

The G7 Research Group presents the

2021 G7 Cornwall Summit Interim Compliance Report

14 June 2021 to 1 February 2022

Prepared by

Matthew Kieffer and Gabrielle Regimbal

and the G7 Research Group

20 March 2022

www.g7.utoronto.ca g7@utoronto.ca @g7 rg

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

Chancellor Angela Merkel, Schloss Elmau, 8 June 2015

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

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

Contents

| Introduction | 3 |
|---|-----|
| Research Team | 4 |
| Compliance Directors | 4 |
| Lead Analysts | 4 |
| Compliance Analysts | 4 |
| Summary | 6 |
| The Interim Compliance Score | 6 |
| Compliance by Member | 6 |
| Compliance by Commitment | |
| The Compliance Gap Between Members | 6 |
| Future Research and Reports | |
| Table A: 2021 Priority Commitments Selected for Assessment | 7 |
| Table B: 2020 G7 Cornwall Interim Compliance Scores | 9 |
| Table C: 2020 G7 Cornwall Interim Compliance Scores by Member | 10 |
| Table D: 2020 G7 Cornwall Interim Compliance Scores by Commitment | 11 |
| 1. Health: Vaccines | |
| 2. Health: Vaccine Equity | 44 |
| 3. Health: Disease Prevention | |
| 4. Health: Indirect Impacts of COVID-19 | 78 |
| 5. Climate Change: Zero Emission Vehicles | 111 |
| 6. Agriculture, Forestry and Land Use | 131 |
| 7. Crime and Corruption: Environmental Crime | 163 |
| 8. Environment: Halting and Reversing Biodiversity Loss | |
| 9. Environment: Marine Health and Litter | 201 |
| 10. Energy: Renewables | |
| 11. Energy: Coal | 249 |
| 12. Trade: Free Trade | |
| 13. Gender: Education Equality | |
| 14. Democracy: China | |
| 15. Regional Security: Addressing Instability | |
| 16. Development: Sustainable Growth in Africa | |
| 17. Infrastructure: Build Back Better | 386 |
| 18. Human Rights: Forced Labour | 407 |
| 19. Digital Economy: Open Internet | |
| 20. Macroeconomics: Strong, Resilient, Sustainable, Balanced and Inclusive Growth | 446 |
| 21. International Cooperation: Research Transparency | |
| 22. International Cooperation: Research and Knowledge Sharing | 530 |

6. Agriculture, Forestry and Land Use

"In our agricultural, forestry and other land use sectors, we commit to ensuring our policies encourage sustainable production, the protection, conservation, and regeneration of ecosystems and the sequestration of carbon."

Carbis Bay G7 Summit Communiqué

Assessment

| | No Compliance | Partial Compliance | Full Compliance |
|----------------|---------------|--------------------|-----------------|
| Canada | | | +1 |
| France | | | +1 |
| Germany | | | +1 |
| Italy | | 0 | |
| Japan | -1 | | |
| United Kingdom | | | +1 |
| United States | | | +1 |
| European Union | | | +1 |
| Overall Score | | +0.63 (81%) | |

Background

According to the Intergovernmental Panel on Climate Change (IPCC), "agriculture, forestry and other land use (AFOLU) plays a central role for food security and sustainable development" as well as being integral to reducing greenhouse gasses since these ecosystems are natural carbon sinks and homes of rich biodiversity. The AFOLU sector is responsible for nearly a quarter of greenhouse gas emissions, primarily coming from agricultural production and deforestation. G7 members committed to ensure that policies relating to agriculture, forestry and other land use encouraged sustainable production and the sequestration of carbon, as well as the regeneration of ecosystems and the conservation of land to foster biodiversity. While there have been commitments made at past summits dealing with each individual criteria of Commitment 203, the 2021 Cornwall Summit was the first-time members acknowledged the link between the AFOLU sector and climate change so directly and made broad-stroke commitments to make production more environmentally friendly to enhance the fight against climate change.

At the 1987 Venezuela Summit, commitments surrounding the importance of forward-looking agricultural policies were first made. Prior to this summit there were few commitments relating to agriculture and those that were, had been primarily focused on distributing fertilizers and increasing aid with the intention of fighting famines in developing countries. At the 1987 Venezuela Summit, members committed to "work in concert to achieve the necessary adjustments of agricultural policies" to improve agricultural and food production/security. 698 This was also the first summit in which climate change was specifically addressed with members acknowledging their own responsibility to "tackle effectively environmental problems of worldwide impact such as…the destruction of tropical forests."

At the 1988 Toronto Summit, the first recognition of the harm haphazard agricultural practices can wreak on the environment was made. In the Toronto Economic Summit Declaration, members recognized the

http://www.g7.utoronto.ca/summit/1987venice/communique/index.html#agriculture.

⁶⁹⁷ Chapter 11 Agriculture, Forestry and Other Land Use (AFOLU), Intergovernmental Panel on Climate Change (Geneva) 2014. Access Date: 30 July 2021. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter11.pdf.

⁶⁹⁸ Venezia Economic Declaration, G7 Information Centre (Toronto) 10 June 1987. Access Date: 29 July 2021.

"potential impact of agriculture on the environment, whether negative through over intensive use of resources or positive in preventing desertification." ⁶⁹⁹

At the 1989 Paris Summit, members acknowledged the importance of the agricultural sector in "tackling problems such as water pollution, soil erosion and desertification" as well as the importance of protecting ecosystems from degradation.⁷⁰⁰ Preserving forests and other environmental habitats for native species and an emphasis on sustainable use of natural resources was also reflected in the commitments.⁷⁰¹

At the 1990 Houston Summit, members committed to prevent the destruction of forests and protect and conserve forests for sustainable management.⁷⁰² The importance of protecting biodiversity through conservation measures was also evident at the Summit, as well as committing to take actions to "limit greenhouse gases, such as carbon dioxide."

At the 1991 London Summit, members committed to "addressing all sources and sinks for greenhouse gases" which is similar to the carbon sequestration criteria found in commitment 203.⁷⁰³ In addition to reducing carbon and other greenhouse gases, members also committed to agree "on principles for the management, conservation and sustainable development of all types of forests."

While environment and climate change did not play a central role at the 1993 Tokyo Summit, there was recognition of the importance of forest and environmental conservation and sustainable development.⁷⁰⁴ Agriculture and other land use sectors were not mentioned, nor was the regeneration of ecosystems and the importance of developing carbon sinks.

At the 1997 Denver Summit of The Eight, sustainable forest management was again emphasized as well as the importance of creating protected areas to conserve biodiversity.⁷⁰⁵ Agriculture was not mentioned in this Summit's communique, nor was carbon sequestration or ecosystem regeneration.

At the 1998 Birmingham Summit, sustainable growth and production played a central role. Members again committed to sustainable forest management and conservation in addition to committing to reduce greenhouse gases.⁷⁰⁶

At the 2001 Genoa Summit, members recognized the importance of sustainable development and the "preservation of the environment."⁷⁰⁷ Forest conservation was not mentioned at this summit although members did agree that limiting and mitigating greenhouse gas emissions and atmospheric damage was crucial to protecting the environment.

⁶⁹⁹ Toronto Economic Summit Economic Declaration, G7 Information Centre (Toronto) 21 June 1988. Access Date: 29 July 2021. http://www.g7.utoronto.ca/summit/1988toronto/communique.html#environment.

⁷⁰⁰ Economic Declaration, G7 Information Centre (Toronto) 16 July 1989. Access Date: 29 July 2021.

http://www.g7.utoronto.ca/summit/1989paris/communique/index.html#environment.

⁷⁰¹ Economic Declaration, G7 Information Centre (Toronto) 16 July 1989. Access Date: 29 July 2021.

http://www.g7.utoronto.ca/summit/1989paris/communique/index.html#environment.

⁷⁰² Houston Economic Declaration, G7 Information Centre (Toronto) 11 July 1990. Access Date: 29 July 2021.

http://www.g7.utoronto.ca/summit/1990houston/declaration.html#environment.

⁷⁰³ Economic Declaration: Building World Partnership, G7 Information Centre (Toronto) 17 July 1991. Access Date: 29 July 2021. http://www.g7.utoronto.ca/summit/1991london/communique/index.html#environment.

⁷⁰⁴ Economic Declaration: A Strengthened Commitment to Jobs and Growth, G7 Information Centre (Toronto) 6-9 July 1993.

Access Date: 29 July 2021. http://www.g7.utoronto.ca/summit/1993tokyo/communique/index.html#environment.

⁷⁰⁵ Communique, G7 Information Centre (Toronto) 22 June 1997. Access Date: 29 July 2021.

http://www.g7.utoronto.ca/summit/1997denver/g8final.htm.

⁷⁰⁶ 1998 Birmingham Summit Communique, G7 Information Centre (Toronto) 17 May 1998. Access Date: 29 July 2021.

http://www.g7.utoronto.ca/summit/1998birmingham/finalcom.htm.

 $^{^{707}}$ Genoa Communique, G7 Information Centre (Toronto) 22 July 2001. Access Date: 29 July 2021.

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

At the 2009 Hokkaido Summit, members recognized the importance of reducing emissions and protecting forests and other biodiverse areas.⁷⁰⁸ In addition, members acknowledged the paramount nature of carbon sinks and sustainable land use to fighting climate change and battling atmospheric degradation.

At the 2010 Muskoka Summit climate change once again played a central role. However, the reduction of carbon emissions dominated the dialogue and there was no mention of forest preservation, sustainable agriculture, or ecosystem regeneration.⁷⁰⁹

At the 2011 Deauville Summit, members once again committed to fighting against forest degradation and reducing greenhouse gases.⁷¹⁰ In addition, members acknowledged the importance of protecting biodiversity and maintaining resilient ecosystems, the absence of which jeopardizes food security.

At the 2012 Camp David Summit, the importance of sustainable agriculture for facilitating food stability was emphasized.⁷¹¹

At the 2014 Brussels Summit, members committed to protecting marine and forest ecosystems and to developing sustainable agricultural practices.⁷¹² The sequestration of carbon and the reduction of emissions was also committed to at the Summit; however these features were not specific to the agricultural, forest and other land use sectors as they are in Commitment 203.

At the 2015 Schloss Elmau Summit, members emphasized the importance of mitigating the effects of climate change and increasing resilience and adaptation through conservation and other land protection efforts in addition to committing to the efficient use of natural resources and sustainable production.⁷¹³ Sustainable agriculture and investment were promoted for the purpose of increasing food security, but the focus of these commitments was not as all-encompassing as Commitment 203.

At the 2016 Ise-Shima Summit, members committed to investing in and utilizing sustainable agricultural practices in line with the UN Sustainable Development Goals and the Paris Agreement on Climate Change.⁷¹⁴ In addition, members also committed to sustainable forest management and the reduction of greenhouse gas emissions.

At the 2018 Charlevoix Summit, members did not commit directly to advancing sustainable agriculture or forest management.⁷¹⁵ Commitments were made surrounding the conservation of land to protect biodiversity and the reduction of harmful carbon emissions that advance environmental degradation.

At the 2019 Biarritz Summit, members committed to the "preservation and restoration of biodiversity" as well as increasing the sustainable management of forests and the agri-food sector.⁷¹⁶ Leaders directly referred

http://www.g7.utoronto.ca/summit/2018charlevoix/communique.html.

⁷⁰⁸ Declaration of Leaders Meeting of Major Economies on Energy Security and Climate Change, G7 Information Centre (Toronto) 9 July 2008. Access Date: 29 July 2021. http://www.g7.utoronto.ca/summit/2008hokkaido/2008-mem.html.

⁷⁰⁹ Muskoka Declaration: Recovery and New Beginnings, G7 Information Centre (Toronto) 26 June 2010. Access Date: 29 July 2021. http://www.g7.utoronto.ca/summit/2010muskoka/communique.html#green.

