019 levels. Working groups were launched at the State level, at the businesses level, as well as with public and commercial buildings.⁵⁰³⁷

⁵⁰³¹ FR-ALERT, how does it work?, Government of France (Paris) 08 June 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.gouvernement.fr/actualite/fr-alert-comment-ca-marche>

⁵⁰³² Council approves new rules to reduce deforestation and forest degradation, Ministry of Ecological Transition (Paris) 28 June 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.ecologie.gouv.fr/conseil-approuve-nouvelles-regles-afin-reduire-deforestation-et-degradation-des-forets>

⁵⁰³³ Adjustment to objective 55, Ministry of Ecological Transition (Paris) 29 June 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.ecologie.gouv.fr/ajustement-lobjectif-55-conseil-adopte-des-orientations-generales-relatives-aux-reductions>

⁵⁰³⁴ Extension of the ecological bonus until 31 December 2022, Ministry of Finance Economy and Industrial and Digital Sovereignty (Paris) 30 June 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://presse.economie.gouv.fr/30-06-2022-prolongation-du-bonus-ecologique-jusquau-31-decembre-2022/>

⁵⁰³⁵ Call for projects: “AI demonstrators for ecological and energy transitions”, Ministry of Ecological Transition (Paris) 5 September 2022. Translation provided by analyst. Access Date: 22 September 2022. <https://www.ecologie.gouv.fr/appel-projets-demonstrateurs-dia-transitions-ecologique-et-energetique>

⁵⁰³⁶ Clément Beaune launches a call for projects "demonstrators of carbon-free autonomous boats" for the Paris 2024 Games, Ministry of Ecological Transition (Paris) 13 July 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.ecologie.gouv.fr/clement-beaune-lance-appel-projets-demonstrateurs-bateaux-autonomes-decarbones-jeux-paris-2024>

⁵⁰³⁷ What you need to know about the “energy sobriety” plan, Government of France (Paris) 18 July 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.gouvernement.fr/actualite/ce-quit-faut-savoir-sur-le-plan-de-sobriete-energetique>

On 18 July 2022, Minister of the Interior and Overseas Gérald Darmanin committed to increasing the number of resources dedicated to fighting forest fires in Gironde, bringing to total to 9 planes and 11 heavy trucks. In addition, Prime Minister, Élisabeth Borne, asked all State services, local authorities and local players to be fully mobilized in response to 15 regions being placed on red alert for heat waves.⁵⁰³⁸ On 21 July 2022, President Emmanuel Macron promised a project to replant the 20,600 hectares of forest destroyed by the forest fire.⁵⁰³⁹

On 18 July 2022, France signed a strategic partnership agreement on energy cooperation with the United Arab Emirates. The partnership will identify joint investment projects in France, the United Arab Emirates or globally in the fields of hydrogen, renewable energies, or nuclear energy.⁵⁰⁴⁰

On 28 July 2022, Agnès Pannier-Runacher, Minister of Energy Transition announced several measures to improve energy efficiency of buildings and housing. France announced a 25 per cent threshold increase for energy savings certificates, EUR150 million for projects to support households facing energy and fuel shortages and launching a consultation.⁵⁰⁴¹

On 28 July 2022, Agnès Pannier-Runacher, Minister of Energy Transition announced several emergency measures to help the development of renewable energy production, which had been placed at risk due to rising costs from inflation. Measures include allowing renewable energy projects to sell energy on the market before contracts take effect, or to allowing projects to increase energy production before bids have been completed.⁵⁰⁴²

On 16 August 2022, France announced a bonus of up to EUR400 for the purchase of a new bicycle, as well as up to EUR3,000 for the purchase of an electrical bicycle that replaces a carbon-emitting vehicle. These grants will allow citizens to purchase a low-carbon method of transportation.⁵⁰⁴³

On 25 August 2022, France announced an increase to EUR24.3 million in the grant provided to municipalities to support biodiversity.⁵⁰⁴⁴

⁵⁰³⁸ Reinforcement of resources to fight forest fires in Gironde, Government of France (Paris) 18 July 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.gouvernement.fr/actualite/renforcement-des-moyens-de-lutte-contre-les-feux-de-foret-en-gironde>

⁵⁰³⁹ Fires in Gironde: a major national replanting project, Government of France (Paris) 21 July 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://www.gouvernement.fr/actualite/incendies-en-gironde-un-grand-chantier-national-de-replantation>

⁵⁰⁴⁰ France and the United Arab Emirates sign a comprehensive strategic partnership agreement on energy cooperation, Ministry of Finance Economy and Industrial and Digital Sovereignty (Paris) 18 July 2022. Translation provided by analyst. Access Date: 23 July 2022. <https://presse.economie.gouv.fr/18-07-2022-la-france-et-les-emirats-arabes-unis-signent-un-accord-de-partenariat-strategique-global-sur-la-cooperation-energetique/>

⁵⁰⁴¹ Agnès Pannier-Runacher announces a strengthening of support systems for energy efficiency projects, Ministry of Ecological Transition (Paris) 28 July 2022. Translation provided by analyst. Access Date: 26 August 2022. <https://www.ecologie.gouv.fr/agnes-pannier-runacher-annonce-renforcement-des-dispositifs-soutien-aux-projets-defficacite>

⁵⁰⁴² Agnès Pannier-Runacher announces emergency measures to accelerate the development of renewable energy production, Ministry of Ecological Transition (Paris) 28 July 2022. Translation provided by analyst. Access Date: 26 August 2022. <https://www.ecologie.gouv.fr/agnes-pannier-runacher-annonce-des-mesures-durgence-accelerer-developpement-production-denergies>

⁵⁰⁴³ Reinforcement of national aid for the purchase of a bicycle, Ministry of Ecological Transition (Paris) 16 August 2022. Translation provided by analyst. Access Date: 26 August 2022. <https://www.ecologie.gouv.fr/renforcement-des-aides-nationales-lachat-dun-velo>

⁵⁰⁴⁴ Expansion of the support allocation to municipalities for the protection of biodiversity, Ministry of the Interior and Overseas (Paris) 25 August 2022. Translation provided by analyst. Access Date: 26 August 2022. <https://www.interieur.gouv.fr/node/1634>

On 27 August 2022, Prime Minister, Élisabeth Borne, announced the creation of a “green fund” to accelerate the ecological transition. This fund, intended for communities, will be funded with EUR1.5 billion for 2023, to help support responses to environmental issues.⁵⁰⁴⁵

On 1 September 2022, France announced EUR10 million to develop or rehabilitate 10,000 kilometres of nature trails. This initiative is intended to preserve and restore natural habitats and biodiversity within France’s metropolitan areas and overseas areas, which are increasingly threatened as a result of climate change.⁵⁰⁴⁶

On 5 September 2022, France announced the creation of a new ecological reserve – the Arjuzanx National Nature Reserve in the Landes. The area, which encompasses 2,205 hectares, will contribute to the conservation of ecological diversity. The reserve will be granted EUR150,000 per year to carry out management, preservation, and educational activities.⁵⁰⁴⁷

On 12 September 2022, France announced the launch of a call for projects to use natural fermentation techniques to accelerate the agricultural and food revolution to develop healthy and sustainable food. The call is intended to develop more robust food and food processes in the face of climate change, and is funded with EUR48.3 million.⁵⁰⁴⁸

France has taken strong actions to address climate mitigation, adaptation, and finance, while also taking actions constituting international collective actions. France is addressing climate mitigation through the commitment to renewable and nuclear energy (e.g. facilitating the production of biomethane, wind, solar, and nuclear power plants); as well as working to reduce emissions through the subsidizing of low emission alternatives for transportation (e.g. developing railways, carbon offsetting aviation industries).. France is addressing climate adaptation by providing financial support to those most affected by climate change (e.g. farmers), and combating the effects of drought, coastal erosion, and wetland habitat loss associated with climate change. France is addressed climate finance by providing financial incentives for private companies to develop projects to address climate change (e.g. research on new nuclear or biomass technology) and for individuals to adapt lifestyle choices that reduce their carbon emissions (e.g. subsidies to switch to renewable energy boilers and low emissions vehicles). France is contributing to international collective by providing funding to other countries (e.g. South Africa) to help them transition to low emissions energies, as well as signing international agreements on climate action (e.g. Beyond Oil and Gas Alliance).

Thus, France receives a score of +1

Analyst: Lucy (Peng Lu) Cai

⁵⁰⁴⁵ National biodiversity strategy 2030: Bérangère Couillard meets fourteen environmental NGOs, Ministry of Ecological Transition (Paris) 14 September 2022. Translation provided by analyst. Access Date: 22 September 2022. <https://www.ecologie.gouv.fr/strategie-nationale-biodiversite-2030-berangere-couillard-rencontre-quatorze-ong-environnementales>

⁵⁰⁴⁶ Launch of the "Nature Trail" call for projects to create or restore 1,000 km of trails, Ministry of Ecological Transition (Paris) 1 September 2022. Translation provided by analyst. Access Date: 22 September 2022. <https://www.ecologie.gouv.fr/lancement-lappel-projets-sentier-nature-creer-ou-restaurer-1000-km-sentiers>

⁵⁰⁴⁷ The Secretary of State for Ecology announces the creation of the Arjuzanx National Nature Reserve in the Landes, Ministry of Ecological Transition (Paris) 5 September 2022. Translation provided by analyst. Access Date: 22 September 2022. <https://www.ecologie.gouv.fr/secretaire-detat-chargee-lecologie-annonce-creation-reserve-naturelle-nationale-darjuzanx-dans>

⁵⁰⁴⁸ Building food transitions with France 2030: launch of the “Ferments of the future” Grand Challenge, Ministry of Agriculture and Food Sovereignty (Paris) 12 September 2022. Translation provided by analyst. Access Date: 22 September 2022. <https://agriculture.gouv.fr/construire-les-transitions-alimentaires-avec-france-2030-lancement-du-grand-defi-ferments-du-futur>

Germany: +1

Germany has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, by promoting green energy, climate financing and fossil fuel reduction policies. Germany has further used collective action by engaging in multilateral agreements hosted by the United Nations.

On 2 November 2021, the United Nations announced Germany joined the Global Methane Pledge.⁵⁰⁴⁹ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵⁰⁵⁰ Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that Germany joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵⁰⁵¹ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 8 November 2021, Germany announced their support for developing countries in regards to the adaptation of climate change with EUR150 million.⁵⁰⁵² This financial support will assist in funding Global environment facilities. This international financing will allow the poorest countries to help mitigate climate change.

On 11 November 2021, Germany committed under a joint declaration to introduce a nuclear-free European Union Taxonomy.⁵⁰⁵³ Under this new policy, Germany will monitor climate neutrality by using the nuclear-free European Union policies to ensure that products are marked as sustainable use or finance nuclear power. This allows Germany to be a global leader in sustainable finance.

On 11 November 2021, Germany in partnership with the United Kingdom, the United States, France and the European Union created an agreement with South Africa after COP26 to phase out coal.⁵⁰⁵⁴ The focus will be to transition the electricity generation from coal combustion to other sustainable forms of energy.

⁵⁰⁴⁹ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵⁰⁵⁰ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵⁰⁵¹ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵⁰⁵² Germany supports developing countries in adapting to climate change with a further 150 million euros, Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 8 November 2021. Access Date: 15 May 2022. <https://www.bmu.de/pressemitteilung/deutschland-unterstuetzt-entwicklungslaender-bei-der-anpassung-an-den-klimawandel-mit-weiteren-150-millionen-euro>

⁵⁰⁵³ Joint Declaration for a nuclear-free EU Taxonomy, Federal Ministry for the Environment, Natural Conservation, Nuclear Safety and Consumer (Berlin) 11 November 2021. Access Date: 16 February 2022. <https://www.bmu.de/en/topics/reports/report/joint-declaration-for-a-nuclear-free-eu-taxonomy>

⁵⁰⁵⁴ Germany supports South Africa in the coal phase-out, Federal Ministry for the Environment, Natural Conservation, Nuclear Safety and Consumer (Berlin) 11 November 2021. Access Date: 15 May 2022. <https://www.bmu.de/pressemitteilung/deutschland-unterstuetzt-suedafrika-beim-kohleausstieg>

On 13 November 2021, Germany announced their strength support for the Santiago Network to assist with the damaging effects of climate change in developing countries.⁵⁰⁵⁵ Germany has pledged EUR10 million to helping developing countries amongst the Santiago Network with loss and damages that occur with climate change.

On 14 November 2021, Germany, under the Paris Agreement agreed to change the double-counting policy for emission reductions.⁵⁰⁵⁶ Thus, emission reductions may only be counted once either in the purchasing country or the country where the measure is implemented, allowing emission trading to help increase climate action.

On 1 December 2021, Germany pledged EUR7.5 million to support school cycle paths in Landau as an initiative to reduce carbon emissions and promote climate protection.⁵⁰⁵⁷ This funding will aid to support designated bicycle roads and the construction of wheel friendly streets to promote climate protecting through the means of cycling.

On 13 December 2021, the Federal Ministry for Economic Affairs and Climate Protection announced further funding for electric vehicles with the intention to switch to clean mobility.⁵⁰⁵⁸ These financial incentives will increase electric mobility and increase climate projection.

On 23 December 2021, the Federal Ministry for Economic Affairs and Climate Protection pledged 900 million towards green hydrogen initiatives to provide the advancement of this international market.⁵⁰⁵⁹

On 16 March 2022, Germany and Norway agreed to hydrogen imports.⁵⁰⁶⁰ This joint venture allows for the increase of renewable energies and energy efficiency and will reduce the consumption of fossil fuels for both parties.

⁵⁰⁵⁵ Germany strengthens Santiago network to develop new solutions for dealing with losses and damage for developing countries, Federal Ministry for the Environment, Natural Conservation, Nuclear Safety and Consumer (Berlin) 13 November 2021. Access Date: 15 May 2022. <https://www.bmu.de/pressemitteilung/deutschland-staerkt-santiago-netzwerk-um-neue-loesungen-zum-umgang-mit-verlusten-und-schaeden-fuer-entwicklungslaender-zu-entwickeln>

⁵⁰⁵⁶ COP26 adopts high standards for global trade in greenhouse gas emission reductions, Natural Conservation, Nuclear Safety and Consumer (Berlin) 14 November 2021. Access Date:16 February 2022. <https://www.bmu.de/en/pressrelease/cop26-adopts-high-standards-for-global-trade-in-greenhouse-gas-emission-reductions>

⁵⁰⁵⁷ Federal Ministry for the Environment supports school cycle paths in Landau with 7.5 million euros Federal Ministry for the Environment, Natural Conservation, Nuclear Safety and Consumer (Berlin) 24 November 2021. Access Date: 15 May 2022. <https://www.bmu.de/pressemitteilung/bundesumweltministerium-foerdert-schul-radwege-in-landau-mit-75-millionen-euro>

⁵⁰⁵⁸ Habeck extends innovation premium for electric cars until the end of 2022 - Habeck: "After that, we will focus the funding even more on climate protection, Federal Minister for Economic Affairs and Climate Protection (Berlin) 13 December 2021. Access Date: 15 May 2022.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2021/12/20211213-habeck-verlangert-innovationspramie-fur-e-autos-bis-ende-2022-habeck-danach-richten-wir-die-forderung-noch-starker-auf-klimaschutz-aus.html>

⁵⁰⁵⁹ 900 million euros for hydrogen project H2Global -Habeck "Starting with the ramp-up of the hydrogen economy", Federal Minister for Economic Affairs and Climate Protection (Berlin) 23 December 2021. Access Date: 15 May 2022. <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2021/12/20211223-900-millionen-euro-fuer-wasserstoffprojekt-h2global.html>

⁵⁰⁶⁰ Germany and Norway agree on cooperation for hydrogen imports, Federal Minister for Economic Affairs and Climate Protection (Berlin) 16 March 2022. Access Date: 15 May 2022.