⁷¹⁰ G8 Declaration: Renewed Commitment for Freedom and Democracy, G7 Information Centre (Toronto) 27 May 2011. Access Date: 29 July 2021. http://www.g7.utoronto.ca/summit/2011deauville/2011-declaration-en.html#climate.

⁷¹¹ Camp David Declaration, G7 Information Centre (Toronto) 19 May 2012. Access Date: 29 July 2021.

http://www.g7.utoronto.ca/summit/2012campdavid/g8-declaration.html.

⁷¹² G7 Brussels Summit Declaration, G7 Information Centre (Toronto) 5 June 2014. Access Date: 30 July 2021.

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

⁷¹³ Leaders' Declaration: G7 Summit, G7 Information Centre (Toronto) 8 June 2015. Access Date: 30 July 2021.

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

⁷¹⁴ G7 Ise-Shima Leaders' Declaration, G7 Information Centre (Toronto) 27 May 2016. Access Date: 30 July 2021.

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

 $^{^{715}\} The\ Charlevoix\ G7\ Summit\ Communique,\ G7\ Information\ Centre\ (Toronto)\ 9\ June\ 2018.\ Access\ Date:\ 30\ July\ 2021.$

to the scaling down of carbon reliant technologies in these sectors and to reduce greenhouse gas emissions overall.

At the 2021 Cornwall Summit, leaders committed to "policies encourage sustainable production, the protection, conservation, and regeneration of ecosystems and the sequestration of carbon" in their agricultural, forestry and other land use sectors.⁷¹⁷ This is the first summit in which all of these criteria were in specific reference to agricultural and other land use practices which were often ignored as a driver of climate change in past summits.

Commitment Features

G7 members committed to ensure "policies encourage sustainable production, the protection, conservation, and regeneration of ecosystems and the sequestration of carbon" in their agricultural, forestry and other land use sectors. This commitment has four parts: 1) to ensure policies regarding the land use sector utilize sustainable production 2) to ensure that policies encourage the protection and conservation of the lands 3) to ensure the regeneration of ecosystems involved in the agricultural, forestry and other land use sectors and 4) to ensure that policies include the sequestration of carbon.

To "ensure" is understood as to "guarantee" or make certain.⁷¹⁸ In regard to this commitment, to "ensure" emphasizes the strength of action needed in order to achieve full compliance. This language implies that only policy actions that fulfill the commitment features will be considered towards compliance.

To "encourage" is understood as to "foster" or "stimulate."⁷¹⁹ In regard to this commitment, any policy action that fosters or stimulates sustainable production, the protection, conservation, and regeneration of ecosystems and the sequestration of carbon will be counted towards compliance, regardless of whether the actual goal is achieved.

"Sustainable production" is understood as the manufacturing of goods and services "while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product" so as to not cause environmental degradation or deplete resources faster than they can be replenished. Examples of production systems that are sustainable are ones that are "non-polluting, conserving of energy and natural resources and are economically viable."

To "protect" is understood as to "shield from exposure, damage or destruction."⁷²² Any policy action that works to safeguard the environment from degradation or damage will count towards compliance.

To "conserve" is understood as "to avoid wasteful or destructive use of."⁷²³ Policy actions that work to maintain the environmental health, biodiversity and original state of lands involved in the agricultural, forestry and other land use sectors will count towards compliance.

71

⁷¹⁶ Biarritz Chair's Summary on Climate, Biodiversity and Oceans, G7 Information Centre (Toronto) 26 August 2019. Access Date: 30 July 2021. http://www.g7.utoronto.ca/summit/2019biarritz/chairs-summary-climate.html.

⁷¹⁷ Carbis Bay G7 Summit Communique: Our Shared Agenda for Global Action to Build Back Better, G7 Information Centre (Toronto) 13 June 2021. Access Date: 30 July 2021. http://www.g7.utoronto.ca/summit/2021cornwall/210613-communique.html.

⁷¹⁸ Ensure, Merriam-Webster (Springfield) Access Date: 27 July 2021. https://www.merriam-webster.com/dictionary/ensure.

⁷¹⁹ Encourage, Merriam-Webster (Springfield) Access Date: 27 July 2021. https://www.merriam-webster.com/dictionary/encourage.

⁷²⁰ Sustainable consumption and production policies, UN Environment Program (Nairobi) Access Date: 27 July 2021. https://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-consumption-and-production-policies.

⁷²¹ Sustainable Production Defined, University of Massachusetts Lowell Center for Sustainable Production (Lowell) Access Date:

²⁷ July 2021. https://www.uml.edu/research/lowell-center/about/sustainable-production-defined.aspx.

⁷²² Protected, Merriam-Webster (Springfield) Access Date: 27 July 2021. https://www.merriam-webster.com/dictionary/protected.

To "regenerate" is understood as "to restore to original strength or properties."⁷²⁴ In regard to this commitment, the "regeneration of ecosystems" refers to any policy action that works to restore the environmental health and biodiversity of damaged lands.

Carbon sequestration is understood as "the process of capturing and storing atmospheric carbon dioxide" which is the most common greenhouse gas.⁷²⁵ Any action that fosters the production of a carbon sink - areas such as oceans, forests or soils that store and absorb carbon dioxide from the environment - will count towards compliance.

On breadth, in order for the G7 member states to achieve full compliance, or a score of +1, they must ensure that policies regarding the agricultural, forestry and other land use sectors fulfill all four parts of the commitment including the encouragement of: 1) sustainable production 2) protection and conservation 3) the regeneration of ecosystems and 4) the sequestration of carbon. Full compliance will be awarded to any member that fulfills all four parts of the commitment criteria regardless of the actual quantity (so long as it is at least two since "policies" implies more than one) of policies enacted over the course of the summit cycle. Thus, if a member fulfills some but not all of the four parts of the commitment, they will receive a score of 0.

To achieve a score of 0, or partial compliance, a state will have enacted policies regarding the agricultural, forestry and other land use sectors that encourage at least two of the four criteria needed to achieve full compliance. For example, if a member were to ensure that their policies encouraged sustainable production and preservation and conservation but did not encourage the regeneration of ecosystems or the sequestration of carbon, they would receive a score of 0.

On depth, in order for an action to count towards compliance it must be related to a policy associated with the agricultural, forestry and other land use sectors and encourage the "sustainable production, the protection, conservation, and regeneration of ecosystems and the sequestration of carbon." As to "encourage" is understood as fostering or stimulating the fulfillment of these criteria, compliance will be awarded for actions that aim to achieve the commitment criteria regardless of how successful they are at achieving their long-term goals. For example, a policy that legislates for the regeneration of an ecosystem will count towards compliance even if the ecosystem is not regenerated to the level intended. Additionally, proposing a law or policy that seeks to fulfill one of the four breadth requirements will count as full compliance regardless of whether the law/policy goes on to be implemented. Actions that would be considered "strong" compliance include, but are not limited to; enforcing a policy, expanding or launching a new program, passing legislation and allocating money towards initiatives that fulfill the breadth requirements. Actions that would be considered "less than strong" include those that show intent to take more meaningful action in the future, such as attending a meeting to discuss the implementation of a new initiative that fulfills one of the breadth requirements.

Considering both the breadth and depth criteria together, in order for a member to achieve a score of +1 they need to *strongly* comply with at least three of the four breadth requirements and somewhat comply with the fourth. For a member to receive a partial score, or that of 0, they must strongly comply with at least half of the four breadth criteria or somewhat comply with more than half.

A score of -1, or non-compliance, will be used for any state that does not take at least strongly fulfill two of the four breadth requirements or somewhat fulfill more than two of the four breadth requirements. They will have not fulfilled the requirement to achieve a partial score, nor will they have encouraged the "sustainable

https://www.usgs.gov/faqs/what-carbon-sequestration?qt-news science products=0#qt-news science products.

⁷²³ Conserve, Merriam-Webster (Springfield) Access Date: 27 July 2021. https://www.merriam-webster.com/dictionary/conserve.

⁷²⁴ Regenerate, Merriam-Webster (Springfield) Access Date: 27 July 2021. https://www.merriam-webster.com/dictionary/regenerated.

⁷²⁵ What is carbon sequestration?, United States Geological Survey (Reston) Access Date: 27 July 2021.

production, the protection, conservation, and regeneration of ecosystems and the sequestration of carbon" in the agricultural, forestry and other land use sectors.

Scoring Guidelines

| -1 | The G7 member has not complied by failing to strongly implement any actions to fulfill at least two of the four breadth requirements and failing to somewhat implement at least half of the breadth criteria |
|----|--|
| 0 | The G7 member has partially complied by strongly fulfilling at least two of the four breadth criteria or somewhat fulfilling more than half of the breadth criteria |
| +1 | The G7 member has fully complied by taking strong action to fulfill at least three of the four breadth requirements (the encouragement of: 1) sustainable production 2) protection and conservation 3) the regeneration of ecosystems and 4) the sequestration of carbon) and somewhat fulfilling the fourth |

Compliance Director: Aida Zarghami Lead Analyst: Annie Ding

Canada: +1

Canada has fully complied by ensuring its policies encourage sustainable production, the protection, conservation, and regeneration of ecosystems and the sequestration of carbon.

On 16 June 2021, the Government of Canada launched the new Agricultural Clean Technology Program to foster an environment for the development and utilization of clean technology that will help make Canada's agricultural industry more sustainable and reduce greenhouse gas emissions. This Program will not only help to foster sustainable production in this industry but also develop clean technologies to increase energy efficiency and stimulate the sequestration of carbon. The creation of this program will also help Canada transition to a low-carbon economy.

On 25 June 2021, the Minister of Infrastructure and Communities Catherine McKenna, joined by the Mayor of Toronto John Tory, announced a CAD200 million Natural Infrastructure Fund.⁷²⁷ Up to CAD120 million was invested in large natural infrastructure projects. This program supported projects that used natural or hybrid approaches to protect the natural environment, improve access to nature for Canadians and reduce reliance on building infrastructure.

On 29 June 2021, the Governments of Canada and Ontario announced an investment of CAD150,000 to support "agri-food innovation in the vegetable farming sector" and to fund research at the Ontario Crops Research Centre. Some of the funding will be used to purchase climate control technologies for the greenhouse at the Research Centre and the installation of a new weather station also intended to maximize climate controls. The purpose is to foster "optimal" growing conditions for vegetables in the greenhouse before they are transplanted outdoors. Additionally, the funding will be used to increase research regarding the development of more "sustainable vegetable farming practices" to help Ontario farmers remain competitive without compromising environmental considerations. The funding for these research initiatives help to foster sustainable production in the agriculture industry.

_

⁷²⁶ Agricultural Clean Technology Program: Research and Innovation Stream: Step 1. What this program offers, Agriculture and Agri-Food Canada (Ottawa) 16 June 2021. Date Accessed: 4 August 2021. https://agriculture.canada.ca/en/agricultural-programs-and-services/agricultural-clean-technology-program-research-and-innovation-stream.

⁷²⁷ Government of Canada announces new Natural Infrastructure Fund, Infrastructure Canada (Toronto) 25 June 2021. Access Date: 28 December 2021. https://www.canada.ca/en/office-infrastructure/news/2021/06/government-of-canada-announces-new-natural-infrastructure-fund.html

⁷²⁸ Funding to Support Research and Innovation in Ontario's Vegetable Farming Sector, Agriculture and Agri-Food Canada (King) 29 June 2021. Date Accessed: 4 August 2021. https://www.canada.ca/en/agriculture-agri-food/news/2021/06/funding-to-support-research-and-innovation-in-ontarios-vegetable-farming-sector.html.

On 30 June 2021, the Minister of Fisheries, Oceans and the Canadian Coast Guard and Member of Parliament for South Shore-St. Margaret's, Bernadette Jordan, announced that the Government of Canada will invest CAD1.16 million in federal funding to revitalize infrastructure at Kejimkujik National Park and National Historic Site and Kejimkujik National Park Seaside.⁷²⁹ The purpose of the investment is to construct climate-resilient infrastructure and rehabilitate the Seaside trail network that were damaged from storms and coastal erosion – replacing them with sustainable trails away from particularly vulnerable areas. This action will help regenerate the protected ecosystems in the park and make them more resilient to the increasing climate change related extreme weather.

On 7 July 2021, the Minister of Agriculture and Agri-Food, Marie-Claude Bibeau, announced that the federal government is investing CAD1.7 million in funding for nine projects in Quebec that will "support and advance innovation" in the agriculture sector.⁷³⁰ Examples of initiatives the investment will fund include research into developing techniques for the production of pest-free strawberry and raspberry plants that reduce reliance on pesticides and research to determine the best strain of wheat adapted to grow in Canadian winters. This will help encourage the sustainable production of produce in the agricultural sector by reducing reliance on pesticides and other pathogens.

On 13 July 2021, Minister Marie-Claude Bibeau visited at Coop Agri-Energie Warwick, the first "agricultural cooperative" which utilizes solely renewable energy in Quebec, to highlight the Agricultural Clean Technology Program and the types of projects the Government of Canada is seeking to invest in to reduce emissions in the agricultural industry.⁷³¹ While this action only somewhat encourages the sequestration of carbon and the increase of sustainable production in the agriculture industry, it does highlight how the Warwick biogas plant captures methane from manure to reduce greenhouse gas emissions and encourages other plants to implement similar initiatives.

On 13 July 2021, the Governments of Canada and Saskatchewan announced that cow-calf producers may be eligible to access "cost hared funding of up to 75 per cent of project costs" to implement surface runoff control measures to protect the integrity of water quality and preserve biodiversity through the new Farm Stewardship Program.⁷³² Some measures to achieve this goal include the funding of retention ponds to collect runoff, ditches and pen regrading. This Program will help protect and regenerate vital ecosystems and biodiversity that have faced degradation due to surface runoff from cattle farming.

On 19 July 2021, Minister Bibeau announced an investment of CAD2.6 million in federal funding to Canadian Forage and Grassland Association for three projects that will improve alfalfa growth and "develop a Canadian grassland carbon offset system."⁷³³ Alfalfa is a key component of the carbon capture and offset

⁷²⁹ Government of Canada invests in infrastructure for Kejimkujic National Park and National Historic Site and Kejimkujik National Park Seaside, Parks Canada (Maitland Bridge) 30 June 2021. Date Accessed: 4 August 2021. https://www.canada.ca/en/parks-canada/news/2021/06/government-of-canada-invests-in-infrastructure-for-kejimkujik-national-park-and-national-historic-site-and-kejimkujik-national-park-seaside.html.

⁷³⁰ Growing an environmentally sustainable agriculture sector in Quebec through science, Agriculture and Agri-Food Canada (Saint-Je-de-l'Ile-d'Orleans) 7 July 2021. Date Accessed: 4 August 2021. https://www.canada.ca/en/agriculture-agri-food/news/2021/07/growing-an-environmentally-sustainable-agriculture-sector-in-quebec-through-science.html.

⁷³¹ Support for major farmer biogas plant part of push for more clean technology in agriculture, Agriculture and Agri-Food Canada (Warwick) 13 July 2021. Date Accessed: 4 August 2021. https://www.canada.ca/en/agriculture-agri-food/news/2021/07/support-for-major-farmer-biogas-plant-part-of-push-for-more-clean-technology-in-agriculture.html.

⁷³² Farm Stewardship Program Supports Saskatchewan Cow-Calf Producers in Protecting Surface Water, Agriculture and Agri-Food Canada (Regina) 13 July 2021. Date Accessed: 4 August 2021. https://www.canada.ca/en/agriculture-agri-food/news/2021/07/farm-stewardship-program-supports-saskatchewan-cow-calf-producers-in-protecting-surface-water.html.

⁷³³ Government of Canada invests \$2.6 million to improve alfalfa growth and develop a grassland carbon offset system,

Agriculture and Agri-Food Canada (Sawyerville) 19 July 2021. Date Accessed: 4 August 2021.

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

system for Canadian agriculture, and it also helps improve soil health. The federally funded projects will help farmers facilitate alfalfa growth and better understand how it grows in order to reduce greenhouse gas emissions.

On 29 July 2021, the Government of Canada provided CAD959,000 in support of an Indigenous Forestry Skills Development and Job Recruitment Program to the B.C. First Nations Forestry Council.⁷³⁴ The funding helped launch the Indigenous Forestry Virtual Platform which includes sharing information through online advisory services, training sessions, virtual job forums and regional focus groups. This will help to integrate the use of Traditional and Indigenous Knowledge into forest sustainability projects.

On 3 August 2021, Parks Canada began mobilizing to plant 150,000 trees in up to eighteen national parks across the country as a part of the Government of Canada's commitment to plant two-billion trees.⁷³⁵ This initiative will help protect biodiversity, restore the ecosystems in national parks and combat climate change. In addition, planting such a high quantity of trees throughout the country will help to significantly reduce greenhouse gas emissions as dense forests act as a natural carbon sink.

On 4 August 2021, the Government of Canada announced a that 70,000 trees will be planted at the Canadian National Vimy Memorial "as part of a 10-year forest conservation project to rejuvenate the forests." While planting the trees is primarily to honor Canadians, and more specifically Newfoundlanders, who served in World War One, the forest conservation project will also help restore the ecosystem by planting new trees to replace those that have reached the end of their lifespan and will increase the area of protected forest.

On 12 August 2021, Minister Bibeau announced the call for proposals under the new On-Farm Climate Action Fund that will support farmers in transitioning and adopting sustainable technologies.⁷³⁷ This will help encourage practices that store carbon and greenhouse gas emissions – thus increasing carbon sequestration in the agricultural industry. Not only will the fund help reduce emissions but also will aid in regenerating the environment by improving soil health and building resilience to climate change.

On 12 August 2021, the Government of Canada and the Province of Newfoundland and Labrador invested a total contribution of more than CAD11 million in funding through the Atlantic Fisheries Fund.⁷³⁸ It invested in 36 projects that focused on equipment modernization, improving productivity and sustainability in the Newfoundland and Labrador fish and seafood sector. The investments were made in harvesting, processing, aquaculture and Indigenous partnerships to promote sustainability and effectiveness of the fish and seafood sector.

On 13 August 2021, France's Minister for the Ecological Transition Barbara Pompili renewed the 2018 France Canada Partnership on the climate and environment with her Canadian counterpart, Minister of the

⁷³⁴ Government of Canada supports Indigenous jobs in forestry sector, Government of Canada (Ottawa) 29 July 2021. Access Date: 28 December 2021. https://www.canada.ca/en/western-economic-diversification/news/2021/07/government-of-canada-supports-indigenous-jobs-in-forestry-sector.html

⁷³⁵ Planting in National Parks Underway as Part of Canada's Two Billion Tree Commitment, Parks Canada (Alma) 3 August 2021. Date Accessed: 5 August 2021. https://www.canada.ca/en/parks-canada/news/2021/08/planting-in-national-parks-underway-as-part-of-canadas-two-billion-tree-commitment.html.

⁷³⁶ Government of Canada announces 10-year forest conservation project at Vimy and Beaumon-Hamel, Veterans Affairs Canada (Ottawa) 4 August 2021. Date Accessed: 5 August 2021. https://www.canada.ca/en/veterans-affairs-

canada/news/2021/08/government-of-canada-announces-10-year-forest-conservation-project-at-vimy-and-beaumont-hamel.html. ⁷³⁷ Helping farmers to reduce GHGs and improve resiliency to climate change, Agriculture and Agri-Food Canada (Sherbrooke) 12 August 2021. Date Accessed: 21 September 2021. https://www.canada.ca/en/agriculture-agri-food/news/2021/08/helping-farmers-to-reduce-ghgs-and-improve-resiliency-to-climate-change.html.

⁷³⁸ Government of Canada and Province of Newfoundland and Labrador invest in projects to increase value and sustainability in the province's fish and seafood sector, Government of Canada (Ottawa) 12 August 2021. Access Date: 28 December 2021. https://www.canada.ca/en/fisheries-oceans/news/2021/08/government-of-canada-and-province-of-newfoundland-and-labrador-invest-in-projects-to-increase-value-and-sustainability-in-the-provinces-fish-and-se.html

Environment and Climate Change Jonathan Wilkinson.⁷³⁹ New initiatives under the renewed partnership include working with the Powering Past Coal Alliance to phase out coal and ensure a fair transition for affected communities and workers, promotion of the Ocean Plastics Charter as a means of developing a more efficient approach to resource use and protecting the oceans, and promoting a post-COVID green recovery.

On 12 November 2021, Innovative Solutions Canada launched a new challenge led by Natural Resources Canada (NRCan) to modernize tree seedling production and make tree planting more cost-efficient and sustainable.⁷⁴⁰ In this challenge, the Government of Canada invited Canadian small businesses to come up with a new innovative product, service or solution through the Innovative Solutions Canada program.

On 17 November 2021, the Minister of Agriculture and Agri-Food, Marie-Claude Bibeau, announced an investment of more than CAD4.3 million to support Canada's pulse and special crops farmers meet growing consumer demand for sustainable, high-quality plant-based protein.⁷⁴¹ Specifically, Pulse Canada received more than CAD 2.3 million to promote the benefits of pulses and their ingredient derivatives to international food manufacturers and foodservice operators as a sustainable, value-added, healthy ingredient across a wide range of food sectors.

On 8 December 2021, the Minister of Environment and Climate Change, Steven Guilbeault, announced that the Government of Canada was investing more than CAD3.1 million over three years in 32 new projects funded under the Great Lake Protection Initiative.⁷⁴² They aimed to address priorities to restore water quality and ecosystem health in Areas of Concern, prevent toxic and nuisance algae and enhance engagement with Indigenous Peoples and the public.

On 13 December 2021, the researchers from the National Research Council of Canada's (NRC) Aquatic and Crop Resource Development Research Center collaborated with DeNova, the Center for Aquaculture Technologies Canada and Dalhousie University to focus on research to develop more sustainable salmon aquaculture feeds.⁷⁴³ This initiative would help reduce harmful greenhouse gas emissions and contribute to the sustainable growth of Canada's ocean-based economy.

On 16 December 2021, Minister of Fisheries Joyce Murray and the Canadian Coast Guard announced a more cautious approach to Pacific herring management based on recently intensified risks to wild salmon.⁷⁴⁴ It would close most commercial fisheries for Pacific herring and limit to First Nations' food social and ceremonial fisheries. Harvesting would be reduced to a 10 per cent harvest rate with a maximum total allowable catch of 7,850 tonnes for the Strait of Georgia.