<https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2022/03/20220316-deutschland-und-norwegen-vereinbaren-zusammenarbeit-fur-wasserstoff-importe.html>

On 25 May 2022, Germany joined the US in signing a joint declaration on the cooperation of their two houses on environmental issues.⁵⁰⁶¹ This joint agreement will assist in solving current commonalities of environmental challenges on both ends and promote bilateral cooperation.

On 27 June 2022, Germany committed to taking climate change initiatives by reaching key decisions reaching an agreement on binding EU energy efficiency targets and expanding renewable energy.⁵⁰⁶² Germany has increased the renewable energy target to 40 per cent by 2030. These commitments allow Germany to rely less on fossil fuels and look towards expanding renewable energies within the EU.

On 22 August 2022, Germany joined the international coalition against plastic pollution with the intention on ending plastic pollution by 2040.⁵⁰⁶³ In addition to this, the coalition has three main strategic goals with its international bunding framework that includes: limiting plastic consumptions and production to a sustainable level, establishing a circular economy for plastics and ensuring the environmentally friendly handling of plastic.

On 29 August 2022, Germany has presented EUR188,000 dollars to climate adaption in Offenburg.⁵⁰⁶⁴ This funding is intended to help set up sustainable climate adaptation management to assist with the current extreme weather concerns in Offenburg.

On 16 September 2022, Federal Environmental Minister Steffi Lemke presented the district mayor of Tempelhof-Schoeneberg with grant approval for climate change adaptation.⁵⁰⁶⁵ This grant additionally provides local communities with a network of special mentoring programs for climate adaptation and a measure of qualifications for climate change adaptations.

On 21 September 2022, Germany committed to EUR1.5 billion for international biodiversity protection from 2025.⁵⁰⁶⁶ This action is instead to demonstrate an important signal for the protection of forests and other endangered ecosystems worldwide and for an ambitious result of the world conference on Nature in December 2022 in Montreal.

⁵⁰⁶¹ Germany and the United States of America deepen their environmental cooperation, Federal Minister for Economic Affairs and Climate Protection (Berlin) 25 May 2022. Access Date: 9 June 2022. <https://www.bmuv.de/pressemitteilung/deutschland-und-die-vereinigten-staaten-von-amerika-vertiefen-ihre-umweltpolitische-zusammenarbeit>

⁵⁰⁶² Minister Habeck: "Energy Council in Luxembourg takes key decisions for greater climate action: first agreement on binding EU energy efficiency target and new ambitious EU renewables target of 40% by 2030" (Berlin) 27 June 2022. Access Date: July 24 2022. <https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2022/06/20220627-habeck-energy-council-in-luxembourg-takes-key-decisions-for-greater-climate-action.html>

⁵⁰⁶³ Germany joins the international coalition against plastic pollution, Federal Minister for Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 22 August 2022. Access Date: 23 September 2022. <https://www.bmuv.de/pressemitteilung/deutschland-tritt-der-internationalen-koalition-gegen-plastikvermuellung-bei>

⁵⁰⁶⁴ Christian Kühn presents funding check for almost 188,000 euros for climate adaptation in Offenburg, Federal Minister for Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 29 August 2022. Access Date: 23 September 2022. <https://www.bmuv.de/pressemitteilung/christian-kuehn-ueberreicht-foerderscheck-in-hoehe-von-fast-188000-euro-fuer-klimaanpassung-in-offenburg>

⁵⁰⁶⁵ Steffi Lemke hands over grant approval for climate adaptation in Tempelhof-Schoneberg, Federal Minister for Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 16 September 2022. Access Date: 23 September 2022. <https://www.bmuv.de/pressemitteilung/steffi-lemke-ueberreicht-foerderbescheid-fuer-klimaanpassung-in-tempelhof-schoeneberg>

⁵⁰⁶⁶ Reliable partner for global nature conservation: Germany is increasing its international funding for biological diversity to 1.5 billion euros per year by 2025, Federal Minister for Environment, Nature Conservation, Nuclear Safety and Consumer Protection (Berlin) 21 September 2022. Access Date: 23 September 2022. <https://www.bmuv.de/pressemitteilung/verlaesslicher-partner-bei-weltweitem-naturschutz-deutschland-steigert-seine-internationale-finanzierung-fuer-biologische-vielfalt-bis-2025-auf-15-milliarden-euro-pro-jahr>

Germany has taken strong action in all three identified categories of climate action: mitigation, adaptation, and finance, with at least one action constituting international, collective action involving at least one other state. Germany has contributed to climate mitigation through joining the global methane pledge, which also constitutes an international collective action. Germany has contributed to climate adaptation and climate finance through their pledge EUR10 million to help developing countries in the Santiago Network with loss and damages that occur with climate change.

Thus, Germany receives a score of +1.

Analyst: Jennifer Lam

India: +1

India has partially complied with its commitment to accelerate their actions across mitigation, adaptation and finance, by promoting green energy, advancing climate justice and waste-free policy frameworks. India has further used collective action to promote marine research and resource management.

On 2 November 2021, the United Nations announced that India joined the Global Methane Pledge.⁵⁰⁶⁷ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference, is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵⁰⁶⁸ Because methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 24 November 2021, the Cabinet Committee on Economic Affairs of India approved the continuation of the research and development scheme O-SMART (Ocean Services, Modeling, Application, Resources and Technology).⁵⁰⁶⁹ This program will assist in the research and technology development that would assist in the capacity building of the oceanographic field. This scheme would strengthen India’s oceanography and technology development.

On 17 December 2021, India in partnership with Vietnam, signed a memorandum of understanding with the intention of scientific and technical cooperation in marine science and ecology.⁵⁰⁷⁰ This joint partnership between India and Vietnam aims to further scientific and applied research in regards to advancing ocean science and further improve the understanding of oceans. This partnership also provides collective research in marine science and ecology between both countries. This Memorandum of Understanding will be valid for the period of five years.

⁵⁰⁶⁷ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵⁰⁶⁸ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵⁰⁶⁹ Cabinet approved continuation of the umbrella scheme “Ocean Services, Modelling, Application, Resources and Technology (O-SMART),” Ministry of Earth Science, (New Delhi) 24 November 2022. Access Date: 15 May 2022. <https://moes.gov.in/sites/default/files/pib-1774581.pdf>

⁵⁰⁷⁰ India and Vietnam today signed a Memorandum of Understanding (MoU) towards promoting scientific and technical cooperation in marine science and ecology, Ministry of Earth Science, (New Delhi) 17 December 2021. Access Date: May 15 2022. <https://moes.gov.in/sites/default/files/PIB1782766.pdf>

On 3 February 2022, India merged two national afforestation programs to make a budgetary head. The purpose of these programs is to help find degraded forest areas.⁵⁰⁷¹ This effort has allowed for greater green efforts and better tree plantation promotion to assist in climate change efforts.

On 17 February 2022, India announced their Green Hydrogen Policy with the intention to bring down the global warming levels by transitioning their fossil fuel-based stocks to Green Hydrogen/Green Ammonia as the energy carriers and as chemical feedstock for different sectors.⁵⁰⁷²

On 18 July 2022, India announced that they would be prohibiting single-use plastic items that have low utility and high littering potential.⁵⁰⁷³ This regulation is intended to promote circular economy and sustainability in India.

On 31 August 2022, India and Nepal signed a memorandum of understanding in regard to the field of biodiversity.⁵⁰⁷⁴ This will assist in strengthening and enhancing cooperation in the field of forests, wildlife, environment, biodiversity and climate change.

India has fully complied with its commitment to accelerate our actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. India has taken strong actions to address climate mitigation, including an action that constitutes an international collective action. This can be seen with the decision to join the global methane pledge. Furthermore, India has taken actions towards climate adaptation by prohibiting single-use plastic.

Thus, India receives a score of +1.

Analyst: Jennifer Lam

Indonesia: 0

Indonesia has partially complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Indonesia joined the Global Methane Pledge.⁵⁰⁷⁵ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per

⁵⁰⁷¹ National afforestation programmes to improve the forest cover, Ministry of Environment, Forest and Climate Change (New Delhi) 3 February 2022. Access Date: 16 February 2022.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1795073>

⁵⁰⁷² Green Hydrogen Policy, Ministry of Policy, (New Delhi) 17 February 2021. Access Date: May 15 2022.

https://mnre.gov.in/img/documents/uploads/file_f-1645102285075.pdf

⁵⁰⁷³ Recycled plastic content in plastic packaging to promote circular, Ministry of Environment, Forest and Climate Change (New Delhi) 18 July 2022. Access Date: 23 September 2022.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1842620>

⁵⁰⁷⁴ Cabinet approves signing of an MoU between India and Nepal in the field of biodiversity conservation, Ministry of Environment, Forest and Climate Change (New Delhi) 31 August 2022. Access Date: September 2022.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1855676>

⁵⁰⁷⁵ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022.

https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

cent by 2030, using a 2020 baseline.”⁵⁰⁷⁶ Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that Indonesia joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵⁰⁷⁷ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 15 November 2022, Indonesia introduced a carbon tax, costing a minimum rate of IDR30 per kilogram of CO₂ equivalent.⁵⁰⁷⁸ The regulation introduced a cap-and-trade system, along with a fund to be established to facilitate carbon trading.

On 8 February 2022, the Ministry of Maritime Affairs and Fisheries, and the French Development Agency, signed an agreement to support the development of sustainable fisheries in Indonesia.⁵⁰⁷⁹ The agreements include preliminary studies in four ports, including environmental, social, economic and climatic studies, as part of efforts to adapt fisheries to climate change.

On 24 February 2022, Indonesia issued a decree enacting Indonesia’s Forestry and Other Land Use (FOLU) NET SINK 2030 plan. The plan outlines actions for sustainable forest management, environmental governance, carbon governance.⁵⁰⁸⁰

On 5 July 2022, Indonesia announced a joint collaboration with Great Britain to develop a low-carbon transportation program in Indonesia. Britain provided GBP9 million for the development of low-carbon urban mass transportation in Indonesia, including electric Bus Rapid Transit systems and rail systems.⁵⁰⁸¹

On 12 September 2022, Indonesia announced a partnership with Norway to support Indonesia’s efforts to reduce greenhouse gas emissions in the forestry sector. Efforts include reducing emissions, adopting better forest management techniques, reducing fires, strengthening law enforcement, and sharing knowledge. Indonesia will also build 30 nurseries that are capable of growing at least 10 million tree seedlings per year.⁵⁰⁸²

⁵⁰⁷⁶ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021.

Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵⁰⁷⁷ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵⁰⁷⁸ Indonesia introduces carbon trading policy to reduce emission, Reuters (Jakarta) 15 November 2022. Access Date: 11 February 2022. <https://www.reuters.com/business/cop/indonesia-introduces-carbon-trading-policy-reduce-emission-2021-11-15/>

⁵⁰⁷⁹ Oceans: A New Franco-Indonesian Partnership For More Sustainable Fisheries, French Development Agency (Paris) 8 February 2022. Access Date: 11 February 2022. <https://www.afd.fr/en/actualites/oceans-new-franco-indonesian-partnership-more-sustainable-fisheries>

⁵⁰⁸⁰ Minister Siti: Working Simultaneously, Parallel, and Integrated Requirements to Achieve Indonesia's FOLU Net Sink Target 2030, Ministry of Environment and Forestry of The Republic of Indonesia (Jakarta) 5 April 2022. Translation provided by Google. Access Date: 1 June 2022. https://www.menlhk.go.id/site/single_post/4746/menteri-siti-bekerja-secara-simultan-paralel-dan-terintegrasi-syarat-tercapainya-target-indonesia-s-folu-net-sink-2030

⁵⁰⁸¹ Indonesia-UK Agree on Cooperation in Low Carbon Transport Program, Jakarta Globe (Jakarta) 5 June 2022. Access Date: 23 July 2022. <https://jakartaglobe.id/news/uk-launches-9m-grant-for-lowcarbon-transport-in-indonesia>

⁵⁰⁸² New Indonesia-Norway Cooperation on GHG Emission Reduction in Forestry Sector and Other Land Uses, Ministry of Environment and Forestry of The Republic of Indonesia (Jakarta) 14 September 2022. Access Date: 22 September 2022. https://www.menlhk.go.id/site/single_post/4960/kerjasama-baru-indonesia-norwegia-pada-pengurangan-emisi-grk-sektor-kehutanan-dan-penggunaan-lahan-lainnya

Indonesia has taken action in two identified categories of climate action: adaptation and climate finance, but shows limited action in mitigation. Indonesia has taken action in climate adaptation through the enactment of the Forestry and Other Land Use (FOLU) NET SINK 2030 plan, which calls for sustainable forestry practices. Indonesia has taken action on climate finance through the introduction of a cap-and-trade system for carbon. Indonesia has taken international action by partnering with the French Development Agency to support sustainable fisheries in Indonesia.

Thus, Indonesia receives a score of 0.

Analyst: Lucy (Peng Lu) Cai

Italy: +1

Italy has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Italy joined the Global Methane Pledge.⁵⁰⁸³ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵⁰⁸⁴ Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that Italy joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵⁰⁸⁵ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 27 December 2021, Minister of Agriculture, Food, and Forestries Stefano Patuanelli, signed two decrees in which funds were allocated to companies recovering from natural disasters and adverse climatic events⁵⁰⁸⁶. In these decrees, EUR70 million was allocated to companies suffering from disasters that occurred between 2019 and 2021, while EUR13 million was allocated to companies suffering from disasters that occurred in 2021.

On 8 February 2022, the Italian parliament approved a new law mandating the state make safeguards for the environment, biodiversity and natural ecosystems.⁵⁰⁸⁷ These changes also state that the private

⁵⁰⁸³ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵⁰⁸⁴ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵⁰⁸⁵ Glasgow Leaders' Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵⁰⁸⁶ Minister Patuanelli signs the decrees for 83 million euros in compensation to companies for natural disasters, Italian Ministry of Agricultural, Food and Forestry Policies (Rome) 27 December 2021. Translation provided by Google Chrome. Access Date: 21 February 2021. <https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/17699>

⁵⁰⁸⁷ Italy makes constitution greener, environmentalists call for action, Reuters (Rome) 9 February 2022. Access Date: 1 October 2022. <https://www.reuters.com/world/europe/italy-makes-protecting-environment-part-constitution-2022-02-08/>

industry and private economic initiatives must not damage the health of the public or the environment. The constitution now also includes animal protection.

On 27 May 2022, the General Directorate of the Mountain Economy and Forests adopted the provision that allocates EUR420 million to the National Forest Strategy between 2022-2023.⁵⁰⁸⁸ Among the goals of this strategy is to increase the biological diversity of forest ecosystems and to prevent or repair damage caused by natural and anthropogenic risks.

Italy has fully complied with its commitment to accelerate our actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. Italy has taken strong actions towards climate mitigation, climate adaptation, climate finance, and has taken actions that constitute international collective actions. The decision to join both the Global Methane Pledge and the Declaration on Forests and Land Use contribute to climate mitigation and are international collective actions. The allocation of funding to companies recovering from natural disasters and adverse climatic events contribute to both climate adaptation and climate finance.

Thus, Italy receives a score of +1.

Analysts: Sylvia Mursbed, Surabhi Pradhan and Jenna Im

Japan: +1

Japan has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, Prime Minister Fumio Kishida announced Japan's "Net-zero by 2050" plan which aims to reduce greenhouse gas emissions by 46 per cent in fiscal year 2030 from 2013 levels.⁵⁰⁸⁹ The plan includes a JPY2 trillion Green Innovation Fund to develop better batteries, synthetic fuels, and other commodities essential to electric vehicle production. Japan will invest USD14.8 billion in climate change adaptation and disaster mitigation and approximately USD240 million to help finance global forestry conservation.