⁷³⁹ Canada and France renew partnership on climate and environment, Government of Canada (Ottawa) 13 August 2021. Access Date: 17 January 2022. https://www.canada.ca/en/environment-climate-change/news/2021/08/canada-and-france-renew-partnership-on-climate-and-environment.html

⁷⁴⁰ Government of Canada seeking innovative ways to reduce tree planting cost and waste, Innovation, Science and Economic Development Canada (Ottawa) 12 November 2021. Access Date: 28 December 2021. https://www.canada.ca/en/innovation-science-economic-development/news/2021/11/government-of-canada-seeking-innovative-ways-to-reduce-tree-planting-cost-and-waste.html

⁷⁴¹ Government of Canada helps meet global demand for sustainable protein products, Government of Canada (Ottawa) 17 November 2021. Access Date: 28 December 2021. https://www.canada.ca/en/agriculture-agri-food/news/2021/11/government-of-canada-helps-meet-global-demand-for-sustainable-protein-products.html

⁷⁴² Canada invests \$3.1 million to protect the Great Lakes and launches new call for proposals, Environment and Climate Change Canada (Vancouver) 8 December 2021. Access Date: 28 December 2021. https://www.canada.ca/en/environment-climate-change/news/2021/12/canada-invests-31-million-to-protect-the-great-lakes-and-launches-new-call-for-proposals.html

⁷⁴³ Advancing Canada's aquaculture into the future, National Research Council Canada (Mississauga) 14 December 2021. Access Date: 28 December 2021. https://nrc.canada.ca/en/stories/advancing-canadas-aquaculture-future

⁷⁴⁴ Fisheries and Oceans Canada updates Pacific herring coast-wide harvest plan for 2021-22, Fisheries and Oceans Canada (Vancouver) 16 December 2021. Access Date: 28 December 2021. https://www.canada.ca/en/fisheries-oceans/news/2021/12/fisheries-and-oceans-canada-updates-pacific-herring-coast-wide-harvest-plan-for-2021-22.html

Canada has fully complied with its commitment to policies encouraging sustainable production, the protection and conservation, the regeneration of ecosystems and the sequestration of carbon. Canada had invested and provided funding for projects that focused on the productivity and sustainability of the fish and seafood sector, the production of crops, pork and salmon. The Minister of Environment and Climate Change funded projects that aimed at addressing priorities to restore water quality and ecosystem health in Areas of Concern, preventing toxic and nuisance algae and enhancing engagement with Indigenous Peoples and the public under the Great Lake Protection Initiative. Canada also invested in natural infrastructure projects in cities to protect the natural environment and increase carbon sequestration, while supporting businesses with innovative modernizing tree seedling production and sustainable tree planting solutions.

Thus, Canada receives a score of +1.

Analyst: Xiyuan Chen

France: +1

France has fully complied by ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon.

On 23 June 2021, the Ministry of Agriculture and Food presented its Action Plan for Adaptation to Climate Change.⁷⁴⁵ The plan for sustainable agriculture is structured around six axes: accelerating the development of eco-friendly agricultural practices to reduce greenhouse gas emissions; developing the potential for carbon sequestration in soils and forest biomass; gearing demand for and consumption of food products towards practices that have lower environmental impact; supporting the adaptation of agricultural and forestry sectors to the impacts of climate change; using agricultural research and development to teach how production can be changed and innovated and guaranteeing a high level of eco-responsibility.

On 7 July 2021, Minister Delegate in charge of Transport Jean-Baptiste Djebbari emphasized the strong commitment of the Government to support the activity of the river sector and signed the Commitment for Green Growth of the River Sector (ECV).⁷⁴⁶ These commitments aim to strengthen the partnership between the General Assembly of River Companies in France (E2F) and the state, ensure the green development of fleets and the energy transition of the sector and enhance the education and know-how of the commitments to the ecological transition. Within the framework of the ECV, greenhouse gas emissions from rivers must be reduced by 20 per cent within 10 years and new targets for transitioning to energy efficient technologies was made.

On 15 July 2021, France expressed a readiness to accept the various concrete action proposals to accelerate the fight against climate change, achieve climate neutrality by 2050 and meet the target of reducing greenhouse gas emissions by 55 per cent at least in 2030 compared to 1990 released by the European Commission.⁷⁴⁷ These proposals will now be the subject of in-depth negotiation for several months in the European Parliament and Council of Ministers, and France plans to advance these negotiations in its presidency of the European Union which will begin in January 2022. Furthermore, the French government

⁷⁴⁵ National low-carbon strategy: the Ministry of Agriculture and Food presents its action plan, Ministry of Agriculture and Food (Paris) 23 June 2021. Translation provided by Google Translate. Access Date: 17 January 2022.

https://agriculture.gouv.fr/strategie-nationale-bas-carbone-le-plan-dactions-du-ministere-de-lagriculture-et-de-lalimentation ⁷⁴⁶ Jean-Baptiste Djebbari signed the commitments for the green growth of the river sector, Ministry for the Ecological Transition (Paris) 7 July 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/jean-baptiste-djebbari-signe-engagements-croissance-verte-du-secteur-fluvial

⁷⁴⁷ "Fit for 55": a new cycle of European climate policies, Ministry for the Ecological Transition (Paris) 15 July 2021. Translation provided by Google Translate. Access Date: 28 November 2021. https://www.ecologie.gouv.fr/fit-55-nouveau-cycle-politiques-europeennes-climat

"welcomes in particular the Commission's proposal to establish a border carbon adjustment mechanism" which will help reduce carbon emissions.

On 20 July 2021, the National Assembly definitively adopted the Climate and Resilience bill which is intended to bring about a long-lasting ecological transformation of French society.⁷⁴⁸ The bill will initiate widespread changes to advance decarbonisation objectives and a climate-friendly economic transition. The Climate and Resilience bill is a landmark action for France in the path towards carbon-neutrality and sustainable development, with its final stage of a ban on renting classified E housing in 2034.

On 23 July 2021, Minister for the Ecological Transition Barbara Pompili published an action plan which will result in a 50 per cent reduction of emissions of pollutants from domestic wood heating, the leading emitter of fine particles in France by 2030.749 The Efficient Domestic Wood Heating action plan will make it possible for France to achieve a 50 per cent reduction of all fine particle emissions between 2020 and 2030 - a key part of the newly passed Climate and Resilience bill. This will help to make wood heating more sustainable.

On 26 July 2021, the French Development Agency (AFD) announced their support for various programs that encourage the participation of local and Indigenous populations in forest management to aid in forest protection and the increasing of sustainable practices.⁷⁵⁰ There are many local barriers that often inhibit Indigenous forest management, such as state instability and the misuse of conservation projects that lead to exploitation - two issues that the AFD seeks to reconcile by aiding local populations in reclaiming their traditional forest management practices. AFD does this by providing technical and financial support to local populations, ultimately increasing the sustainability of forest management and increasing the amount of protected areas.

On 26 July 2021, the AFD announced that it is increasing its support to increase the sustainable management of the Congo River Basin to combat deforestation.⁷⁵¹ The Congo River Basin is an enormous carbon sink and site of biodiversity and thus aiding in the implementation of responsible forest management increases sustainable practices, preserves biodiversity and works to increase carbon sequestration. In order to achieve this goal, AFD has committed to granting EUR6 million to ensure that the Northern Congo increases biodiversity conservation and sustainable management practices.

On 6 August 2021, the Ministry of Agriculture and Food deployed a new wave of funding for a total of 107 projects to promote sustainable food production.⁷⁵² The National Food Program (PNA) committed a total of EUR14 million to the initiative, and the objective of having at least one territorial food project per department by 2023 has now almost been reached with nearly 300 chapters around France. Furthermore, the PNA designated 21 laureates for the 2020-2021 edition of. Its call for innovative or exemplary projects for sustainable agriculture.

⁷⁴⁸ Climate and Resilience Bill – Final vote in the National Assembly and the Senate: ecology in our lives, Ministry for the

Ecological Transition (Paris) 20 July 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/projet-loi-climat-resilience-vote-definitif-lassemblee-nationale-et-au-senat-lecologie-dans-nos-vies ⁷⁴⁹ The Government publishes the action plan to reduce fine particle emissions from domestic wood heating by 50%, Ministry for the Ecological Transition (Paris) 23 July 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/gouvernement-publie-plan-daction-reduire-50-emissions-particules-fines-du-chauffage-au-bois 750 Mobilizing Local Populations in Forest Management, French Development Agency (Paris) 26 July 2021. Date Accessed: 21 September 2021. https://www.afd.fr/en/actualites/mobilizing-local-populations-forest-management?origin=/en/actualites. 751 Combating Deforestation in the Congo Basin, French Development Agency (Paris) 26 July 2021. Date Accessed: 21 September 2021. https://www.afd.fr/en/actualites/combating-deforestation-congo-basin?origin=/en/actualites.

⁷⁵² National Food Programme: more than 170 projects funded across the country, an unprecedented year thanks to support from the France Relance plan, Ministry of Agriculture and Food (Paris) 6 August 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://agriculture.gouv.fr/programme-national-pour-lalimentation-plus-de-170-projets-finances-surtout-le-territoire

On 9 August 2021, the AFD announced that it is supporting efforts to help Amazonian states transition towards more sustainable development, combat deforestation and preserve biodiversity off the heels of a July report that the Amazon rainforest was emitting more carbon emissions than it was absorbing due to the increase in forest fires.⁷⁵³ The AFD is achieving this goal by aiding in the development of protected areas to preserve biodiversity and protect Indigenous territories. Additionally, the AFD entered into an agreement with the National Institute for Biodiversity in Ecuador to gain access to monitoring the park so the agency can assess the impacts of different activities on biodiversity in the region.

On 13 August 2021, Minister Pompili renewed the 2018 France Canada Partnership on the climate and environment with her Canadian counterpart, Minister of the Environment and Climate Change Jonathan Wilkinson.⁷⁵⁴ New initiatives under the renewed partnership include working with the Powering Past Coal Alliance to phase out coal and ensure a fair transition for affected communities and workers, promotion of the Ocean Plastics Charter as a means of developing a more efficient approach to resource use and protecting the oceans and promoting a post-COVID green recovery.

On 6 September 2021, Secretary of State for Biodiversity Berangere Abba announced the creation of a wilderness area, two regional parks and the extension of two national nature reserves. Through this, the French government is pursuing its commitment to protect 30 per cent of land and sea areas, with 10 per cent under heavy protection. In a statement to the press, the secretary of state for biodiversity emphasized how important these methods are for preserving biodiversity.

On 7 September 2021, France hosted the 20th World Organic Congress in Rennes to stress the importance of transitioning to organic agriculture to foster sustainability and improve the health of the environment.⁷⁵⁶ The Congress brings together international stakeholders to discuss sustainable solutions and how to make the agricultural sector more resilient to climate change. The Ministry of Ecological Transition stressed that transitioning to an organic agricultural model would be the best way to preserve the environment and biodiversity while also lowering emissions.

On 22 September 2021, the finance bill for 2022 was presented in the Council of Ministers.⁷⁵⁷ This bill provided for a further increase of the budget of the Ministry of Ecological Transition to reach a total amount of EUR49.9 billion – this is a three per cent increase compared to the year 2021, and an addition to the EUR30 billion of the recovery plan committed to in 2021 and 2022.

On 11 October 2021, Minister Pompili, and Bruno Le Maire, Minister of the Economy, Finance and Recovery, and Olivier Dussopt, Minister Delegate in charge of Public Accounts, unveiled the second edition of the "green budget," a tool intended to support countries in aligning their budgetary, economic, and fiscal

⁷⁵³ Protected Areas: Nurturing Biodiversity for Present and Future Generations, French Development Agency (Paris) 9 August 2021. Date Accessed: 21 September 2021. https://www.afd.fr/en/actualites/protected-areas-nurturing-biodiversity-present-and-future-generations.

⁷⁵⁴ Canada and France renew partnership on climate and environment, Government of Canada (Ottawa) 13 August 2021. Access Date: 17 January 2022. https://www.canada.ca/en/environment-climate-change/news/2021/08/canada-and-france-renew-partnership-on-climate-and-environment.html

⁷⁵⁵ IUCN World Conservation Congress: To preserve exceptional natural areas, France is creating 5 new protected areas, including 2 under strong protection, Ministry for the Ecological Transition (Paris) 6 September 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/congres-mondial-nature-luicn-preserver-des-espaces-naturels-exceptionnels-france-cree-5-nouvelles

⁷⁵⁶ 20th World Organic Congress: organic farming, a solution to the global challenges of our time?, Ministry for the Ecological Transition (Paris) 7 September 2021. Date Accessed: 21 September 2021. https://www.ecologie.gouv.fr/20e-congres-mondial-bio-lagriculture-biologique-solution-aux-enjeux-globaux-notre-temps.

⁷⁵⁷ 50 billion euros: an unprecedented effort for ecological transition in the 2022 finance bill, Ministry for the Ecological Transition (Paris) 22 September 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/50-milliards-deuros-effort-inedit-transition-ecologique-dans-projet-loi-finances-2022

policies with the challenges of environmental transition, with respect to climate ambitions.⁷⁵⁸ The report Is focused on six environmental objectives: the fight against climate change; adaptation to climate change and the prevention of natural risks; water resource management; the circular economy, waste and the prevention of technological risks; the fight against pollution and biodiversity in the protection of natural, agricultural and forested areas. The green budget pledges increased funds towards various environmental ambitions, including an increase of EUR1.1 billion increase from EUR29.8 billion towards so-called green spending and an additional EUR5.7 billion towards the environmental Recovery Plan.

On 11 October 2021, Minister Pompili, Minister Le Maire and Minister of Agriculture and Food Julien Denormandie signed the decree issuing a ban on plastic packaging around unprocessed fresh fruits and vegetables.⁷⁵⁹ From 1 January 2022 onwards, 30 fresh unprocessed fruits and vegetables will be sold without plastic, marking a step forward for ecosystem preservation and the fight against plastic waste. The decree provides a gradual application of the ban, so that by 2026 all fruits and vegetables will be sold without plastic packaging.

On 8 November 2021, Minister Denormandie announced the launch of the new Seeds and Plants for Sustainable Agriculture plan at the international conference on green development.⁷⁶⁰ This new plan is centered around four main principles: diversity of seed variety and species; ensuring that seeds produce quality, sustainable food; use and development of new techniques for seed production and distribution and incorporation of scientific expertise at the service of public authorities and society. Furthermore, this plan is framed with the objectives of the European strategy "from farm to table," which identifies seeds as an essential actor for a successful transition to a more sustainable agriculture adapting to climate change.

On 12 November 2021, Minister Pompili, Minister Le Maire and Jean-Yves Le Drian, Minister of Foreign Affairs, signed an agreement ending public funding abroad for certain fossil fuel energy projects from the end of 2022.761 France considers the signing of this agreement, which concerns fossil fuel energy projects that do not have greenhouse gas emission mitigation devices, "a new step in the necessary decarbonisation of export financing to which the Government is resolutely committed."

On 29 November 2021, Secretary of State Abba brought together stakeholders for a monitoring committee for the National Strategy to Combat Imported Deforestation.⁷⁶² The meeting allowed for all stakeholders to be presented with the new tools and policy options available to them in their cause of mitigating deforestation. This strategy shows the commitment of France to take the fight against deforestation to the European, or international level.

augmentation-des-depenses-favorables-lenvironnement-en-2022

⁷⁵⁸ Green budget: Increase in environmentally friendly spending in 2022, Ministry for the Ecological Transition (Paris) 11 October 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/budget-vert-

⁷⁵⁹ Fight against plastic pollution: publication of the decree framing the ban on plastic packaging around fresh fruits and vegetables, Ministry of Agriculture and Food (Paris) 11 October 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://agriculture.gouv.fr/lutte-contre-la-pollution-plastique-un-decret-encadrant-linterdiction-des-emballages-plastiques 760 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 (Paris) 8 November 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://agriculture.gouv.fr/lancement-du-nouveau-plan-semenceset-plants-pour-une-agriculture-durable

⁷⁶¹ COP26: France signs an agreement reaffirming its commitment to end foreign public funding of fossil fuel projects, Ministry for the Ecological Transition (Paris) 12 November 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/cop26-france-signe-accord-reaffirmant-engagement-mettre-fin-aux-financements-publics-letranger ⁷⁶² Bérangère Abba presents new tools for implementing the National Strategy to Combat Imported Deforestation, Ministry for the Ecological Transition (Paris) 3 December 2021. Translation provided by Google Translate. Access Date: 17 January 2021. https://www.ecologie.gouv.fr/berangere-abba-presente-nouveaux-outils-mise-en-oeuvre-strategie-nationale-lutte-contre

On 2 December 2021, Minister Pompili travelled to Nantes and Saint-Nazaire in the Loire-Atlantique region to discuss the development of a strategy for the decarbonization of various French economic sectors. At this meeting, Minister Pompili reaffirmed the commitment of the French government towards decarbonization across various industries and supported the innovative and sustainable sailing prototype, Solid Sail, which will significantly reduce the greenhouse gas emissions of the maritime transport sector. This project is supported by nearly EUR600,000 as part of the Future Investments Programme.

On 6 December 2021, Minister Pompili announced the launch of the "Mission Ecological Transition" portal, a search engine that will "bring together all the aid offered for the ecological transition of companies, the State, and communities, roughly 500 devices."⁷⁶⁴ Minister Pompili also unveiled a new system called "decarbon'Action" which aims to support small and medium sized enterprises so that they can define their plan to reduce their emissions. The system plans to support 400 companies by 2023. Finally, Minister Pompili referenced her visit to the maritime transport sector and described the undertaking of a "major work of drawing up roadmaps for decarbonization, shared between economic sectors and public authorities."

On 14 December 2021, France and the United States held the first meeting of the United States-France Bilateral Clean Energy Partnership in which ty supported the goals of the 26th United Nations Conference of the Parties on Climate Change (COP-26) to "accelerate the global transition to net zero and through, among other approaches and activities." Some of the key areas covered by the partnership include nuclear energy, scientific research and development, clean energy technology development and deployment and responsible and sustainable clean energy supply chains. This meeting saw extensive discussion on clean energy policies and carbon sequestration. Both countries have stated their commitment to leveraging technological innovation and its market deployment to achieve zero carbon emissions by 2050, and the next meeting of the United States-France Bilateral Clean Energy Partnership is scheduled for Washington D.C. in 2022.

France has fully complied with its commitment to ensuring its policies encourage sustainable production, as well as the protection and conservation, the regeneration of ecosystems and the sequestration of carbon. France has demonstrated responsible environmental policy development by developing a new green budget, establishing an Action Plan for Adaptation to Climate Change (PNACC) and adopting the Climate and Resilience bill.

Thus, France receives a score of +1.

Analyst: Paul Maiquez-Gamester

Germany: +1

Germany has fully complied by ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon.

On 25 June 2021, the Bundesrat passed an amendment to Germany's Climate Change Act, approving an Immediate Action Programme worth EUR8 billion with the goal of intensifying support for decarbonisation

⁷⁶³ Barbara Pompili will announce the Decarbonization Strategy for French economic sectors on Friday December 3 in Loire-Atlantique (44), Ministry for the Ecological Transition (Paris) 2 December 2021. Translation provided by Google Translate. Access Date: 17 January 2021. https://www.ecologie.gouv.fr/barbara-pompili-annoncera-strategie-decarbonation-des-filieres-

Energy Partnership, Ministry for the Ecological Transition (Paris) 17 December 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/declaration-conjointe-emise-etats-unis-et-france-suite-premiere-reunion-du-partenariat-bilateral

economiques-francaises-vendredi-3
⁷⁶⁴ Speech by Barbara Pompili at the Business Climate Convention in Nantes on December 3, 2021, Ministry for the Ecological Transition (Paris) 6 December 2021. Translation provided by Google Translate. Access Date: 17 January 2022.

https://www.ecologie.gouv.fr/intervention-barbara-pompili-lors-convention-des-entreprises-climat-nantes-3-decembre-2021
⁷⁶⁵ Joint Statement Issued by the United States and France Following the First Meeting of the United States-France Bilateral Clean

of the industrial sector, creating green hydrogen, energy-focused building refurbishments, climate-friendly mobility and sustainable forestry and agriculture.⁷⁶⁶ This amendment also focused on raising the carbon dioxide emission reduction targets, strengthening natural sinks with the aim of binding carbon dioxide, coordinating climate action at the European level and specified greenhouse gas emission targets to be achieved during the 2030s.

On 25 June 2021, the Federal Council adopted several legislative initiatives and ordinances pertaining to the Common European Agricultural Policy (CAP), two-tier consumer production, plant health, organic farming and various regulations on animal welfare. The amendments and system change in in the CAP set the groundwork for an agriculture that improves environmental conservation, protection and climate change in practice by introducing a revised budget for eco-regulations, redistributing funding to small and medium-sized enterprises, reallocation of funds and supporting young farmers with an additional EUR98 million. Germany also implemented European Union law regarding plant health and made regulations regarding phytosanitary import controls.

On 6 July 2021, the Chairman of the Commission on the Future of Agriculture handed over its final report to Chancellor Angela Merkel, outlining several strategies for agricultural policy development and recommendations to increase efforts to boost climate and environmental protection.⁷⁶⁸ The final report stressed that to properly support modern agriculture in Germany, adequate financial support must be given to farmers and local sustainable development initiatives.

On 6 July 2021, Federal Minister for Food and Agriculture (BMEL) Hans-Joachim Fuchtel, handed over the final premium approval allocating an amount of EUR398,100 to six communities in Baden-Württemberg to promote the conversion of damaged forests into site-adapted and climate-resilient mixed forests.⁷⁶⁹ This premium is part of a long strategy for adapting forests to climate change and ensures the healthy regeneration of forests and ecosystems.

On 22 July 2021, the Parliamentary State Secretary Uwe Feiler presented the funding notification for EUR1.8 million from the Forest Climate Fund to the BENEATH project, which aims to quantify, evaluate and improve the climate protection performance of near-natural beech forests in terms of the influence of climate change in forest soil, especially related to carbon balance.⁷⁷⁰ In a statement, Secretary Feiler noted that "The Intergovernmental Panel on Climate Change calls sustainable forest management one of the most effective climate protection measures of all. That also means: We must keep an eye on the forest soils, they store 3,500 gigatons of carbon worldwide."

https://www.bmel.de/SharedDocs/Pressemitteilungen/DE/2021/114-bundeswaldpraemie-bw-fuchtel.html

⁷⁶⁶ Climate Change Act 2021: Intergenerational contract for the climate, Federal Government of Germany (Berlin) 25 June 2021. Access Date: 17 January 2022. https://www.bundesregierung.de/breg-de/themen/klimaschutz/climate-change-act-2021-1936846 ⁷⁶⁷ System change in the CAP, empowerment of consumers, reduction of glyphosate, more animal welfare, Federal Ministry of Food and Agriculture (Bonn) 25 June 2021. Translation provided by Google Translate. Access Date: 17 January 2021. https://www.bmel.de/SharedDocs/Pressemitteilungen/DE/2021/108-bundesrat.html

⁷⁶⁸ Recommendations of the Commission on the Future of Agriculture: Like "squaring a circle", Federal Government of Germany (Berlin) 6 July 2021. Access Date: 17 January 2022. https://www.bundesregierung.de/breg-en/news/future-agriculture-1940546 ⁷⁶⁹ Fuchtel: We need the municipalities for healthy forests, Federal Ministry of Food and Agriculture (Bonn) 6 July 2021.

Translation provided by Google Translate. Access Date: 17 January 2021.

⁷⁷⁰ Improving the climate protection performance of forest soils, Federal Ministry of Food and Agriculture (Bonn) 22 July 2021. Translation provided by Google Translate. Access Date: 27 January 2021.

https://www.bmel.de/SharedDocs/Pressemitteilungen/DE/2021/126-klimaschutzleistung-waldboeden.html

On 2 September 2021, the International Ministerial Conference to combat marine litter and plastic pollution, hosted by Germany, Ecuador, Ghana and Vietnam, ended with a draft resolution.⁷⁷¹ All four countries advocated for a global agreement which would achieve joint action, hopefully resolving the crisis posed by marine litter to the sea and ocean ecosystems. Germany continues to work to ensure that marine litter and ecosystem conservation is given a high priority in global forums.

On 1 October 2021, Oslo/Paris convention countries for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) agreed to create one of the largest protected marine areas in the world, providing protection for seabirds.⁷⁷² The goal of this new protected area is to reduce marine pollution and litter on beaches by 50 per cent by 2025 and by 75 per cent by 2030. This action will help to protect aquatic and marine environments.