On 2 November 2021, the United Nations announced that Japan joined the Global Methane Pledge.⁵⁰⁹⁰ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take "national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline." Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

⁵⁰⁸⁸420 million for the implementation of the National Forest Strategy: funds available for 2022 and 2023 allocated by the 2022 Stability Law, Ministry of Agricultural, Food, and Forestry Policies (Rome) 27 May 2022. Translation provided by: Google Chrome. Access Date: 26 June, 2022.

⁵⁰⁸⁹ COP26 World Leaders Summit Statement by Prime Minister KISHIDA Fumio, Prime Minister of Japan and His Cabinet (Tokyo) 2 November 2021. Access Date: 11 February 2022.
https://japan.kantei.go.jp/100_kishida/statement/202111/_00002.html

⁵⁰⁹⁰ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022.
https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

On 2 November 2021, the United Nations announced that Japan joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵⁰⁹¹ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 14 January 2022, Japan announced it will provide USD13 million in emergency grant aid to the Philippines to assist in recovering from damages caused by Typhoon Odette.⁵⁰⁹² The emergency grant aid will fund humanitarian assistance activities through international nongovernmental organizations providing food, shelter, and health services. This constitutes climate change adaptation through the provision of financial support to a country facing the adverse effects of climate change.

On 4 February 2022, the government announced it will provide USD2.44 million in emergency grant aid to Tonga following damages caused by a volcanic eruption and tsunami.⁵⁰⁹³ The aid will help the implementation of humanitarian assistance through the United Nations Children's Fund and the World Food Programme. This constitutes climate change adaptation through the provision of financial support to a country facing the adverse effects of climate change.

On 22 March 2022, the Ministry of Foreign Affairs announced Japan has contributed USD6 million to the Adaptation Fund, a multilateral climate fund assisting developing countries in adapting to the adverse effects of climate change.⁵⁰⁹⁴ The initiative aims to address the Paris Agreement's emphasis on aiding vulnerable developing countries. This constitutes climate change adaptation through financing a multilateral instrument that assists developing countries in adapting to worsening climate conditions.

On 19 August 2022, the Environmental Regeneration and Material Cycles Bureau of the Ministry of the Environment of Japan and the Department of Local Administration of the Ministry of the Interior of the Kingdom of Thailand signed a memorandum of cooperation for the mutual strengthening of waste management and recycling policies.⁵⁰⁹⁵ The effective period will last for five years, and the cooperation will consist of regular policy dialogues, exchanges in information on policy development and implementation, and the organization of workshops, seminars, and conferences. This action addresses the commitment to strengthen global efforts to further climate change adaptation and mitigation through sustainable waste management practices.

On 25 August 2022, the Ambassador of Japan to the Republic of Senegal, Osamu Izawa, and Minister of Environment and Sustainable Development of the Republic of Senegal, Adbou Karim Sall, signed a memorandum of cooperation on the Joint Crediting Mechanism (JCM).⁵⁰⁹⁶ The Republic of Senegal

⁵⁰⁹¹Glasgow Leaders' Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵⁰⁹² Emergency Grant Aid for the Philippines in Response to Typhoon Disaster, Ministry of Foreign Affairs of Japan (Tokyo) 14 January 2022. Access Date: 15 May 2022. https://www.mofa.go.jp/press/release/press1e_000244.html

⁵⁰⁹³ Emergency Grant Aid in response to the volcanic eruption and tsunami in the Kingdom of Tonga, Ministry of Foreign Affairs of Japan (Tokyo) 4 February 2022. Access Date: 15 May 2022. https://www.mofa.go.jp/press/release/press1e_000255.html

⁵⁰⁹⁴ Japan's contribution to the Adaptation Fund (AF), Ministry of Foreign Affairs of Japan (Tokyo) 25 March 2022. Access Date: 15 May 2022. https://www.mofa.go.jp/ic/ch/page24e_000351.html

⁵⁰⁹⁵ Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment of Japan, and Department of Local Administration, Ministry of the Interior of the Kingdom of Thailand, sign a Memorandum of Cooperation in the Field of Waste Management, Ministry of the Environment of Japan (Tokyo) 23 August 2022. Access Date: 25 August 2022. https://www.env.go.jp/en/press/press_00416.html

⁵⁰⁹⁶ Japan and the Republic of Senegal sign the Memorandum of Cooperation for establishing the JCM, Ministry of the Environment of Japan (Tokyo) 25 August 2022. Access Date: 25 September 2022. https://www.env.go.jp/en/press/press_00492.html

is the eighteenth partner country in the JCM program. The JCM is a market mechanism framework used to promote emission reductions through the dissemination of decarbonizing technologies and infrastructure from Japan to partnering developing countries. This action is in accordance with Article Six of the Paris Agreement and contributes to the mitigation of carbon emissions on a global scale.

On 26 August 2022, Minister for Foreign Affairs of Japan, Yoshimasa Hayashi, and Minister of Foreign Affairs, Migration and Tunisian Abroad of the Republic of Tunisia, Othman Jerandi, signed a memorandum of cooperation on the Joint Crediting Mechanism, becoming the nineteenth partner country.⁵⁰⁹⁷ This will allow Japan to contribute to the nationally determined contributions of both countries by sharing decarbonizing systems and services. This action is in accordance with Article Six of the Paris Agreement and contributes to the mitigation of carbon emissions on a global scale.

On 30 August 2022, Minister of the Environment of Japan, Akihiro Nishimura, and Coordinating Minister for Maritime Affairs and Investment of the Republic of Indonesia, Luhut Pandjaitan, signed the Comprehensive Environmental Cooperation Package on Climate-Biodiversity Conservation-Circular Economy-Nexus.⁵⁰⁹⁸ The package will promote cooperation on pressing environmental issues in the G20 and induce over USD700 million in private and public investments in decarbonization, biodiversity conservation, and the circular economy. This action advances climate change adaptation and mitigation in an international framework, promoting cooperation among countries to reach the Paris Agreement goals.

On 5 September 2022, the Ambassador of Japan to the Republic of Azerbaijan, Junichi Wada, and Minister of Ecology and Natural Resources of the Republic of Azerbaijan, Mukhtar Babayev, signed a memorandum of cooperation on the Joint Crediting Mechanism, becoming the twentieth partner country.⁵⁰⁹⁹ This will allow Japan to work closely with Azerbaijan to establish carbon mitigation systems with Joint Crediting Mechanism credits. This action is in accordance with Article Six of the Paris Agreement and contributes to the mitigation of carbon emissions on a global scale.

On 6 September 2022, the Ambassador of Japan to the Republic of Moldova, Yoshihiro Katayama, and Minister of Environment of the Republic of Moldova, Iuliana Cantaragiu, signed a memorandum of cooperation on the Joint Crediting Mechanism, becoming the twenty-first partner country.⁵¹⁰⁰ This will allow Japan to work closely with Moldova to establish carbon mitigation systems with Joint Crediting Mechanism credits. This action is in accordance with Article Six of the Paris Agreement and contributes to the mitigation of carbon emissions on a global scale.

On 13 September 2022, the Ambassador of Japan to Georgia, Akira Imamura, and Minister of Environment Protection and Agriculture of Georgia, Otar Shamgia, signed a memorandum of cooperation on the JCM, becoming the twenty-second partner country.⁵¹⁰¹ This will allow Japan to work closely with Georgia to establish carbon mitigation systems with Joint Crediting Mechanism

⁵⁰⁹⁷ Japan and the Republic of Tunisia sign the Memorandum of Cooperation for establishing the JCM, Ministry of the Environment of Japan (Tokyo) 26 August 2022. Access Date: 25 September 2022.

https://www.env.go.jp/en/press/press_00412.html

⁵⁰⁹⁸ Ministry of the Environment, Japan, and Coordinating Ministry for Maritime Affairs and Investment, Republic of Indonesia, hold Bilateral Meeting and sign Comprehensive Environmental Cooperation Package, Ministry of the Environment of Japan (Tokyo) 1 September 2022. Access Date: 25 September 2022. https://www.env.go.jp/en/press/press_00450.html

⁵⁰⁹⁹ Japan and the Republic of Azerbaijan sign the Memorandum of Cooperation for establishing the JCM, Ministry of the Environment of Japan (Tokyo) 6 September 2022. Access Date: 25 September 2022.

https://www.env.go.jp/en/press/press_00510.html

⁵¹⁰⁰ Japan and the Republic of Moldova Sign the Memorandum of Cooperation for Establishing the JCM, Ministry of the Environment of Japan (Tokyo) 6 September 2022. Access Date: 25 September 2022.

https://www.env.go.jp/en/press/press_00446.html

⁵¹⁰¹ Japan and Georgia Sign the Memorandum of Cooperation for Establishing the JCM, Ministry of the Environment of Japan (Tokyo) 13 September 2022. Access Date: 25 September 2022. https://www.env.go.jp/en/press/press_00444.html

credits. This action is in accordance with Article Six of the Paris Agreement and contributes to the mitigation of carbon emissions on a global scale.

On 16 September 2022, the Government of Japan announced it would allocate emergency grant aid of USD 7 million to Pakistan to assist in the recovery from damages caused by the floods this summer.⁵¹⁰² The aid will go to humanitarian assistance activities and resources through international organizations including the World Food Program, International Organization for Migration, and UNICEF. This action constitutes climate change adaptation financing.

Japan has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. Japan has taken strong action in all three identified categories of climate action: mitigation, adaptation, and finance, with at least one action constituting international, collective action involving at least one other state. Japan's investment of USD14.8 billion in climate change adaptation and disaster mitigation contributes to climate mitigation, adaptation, and finance. Further, their decision to join the global methane pledge and the expansion of JCM partnerships constitutes international collective action.

Thus, Japan receives a score of +1.

Analyst: Kenji Tan

Korea: +1

Korea has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Korea joined the Global Methane Pledge.⁵¹⁰³ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵¹⁰⁴ Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that Korea joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵¹⁰⁵ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

⁵¹⁰² Emergency Grant Aid in response to the Flood Disaster in Pakistan, Ministry of Foreign Affairs of Japan (Tokyo) 16 September 2022. Access Date: 25 September 2022. https://www.mofa.go.jp/press/release/press6e_000401.html

⁵¹⁰³ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵¹⁰⁴ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵¹⁰⁵ Glasgow Leaders' Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

On 29 December 2021, the Ministry of Environment signed an agreement with Incheon Metropolitan City, Gyeongsangbuk-do, Korea Productivity Center, Korea Green Foundation, and Hyundai Steel to recycle spent coffee grounds.⁵¹⁰⁶ The aim is to recycle 200,000 tons of coffee grounds into a sawdust substitute of deodorant which will save up to KRW20 billion in waste processing costs as well as reduce carbon emissions by 338kg/ton. This constitutes to adapting industrial policy to help mitigate waste and emissions.

On 12 January 2022, the Ministry of Environment announced its plan for 2022 with three core tasks: full implementation for carbon neutrality, integrated water management, and expansion of inclusive environmental services.⁵¹⁰⁷ Each core task is accompanied by an in depth plan on how it will be achieved. The Ministry aims at keeping on track for the 2030 greenhouse gas reduction goal and 2050 carbon neutrality commitment with measures including scrapping old diesel vehicles and promoting eco-friendly electric appliances in households.

On 26 January 2022, the Ministry of Environment announced the government will implement a deposit system for disposable cups in major fast food and café chains from 10 June 2022.⁵¹⁰⁸ The plan will have consumers pay a KRW300 deposit per disposable cup which can be reclaimed when returning the cup to any of the 38,000 stores that will be subject to the deposit system. The disposable cups, both paper and plastic, will then be sent to recycling companies. As recycling saves energy, this policy will reduce carbon emissions. As of 20 May 2022, the government has decided to postpone the implementation of this policy to December 2022, acknowledging that many small to medium-sized businesses are struggling to recover from the effects of the pandemic.⁵¹⁰⁹

On 27 January 2022, Minister of Environment Han Jeoung Ae committed to strengthen the national environmental health services to protect socially vulnerable groups that are particularly susceptible to extreme temperatures.⁵¹¹⁰ Environmental health experts will visit 1,500 low-income households to assess living conditions and the ministry aims to provide indoor heaters and air purifiers as needed as part of climate change adaptation measures.

⁵¹⁰⁶ Reusing Coffee Grounds as Precious Resources for Livestock Farmers, Ministry of Environment (Sejong) 29 December 2021. Access Date: 11 February 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=10&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1498420&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹⁰⁷ The Ministry of Environment announces a plan for 2022, Ministry of Environment (Seoul) 12 January 2022. Access Date: 11 February 2022. <http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1501800&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹⁰⁸ Government to charge KRW 300 deposit per disposable cup starting from June 10 of this year, Ministry of Environment (Sejong) 26 January 2022. Access Date: 14 May 2022

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=10&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1505560&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹⁰⁹ The Deposit Scheme for Disposable Cups will be Postponed until December 2022, Ministry of Environment (Sejong) 20 May 2022. Access Date: 5 June 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1526830&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹⁰ The Ministry of Environment to strengthen environmental health services for socially vulnerable groups, Ministry of Environment (Seoul) 27 January 2022. Access Date: 11 February 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1505880&boardMasterId=522&boardCategoryId=&decorator=>

On 14 March 2022, Minister Han Jeoung Ae simplified the requirements for recycling used coffee grounds of coffee shops which had been classified as household waste.⁵¹¹¹ As a household waste, their disposal options were either by landfilling or incineration which created unnecessary carbon emissions. This change addresses climate change mitigation by aiming to reduce emissions by allowing coffee grounds to be a circular resource.

On 24 March 2022, Minister Han Jeoung Ae signed a memorandum of understanding on the establishment of a “Special Hydrogen Mobility Zone” with Gyeonggi-do Provincial Government, Pyeongtaek City, Hyundai Motor Company, SK E&S, Hyundai Glovis, and Korea Gas Technology Corporation.⁵¹¹² The project involves supplying 850 hydrogen-powered commercial vehicles for Pyeongtaek City, including trucks and buses, to replace the much higher carbon-emitting internal-combustion engine vehicles. The Ministry of Environment will assist the project through administrative and financial support.

On 31 March 2022, Minister Han Jeoung Ae signed a memorandum of understanding on the pilot projects for greener delivery services with the Seoul Metropolitan Government, the Korea Automobile Environmental Association, and Coupang e-commerce company.⁵¹¹³ The projects will aim to create wireless charging stations for electric trucks that are suitable for logistics and provide a mechanism to allow companies to convert internal-combustion engine trucks into electric trucks. This action contributes to an adaptation in the service industry to reduce vehicular carbon emissions.

On 26 April 2022, the Cabinet passed a partial amendment of the Enforcement Decree of the Act on the Promotion of Saving and Recycling of Resources which will see fifteen plastic products becoming subject to recycling obligations.⁵¹¹⁴ This contributes to an adaptation in industrial practices that mitigates greenhouse gas emissions.

On 9 May 2022, Minister Han Jeoung Ae and Minister of Environment and Tourism of Mongolia, Bat-Ulzii Bat-Erdene, signed an “Implementing Arrangement for Cooperation on Paris Agreement Article 6 Cooperative Approach (Agreement for Global GHG Reduction)” and an “Memorandum of Understanding on Environmental Cooperation.”⁵¹¹⁵ The agreement specifies how the signatories will cooperate in responding to climate change through sharing policies and establishing a joint committee

⁵¹¹¹ Korea Now Allows Used Coffee Grounds Recycling Without Permit, Ministry of Environment (Sejong) 18 March 2022. Access Date: 14 May 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=20&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1514740&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹² Pyeongtaek to lead conversion of commercial vehicles to hydrogen fuel cell, Ministry of Environment (Sejong) 24 March 2022. Access Date: 14 May 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=10&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1516720&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹³ Public and Private Sectors to Improve Electric Truck Charging System in Logistics, Ministry of Environment (Sejong) 4 April 2022. Access Date: 14 May 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=10&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1517850&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹⁴ Recycling Obligations Reinforced for fifteen Plastic Products, Including Industrial Films, Ministry of Environment (Sejong) 29 April 2022. Access Date: 14 May 2022

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1522620&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹⁵ Korea and Mongolia to Pursue Cooperation in the Mitigation of GHG in Accordance with Article 6 of the Paris Agreement, Ministry of Environment (Sejong) 9 May 2022. Access Date: 14 May 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1523930&boardMasterId=522&boardCategoryId=&decorator=>

to monitor the implementation. This action satisfies the global effort aspect of the commitment by working with another country to address climate change.