On 8 November 2021, Germany committed EUR150 million for climate change adaptation in developing countries, bringing the total amount provided towards the adaptation finance fund to EUR2 billion a year.⁷⁷³ Projects supported by the Adaptation Fund include efficient irrigation systems in agriculture, transboundary coastal zones and water management and securing alternative livelihoods for farming and forestry communities. To date, Germany had contributed EUR390 million making it the largest donor.

On 24 November 2021, the Federal Cabinet approved the ordinances submitted by the Federal Minister for Food and Agriculture, Julia Klöckner, for the national implementation of the CAP.⁷⁷⁴ This represents a crucial stage in the implementation, after the relevant laws passed through the Bundestag and Bundesrat in June. The CAP was constituted mainly of direct payment regulations in the form of obligations and premium amounts for organic regulations, and conditionality regulations on the details on distance regulations to water bodies. A strategy for protecting wetlands and moors in the form of management requirements were also issued on agricultural land in such areas.

On 13 December 2021, the new Federal Minister of Food and Agriculture Cem Özdemir met with his European counterparts to discuss the draft regulation by the European Union Commission to prevent deforestation and forest damage within certain agricultural commodities.⁷⁷⁵ Minister Özdemir emphasized the importance of ensuring that agricultural goods purchased by Germany were not contributing to deforestation abroad. As one of his first meetings with his European counterparts, Minister Özdemir has made it clear that climate change mitigation and avoiding deforestation are key issues for German policymakers.

https://www.bmel.de/SharedDocs/Pressemitteilungen/DE/2021/180-agrarrat.html

⁷⁷¹ International Ministerial Conference to combat marine litter and plastic pollution ends with draft resolution, Ministry of Nature Conservation, Nuclear Safety and Consumer Protection (Bonn) 2 September 2021. Access Date: 27 January 2021. https://www.bmu.de/en/pressrelease/international-ministerial-conference-to-combat-marine-litter-and-plastic-pollution-ends-with-draft-resolution

North-East Atlantic countries create one of the largest marine protected areas in the world, Ministry of Nature Conservation, Nuclear Safety and Consumer Protection (Bonn) 1 October 2021. Access Date: 27 January 2021.

https://www.bmu.de/en/pressrelease/north-east-atlantic-countries-create-one-of-the-largest-marine-protected-areas-in-the-world Germany commits 150 million euros for climate change adaptation in developing countries, Ministry of Nature Conservation, Nuclear Safety and Consumer Protection (Bonn) 8 November 2021. Access Date: 27 January 2021.

https://www.bmu.de/en/pressrelease/germany-commits-150-million-euros-for-climate-change-adaptation-in-developing-countries ⁷⁷⁴ Klöckner: Broad political basis for the implementation of the European agricultural policy, Federal Ministry of Food and Agriculture (Bonn) 24 November 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.bmel.de/SharedDocs/Pressemitteilungen/DE/2021/173-gap-verordnungen-bundeskabinett.html

⁷⁷⁵ Özdemir: We want to put an end to imported forest destruction, Federal Ministry of Food and Agriculture (Bonn) 13 December 2021. Translation provided by Google Translate. Access Date: 17 January 2022.

On 13 December 2021, the German Cabinet passed a draft law for a second supplementary budget for 2021, with which an allocation of around EUR60 billion will go to the Energy and Climate Fund (EKF).⁷⁷⁶ Federal Minister for Economics and Climate Protection Robert Habeck stated "With the EUR60 billion that has now been decided in the supplementary budget, we are starting the next stage. We can use the funds to leverage investments that go hand in hand with economic recovery and climate protection." The Bundestag must still approve the draft law.

On 11 January 2022, Minister Habeck presented the opening balance sheet for German climate protection.⁷⁷⁷ In his remarks, Minister Habeck stated that climate protection has been insufficient in various sectors and efforts must be intensified. Minister Habeck presented some immediate measures that the Federal Ministry of Economics and Climate Protection prepared, including an amendment to the German Renewable Energy Act where the course for 80 per cent renewable electricity generation has been moved to 2030. Furthermore, Minister Habeck proposed the creation of legal and financial conditions for the provision of climate protection contracts, called Carbon Contracts for Difference. These will serve as tools to support the transformation in the industry.

Germany has fully complied with its commitment to ensuring its policies encourage sustainable production, as well as the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon. Through funding efforts towards industrial decarbonization and investment for sustainable development in developing countries and environmentally conscious policy developments such as the CAP, Germany has ensured sustainable development and decarbonization are prime aspects of its international and domestic policies. Additionally, Germany has taken efforts to preserve and restore ecosystems.

Thus, Germany receives a score of +1.

Analyst: Paul Maiguez-Gamester

Italy: 0

Italy has partially compiled by completing at least partial action in more than half of the commitment requirements including sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon.

On 19-21 July 2021, the United Nations Food Systems Summit was held in Rome under the leadership of Italy's Government and United Nations.⁷⁷⁸ The goal of this food summit was to build sustainable food systems that work for everyone by bringing youths, smallholder farmers, indigenous people, policy leaders and many more actors together to discuss how to make food systems more resilient to climate change.

⁷⁷⁶ Habeck: Additional funds for the transformation to a climate-neutral economy – Cabinet approves draft of the second supplementary budget for 2021, Federal Ministry for Economics and Climate Protection (Bonn) 13 December 2021. Translation provided by Google Translate. Access Date: 17 January 2022.

https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/12/20211213-habeck-zusaetzliche-mittel-fuer-die-transformation-zu-einer-klimaneutralen-volkswirtschaft-kabinett-beschliesst-entwurf-des-zweiten-nachtragshaushalts-2021.html 777 Habeck: Additional funds for the transformation to a climate-neutral economy — Cabinet approves draft of the second supplementary budget for 2021, Federal Ministry for Economics and Climate Protection (Bonn) 13 December 2021. Translation provided by Google Translate. Access Date: 17 January 2022.

https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2021/12/20211213-habeck-zusaetzliche-mittel-fuer-die-transformation-zu-einer-klimaneutralen-volkswirtschaft-kabinett-beschliesst-entwurf-des-zweiten-nachtragshaushalts-2021.html ⁷⁷⁸ Italy to set the stage for UN Food System with three-day event that will deliver bold new ambitions, Presidency of the Council of Ministers (Rome) 17 March 2021. Access Date: 31 January 2022. https://www.governo.it/it/articolo/italy-set-stage-un-food-systems-summit-three-day-event-will-deliver-bold-new-ambitions

On 29 July 2021, the Ministry of Ecological Transition released an ordinance for the repair of environmental damage that occurred due to quarrying activities by VANNELLA.⁷⁷⁹ The ordinance will identify activities "relating to maintenance and crop care subsequent to planting" and integration. This ordinance will help to restore a damaged ecosystem.

On 29 September 2021, the Undersecretary to the Ministry of Ecological Transition, Ilaria Fontana, emphasized the importance of protecting and conserving the marine resources and ecosystems in Antarctica. The one of Supporting the "need to intervene, in Antarctica, with the designation of Marine Protected Areas." These statements reemphasize Italy's commitment to the protection of vulnerable ecosystems in the Antarctic Peninsula.

On the dates of 30 September-2 October 2021 Italy hosted the Pre-COP26 in Milan which was attended by around 40-50 countries and representatives from UNFCCC.⁷⁸¹ During the Pre-COP26 event ministers were able to shape the negotiations in detail regarding climate change and transition to sustainable development.

Italy has partially complied with its commitment to transition to sustainable production, conserve and protect and ecosystems, restore ecosystems and work towards the sequestration of carbon. Italy has done this by emphasizing the importance of protecting Antarctic ecosystems, adopting an ordinance to restore a degraded ecosystem and by participating in global summits to transition to increased sustainable production/development for agriculture. Italy has taken no action towards the sequestration of carbon.

Thus, Italy receives a score of 0.

Analyst: Aida Zarghami

Japan: −1

Japan has not complied to its commitment of ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon.

On 26 July 2021, the Ministry of Economy, Trade and Industry (METI) revised the Roadmap for Carbon Recycling Technologies, "a document that aims to accelerate innovation by showing the path for expanding and disseminating Carbon Recycling (technologies whereby CO2 [carbon dioxide] is used as a fuel or raw material)."⁷⁸² Revisions included bringing forward the beginning of widespread adoption of (general purpose) Carbon Recycling products to around the year 2040 from previous estimates of 2050, in light of progressive trend of development in Japan. These actions aim to sequester carbon from the atmosphere.

On 3 September 2021, Prime Minister Yoshihide Suga held the 47th meeting of the Global Warming Prevention Headquarters at the Prime Minister's Office, to discuss "the draft Plan for Global Warming Countermeasures and the draft Long-Term Strategy under the Paris Agreement and other matters." The

⁷⁷⁹ Order to repair the environmental damage caused by the quarrying activity conducted by VANELLA srl, Ministry of Ecological Transition (Rome) 29 July 2021. Translation provided by Google Translate. Access date: 5 February 2022.

https://www.mite.gov.it/notizie/ordinanza-di-riparazione-del-danno-ambientale-cagionato-dall-attivita-di-coltivazione-di

⁷⁸⁰ Environment: Increase the number of marine protected areas in Antarctica, Ministry of Ecological Transition (Rome) 29 September 2021. Translation provided by Google Translate. Access Date: 5 February 2022.

https://www.mite.gov.it/notizie/ambiente-aumentare-il-numero-di-aree-marine-protette-antartide

⁷⁸¹ Pre-Cop was the final official ministerial meeting ahead of the COP, UN Climate Change Conference UK 2021 (Glasgow) N/A. Access Date: 31 January 2022. https://ukcop26.org/pre-cop/pre-cop/milan/

⁷⁸² Roadmap for Carbon Recycling Technologies Revised, Ministry of Economy, Trade and Industry Japan (Tokyo) 26 July 2021. Access Date: 28 November 2021. https://www.meti.go.jp/english/press/2021/0726 003.html

⁷⁸³ Press Release: Global Warming Prevention Headquarters, Prime Minister of Japan and His Cabinet (Tokyo) 3 September 2021. Access Date: 28 November 2021. https://japan.kantei.go.jp/99_suga/actions/202109/_00007.html

Prime Minister stated Japan's goal of reaching net-zero emissions by 2050, in addition to seeking a 46 per cent reduction in greenhouse gas emissions by the year 2030, and to continue reaching the goal of cutting emissions by 50 per cent. One of the concrete measures presented to achieve this goal includes the decarbonization of the food sector.

On 4 October 2021, METI and the New Energy and Industrial Technology Development Organization (NEDO) also jointly held the Third International Conference on Carbon Recycling 2021.⁷⁸⁴ "Industry, academia and government leaders in the field of carbon recycling (concrete/cement, fuel/chemicals, and R&D/investment) participated from Japan and abroad, and through panel discussions, announced their future directions toward implementing carbon recycling throughout society." Furthermore, METI reiterated previous carbon sequestration efforts, such as the Green Growth Strategy Carbon Recycling Action Plan and the revision of the Roadmap for Carbon Recycling Technologies.

On 22 October 2021, the Ministry of the Environment (MOEJ) announced that the Cabinet has approved the Climate Change Adaptation Plan, which describes "describes the basic direction of the measures to be taken for climate change" for multiple sectors, including agriculture, forestry, the environment and other land use sectors.⁷⁸⁵ This will help to ensure that these land use sectors will adopt policies that are in line with climate change objectives.

On 27 October 2021, Japan attended the Japan-ASEAN Summit Meeting on Environmental Cooperated, aimed at strengthening cooperation between Japan and the Association of Southeast Asian Nations (ASEAN) on climate change, as part of ASEAN's climate action and its transition to decarbonization.⁷⁸⁶ The meeting encouraged the countries to "further enhance cooperation on regional activities to achieve innovative and sustainable agricultural production and food systems aiming to promote the application of digital technologies in agriculture, application of nature-based solutions in agriculture, forestry and climate change adaptation and mitigation" as appropriate to the locales to achieve climate change goals.