On 21 June 2022, Minister of Environment, Han Wha-jin, announced plans to increase renewable energy production from 3,264 GWh in 2021 to 5,764 GWh in 2026, enough to supply 1.38 million households with electricity.⁵¹¹⁶ The plan will utilize biogas, floating solar farms, and hydropower derived from wastewater treatment facilities, water filtration plants, and dams. This commitment addresses climate change adaptation as it works to improve infrastructure to meet a more renewable standard.

On 30 June 2022, the Ministry of Environment amended the Enforcement Decree of the Clean Air Conservation Act to manage gas heat pumps as air pollutant emitting facilities.⁵¹¹⁷ Gas heat pumps will have newly permissible standards for emitting nitrogen oxide, carbon monoxide, and total hydrocarbons beginning in January 2023. This action constitutes climate change mitigation as it helps limit greenhouse gas emissions from a newly recognized pollutant emitting source.

On 17 August 2022, Minister of Environment, Han Wha-jin, announced the revision of the Enforcement Rules of the Clean Air Conservation Act which will be enforced on 1 January 2023.⁵¹¹⁸ The revision details the extension of the early scrappage subsidy program for grade four diesel vehicles that emit ultrafine particles. The ministry of Environment estimates an annual reduction in emissions of ultrafine particles by 3,400 tons and GHGs by 4.7 million tons. This action addresses climate change mitigation by significantly reducing emissions from polluting vehicles.

On 5 September 2022, Minister of Environment, Han Wha-jin, announced a significant ease in the criteria for recognizing circular resources and the establishment of a system to recycle captured carbon dioxide using Carbon Capture, Utilization, and Storage technology.⁵¹¹⁹ The standards outlined to classify a substance as a circular resource have been reduced from nine to two. This will lower the carbon dioxide emissions from incineration and will lessen the burden on the waste management sector. This action constitutes climate change adaptation and mitigation as it reduces emissions and promotes future sustainability with a circular economy.

On 19 September 2022, Minister of Environment, Han Wha-jin, Busan Metropolitan Government, Hyundai Motors, Busan Port Authority, Busan Metrobus Company Association, and Busan Techno Park signed a memorandum of understanding to replace 1,000 diesel buses into hydrogen fuel cell

⁵¹¹⁶ The Ministry of Environment plans to produce energy from wastewater treatment plants and water filtration plants, Ministry of Environment (Sejong) 24 June 2022. Access Date: 12 August 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=10&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1533260&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹⁷ The Ministry of Environment to establish permissible emissions standards for gas heat pumps (GHP), Ministry of Environment (Sejong) 4 July 2022. Access Date: 12 August 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1535060&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹⁸ The Ministry of Environment to extend its vehicle scrappage subsidy program to Grade 4 diesel vehicles from 2023, Ministry of Environment (Sejong) 19 August 2022. Access Date: 25 September 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=10&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1543110&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹¹⁹ ME to Speed up deregulation for waste recycling, Ministry of Environment (Sejong) 5 September 2022. Access Date: 25 September 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=10&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1546940&boardMasterId=522&boardCategoryId=&decorator=>

buses in Busan by 2025.⁵¹²⁰ Busan aims to increase its competitiveness as a carbon-free exhibition in a bid to host the World Expo 2030. This action addresses climate change adaptation as it contributes to an infrastructural transformation towards sustainability.

Korea has taken strong action to address climate mitigation and adaptation, and has also taken action constituting international, collective action involving at least one other state. Their climate plan for 2022 contributes to climate mitigation, and their strengthened national environmental health services contribute towards climate adaptation. In leading the creation of the “Special Hydrogen Mobility Zone,” the Ministry of Environment has provided financial support for climate change mitigation. Further, the decision to join the global methane pledge constitutes an international collective action.

Thus, Korea receives a score of +1.

Analyst: Kenji Tan

Mexico: 0

Mexico has partially complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the Ministry of Foreign Relations announced Mexico joined the Global Methane Pledge.⁵¹²¹ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵¹²² Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the Ministry of Foreign Relations announced Mexico had formally joined the Declaration on Forests and Land Use that was drafted at COP26.⁵¹²³ The document pushes for the conservation and restoration of forests and other terrestrial ecosystems, improving rural livelihoods, redesigning agricultural policies, and promoting food security.⁵¹²⁴

On 13 December 2021, the Ministry of the Environment and Natural Resources announced a new protected natural area located in the municipalities of Mexquitic de Carmona, San Luis Potosí, Villa de Reyes and Villa de Arriaga in the state of San Luis Potosí.⁵¹²⁵ This area spans over 111,000 hectares

⁵¹²⁰ The City of Busan to Replace its 1,000 Buses with Fuel Cell Buses, Ministry of Environment (Sejong) 22 September 2022. Access Date: 25 September 2022.

<http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=461&orgCd=&boardId=1550650&boardMasterId=522&boardCategoryId=&decorator=>

⁵¹²¹ Mexico joins the Global Methane Pledge at COP26, Ministry of Foreign Relations (Mexico City) 2 November 2021. Access Date: 12 February 2022. <https://www.gob.mx/sre/prensa/mexico-joins-the-global-methane-pledge-at-cop26?idiom=en>

⁵¹²² World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵¹²³ Mexico joins COP26 Declaration on Forests and Land Use, Ministry of Foreign Relations (Mexico City) 2 November 2021. Access Date: 12 February 2022. <https://www.gob.mx/sre/prensa/mexico-joins-cop26-declaration-on-forests-and-land-use>

⁵¹²⁴ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵¹²⁵ Government of Mexico declares Sierra de San Miguelito Natural Protected Area, in SLP, Mexican Secretary of the Environment and Natural Resources (Mexico City) 13 December 2021. Translation provided by Google Chrome. Access Date: 21 February 2022. <https://www.gob.mx/semarnat/prensa/gobierno-de-mexico-declara-area-natural-protegida-a-la-sierra-de-san-miguelito-en-slp?idiom=es>

and is made up of ecosystems that are crucial for the conservation of biological diversity with over 700 species of plants and 300 species of animals.

On 3 February 2022, the Ministry of Environment and Natural Resources announced an agreement in which the Federal Maritime-Terrestrial Zone in Isla Chica, Holbox, Quintana Roo is designated a protected area.⁵¹²⁶ Included in this agreement are actions for the protection, conservation and sustainable management of the resources in the region.

On 8 February 2022, the National Agency for Industrial Safety and Environmental Protection of the Hydrocarbons Sector signed a coordination agreement with the Government of the State of Puebla to improve mechanisms for the disclosure and compliance with the law that regulates the protection of the environment in the hydrocarbons sector, as well as releasing emissions into the atmosphere and managing of waste from it.⁵¹²⁷ This coordinated effort will identify and share information about situations with higher risks of causing environmental damage, with the goal of preventing negative outcomes.

On 22 February 2022, the Ministry of Environment and Natural Resources unveiled the General Strategy for Territorial Planning, an effort in coordination with the Ministry of Agrarian, Territorial, and Urban Development.⁵¹²⁸ It aims to shift the uses of land into a model that is more fair, balanced, and sustainable. The policy is part of a broader push to help plan areas in a way that integrates both the needs of communities and the environment, which thereby protects local areas while guaranteeing improvements in wellbeing.

On 24 March 2022, the Ministry of Environment and Natural Resources signed two agreements with the State of Tlaxcala which will allow for the prevention, control, mitigation, remedy, and repair of the damage incurred by the environment and natural resources by the various economic sectors within the state.⁵¹²⁹ This is created in hopes of promoting economic activity that is conscious of the need to protect the environment while also creating mechanisms to adapt to the effects of climate change.

On 1 April 2022, the Ministry of Environment and Natural Resources established a Critical Habitat zone in the mountainous wetlands of La Kisst and María Eugenia in the town of San Cristobal de las Casas, Chiapas.⁵¹³⁰ Through the creation of this mechanism, the Ministry is striving to ensure the protection and conservation of the flora and fauna residing in the ecosystems of La Kisst and María Eugenia.

On 19 April 2022, the Ministry of Environment and Natural Resources and the government of the State of Nayarit signed a collaboration agreement that allows for participatory urban planning of the

⁵¹²⁶ Semarnat issues Agreement for the protection of the Federal Maritime-Terrestrial Zone in Isla Chica, Holbox, Quintana Roo, Mexican Secretary of the Environment and Natural Resources (Mexico City) 3 February 2022. Translation provided by Google Chrome. Access Date: 21 February 2022. <https://www.gob.mx/semarnat/prensa/emite-semarnat-acuerdo-para-la-proteccion-en-zona-federal-maritimo-terrestre-en-isla-chica-holbox-quintana-roo?idiom=es>

⁵¹²⁷ Collaboration of the hydrocarbon sector in Puebla, Mexican Secretary of the Environment and Natural Resources (Mexico City) 8 February 2022. Translation provided by Google Chrome. Access Date: 21 February 2022. <https://www.gob.mx/semarnat/prensa/colaboracion-del-sector-hidrocarburos-en-puebla?idiom=es>

⁵¹²⁸ General Strategy for Territorial Planning Unveiled (Mexico City) 22 February 2022. Translation provided by Analyst. Access Date: 15 May 2022. <https://www.gob.mx/semarnat/prensa/presentan-estrategia-general-por-la-planeacion-territorial?idiom=es>

⁵¹²⁹ Collaboration of the environmental sector with the government of Tlaxcala (Mexico City) 24 March 2022. Translation provided by Analyst. Access Date: 15 May 2022. <https://www.gob.mx/semarnat/prensa/colaboracion-de-sector-ambiental-con-el-gobierno-de-tlaxcala?idiom=es>

⁵¹³⁰ A Critical Habitat is established in the Mountain Wetlands of La Kisst and María Eugenia, in San Cristobal de las Casas, Chiapas (Mexico City) 1 April 2022. Translation provided by Analyst. Access Date: 5 June 2022. <https://www.gob.mx/semarnat/prensa/se-establece-el-habitat-critico-en-los-humedales-de-montana-la-kisst-y-maria-eugenia-en-san-cristobal-de-las-casas-chiapas?idiom=es>

municipality of Bahía de Banderas and thus allow for sustainable development in the region.⁵¹³¹ Through this initiative, it is hoped that new policies are developed that allow for sustainable development in the region of Bahía de Banderas-Vallarta.

On 25 May 2022, the Ministry of Environment and Natural Resources and the government of Yucatan signed and ratified agreements to allow for coordinated efforts to tackle issues of land use planning, pig farms and the Federal Maritime-Terrestrial Zone.⁵¹³² The agreements are targeting the objective of harmonizing legislative instruments of different levels of government in the nation, allowing for cross-government collaboration in environmental issues in the state of Yucatan.

On 17 August 2022, the Ministry of Environment and Natural Resources launched, SIAT which expects to help with the monitoring of mitigation and adaption actions within the country.⁵¹³³ Through this, it is expected that it will be easier to track what has been conducted to fulfill the Paris Agreement, improving reporting.⁵¹³⁴

Mexico has taken strong actions towards climate mitigation through initiatives like creating new environmentally protected areas and building frameworks to encourage more sustainable planning practices. Further, the decision to join both the Global Methane Pledge and the Declaration on Forest and Land Use constitute international collective actions. Additionally, establishing collaboration agreements with lower levels of governments supports the goal of climate adaption by formalizing procedures to better deal with the impacts of climate change. Nevertheless, Mexico has yet to take concrete steps toward the goal of climate financing.

Thus, Mexico receives a score of 0.

Analyst: Mateo Larrazabal

Russia: 0

Russia has partially complied with its commitment to accelerate its actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Russia joined 141 other countries in committing to the Declaration on Forests and Land Use at the 26th United Nations Climate Change Conference.⁵¹³⁵ The Declaration reaffirms collective and individual commitments to the UN

⁵¹³¹ The Federal, Nayarit, and Bahía de Banderas Governments join efforts in Municipal, Ecological, and Participatory Planning (Mexico City) 19 April 2022. Translation provided by Analyst. Access Date: 5 June 2022.

<https://www.gob.mx/semarnat/prensa/suman-esfuerzos-gobiernos-federal-de-nayarit-y-bahia-de-banderas-en-ordenamiento-ecologico-y-participativo-municipal?idiom=es>

⁵¹³² Semarnat and the Government of Yucatan strengthen cooperation to address high-priority environmental issues (Mexico City) 25 May 2022. Translation provided by Analyst. Access Date: 5 June 2022.

<https://www.gob.mx/semarnat/prensa/semarnat-y-gobierno-de-yucatan-fortalecen-cooperacion-para-atender-conflictos-ambientales-prioritarios?idiom=es>

⁵¹³³ Mexico launches tool that will help monitor mitigation and adaption actions within the country (Mexico City) 17 August 2022. Translation provided by: Analyst. Access Date: 23 September 2022 <https://www.gob.mx/semarnat/prensa/lanza-mexico-herramienta-que-ayudara-a-monitorear-acciones-de-mitigacion-y-adaptacion-en-las-entidades-del-pais>

⁵¹³⁴ Mexico launches tool that will help monitor mitigation and adaption actions within the country (Mexico City) 17 August 2022. Translation provided by: Analyst. Access Date: 23 September 2022

<https://www.gob.mx/semarnat/prensa/lanza-mexico-herramienta-que-ayudara-a-monitorear-acciones-de-mitigacion-y-adaptacion-en-las-entidades-del-pais>

⁵¹³⁵ Glasgow Leaders' Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 8 February 2022, Deputy Prime Minister for Environmental Policy Viktoria Abramchenko announced their plans to invest RUB5.9 into climate and decarbonization research over the span of the next eight years.⁵¹³⁶ The state-funded research program will focus on studying climate change and strategies for adaptation and decarbonization. The government hopes the program and funding will reduce air pollution and improve the health of those in heavily industrialized cities. By monitoring industrial carbon emissions and boosting Russian ecosystems' the country will be able to better understand environmental changes and predict possible risks, to reduce them.

Russia has partially complied with its commitment to accelerate actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. Russia has taken action towards climate mitigation through signing the Declaration on Forests and Land Use. Further, this agreement constitutes a collective international action. Russia has not taken actions towards climate adaptation or climate finance.

Thus, Russia receives a score of 0.

Analysts: Jenna Im and Surabhi Pradhan

Saudi Arabia: 0

Saudi Arabia has partially complied with its commitment to accelerate their actions across mitigation, adaptation, and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Saudi Arabia joined the Global Methane Pledge.⁵¹³⁷ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference, is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.” Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 23 December 2021, Assistant Minister of Foreign Affairs for Executive Affairs, Abdulhadi bin Ahmed Al-Mansoori, increased the energy efficiency of the Ministry of Foreign Affairs headquarters by 31.98 per cent.⁵¹³⁸ By upgrading the air-conditioning, lighting and control systems, over 5.59 million kilowatt-hours or 3,700 metric tons of harmful carbon emissions will be saved annually.