Japan has failed to comply with its commitment to ensure sustainable production in the agricultural sector, conserve and protect ecosystems, restore ecosystems and foster carbon sequestration. This is because Japan has only taken strong action towards carbon sequestration via the implementation of the Carbon Recycling Action Plan and other policies and took partial action towards fostering sustainable production in agriculture. Japan took no action towards environmental protection and conservation nor any action to restore ecosystems.

Thus, Japan receives a score of -1.

Analyst: Muhammad Hamza Khan

United Kingdom: +1

The United Kingdon

The United Kingdom has fully complied by ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon.

On 23 June 2021, the Environment Agency and Natural England launched updates to water abstraction

⁷⁸⁴ Press Release: Third International Conference on Carbon Recycling 2021 Held, Ministry of Economy, Trade and Industry Japan (Tokyo) 6 October 2021. Access Date: 28 November 2021. https://www.meti.go.jp/english/press/2021/1006 002.html

⁷⁸⁵ Press Release: The Cabinet's Approval of the Climate Change Adaptation Plan and the Results of the Call for Public Comments on the Plan, Ministry of the Environment Japan (Tokyo) 22 October 2021. Access Date: 26 November 2021. https://www.env.go.jp/en/headline/2560.html

⁷⁸⁶ Press Release: Outcome of the Japan-ASEAN Summit Meeting on Environmental Cooperation, Ministry of the Environment Japan (Tokyo) 27 October 2021. Access Date: 26 November 2021. https://www.env.go.jp/en/headline/2547.html

licenses to 20 businesses operating in Ant Valley, a region of environmental importance.⁷⁸⁷ Under these new regulations, businesses will have to source water sustainably rather than sourcing it from rivers, lakes or groundwater. Each year, the regulations are predicted to replace 3 billion liters of water, which will help bring water levels back to their original amount.

On 24 June 2021, the Department for Environment, Food and Rural Affairs and Natural England declared two new Areas of Outstanding Natural Beauty: Yorkshire Wolds and Cheshire Sandstone Ridge.⁷⁸⁸ This development will allow these natural habitats to remain protected and will increase citizens' access to nature.

On 19 July 2021, the Environment Agency announced new guidelines for businesses that want to capture carbon dioxide from their combustion process, the goal of the new guidelines is 10Mt of carbon dioxide emissions a year by 2030.⁷⁸⁹ Under these new guidelines, these businesses will have to apply for an environmental permit, which will only be awarded to groups that meet requirements to protect the environment and local communities.

On 21 July 2021, the Department for Environment, Food and Rural Affairs worked with local communities to create a plan to plant 500 hectares of trees by 2025.⁷⁹⁰ This initiative aims to increase biodiversity, restore habitats and bring local communities closer to nature.

On 21 July 2021, the Department for Environment, Food and Rural Affairs and the Forestry Commission created a GBP1 million fund to increase tree production in England.⁷⁹¹ This fund will support nurseries to develop and adopt new technologies to increase the quantity of tree stock while increasing biodiversity of trees in England.

On 21 July 2021, the Department for Environment, Food and Rural Affairs, Natural England, and the Environment Agency awarded GBP100,000 to each of 27 projects designed to capture carbon and improve water quality and biodiversity.⁷⁹² Various organizations have also been given funding to set out on projects that will protect natural habitats.

On 22 July 2021, the UK government worked with water regulators including the Environment Agency to reform water policies.⁷⁹³ Changes include measuring water companies using an outcome rather than output-bases system, using nature-based solutions for water treatment to improve biodiversity, working with other entities like landowners and wildlife trusts so environmental improvements are more efficiently achieved and having water companies work more closely with the Environment Agency and Natural England.

 ⁷⁸⁷ Habitats protected in Norfolk through stricter abstraction laws, Environment Agency (Bristol) 23 June 2021. Access Date: 16 January 2022. https://www.gov.uk/government/news/habitats-protected-in-norfolk-through-stricter-abstraction-limits
 ⁷⁸⁸ Ambitious proposals to create and improve protected landscapes across England, Department for Environment, Food and Rural Affairs (London) 24 June 2021. Access Date: 16 January 2022. https://www.gov.uk/government/news/ambitious-proposals-to-create-and-improve-protected-landscapes-across-england

⁷⁸⁹ Guidance published on new carbon capture technologies, Environment Agency (Bristol) 19 July 2021. Access Date: 9 January 2022. https://www.gov.uk/government/news/guidance-published-on-new-carbon-capture-technologies

⁷⁹⁰ New Community Forest created in the North East to support a greener future, Department for Environment, Food and Rural Affairs (London) 21 July 2021. Access Date: 9 January 2022. https://www.gov.uk/government/news/new-community-forest-created-in-the-north-east-to-support-a-greener-future

⁷⁹¹ Forestry Commission launches new Tree Production Innovation Fund, Forestry Commission (Bristol) 21 July 2021. Access Date: 9 January 2022. https://www.gov.uk/government/news/forestry-commission-launches-new-tree-production-innovation-fund ⁷⁹² Boost to drive investment in Essex, Norfolk, and Lincolnshire environment, Department for Environment, Food and Rural Affairs (London) 21 July 2021. Access Date: 9 January 2022. https://www.gov.uk/government/news/boost-to-drive-investment-in-essex-norfolk-and-lincolnshire-environment

⁷⁹³ Water Policy reforms to deliver ambitious environmental agenda, Department for Environment, Food and Rural Affairs (London) 22 July 2021. Access Date: 9 January 2022. https://www.gov.uk/government/news/water-policy-reforms-to-deliver-ambitious-environmental-agenda

On 27 July 2021, the Government of the United Kingdom agreed to provide KES20 billion in funds to Kenya to help the country achieve its green housing goals.⁷⁹⁴ UK funds are being awarded to projects to help forest restoration, green energy, and green cooling.

On 28 July 2021, the UK government plans to fund 90 projects with a total of GBP40 million through the Green Recovery Challenge Fund.⁷⁹⁵ The UK also announced an additional GBP550 million in new funding to help Kenya achieve their climate change objectives, including for projects that relate to forest restoration.

On 2 August 2021, the Foreign, Commonwealth and Development Office launched a new training package for the UK's Overseas Territories as part of the UK government's Blue Belt Programme. This training package includes easy-to-access modules designed to teach how to better manage and protect marine environments.

On 2 August 2021, The UK government provided GBP17 million in funds to programs to help farmers prevent water pollution through free advice programs.⁷⁹⁷ These programs are meant to teach green management and increase sustainable production in the agricultural sector.

On 4 August 2021, the Environment Agency announced that a project to invest GBP5.59 million to improve the environment across Yorkshire has succeeded.⁷⁹⁸ Over 40 projects that received funding through the program managed to improve over 100 kilometers of rivers, restored and created 570 hectares of natural habitats, remove barriers to fish migration and planted 36,000 trees.

On 11 August 2021, the UK government awarded GBP1.4 million to Malaysia as part of the UK Partnering for Accelerated Climate Transitions program.⁷⁹⁹ Five projects are being funded through this program to help increase the capacity of Malaysia to achieve low-carbon energy and protect its natural habitats.

On 13 August 2021, the UK government provided the first GBP16.2 million as part of the Blue Planet Fund, which plans to eventually total GBP500 million in investment.⁸⁰⁰ These funds were awarded to projects designed to increase marine protection, minimize plastic pollution and halt damage to coral reefs.

On 18 August 2021, the Environment Agency launched the month-long Operation LUNGFISH to prevent illegal fishing, examples of prohibited activities include fishing without a license or using illegal traps.⁸⁰¹ This

⁷⁹⁴ UK Mobilises KES 20 billion investment into Kenya's Big Four projects, Foreign, Commonwealth and Development Office (London) 27 July 2021. Access Date: 9 January 2022. https://www.gov.uk/government/news/uk-mobilises-kes-20-billion-investment-into-kenyas-big-four-projects

⁷⁹⁵ Multi-million pound boost for green jobs and nature recovery, Department for Environment, Food and Rural Affairs (London) 28 July 2021. Access Date: 9 January 2022. https://www.gov.uk/government/news/multi-million-pound-boost-for-green-jobs-and-nature-recovery

⁷⁹⁶ Blue Belt Programme launches Training Programme for UK Overseas Territories, Foreign, Commonwealth and Development Office (London) 2 August 2021. Access Date: 8 January 2022. https://www.gov.uk/government/news/blue-belt-programme-launches-training-programme-for-uk-overseas-territories

⁷⁹⁷ Funding boost for farmers to tackle water pollution, Department for Environment, Food and Rural Affairs (London) 2 August 2021. Access Date: 8 January 2022. https://www.gov.uk/government/news/funding-boost-for-farmers-to-tackle-water-pollution ⁷⁹⁸ Multi-million pound investment brings Yorkshire improvements, Environment Agency (Bristol) 4 August 2021. Access Date: 8 January 2022.https://www.gov.uk/government/news/multi-million-pound-investment-brings-yorkshire-improvements ⁷⁹⁹ UK PACT backs low-carbon transition in Malaysia with £1.4 million in support, Foreign, Commonwealth and Development Office (London) 11 August 2021. Access Date: 8 January 2022. https://www.gov.uk/government/news/uk-pact-backs-low-carbon-transition-in-malaysia-with-14-million-in-support

⁸⁰⁰ Government scales up support to protect the world's ocean with multimillion boost for marine recovery, Department for Environment, Food and Rural Affairs (London) 13 August 2021. Access Date: 8 January 2022.

https://www.gov.uk/government/news/government-scales-up-support-to-protect-the-worlds-ocean-with-multimillion-boost-formarine-recovery

will help to protect the environment and conserve species from the effects of overfishing which reap a detrimental impact on biodiversity and ecosystem health.

On 26 August 2021, the Environment Agency announced a plan to invest GBP9.5 million into a program to improve navigation infrastructure on the Thames River.⁸⁰² Some improvements include plans to construct new fish passes that will help improve the natural habitats there.

On 27 August 2021, the Department for Environment, Food and Rural Affairs and Natural England announced five new projects to restore thousands of hectares of England's peatlands.⁸⁰³ To achieve these projects, the UK government plans to invest over GBP50 million.

On 2 September 2021, the UK government provided GBP263,000 in funds to the Pacific Community as part of an agreement to help Pacific Island Countries get rights over their ocean spaces.⁸⁰⁴ This development aims to help the Pacific Community gain the ability to sustainably manage the environments within their ocean spaces.

On 10 September 2021, the Marine Management Organization announced a new plan, the Studland Bay Marine Conservation Zone Habitat Protection Strategy.⁸⁰⁵ This plan aims to protect the Marine Conservation Zone and its seagrass habitat through two main steps that will be implemented in December 2021 and June 2022. Both steps will implement a voluntary no-anchor zone in these waters to protect the marine ecosystems.

On 11 September 2021, the Department for Environment, Food and Rural Affairs provided GBP24 million in funds to spur the creation of new technologies to promote the sustainability of the seafood industry.⁸⁰⁶ This initial round of funding is part of a GBP100 million investment project that has three pillars. The first pillar promotes the coordination of the seafood industry to work alongside scientists to encourage more sustainable fishing practices and gather data.