⁵¹³⁶ Victoria Abramchenko: 5.9 billion rubles will be allocated for scientific solutions in the field of environmental development and climate change, Government of Russia (Moscow) 8 February 2022. Translation provided by Google Translate. Access Date: 1 October 2022. <http://government.ru/news/44518/>

⁵¹³⁷ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵¹³⁸ "Tarsheed" completes the implementation of the work of raising energy efficiency and reducing its consumption in the Ministry of Foreign Affairs building, Saudi Press Agency (Riyadh) 23 December 2021. Translation provided by: Google Translate. Access Date: 9 February 2022. <https://www.spa.gov.sa/viewstory.php?lang=ar&newsid=2315407>

On 24 January 2022, the Ministry of Economy & Planning signed a Memorandum of Understanding with the King Abdullah University of Science and Technology.⁵¹³⁹ The three-year agreement primarily facilitates collaboration in research for sustainable development, especially with respect to offshore coastal systems, desert agriculture and low carbon fuels. Additionally, it creates programs in talent and capacity development as well as innovation inducement.

On 26 April 2022, the Government of the government of Saudi Arabia signed an agreement to purchase between 50,000 and 100,000 electric vehicles over a ten-year period.⁵¹⁴⁰ The agreement aims to reduce carbon emissions through adoption of these vehicles and by promoting the manufacture and development of environmentally friendly vehicles.

On 28 May 2022, the Saudi Ministry of Economy and Planning announced a collaboration with the World Economic Forum to research solutions to sustainability problems such as food security, food stability and resilient agricultural systems.⁵¹⁴¹

On 16 July 2022, the Saudi Minister of Energy, along with the U.S. Senior Advisor for Energy Security joined an agreement regarding cooperation in establishing a Circular Carbon Economy and deploying Carbon Capture, Utilization and Storage technologies.⁵¹⁴²

On 4 September 2022, the Kingdom of Saudi Arabia announced USD2.5 to the International Atomic Energy Agency to support the use of nuclear technology.⁵¹⁴³

Saudi Arabia has taken actions to address climate mitigation, but has not taken any actions to address climate adaptation or climate finance. The efforts of the government in increasing the energy efficiency of the Ministry of Foreign Affairs headquarters, conducting research in sustainable development and making its fleet of vehicles environmentally friendly contributed towards climate mitigation. By joining the global methane pledge, Saudi Arabia contributed to climate mitigation and engaged in an international collective action.

Thus, Saudi Arabia receives a score of 0.

Analyst: Farhan Sakkir Karepilakkijil

South Africa: 0

South Africa has partially complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

⁵¹³⁹ MEP & KAUST sign MoU to advance Vision 2030 efforts and SDGs in Saudi Arabia, Ministry of Economy & Planning (Riyadh) 24 January 2022. Access Date: 9 May 2022. <https://www.mep.gov.sa/en/MediaCenter/News/Pages/-MEP-&-KAUST-sign-MoU-to-advance-Vision-2030-efforts-and-SDGs-in-Saudi-Arabia.aspx>

⁵¹⁴⁰ Saudi Arabia Enters into an Agreement with Lucid to Purchase up to 100,000 Electric Vehicles, Ministry of Finance (Riyadh) 26 April 2022. Access Date: 10 May 2022. https://www.mof.gov.sa/en/mediacenter/News/Pages/news_26042022.aspx

⁵¹⁴¹ The Saudi Ministry of Economy and Planning signs a cooperation agreement with UpLink, the open innovation platform of the World Economic Forum, Ministry of Economy & Planning (Riyadh) 28 May 2022. Access Date: 10 July 2022. <https://www.mep.gov.sa/en/MediaCenter/News/Pages/MEP-signs-a-cooperation-agreement-with-UpLink.aspx>

⁵¹⁴² The Kingdom and the U.S. sign a partnership framework for advancing clean energy, Ministry of Energy (Riyadh) 16 July 2022. Access Date: 10 August 2022. <https://www.moenergy.gov.sa/en/MediaCenter/News/Pages/The-Kingdom-and-the-U.S.-sign-a-partnership-framework-for-advancing-clean-energy.aspx>

⁵¹⁴³ The Kingdom donates \$3.5 million to two initiatives of the International Atomic Energy Agency (ReNuAL2 and ZODIAC) to support the Agency's efforts in ensuring the safe and peaceful use of nuclear technology, Ministry of Energy (Riyadh) 4 September 2022. Access Date: 18 September 2022.

<https://www.moenergy.gov.sa/en/MediaCenter/News/Pages/KSA-donates-to-IAEA-for-ReNuAL2-and-ZODIAC.aspx>

On 2 November 2021, President Cyril Ramaphosa, announced that South Africa will cooperate with France, Germany, the United Kingdom, the United States, and the European Union to strive toward “a just transition to a low carbon economy and a climate-resilient society.”⁵¹⁴⁴ The South African government submitted a revised Nationally Determined Contribution to reduce domestic carbon emissions with the range of 420 CO₂-eq and 350 CO₂-eq by 2030. In this partnership, supporting countries would finance USD8.5 billion within the next three to five years to aid South Africa to undergo the transition for investing in renewable energy or the development of new low-carbon industries.

On 29 March 2022, four tree species were added to the list of protected trees in South Africa.⁵¹⁴⁵ This designation prohibits anyone from cutting, damaging, or owning the tree unless they were granted express permission from the Minister to do so.

South Africa has partially complied with its commitment to take strong action in all three identified categories of climate action: mitigation, adaptation, and finance, and at least 1 action constituting international, collective action involving other states. South Africa addressed climate mitigation through the partnership with France, Germany, the UK and the US, which also constitutes an international collective action. However, South Africa did not contribute towards climate adaptation or climate finance.

Thus, South Africa receives a score of 0.

Analyst: Wesley Cheung

Turkey: 0

Turkey partially complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that Turkey joined 141 other countries in committing to the Declaration on Forests and Land Use at the 26th United Nations Climate Change Conference.⁵¹⁴⁶ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 1 June 2022, the “Vocational and Technical Education Cooperation Protocol” was signed between the Ministries of Agriculture and Forestry and the Ministry of National Education.⁵¹⁴⁷ This agreement aims to follow the developments in the field of agriculture and to train the qualified manpower needed by the agriculture and food sectors.

⁵¹⁴⁴ Presidency on International Partnership to Support a Just Transition to a Low Carbon Economy and a Climate Resilient Society, South African Government (Pretoria) 2 November 2021. Access Date: 15 December 2021. <https://www.gov.za/speeches/presidency-international-partnership-support-just-transition-2-nov-2021-0000>

⁵¹⁴⁵ Four tree species added to list of protected trees in South Africa, Department of Forestry, Fisheries, and the Environment (Cape Town) 29 March 2022. Access Date: 25 June 2022. https://www.dffe.gov.za/mediarelease/protectedtreespecies_newtreesadded

⁵¹⁴⁶ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵¹⁴⁷ A COOPERATION PROTOCOL IN THE FIELD OF EDUCATION IS SIGNED BETWEEN THE MINISTRY OF AGRICULTURE AND FOREST AND NATIONAL EDUCATION, Ministry of Agriculture and Forestry (Ankara) 1 June 2022. Translation provided by: Google Chrome. Access Date: 26 June 2022. <https://www.tarimorman.gov.tr/Sayfalar/AnaSayfa.aspx>

On 9 August 2022, the Ministry of Agriculture and Forestry of Turkey published a regulation, turning 18 million tons of food waste by hostels, restaurants, and cafeterias into animal feed.⁵¹⁴⁸ With the regulation, the food can be fed to domestic, ornamental, laboratory animals, and animals from zoos and circuses. This new regulation will significantly reduce the amount of municipal solid waste.

Turkey partially complied with its commitment to take action in all three identified categories of climate action: mitigation, adaptation, and finance, and at least one action constituting international, collective action involving other states. Turkey addressed climate mitigation by committing to the declaration on Forests and Land Use, which also constitutes an international collective action. Turkey has not taken actions towards climate adaptation or climate finance.

Thus, Turkey has received a score of 0.

Analysts: Jessica Wang and Jenna Im

United Kingdom: +1

The United Kingdom has fully complied with its commitment to accelerate its actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that the United Kingdom joined the Global Methane Pledge.⁵¹⁴⁹ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵¹⁵⁰ Due to the fact that methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that the United Kingdom joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵¹⁵¹ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 7 December 2021, the Department for Business, Energy & Industrial Strategy invested GBP116 million to accelerate the country’s green innovation.⁵¹⁵² The funding will support British businesses to develop new green technologies to reduce carbon emissions and remove greenhouse gases from the atmosphere.

⁵¹⁴⁸ Residents of restaurant and dining hall can be used as feed, Turkey Ministry of Agriculture and Forestry (Ankara) 9 August 2021. Access Date: 2 October 2022. <https://www.tarimorman.gov.tr/Haber/5339/Restoran-Ve-Yemekhane-Artiklari-Yem-Olarak-Kullanilabilecek/>

⁵¹⁴⁹ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵¹⁵⁰ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵¹⁵¹ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵¹⁵² Government invests over £116 million to drive forward green innovation in the UK, Government of United Kingdom (London) 7 December 2021. Access Date: 26 September 2022. <https://www.gov.uk/government/news/government-invests-over-116-million-to-drive-forward-green-innovation-in-the-uk>

On 9 May 2022, the Environment Agency pledged a minimum of GBP3.5 million and a maximum of GBP5 million to repair a collapsed flood wall in Matlock, UK.⁵¹⁵³ This funding will also contribute towards a long-term solution to protect 50 homes and businesses from River Derwent flooding.

On 31 May 2022, the Department for Business, Energy, and Industrial Strategy allocated over GBP31 million to support British industries in reducing their reliance on fossil fuels and their production of carbon emissions.⁵¹⁵⁴ More specifically, this funding will be used in the development of red diesel alternatives, such as e-fuels and green hydrogen, as well as technologies which capture and store energy.

On 16 June 2022, the Forestry Commission developed the Woodland Creation Accelerator Fund with GBP7.8 million to support local authorities in hiring and training new staff.⁵¹⁵⁵ The goal of training these new staff is to enhance woodland creation and tree planting plans.

On 22 June 2022, the government released GBP636,548 of additional emergency funding to be allocated to flood victims in Bangladesh.⁵¹⁵⁶ The purpose of this emergency funding is to provide financial assistance, shelter management, water and sanitation, and educational materials to communities and individuals affected by the flooding in Bangladesh.

On 8 July 2022, the Department for Business, Energy & Industrial Strategy announced the funding of GBP54 million to develop technologies to aid in removing carbon emissions from the atmosphere.⁵¹⁵⁷ The projects which will receive the funding will aid in the UK reaching its climate change targets. The funding will also help in developing a new greenhouse gas removal industry within the UK.

On 2 August 2022, the Department for Business, Energy & Industrial Strategy announced up to GBP635 million in funding for public sector organizations to install low carbon heating and energy efficiency measures.⁵¹⁵⁸ This funding will also help taxpayers and public organizations save GBP650 million per year in energy bills over the next 15 years. This funding can be provided for schools, hospitals, leisure centres and historic town halls. Organizations will be able to reduce their use of fossil fuels through the installation of low carbon heating systems, which will be powered by cleaner, renewable energies.

On 4 August 2022, innovative biomass projects across the UK received government funding of GBP37 million.⁵¹⁵⁹ GBP32 million of funding is directed towards projects that will increase the production of

⁵¹⁵³ Over £3.5 million announced for repairs to collapsed flood wall in Matlock, Environment Agency (London) 9 May 2022. Access Date: 26 June 2022. <https://www.gov.uk/government/news/over-3-5-million-announced-for-repairs-to-collapsed-flood-wall-in-matlock>

⁵¹⁵⁴ Government invests over £31 million to help industry slash emissions and energy costs, department for business, energy, and industrial strategy (London) 31 May 2022. Access Date: 26 June 2022. <https://www.gov.uk/government/news/government-invests-over-31-million-to-help-industry-slash-emissions-and-energy-costs>

⁵¹⁵⁵ New fund opens to accelerate tree planting, Forestry Commission (London) 16 June 2022. Access Date: 26 June 2022. <https://www.gov.uk/government/news/new-fund-opens-to-accelerate-tree-planting>

⁵¹⁵⁶ UK allocates over five crore taka for emergency relief to flood victims in Bangladesh, United Kingdom Government (London) 22 June 2022. Access Date: 26 June 2022. <https://www.gov.uk/government/news/uk-allocates-over-five-crore-taka-for-emergency-relief-to-flood-victims-in-bangladesh>

⁵¹⁵⁷ Projects developing innovative carbon removal tech benefit from over £54 million government funding, Government of United Kingdom (London) 8 July 2022. Access Date: 26 September 2022. <https://www.gov.uk/government/news/projects-developing-innovative-carbon-removal-tech-benefit-from-over-54-million-government-funding>

⁵¹⁵⁸ Further taxpayer savings with green upgrades for public buildings, Government of United Kingdom (London) 2 August 2022. Access Date: 26 September 2022. <https://www.gov.uk/government/news/further-taxpayer-savings-with-green-upgrades-for-public-buildings>

⁵¹⁵⁹ Renewable energy innovation boosted by £37 million government funding across the UK, Government of United Kingdom (London) 4 August 2022. Access Date: 26 September 2022. <https://www.gov.uk/government/news/renewable-energy-innovation-boosted-by-37-million-government-funding-across-the-uk>

sustainable biomass, which can be used as a renewable energy source. GBP5 million of the funding is directed towards supporting innovative technologies to generate hydrogen from biomass and waste.

On 17 August 2022, the Department for Environment, Food and Rural Affairs, the Environment Agency, and Rural Payments Agency announced support for farmers impacted by dry weather for the year.⁵¹⁶⁰ The country relaxed its rules to allow farmers to cut or graze areas of land set aside in their previous agreements in lieu of the changing climate. These changes will make it easier for farmers to provide vital foods for livestock. The new rules will also help increase access to bedding, fodder, grazing or foraging in ways that limit environmental impacts.

On 27 August 2022, the Department for Environment, Food and Rural Affairs, Natural England, and Rt Hon Lord Nenyon announced the banning of the sale of horticultural peat by 2024.⁵¹⁶¹ The ban aims to preserve England's peatlands, which are the UK's largest carbon store. The banning of amateur uses of peats will contribute towards the country's efforts to restore 35,000 hectares of peatlands by 2025 and achieve net zero.

On 2 September 2022, the government of UK provided nuclear projects across the UK with funding to help develop the next generation of nuclear reactors.⁵¹⁶² The funding of GBP3.3 million, provided from the Advanced Modular Reactor Research, Development and Demonstration programme will support the development of the nuclear technology, helping revolutionize and decarbonize the UK's energy. The funding will support the innovation of 6 of the winning projects, until they are able to attract private investments.

On 22 September 2022, the Department for Environment, Food & Rural Affairs, and the Forestry Commission announced the Seed Sourcing Grant.⁵¹⁶³ The Grant will enhance the quality, quantity and diversity of domestic tree seed sources, create greener jobs and help reach the country's net zero target. The Grant received the funding of GBP1.2 million.

On 23 September 2022, the Department for Business, Energy & Industrial Strategy, and Lord Callanan announced GBP49.4 million in funding to support the British industry, end their reliance on fossil fuels and reduce the cost of energy.⁵¹⁶⁴ The funding will be awarded to pioneering projects across the country in order to drive economic growth through the transition towards low carbon energy.

On 3 October, the government announced the site for the country's first fusion energy plant for the Spherical Tokamak for Energy Production.⁵¹⁶⁵ This plant, which has received the funding of GBP220

⁵¹⁶⁰ Support for farmers on dry weather impacts, Government of United Kingdom (London) 17 August 2022. Access Date: 26 September 2022. <https://www.gov.uk/government/news/support-for-farmers-on-dry-weather-impacts>

⁵¹⁶¹ Sale of horticultural peat to be banned in move to protect England's precious peatlands, Government of United Kingdom (London) 27 August 2022. Access Date: 26 September 2022. <https://www.gov.uk/government/news/sale-of-horticultural-peat-to-be-banned-in-move-to-protect-englands-precious-peatlands>

⁵¹⁶² £3.3 million boost for next generation nuclear technology, Government of United Kingdom (London) 2 September 2022. Access Date: 26 September 2022. <https://www.gov.uk/government/news/33-million-boost-for-next-generation-nuclear-technology>

⁵¹⁶³ Domestic tree seed production to be ramped up with new grant, Government of United Kingdom (London) 22 September 2022. Access Date: 26 September 2022. <https://www.gov.uk/government/news/domestic-tree-seed-production-to-be-ramped-up-with-new-grant>

⁵¹⁶⁴ Nearly £50 million boost for Britain's industrial future, Government of United Kingdom (London) 23 September 2022. Access Date: 6 October 2022. <https://www.gov.uk/government/news/nearly-50-million-boost-for-britains-industrial-future>

⁵¹⁶⁵ Site of UK's first fusion energy plant selected, Government of United Kingdom (London) 3 October 2022. Access Date: 7 October 2022. <https://www.gov.uk/government/news/site-of-uks-first-fusion-energy-plant-selected>

million from the government, will provide safe, sustainable, and low carbon energy. It is expected for the plant to also attract further development nationwide.

On 3 October 2022, the UK Partnering for Accelerated Climate Transition implemented a project in Mexico to help mitigate the effects of climate change.⁵¹⁶⁶ Specifically, the production of coffee will be aided in the state of Veracruz. Through planting tree species that favour conservation of the biodiversity in the regions ecosystem and region, the community will benefit from an improved quality of life and decarbonization in the area.

On 6 October 2022, the United Kingdom government launched a GBP20 million competition to research the use of hydrogen in the effort for a cleaner and more efficient transportation sector.⁵¹⁶⁷ The competition aims to clear the air and lower carbon emissions emitted from transport buses and delivery vehicles. The competition will develop long term solutions for using hydrogen in transport, and decarbonize the nation's transport sector, providing energy security.

The United Kingdom has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement. The United Kingdom has taken strong actions to address climate mitigation, adaptation, and finance, while also taking actions constituting international, collective action.

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

Analysts: Jyoti Kalsi, Jenna Im and Surabhi Pradhan

United States: +1

The United States has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the United Nations announced that the United States joined the Global Methane Pledge.⁵¹⁶⁸ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵¹⁶⁹ Because methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

⁵¹⁶⁶ UK PACT helps mitigate the effects of climate change in Mexico, Government of United Kingdom (London) 3 October 2022. Access Date: 7 October 2022. <https://www.gov.uk/government/news/uk-pact-helps-mitigate-the-effects-of-climate-change-in-mexico>

⁵¹⁶⁷ Tees Valley Hydrogen Hub boosted by £20 million competition, Government of United Kingdom (London) 6 October 2022. Access Date: 10 October 2022. <https://www.gov.uk/government/news/tees-valley-hydrogen-hub-boosted-by-20-million-competition>

⁵¹⁶⁸ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵¹⁶⁹ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

On 2 November 2021, the United Nations announced that the United States joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵¹⁷⁰ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 3 November 2021, the Department of Energy announced the Net-Zero World Initiative, which provides its country partners with assistance in developing and implementing a technology and investment strategy to meet the goal of net-zero emissions.⁵¹⁷¹ The initiative currently involves Argentina, Chile, Egypt, Indonesia, Nigeria, and Ukraine.

On 8 November 2021, the U.S. Agency for International Development announced its plan for climate mitigation and adaptation investment by mobilizing a targeted USD150 billion by 2030.⁵¹⁷² The plan includes working with partner governments in Colombia, Philippines, South Africa, Vietnam, Indonesia, and India, as well as with private partners.

On 15 November 2021, the United States passed the Bipartisan Infrastructure Law Clean School Bus Program, providing USD5 billion over the next five years to replace existing school buses with low- or no-emission electric buses.⁵¹⁷³ The United States aims to replace around 500,000 diesel school buses to reduce emission of greenhouse gases and particulate matter.

On 3 December 2022, the U.S. Department of Agriculture announced USD633 million to set up climate-friendly systems for rural businesses and to improve the availability of biofuel.⁵¹⁷⁴

On 7 December 2022, the U.S. Department of Agriculture announced up to USD800 million to support biofuel production and infrastructure.⁵¹⁷⁵ The decision aims to nullify the losses due to the COVID-19 pandemic and to support refuelling and distribution centres.

On 12 January 2022, the U.S. Department of Agriculture committed USD9 million to support climate research and their acquisition by the agricultural sector.⁵¹⁷⁶

⁵¹⁷⁰Glasgow Leaders' Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵¹⁷¹ U.S. Launches Net-Zero World Initiative to Accelerate Global Energy System Decarbonization, U.S. Department of Energy (Washington) 3 November 2021. Access Date: 2 February 2022. <https://www.energy.gov/articles/us-launches-net-zero-world-initiative-accelerate-global-energy-system-decarbonization>

⁵¹⁷² USAID Announces Target to Mobilize \$150 Billion in Climate Finance, United States Agency for International Development (Washington) 8 November 2021. Access Date: 5 February 2022. <https://www.usaid.gov/news-information/press-releases/nov-8-2021-usaid-announces-target-mobilize-150-billion-climate-finance>

⁵¹⁷³ Bipartisan Infrastructure Law Clean School Bus Program Initial Implementation Report to Congress, United States Environmental Protection Agency (Washington) January 2022. Access Date: 2 February 2022. <https://www.epa.gov/system/files/documents/2022-02/420r22002.pdf>

⁵¹⁷⁴ USDA Invests \$633 Million in Climate-Smart and Resilient Infrastructure for People in Rural Communities, U.S. Department of Agriculture (Shrewsbury) 3 December 2022. Access Date: 18 September 2022. <https://www.usda.gov/media/press-releases/2021/12/03/usda-invests-633-million-climate-smart-and-resilient-infrastructure>

⁵¹⁷⁵ USDA to Make Up to \$800 Million Available to Provide Economic Relief to Biofuel Producers and Restore Renewable Fuel Markets Hit by the Pandemic, U.S. Department of Agriculture (Washington) 7 December 2022. Access Date: 18 September 2022. <https://www.usda.gov/media/press-releases/2021/12/07/usda-make-800-million-available-provide-economic-relief-biofuel>

⁵¹⁷⁶ USDA Invests \$9M to Expand Reach and Increase Adoption of Climate-Smart Practices, U.S. Department of Agriculture (Washington) 12 January 2022. Access Date: 18 September 2022. <https://www.usda.gov/media/press-releases/2022/01/12/usda-invests-9m-expand-reach-and-increase-adoption-climate-smart>

On 13 January 2022, the Department of Energy announced USD420 million supporting preliminary research on clean energy technology, low-carbon manufacturing, and quantum information science at the DOE's Energy Frontier Research Centers.⁵¹⁷⁷

On 25 January 2022, the Department of Energy committed USD25 million to eight research projects on the development of wave energy technologies.⁵¹⁷⁸ The purpose of this research is to “[diversify] and [expand] clean energy sources will usher in a new era of energy independence that makes the grid more resilient, curbs the climate crisis, and saves Americans money on their energy bills.”

On 2 February 2022, the Department of Energy and the Departments of Homeland Security and Housing and Urban Development committed to rebuild, expand and fortify the Puerto Rican electrical grid using funds amounting to USD12 billion.⁵¹⁷⁹ The initiative establishes energy stores and improves the electrical power system while making it more resilient.

On 2 February 2022, the Department of Energy and the Departments of Homeland Security and Housing and Urban Development launched the two-year long Puerto Rico Grid Resilience and Transitions to 100 per cent Renewable Energy (PR100) study. While considering climate justice, it aims to provide a pathway to 100 per cent renewable energy, resilient power systems, affordable energy and cleaner air.

On 7 February 2022, Agriculture Secretary, Tom Vilsack, announced the United States Department of Agriculture will provide incentives worth USD1 billion to farmers to implement climate-smart technologies and monitor the greenhouse gas benefits associated with them.⁵¹⁸⁰ This action aims to support cost-effective innovations to reduce emissions and the market for climate-smart commodities.

On 10 February 2022, the Departments of Transportation and Energy allocated almost USD5 billion over a five-year period under the new National Electric Vehicle Infrastructure Formula Program.⁵¹⁸¹ It aims to make electric vehicle charging accessible by installing electric vehicle charging stations along the Alternative Fuels Corridor.

On 14 February 2022, the Department of Energy granted USD175 million to 68 high-risk and high-impact research projects on the development of clean energy such as electric vehicles, offshore wind energy and nuclear energy.⁵¹⁸²

⁵¹⁷⁷ DOE Announces \$420 Million to Advance Clean Energy Breakthroughs at Energy Research Centers Across America, U.S. Department of Energy (Washington) 13 January 2022. Access Date: 11 May 2022. <https://www.energy.gov/articles/doe-announces-420-million-advance-clean-energy-breakthroughs-energy-research-centers>

⁵¹⁷⁸ DOE Announces \$25 Million for Cutting-Edge Wave Energy Research, U.S. Department of Energy (Washington) 25 January 2022. Access Date: 10 May 2022. <https://www.energy.gov/articles/doe-announces-25-million-cutting-edge-wave-energy-research>

⁵¹⁷⁹ DOE, DHS, HUD Launch Joint Effort with Puerto Rico to Modernize Energy Grid, U.S. Department of Energy (Washington) 2 February 2022. Access Date: 10 May 2022. <https://www.energy.gov/articles/doe-dhs-hud-launch-joint-effort-puerto-rico-modernize-energy-grid>

⁵¹⁸⁰ USDA to Invest \$1 Billion in Climate Smart Commodities, Expanding Markets, Strengthening Rural America, U.S. Department of Agriculture (Jefferson City) 2 February 2022. Access Date: 12 February 2022. <https://www.usda.gov/media/press-releases/2022/02/07/usda-invest-1-billion-climate-smart-commodities-expanding-markets>

⁵¹⁸¹ President Biden, DOE and DOT Announce \$5 Billion over Five Years for National EV Charging Network, U.S. Department of Energy (Washington) 10 February 2022. Access Date: 11 May 2022. <https://www.energy.gov/articles/president-biden-doe-and-dot-announce-5-billion-over-five-years-national-ev-charging>

⁵¹⁸² DOE Announces \$175 Million for Novel Clean Energy Technology Projects, U.S. Department of Energy (Washington) 14 February 2022. Access Date: 20 May 2022 <https://www.energy.gov/articles/doe-announces-175-million-novel-clean-energy-technology-projects>

On 17 February 2022, the Department of Energy granted USD36 million to 11 projects aiming to reduce the production of nuclear waste and to improve measures of storage.⁵¹⁸³ These projects will “support safe and sustainable domestic fuel stocks, and advance our nation’s clean energy portfolio.”

On 22 February 2022, the Department of Energy granted USD150 million in research funds for increasing the efficiency and decreasing the carbon footprint of clean energy manufacturing and technologies.⁵¹⁸⁴ Under the Energy Earthshots initiatives, this action supports chemical and materials research with the goal of developing solar and nuclear energy, carbon capture, energy storage and mineral usage in manufacturing.

On 14 March 2022, the U.S. Department of Energy allocated USD32 million to support over 30 renovation projects aiming to improve energy efficiency.⁵¹⁸⁵

On 18 March 2022, the U.S. Department of Energy and the U.S. Department of Labor launched a national workforce training program in lithium-battery manufacturing, with an investment of USD5 million.⁵¹⁸⁶

On 21 March 2022, the Department of Energy allocated nearly USD9 million to 14 projects by tribal communities to develop a resilient system of clean energy which communities can access at lower costs.⁵¹⁸⁷ These projects are estimated to generate 3.3 megawatts of clean energy, over 3.6 megawatt-hours of battery storage and USD48.5 million in savings.

On 29 March 2022, the U.S. Department of Energy selected 23 communities to receive assistance in reducing pollution and energy costs, increasing energy resilience and creating economic opportunities in clean energy.⁵¹⁸⁸

On 30 March 2022, the U.S. Department of Energy allocated USD3.16 billion for the renovation of thousands of low-income homes to reduce energy usage, under the Weatherization Assistance Program.⁵¹⁸⁹

⁵¹⁸³ DOE Awards \$36 Million to Reduce Waste from Advanced Nuclear Reactors, U.S. Department of Energy (Washington) 17 February 2022. Access Date: 20 May 2022 <https://www.energy.gov/articles/doe-awards-36-million-reduce-waste-advanced-nuclear-reactors>

⁵¹⁸⁴ DOE Announces \$150 Million to Reduce Climate Impacts of Energy Technologies and Manufacturing, U.S. Department of Energy (Washington) 22 February 2022. Access Date: 20 May 2022 <https://www.energy.gov/articles/doe-announces-150-million-reduce-climate-impacts-energy-technologies-and-manufacturing>

⁵¹⁸⁵ DOE Awards \$32 Million to Accelerate Next-Generation Building Upgrades, U.S. Department of Energy (Washington) 14 March 2022. Access Date: 30 July 2022 <https://www.energy.gov/articles/doe-awards-32-million-accelerate-next-generation-building-upgrades>

⁵¹⁸⁶ DOE Announces \$5 Million to Launch Lithium-Battery Workforce Initiative, U.S. Department of Energy (Washington) 18 March 2022. Access Date: 30 July 2022 <https://www.energy.gov/articles/doe-announces-5-million-launch-lithium-battery-workforce-initiative>

⁵¹⁸⁷ DOE Awards \$9 Million to Tribal Communities To Enhance Energy Security And Resilience, U.S. Department of Energy (Washington) 21 March 2022. Access Date: 2 June 2022 <https://www.energy.gov/articles/doe-awards-9-million-tribal-communities-enhance-energy-security-and-resilience>

⁵¹⁸⁸ DOE Will Assist 23 Communities With Locally Tailored Pathways to Clean Energy, U.S. Department of Energy (Washington) 29 March 2022. Access Date: 30 July 2022 <https://www.energy.gov/articles/doe-will-assist-23-communities-locally-tailored-pathways-clean-energy>

⁵¹⁸⁹ Biden Administration Announces Investments to Make Homes More Energy Efficient and Lower Costs for American Families, U.S. Department of Energy (Washington) 30 March 2022. Access Date: 30 July 2022 <https://www.energy.gov/articles/biden-administration-announces-investments-make-homes-more-energy-efficient-and-lower>

On 22 April 2022, the U.S. Department of Agriculture allocated nearly USD800 million to energy-efficient infrastructure and rebuilding rural communities affected by climate change.⁵¹⁹⁰

On 2 May 2022, the U.S. Department of Energy announced USD3.16 billion to expand the domestic manufacturing and recycling of batteries used in electric vehicles.⁵¹⁹¹

On 3 May 2022, the U.S. Department of Energy launched the Electric Vehicles for American Low-Carbon Living and granted up to USD45 million to the program.⁵¹⁹² It aims to support research for the development of electric vehicles batteries with improved charging speeds, efficiency and resilience.

On 5 May 2022, the Department of Energy allocated over USD2.3 billion for cutting carbon pollution.⁵¹⁹³ Of this, USD1.25 billion will be used to “accelerate geologic carbon storage projects each capable of permanently storing at least 50 million metric tons of captured CO₂ – the equivalent to the emissions from roughly 10 million gasoline-powered cars a year.”

On 18 May 2022, the Department of Energy announced USD53 million for 259 projects by small businesses to develop clean-energy scientific instrumentations and technologies.⁵¹⁹⁴

On 19 May 2022, the Department of Energy granted USD24.9 million to six research and development projects on the efficiency of hydrogen turbines for the generation of clean electricity.⁵¹⁹⁵

On 20 May 2022, the Department of Energy allocated USD7 million to expand the Industrial Assessment Center Program that helps local manufacturers reduce their energy usage and waste generation.⁵¹⁹⁶

On 25 May 2022, the Department of Energy granted USD38 million to the Net Zero Labs Pilot Initiative that aims to decarbonize four DOE National Laboratories.⁵¹⁹⁷

⁵¹⁹⁰ On Earth Day, USDA Invests Nearly \$800 Million in Critical Infrastructure to Combat Climate Change Across Rural America, U.S. Department of Agriculture (Washington) 22 April 2022. Access Date: 18 September 2022 <https://www.usda.gov/media/press-releases/2022/04/22/earth-day-usda-invests-nearly-800-million-critical-infrastructure>

⁵¹⁹¹ Biden Administration Announces \$3.16 Billion from Bipartisan Infrastructure Law to Boost Domestic Battery Manufacturing and Supply Chains, U.S. Department of Energy (Washington) 2 May 2022. Access Date: 30 July 2022 <https://www.energy.gov/articles/biden-administration-announces-316-billion-bipartisan-infrastructure-law-boost-domestic>

⁵¹⁹² DOE Announces \$45 Million to Develop More Efficient Electric Vehicle Batteries, U.S. Department of Energy (Washington) 3 May 2022. Access Date: 30 July 2022 <https://www.energy.gov/articles/doe-announces-45-million-develop-more-efficient-electric-vehicle-batteries>

⁵¹⁹³ Biden-Harris Administration Announces Over \$2.3 Billion Investment To Cut U.S. Carbon Pollution, Department of Energy (Washington) 5 May 2022. Date Accessed: 30 June 2022. <https://www.energy.gov/articles/biden-harris-administration-announces-over-23-billion-investment-cut-us-carbon-pollution>

⁵¹⁹⁴ DOE Announces \$53 Million for Small Businesses Pursuing Clean Energy and Climate Solutions, U.S. Department of Energy (Washington) 18 May 2022. Access Date: 2 June 2022 <https://www.energy.gov/articles/doe-announces-53-million-small-businesses-pursuing-clean-energy-and-climate-solutions>

⁵¹⁹⁵ DOE Announces Nearly \$25 Million to Study Advanced Clean Hydrogen Technologies for Electricity Generation, U.S. Department of Energy (Washington) 19 May 2022. Access Date: 2 June 2022 <https://www.energy.gov/articles/doe-announces-nearly-25-million-study-advanced-clean-hydrogen-technologies-electricity>

⁵¹⁹⁶ Biden Administration Launches \$7 Million Bipartisan Infrastructure Law Initiative to Further Decarbonize Manufacturing, U.S. Department of Energy (Washington) 20 May 2022. Access Date: 2 June 2022 <https://www.energy.gov/articles/biden-administration-launches-7-million-bipartisan-infrastructure-law-initiative-further>

⁵¹⁹⁷ DOE Announces \$38 Million to Launch Decarbonization Initiative at National Laboratories, U.S. Department of Energy (Washington) 25 May 2022. Access Date: 2 June 2022. <https://www.energy.gov/articles/doe-announces-38-million-launch-decarbonization-initiative-national-laboratories>

On 1 June 2022, the Department of Energy announced USD59 million to support research on the establishment of commercial integrated biorefineries, with the aim of decarbonizing the transportation industry.⁵¹⁹⁸

On 6 June 2022, the U.S. Department of Energy announced USD2.3 billion for projects that make the power grid cleaner and more resilient to the effects of climate change.⁵¹⁹⁹

On 7 July 2022, the U.S. Department of Energy awarded USD14 million to 22 projects working towards understanding climate phenomena to help predict climate change events.⁵²⁰⁰

On 8 July 2022, the U.S. Department of Energy awarded USD41.6 million for repairs, weatherization and implementation of other energy-saving technologies in houses.⁵²⁰¹

On 14 July 2022, the U.S. Department of Energy allocated USD18.4 million to seven projects on resolving the barriers to the commercialisation of clean energy technologies.⁵²⁰²

On 14 July 2022, the U.S. Department of Energy committed USD56 million to initiatives aiming to commercialise and recycle solar technologies.⁵²⁰³

On 16 July 2022, the Saudi Minister of Energy, along with the U.S. Senior Advisor for Energy Security joined an agreement regarding cooperation in establishing a Circular Carbon Economy and deploying Carbon Capture, Utilization and Storage technologies.⁵²⁰⁴

On 21 July 2022, the U.S. Department of Energy committed USD96 million to develop cleaner non-road vehicles and to increase the charging accessibility, efficiency and affordability of electric vehicles.⁵²⁰⁵

⁵¹⁹⁸ DOE Announces \$59 Million to Expand Biofuels Production and Decarbonize Transportation Sector, U.S. Department of Energy (Washington) 1 June 2022. Access Date: 2 June 2022. <https://www.energy.gov/articles/doe-announces-59-million-expand-biofuels-production-and-decarbonize-transportation-sector>

⁵¹⁹⁹ Biden Administration Announces \$2.3 Billion for States and Tribes to Strengthen and Modernize America's Power Grid, U.S. Department of Energy (Washington) 6 July 2022. Access Date: 30 July 2022. <https://www.energy.gov/articles/biden-administration-announces-23-billion-states-and-tribes-strengthen-and-modernize>

⁵²⁰⁰ DOE Awards \$14 Million to Improve Climate Change Predictions, U.S. Department of Energy (Washington) 7 July 2022. Access Date: 30 July 2022. <https://www.energy.gov/articles/doe-awards-14-million-improve-climate-change-predictions>

⁵²⁰¹ Biden-Harris Administration Announces \$40 Million to Lower Utility Costs for American Families, U.S. Department of Energy (Washington) 8 July 2022. Access Date: 30 July 2022. <https://www.energy.gov/articles/biden-harris-administration-announces-40-million-lower-utility-costs-american-families>

⁵²⁰² DOE Announces \$18 Million to Streamline Commercialization of Clean Energy Technologies, U.S. Department of Energy (Washington) 14 July 2022. Access Date: 30 July 2022. <https://www.energy.gov/articles/doe-announces-18-million-streamline-commercialization-clean-energy-technologies>

⁵²⁰³ Biden-Harris Administration Announces \$56 Million to Advance U.S. Solar Manufacturing and Lower Energy Costs, U.S. Department of Energy (Washington) 14 July 2022. Access Date: 30 July 2022. <https://www.energy.gov/articles/biden-harris-administration-announces-56-million-advance-us-solar-manufacturing-and-lower>

⁵²⁰⁴ The Kingdom and the U.S. sign a partnership framework for advancing clean energy, Ministry of Energy (Riyadh) 16 July 2022. Access Date: 10 August 2022. <https://www.moenergy.gov.sa/en/MediaCenter/News/Pages/The-Kingdom-and-the-U.S.-sign-a-partnership-framework-for-advancing-clean-energy.aspx>

⁵²⁰⁵ DOE Announces \$96 Million for Advancing Clean Vehicle Technologies to Reduce Carbon Emissions, U.S. Department of Energy (Washington) 21 July 2022. Access Date: 30 July 2022. <https://www.energy.gov/articles/doe-announces-96-million-advancing-clean-vehicle-technologies-reduce-carbon-emissions>

On 27 July 2022, the U.S. Department of Energy launched the Community Solar Subscription Platform to integrate low-income households to community solar projects.⁵²⁰⁶ Additionally, the DOE announced USD10 million to hire and train workers in the solar industry.

On 27 July 2022, the U.S. Department of Energy's Loan Office Program granted a loan of USD102.1 million to a facility producing graphite-based active anode material, which is used in lithium-ion batteries for green technologies.⁵²⁰⁷

On 28 July 2022, the U.S. Department of Treasury's Office of Financial Research launched the Climate Data and Analytics Hub to develop the government's understanding on financial risks caused by climate change.⁵²⁰⁸ The program permits the integration of public financial data with federal climate data and offers analytical and visualization tools.

On 28 July 2022, the U.S. Department of Energy committed up to USD165 million to develop the technology and understanding required to scale up geothermal energy production.⁵²⁰⁹

On 1 August 2022, the Vice President of the United States, the Department of Homeland Security Secretary and the Federal Emergency Management Agency Administrator announced USD1.16 billion to improve community resilience to extreme weather events like "floods, hurricanes, droughts, wildfires and extreme heat."⁵²¹⁰

On 1 August 2022, the U.S. Department of Energy announced the Cadmium Telluride Accelerator Consortium, with a USD20 million investment, to develop cheaper and more productive cadmium telluride solar cells.⁵²¹¹

On 2 August 2022, the U.S. Department of Energy announced USD 26 million for projects that will illustrate the reliability of a clean energy grid during disruptions.⁵²¹²

⁵²⁰⁶ Biden-Harris Administration Launches New Solar Initiatives to Lower Electricity Bills and Create Clean Energy Jobs, U.S. Department of Energy (Washington) 27 July 2022. Access Date: 4 August 2022.

⁵²⁰⁷ DOE Announces First Advanced Technology Vehicles Manufacturing Loan in More than a Decade, U.S. Department of Energy (Washington) 27 July 2022. Access Date: 4 August 2022. <https://www.energy.gov/articles/doe-announces-first-advanced-technology-vehicles-manufacturing-loan-more-decade>

⁵²⁰⁸ Office of Financial Research Pilots Cutting-edge Data Hub to Assist with Climate-risk Assessments, U.S. Department of the Treasury (Washington) 28 July 2022. Access Date: 20 September 2022. <https://home.treasury.gov/news/press-releases/jy0895>

⁵²⁰⁹ DOE to Invest Up to \$165 Million to Advance Domestic Geothermal Energy Deployment, U.S. Department of Energy (Washington) 28 July 2022. Access Date: 4 August 2022. <https://www.energy.gov/articles/doe-invest-165-million-advance-domestic-geothermal-energy-deployment>

⁵²¹⁰ Biden-Harris Administration Announces over \$1 Billion in Project Selections to Make Communities More Resilient to Climate Change and Extreme Weather Events, U.S. Department of Homeland Security (Washington) 1 August 2022. Access Date: 18 September 2022. <https://www.dhs.gov/news/2022/08/01/biden-harris-administration-announces-over-1-billion-project-selections-make>

⁵²¹¹ DOE Launches New Research Group to Grow America's Solar Industry, U.S. Department of Energy (Washington) 1 August 2022. Access Date: 4 August 2022. <https://www.energy.gov/articles/doe-launches-new-research-group-grow-americas-solar-industry>

⁵²¹² Biden-Harris Administration Announces \$26 Million Program From Bipartisan Infrastructure Law to Demonstrate How U.S. Power Grid Can Run on 100% Clean Energy, U.S. Department of Energy (Washington) 2 August 2022. Access Date: 4 August 2022. <https://www.energy.gov/articles/biden-harris-administration-announces-26-million-program-bipartisan-infrastructure-law>

On 5 August 2022, the U.S. Department of Energy committed up to USD32 million for research into technology that can detect, assess and mitigate methane emissions from oil and gas production.⁵²¹³

On 12 August 2022, the U.S. Department of Agriculture announced USD197 million for conservation partnerships that address the effects of climate change.⁵²¹⁴

On 15 August 2022, the U.S. Department of Energy committed up to USD44 million to develop and test enhanced geothermal systems technology.⁵²¹⁵

On 23 August 2022, the U.S. Department of Energy allocated USD60 million for research into clean hydrogen technology as well as electrical grid resilience.⁵²¹⁶ The Department's efforts in clean hydrogen research will focus on emissions monitoring, storage technologies and fuel cell durability.

On 24 August 2022, the U.S. Department of Agriculture invested USD121 million in rural infrastructure to increase their energy efficiency.⁵²¹⁷

On 25 August 2022, the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization created a rapid response team to assist four states in their transition to a cleaner energy infrastructure.⁵²¹⁸

On 25 August 2022, the U.S. Department of Energy committed more than USD540 million to research on green energy and clean production.⁵²¹⁹ The projects will work on efficient use of critical minerals, solar and nuclear energy, improved manufacturing, direct air capture, carbon sinks, energy storage and hydrogen production.

On 26 August 2022, the U.S. Department of Energy allocated more than USD31 million to develop carbon capture technology able to capture at least 95 per cent of the carbon dioxide emitted by power and industrial plants.⁵²²⁰

⁵²¹³ DOE Announces \$32 Million to Reduce Methane Emissions from Oil and Gas Sector, U.S. Department of Energy (Washington) 5 August 2022. Access Date: 6 August 2022. <https://www.energy.gov/articles/doe-announces-32-million-reduce-methane-emissions-oil-and-gas-sector>

⁵²¹⁴ USDA Investing \$197 Million in Partner-Driven, Locally led Conservation, U.S. Department of Agriculture (Washington) 12 August 2022. Access Date: 18 September 2022. <https://www.usda.gov/media/press-releases/2022/08/12/usda-investing-197-million-partner-driven-locally-led-conservation>

⁵²¹⁵ DOE Announces up to \$44 Million to Advance Enhanced Geothermal Systems, U.S. Department of Energy (Washington) 15 August 2022. Access Date: 24 August 2022. <https://www.energy.gov/articles/doe-announces-44-million-advance-enhanced-geothermal-systems>

⁵²¹⁶ DOE Announces \$60 Million to Advance Clean Hydrogen Technologies and Decarbonize Grid, U.S. Department of Energy (Washington) 23 August 2022. Access Date: 24 August 2022. <https://www.energy.gov/articles/doe-announces-60-million-advance-clean-hydrogen-technologies-and-decarbonize-grid>

⁵²¹⁷ USDA Invests \$121 Million in Critical Infrastructure to Combat Climate Change Across Rural America, U.S. Department of Agriculture (Sharon) 24 August 2022. Access Date: 18 September 2022. <https://www.usda.gov/media/press-releases/2022/08/24/usda-invests-121-million-critical-infrastructure-combat-climate>

⁵²¹⁸ Federal Working Group Announces Establishment of Rapid Response Team to Support Energy Communities in The Four Corners, U.S. Department of Energy (Washington) 25 August 2022. Access Date: 29 August 2022. <https://www.energy.gov/articles/federal-working-group-announces-establishment-rapid-response-team-support-energy>

⁵²¹⁹ DOE Announces \$540 Million for Technologies to Transform Energy Production and Cut Emissions, U.S. Department of Energy (Washington) 25 August 2022. Access Date: 29 August 2022. <https://www.energy.gov/articles/doe-announces-540-million-technologies-transform-energy-production-and-cut-emissions>

⁵²²⁰ U.S. Department of Energy Invests \$31 Million to Advance Carbon Capture and Storage for Natural Gas Power and Industrial Sectors, U.S. Department of Energy (Washington) 26 August 2022. Access Date: 29 August 2022. <https://www.energy.gov/fecm/articles/us-department-energy-invests-31-million-advance-carbon-capture-and-storage-natural>

On 30 August 2022, the U.S. Department of Energy announced USD6.4 million to research on experimental decarbonization technology and carbon capture to redress the effects of coal pollution.⁵²²¹

On 30 August 2022, the U.S. Department of Energy committed USD70 million to improve the Energy Exascale Earth System Model for better climate predictions in the effort against climate change.⁵²²²

On 31 August 2022, the U.S. Department of Energy announced USD46 million to develop technologies that create biofuel and bioproducts from waste streams and carbon dioxide capture.⁵²²³

On 6 September 2022, the U.S. Department of Energy announced USD66 million to research the effects of extreme weather events caused by climate change on urban infrastructure and communities.⁵²²⁴

On 13 September 2022, the U.S. Department of Energy committed USD4.7 million to research on improving the energy efficiency of hydrogen turbines using ceramic matrix composite components.⁵²²⁵

On 13 September 2022, the U.S. Department of Energy committed USD178 million to advance renewable bioenergy research.⁵²²⁶

On 14 September 2022, the U.S. Department of Agriculture (USDA) committed up to USD2.8 billion to assist in the implementation of green agricultural technology that reduces the emission of greenhouse gases and sequesters carbon.⁵²²⁷ Over a five-year period, the USDA aims to sequester over 50 million metric tons of carbon dioxide.

On 16 September 2022, the U.S. Department of Energy announced the American Made prize challenge to support community organisations in developing solutions to clean energy problems.⁵²²⁸

The United States has taken strong actions to address climate mitigation, climate adaptation and climate finance, while also taking actions constituting international collective actions. In terms of the efforts

⁵²²¹ U.S. Department of Energy Invests Over \$6 Million to Support University Training and Research for Decarbonization and Environmental Remediation Projects, U.S. Department of Energy (Washington) 30 August 2022. Access Date: 1 September 2022. <https://www.energy.gov/fecm/articles/us-department-energy-invests-over-6-million-support-university-training-and-research>

⁵²²² DOE Announces \$70 Million to Improve Supercomputer Model of Earth's Climate System, U.S. Department of Energy (Washington) 30 August 2022. Access Date: 1 September 2022. <https://www.energy.gov/articles/doe-announces-70-million-improve-supercomputer-model-earths-climate-system>

⁵²²³ DOE Announces \$46 Million to Explore New Technologies That Convert Carbon and Waste Into Clean Energy, U.S. Department of Energy (Washington) 31 August 2022. Access Date: 1 September 2022. <https://www.energy.gov/articles/doe-announces-46-million-explore-new-technologies-convert-carbon-and-waste-clean-energy>

⁵²²⁴ DOE Announces \$66 Million to Research the Impact of Climate Change on America's Urban Communities, U.S. Department of Energy (Washington) 6 September 2022. Access Date: 18 September 2022. <https://www.energy.gov/articles/doe-announces-66-million-research-impact-climate-change-americas-urban-communities>

⁵²²⁵ U.S. Department of Energy Invests \$4.7 Million to Improve Hydrogen Turbine Performance and Reduce Hydrogen-based Energy Costs, U.S. Department of Energy (Washington) 13 September 2022. Access Date: 18 September 2022. <https://www.energy.gov/fecm/articles/us-department-energy-invests-47-million-improve-hydrogen-turbine-performance-and>

⁵²²⁶ DOE Announces \$178 Million to Advance Bioenergy Technology, U.S. Department of Energy (Washington) 13 September 2022. Access Date: 18 September 2022. <https://www.energy.gov/articles/doe-announces-178-million-advance-bioenergy-technology>

⁵²²⁷ Biden-Harris Administration Announces Historic Investment in Partnerships for 70 Climate-Smart Commodities and Rural Projects, U.S. Department of Agriculture (Washington) 14 September 2022. Access Date: 18 September 2022. <https://www.usda.gov/media/press-releases/2022/09/14/biden-harris-administration-announces-historic-investment>

⁵²²⁸ U.S. Department of Energy Announces Prize to Increase Equity and Develop Clean Energy Solutions for Underserved Communities, U.S. Department of Energy (Washington) 16 September 2022. Access Date: 18 September 2022. <https://www.energy.gov/eere/articles/us-department-energy-announces-prize-increase-equity-and-develop-clean-energy>

for climate mitigation, the United States has invested in electric vehicles and numerous research projects on clean energy. The governmental decision to allocate USD12 billion to the Puerto Rican electrical grid contributes to climate adaptation. By joining the global methane pledge, the United States is contributing towards climate mitigation, and the USD1 billion investment into incentives for farmers to implement climate-smart technologies contributes to climate finance. Further, the Net-Zero World Initiative constitutes an international collective action.

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

Analyst: Farhan Sakkir Karepilakkejiyl

European Union: +1

The European Union has fully complied with its commitment to accelerate their actions across mitigation, adaptation and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions or carbon neutrality by or around mid-century and the need to strengthen global efforts required to reach the goals of the Paris Agreement.

On 2 November 2021, the European Commission announced that the European Union joined the Global Methane Pledge.⁵²²⁹ The Global Methane Pledge, signed at the 26th United Nations Climate Change Conference (COP26), is a collective agreement in which the 103 countries that have signed on agree to take “national-level, voluntary actions to contribute to reducing global methane emissions by at least 30 per cent by 2030, using a 2020 baseline.”⁵²³⁰ Because methane contributes significantly to climate change, scientists believe this could prevent 0.2°C of warming by 2050.

On 2 November 2021, the United Nations announced that the European Union joined 141 other countries in committing to the Declaration on Forests and Land Use at COP26.⁵²³¹ The Declaration reaffirms collective and individual commitments to the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Sustainable Development Goals; and other relevant initiatives, with the goal of reversing forest loss and land degradation.

On 16 November 2021, the Commission of the European Union reached an agreement on the 2022 EU budget.⁵²³² The budget reflects that climate change and green transitions are some of the EU’s main priorities. According to the budget, the EU sets total commitments of EUR562,354 million and total payments of EUR566,018 million on “natural resources and environment.”

On 24 November 2021, the Commission of the European Union approved a EUR2.27 billion Greek plan “for the production of electricity from renewable sources and high efficiency combined heat and power.”⁵²³³ This measure aims to help Greece reduce their emissions by meeting its targets for renewable energy, thus contributing to the European goal of climate neutrality by 2050.

⁵²²⁹ Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach, European Commission (Brussels) 2 November 2021. Access Date: 21 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766

⁵²³⁰ World Leaders Kick Start Accelerated Climate Action at COP26, United Nations (New York) 2 November 2021. Access Date: 21 February, 2022. <https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26>

⁵²³¹ Glasgow Leaders’ Declaration on Forest and Land Use, United Nations (Glasgow) 2 November 2021. Access Date: 21 February 2022. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

⁵²³² Agreement reached on 2022 Eu budget, Council of the European Union (Brussels) 16 November 2021. Access Date: 8 February 2022. <https://www.consilium.europa.eu/en/press/press-releases/2021/11/16/eu-budget-for-2022/>

⁵²³³ State aid: Commission approves €2.27 billion Greek aid scheme to support electricity production from renewable energy sources and high efficiency combined heat and power, European Commission (Brussels) 24 November 2021. Access Date: 8 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6261

On 25 November 2021, the European Commission approved an investment package of over EUR290 million for the LIFE Programmes for the environment and climate action.⁵²³⁴ This investment will fund 132 new projects which collectively aim to help Europe reach its target to become climate neutral by 2050.

On 2 December 2021, the European Council adopted the Common Agricultural Policy for 2023-2027.⁵²³⁵ The goal of this new policy is to facilitate “fairer, greener and more performance-based Common Agricultural Policy that seeks to ensure a sustainable future for European farmers, provide more targeted support to smaller farms, and allow greater flexibility for member states in adapting the measures to local conditions.”

On 15 December 2021, the European Union Commission approved the allocation of EUR185.9 million to promote the EU agri-food products in and outside the EU.⁵²³⁶ The promotion policy work programme “focuses on products and agricultural practices that support the European Green Deal objectives, such as EU organic products, fruit and vegetables, sustainable agriculture and animal welfare.”

On 20 December 2021, the Commission of the European Union approved a EUR900 million German plan to support investments in the production of renewable hydrogen in non-EU countries, “which will then be imported and sold in the EU.”⁵²³⁷ The goal of the plan is to meet the EU’s increasing demand for renewable hydrogen, and it supports the development of unexploited renewable resources outside of the EU.

On 17 February 2022, the European Commission announced a EUR110 million investment into the LIFE programme, which integrates projects for environmental and climate protection in eleven EU countries.⁵²³⁸ These projects will “contribute to a green recovery from the COVID-19 pandemic and support the European Green Deal’s objectives of making the EU climate neutral and zero-pollution by 2050.” All of which are key actions of delivering the European Green Deal objectives under the EU Biodiversity Strategy for 2030 and the EU Circular Economy Action Plan.

On 1 April 2022, the European Commission signed an agreement with seven large-scale projects via the EU Innovation Fund to allocate EUR1.1 billion grant to fund innovative projects for the EU climate transition.⁵²³⁹ These projects seek to “reduce emissions by over 76 Mt of CO₂eq during the first ten years of operation.” They also deploy innovative low-carbon technologies to key industries such as “hydrogen, steel, chemicals, cement, solar energy, biofuels, and carbon capture and storage.”⁵²⁴⁰

⁵²³⁴ LIFE Programme: More than €290 million in EU funding for nature, environment and climate action projects, Council of the European Union (Brussels) 25 November 2021. Access Date: 8 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6178

⁵²³⁵ Council adopts fairer, greener and more performance-based farming policy for 2023-2027, Council of the European Union (Brussels) 2 December 2021. Access Date: 8 February 2022. <https://www.consilium.europa.eu/en/press/press-releases/2021/12/02/council-adopts-fairer-greener-and-more-performance-based-farming-policy-for-2023-2027/>

⁵²³⁶ EU continues strong support to promote sustainable agri-food products in 2022 (Brussels) 20 December 2021. Access Date: 8 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6839

⁵²³⁷ State aid: Commission approves €900 million German scheme to support investments in production of renewable hydrogen (Brussels) 20 December 2021. Access Date: 8 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_7022

⁵²³⁸ Green Deal: EU invests over €110 million in LIFE projects for environment and climate in 11 EU countries (Brussels) 17 February 2022. Access Date: 30 April 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_864

⁵²³⁹ Commission awards over €1 billion to innovative projects for the EU climate transition (Brussels) 1 April 2022. Access Date: 30 April 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2163

⁵²⁴⁰ Commission awards over €1 billion to innovative projects for the EU climate transition (Brussels) 1 April 2022. Access Date: 30 April 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2163

On 5 April 2022, the European Parliament approved new rules for selecting which energy projects can receive the EU funding and aligning the existing regulation with the EU's Green Deal.⁵²⁴¹ This legislation sets criteria and the methodology for choosing energy projects of common interests. This new rule promotes energy infrastructure policy; support hydrogen, carbon capture, and storage; and increase the security of supply.

On 28 April 2022, the European Commission announced that 100 European Union cities will be participating in “the European Union Mission for 100 climate-neutral and smart cities by 2030.”⁵²⁴² A hundred cities coming from twenty-seven Member States, with twelve additional cities coming from countries associated with the Horizon Europe, will participate in research and innovation actions to transition their cities to become climate-neutral by 2030. This Cities Mission will receive ERU360 million of Horizon Europe funding covering the period 2022 to 2023. The Cities Mission will also include custom assistance from a dedicated Mission Platform run by NetZeroCities.

On 4 May 2022, the Parliament of the European Union approved new guidelines for the funding of trans-European energy infrastructure, which further aligns the regulation with the EU's Green Deal.⁵²⁴³ This regulation sets the criteria for choosing energy projects that are eligible to receive EU funding. The updated regulation supports projects related to the development of hydrogen infrastructure and carbon capture and storage, and it now excludes new projects based on natural gas.

On 16 May 2022, the Council of the European Union adopted a revised Trans-European Networks for Energy Regulation, which facilitates the cross-border connection of member states' energy infrastructure.⁵²⁴⁴ The regulation aims to further help the EU achieve its 2050 climate neutrality objectives while ensuring market integration, competitiveness, and security of supply.

On 24 June 2022, the EU Commission officially launched the Alliance for Zero Emission Aviation.⁵²⁴⁵ The Alliance sought to gather representatives of the aviation community to join forces in preparing for the advent of zero-emission aircraft. The Alliance for Zero Emission Aviation aims to prepare the aviation ecosystem for the entry into service of hydrogen- and electric-powered aircraft, therefore contributes to Europe's 2050 climate neutrality objective.

On 27 June 2022, the European energy and environment ministers launched one of the most comprehensive climate action packages in the history of the EU. These include the Fit for 55' package: the EU Renewable Energy Directive and the EU Energy Efficiency Directive. For the first time, a

⁵²⁴¹ Green Deal: EP backs updated guidelines for trans-European energy infrastructure (Strasbourg) 5 April 2022. Access Date: 30 April 2022. <https://www.europarl.europa.eu/news/en/press-room/20220401IPR26530/green-deal-ep-backs-updated-guidelines-for-trans-european-energy-infrastructure>

⁵²⁴² Commission announces 100 cities participating in EU Mission for climate-neutral and smart cities by 2030 (Brussels) 28 April 2022. Access Date: 20 April 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2591

⁵²⁴³ Green Deal: EP backs updated guidelines for trans-European energy infrastructure (Brussels) 4 May 2022. Access Date: 6 June 2022. <https://www.europarl.europa.eu/news/en/press-room/20220401IPR26530/green-deal-ep-backs-updated-guidelines-for-trans-european-energy-infrastructure>

⁵²⁴⁴ TEN-E: Council gives green light to new rules for cross-border energy infrastructure (Brussels) 16 May 2022. Access Date: 6 June 2022. <https://www.consilium.europa.eu/en/press/press-releases/2022/05/16/ten-e-council-gives-green-light-to-new-rules-for-cross-border-energy-infrastructure>

⁵²⁴⁵ Zero-Emission Aviation: Commission launches new Alliance to make hydrogen-powered and electric aircraft a reality (Brussels) 24 June 2022. Access Date: 22 July 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_3854

binding EU-wide target for energy efficiency was defined. In addition, the binding 2030 target for renewable energy share in gross final energy consumption was raised to 40 per cent.⁵²⁴⁶

On 12 July 2022, the EU invested ERU1.8 billion in large-scale innovative clean-tech projects.⁵²⁴⁷ These grants will be disbursed through the Innovation Fund to assist bringing new technologies to the market to drive a green transition. This fund has increased by 60 per cent relative to the first disbursement round, doubling the number of projects supported. Projects were evaluated by independent experts based on their ability to reduce greenhouse gas emissions and innovate while being mature for deployment.

On 30 August 2022, the European Investment Bank grants a EUR18 million loan to Tapojarvi, to reduce the environmental footprint of the steel industry.⁵²⁴⁸ Tapojarvi is a family-owned Finnish company specializing in “handling, processing, and recycling services for the mining and steel industry.” This loan seeks to help reduce the environmental impact of the steel industry, promote a shift toward a circular economy, and the development of innovative processes.

On 7 September 2022, the “Aquila Clean Energy EMEA, the clean energy development platform in Europe of Aquila Capital, has closed a EUR 1 billion construction facility.”⁵²⁴⁹ This loan was granted by the European Investment Bank and was supported by the InvestEU programme. It will finance the development and construction of Aquila Clean Energy’s entire renewable energy pipeline in Spain and Portugal, with over 50 projects and within the next three years.

The European Union has fully complied with its commitment to take strong action in all three identified categories of climate action: mitigation, adaptation, and finance, and at least one action constituting international, collective action involving other states. Climate mitigation was addressed through joining the global methane pledge, which also constitutes an international collective action. The new Common Agricultural policy contributes towards climate adaptation for smaller farms. The investment into the LIFE Programme contributes towards climate finance.

Thus, the European Union has received a score of +1.

Analyst: Jessica Wang

⁵²⁴⁶ Minister Habeck: “Energy Council in Luxembourg takes key decisions for greater climate action: first agreement on binding EU energy efficiency target and new ambitious EU renewables target of 40% by 2030” (Berlin) 27 June 2022. Access Date: July 24 2022. <https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2022/06/20220627-habeck-energy-council-in-luxembourg-takes-key-decisions-for-greater-climate-action.html>

⁵²⁴⁷ Innovation Fund: EU invests €1.8 billion in clean tech projects (Brussels) 12 July 2022. Access Date: 22 July 2022. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4402

⁵²⁴⁸ The EIB backs Tapojarvi with EUR 18 million to reduce the environmental footprint of the steel industry (Brussels) 30 August 2022. Access Date: 23 September 2022. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_5242

⁵²⁴⁹ Aquila Clean Energy raises financing for 2.6 GW capacity renewable energy projects in Southern Europe with the support of InvestEU (Brussels) 7 September 2022. Access Date: 23 September 2022. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_5370