On 13 September 2021, the Department for Environment, Food and Rural Affairs announced GBP2.5 million in funding to farmers and landowners as the sixth round of the Countryside Stewardship Facilitation

⁸⁰¹ Environment Agency delivers warning to illegal anglers with new enforcement campaign, Environment Agency (Bristol), 18 August 2021. Access Date: 8 January 2022. https://www.gov.uk/government/news/environment-agency-delivers-warning-to-illegal-anglers-with-new-enforcement-campaign

⁸⁰² Bumper £9.5 million navigation investment for River Thames, Environment Agency (Bristol) 26 August 2021. Access Date: 8 January 2022. https://www.gov.uk/government/news/bumper-95-million-navigation-investment-for-river-thames

⁸⁰³ Thousands of hectares of vital peatland to be restored to help tackle climate change and protect biodiversity, Department for Environment, Food and Rural Affairs (London) 27 August 2021. Access Date: 8 January 2022.

https://www.gov.uk/government/news/thousands-of-hectares-of-vital-peatland-to-be-restored-to-help-tackle-climate-change-and-protect-biodiversity

⁸⁰⁴ UK supports Pacific Island progress on Extended Continental Shelf, Foreign, Commonwealth and Development Office (London) 2 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/uk-supports-pacific-island-progress-on-extended-continental-shelf

⁸⁰⁵ The MMO introduces the Studland Bay Marine Conservation Zone Habitat Protection Strategy, Marine Management Organisation (Newcastle) 10 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/the-mmo-introduces-the-studland-bay-marine-conservation-zone-habitat-protection-strategy

⁸⁰⁶ £24 million for cutting-edge science and fisheries, Department for Environment, Food and Rural Affairs (London) 11 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/24-million-for-cutting-edge-science-and-fisheries

Fund.⁸⁰⁷ This program provides funds to groups of farmers if they submit a detailed plan about how they plan to work together to protect and manage the local environment.

On 17 September 2021, the Environment Agency announced new restrictions on salmon fishing to combat a decline in migratory salmon numbers, which are currently below sustainable levels. 808 These new restrictions prohibit the catch of salmon in the Severn Estuary and River Severn and mandate all salmon to be released.

On 21 September 2021, Chancellor of the Exchequer Rishi Sunak launched the Green Gilt program, which is a 12-year government bond that is sold to help finance green projects in the UK.⁸⁰⁹ These projects aim to preserve natural habitats and finance clean transportation and green energy, on the day of its sale, the Green Glit program raised GBP10 million.

On 22 September 2021, Natural England announced a plan to expand the National Nature Reserve, a partnership between multiple environmental organizations in England.⁸¹⁰ The project will last 20 years and increase the quantity of land under protection and conservation measures.

On 22 September 2021, the UK funded GBP220 million to top-polluting industries to help facilitate a switch to green production.⁸¹¹ This funding targets new projects aimed to help increase capture carbon, reduce carbon emissions and recycle waste heat into electricity.

On 22 September 2021, the UK government provided GBP100 million in funding to six biodiversity hotspots that are home to endangered species.⁸¹² This funding will be provided over a span of seven years, and money will be allocated to community-led projects. These projects aim to support sustainable agriculture and land management, restore natural habitats and allow local communities to self-manage their land.

On 25 September 2021, the Department for Environment, Food and Rural Agriculture and the Forestry Commission announced the new environmental project, The Woodlands for Water project. 813 Through this project, 3,150 hectares of woodlands are planned to be created, and landowners can apply for funding from the England Woodland Creation Offer in order to plant and manage new trees.

⁸⁰⁷ New round of government fund for collaborative farming communities, Department for Environment, Food and Rural Affairs (London) 13 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/new-round-of-government-fund-for-collaborative-farming-communities

⁸⁰⁸ New bylaws to be introduced in the Severn Estuary and River Severn, Environment Agency (Bristol) 17 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/new-byelaws-to-be-introduced-in-the-severn-estuary-and-river-severn

⁸⁰⁹UK's first Green Gilt raises £10 billion for green projects, Her Majesty's Treasury (London) 21 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/uks-first-green-gilt-raises-10-billion-for-green-projects

⁸¹⁰ Partners agree 20-year vision for Purbeck Heaths super NNR, Natural England (York) 22 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/partners-agree-20-year-vision-for-purbeck-heaths-super-nnr

⁸¹¹ £220 million to help big-emitting industries become cleaner and greener, Prime Minister's Office (London) 22 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/220-million-to-help-big-emitting-industries-become-cleaner-and-greener

⁸¹² Lifeline for some the world's most precious biodiverse habitats announced, Prime Minister's Office (London) 22 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/lifeline-for-some-the-worlds-most-precious-biodiverse-habitats-announced

⁸¹³Riverbanks and watercourses to be planted with new woodland, Department for Environment, Food and Rural Affairs (London) 25 September 2021. Access Date: 7 January 2022. https://www.gov.uk/government/news/riverbanks-and-watercourses-to-be-planted-with-new-woodland

On 1 October 2021, the Department for Environment, Food and Rural Agriculture provided GBP 7.2 million to 17 different projects designed to combat illegal wildlife trade.⁸¹⁴ These projects include efforts to protect endangered species such as pangolins, tigers, rosewood timber and elephants.

On 15 October 2021, the Environment Agency launched a new strategy to protect and restore England's chalk streams, which make up around 85 per cent of the world's total chalk streams.⁸¹⁵ In England, chalk streams provide a vital habitat and a water source for the country.

On 18 October 2021, Chancellor of the Exchequer Rishi Sunak announced new guidelines for businesses to disclose their environmental impacts.⁸¹⁶ These guidelines will encourage green investment and discourage unsustainable business practices.

On 28 October 2021, the UK created the Climate Services for a Net-Zero Resilient World (CS-N0W), which is a 4-year program with the backing of GBP5 million.⁸¹⁷ It aims to use the latest scientific knowledge to help inform UK climate policy and achieve the government's goals of net-zero emissions by 2050.

On 1 November 2021, Prime Minister Boris Johnson launched a major funding initiative for the UK's new Clean Green Initiative (CGI) at the United Nations Climate Change Conference (COP26).⁸¹⁸ The CGI aims to promote both public and private investment in green infrastructure worldwide. Over the next five years, the UK will provide over GBP3 billion in total to support green growth in developing countries, and GBP200 million of those funds will be used to create a new Climate Innovation Facility. This facility will work with the private sector to innovate in technologies that the private sector deems too risky to invest in alone.

On 2 November 2021, the UK will provide GBP1.5 billion over the span of five years to support the Global Forest Finance Pledge (GFFP).⁸¹⁹ The GFFP aims to tackle deforestation around the world, and 12 countries also pledged public funds to support the program.

On 2 November 2021, the UK government announced a plan to fund GBP50 million into the High Impact Partnership on Climate Change, which is a program launched by the European Bank for Reconstruction and Development during COP26.820 The Partnership aims to support environmental protection and innovative solutions and investments that reduce greenhouse gas emissions. The UK's funds are used to encourage the private sector to support work in the Middle East and Africa.

Department for Environment, Food and Rural Affairs (London) 2 November 2021. Access Date: 28 November 2021. (https://www.gov.uk/government/news/12-billion-donor-support-to-halt-and-reverse-forest-loss-and-protect-land-rights B20 UK Announces Funding for Climate and the Environment in the Middle East and Africa, Foreign, Commonwealth and Development Office (London). 2 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/uk-announces-funding-for-climate-and-the-environment-in-the-middle-east-and-north-africa

⁸¹⁴ UK commits additional £7.2 million to tackling illegal wildlife trade, Department for Environment, Food and Rural Affairs (London) 1 October 2021. Access Date: 6 January 2022. https://www.gov.uk/government/news/uk-commits-additional-72-million-to-tackling-illegal-wildlife-trade

⁸¹⁵ New strategy launched to protect chalk streams, Environment Agency (Bristol) 15 October 2021. Access Date: 6 January 2022. https://www.gov.uk/government/news/new-strategy-launched-to-protect-chalk-streams

⁸¹⁶ Chancellor sets new standards for environmental reporting to weed out greenwashing and support transition to a greener financial system, Her Majesty's Treasury (London) 18 October 2021. Access Date: 6 January 2022.

https://www.gov.uk/government/news/chancellor-sets-new-standards-for-environmental-reporting-to-weed-out-greenwashing-and-support-transition-to-a-greener-financial-system

⁸¹⁷Climate Services for a Net Zero resilient world (CS-NOW): overview, Department for Business, Energy & Industrial Strategy (London) 28 November 2021. Access Date: 28 November 2021.https://www.gov.uk/government/publications/climate-services-for-a-net-zero-resilient-world/cs-nOw-overview

⁸¹⁸ PM Launches New Initiative to Take Green Industrial Revolution Global, Prime Minister's Office (London) 1 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/pm-launches-new-initiative-to-take-green-industrial-revolution-global

^{819 \$12} Billion Donor Support to Halt and Reverse Loss and Protect Land Rights,

On 5 November 2021, the UK and Zambia signed the Green Growth Compact, which aims to create sustainable growth and jobs.⁸²¹ The Compact will deliver billions of pounds for investment purposes, aim to double trade between the two countries, and channel millions of pounds of financial resources to smaller companies.

On 8 November 2021, the Environment Agency temporarily installed a flood barrier across the Newhaven Railway, which is the first of its kind in the UK.⁸²² This scheme is part of the GBP17.5 million project to alleviate flooding in Newhaven.

On 8 November 2021, the UK government announced the GBP274 million program, Climate Action for a Resilient Asia (CARA), which aims to promote adaptation to climate changes for seven years. The program will work with the Met Office, the Asian Development Bank, the World Bank, the United Nations Development Program, and the International Center for Integrated Mountain Development. CARA also will provide a Flexible Technical Assistance Fund, which aims to provide innovative programming in the Indo-Pacific Region.

On 9 November 2021, the UK Space Agency gave GBP11 million in funds to 11 UK organizations to develop new space technologies.⁸²⁴ The majority of the funded projects include initiatives related to climate change and environmental management. Such projects include a satellite to measure thermal emissions from Earth, a forestry and management tool to monitor trees' health from space, a satellite to measure the density of Earth's thermosphere, thermal telescopes to measure the energy efficiency of buildings, a satellite observation system to measure Earth's weather variability and a system to monitor emitters of greenhouse gasses.

On 9 November 2021, the Government of the UK funded GBP210 million to small nuclear reactors in the UK along with private investment funds of GBP250 million.⁸²⁵ The government additionally provided GBP165 million in funds to promote gender diversity while combating climate change.⁸²⁶ The funds are divided into two initiatives. The first GBP45 million aims to help communities and local women's rights movements in Asia and the Pacific to promote gender inequality and adjust to the impacts of climate change. The second GBP120 million is to tackle pollution, protect biodiversity and promote green energy while supporting women's equality and leadership in Bangladesh.

On 10 November 2021, the UK government made the Environment Act law.⁸²⁷ The Act aims to stop deforestation overseas, halt the extinction of species by 2030 and require new developments to create or

⁸²¹ Green Growth Compact agreement between the UK and Zambia, Foreign, Commonwealth and Development Office (London) 5 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/green-growth-compact-agreement-between-the-uk-and-zambia

⁸²² Newhaven flood barrier success, Environment Agency (Bristol) 8 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/newhaven-flood-barrier-success

⁸²³ UK announces £274m boost to climate resilience across Indo-Pacific, Foreign, Commonwealth and Development Office (London) 8 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/uk-announces-274m-boost-to-climate-resilience-across-indo-pacific

⁸²⁴ Government backs ground-breaking space technology to tackle climate change, UK Space Agency (Swindon) 9 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/government-backs-ground-breaking-space-technology-to-tackle-climate-change

⁸²⁵ UK backs new small nuclear technology with £210 million, Department for Business, Energy and Industrial Strategy (London) 9 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/uk-backs-new-small-nuclear-technology-with-210-million

⁸²⁶ UK boost to advance gender equality in climate action, Foreign, Commonwealth and Development Office (London) 9 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/uk-boost-to-advance-gender-equality-in-climate-action

⁸²⁷ World-leading Environment Act becomes law, Department for Environment, Food and Rural Affairs (London) 10 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/world-leading-environment-act-becomes-law

preserve habitats. These environmental targets are legally binding and are to be enforced by the new and independent Office for Environmental Protection.

On 11 November 2021, the UK government launched the UK Urban Climate Action Programme to help reduce emissions in cities around the world, which currently release 40 per cent of the world's emissions.⁸²⁸ The UK will fund GBP27.5 million in total to help cities in Asia, Africa and Latin America grow sustainably.

On 18 November 2021, the Environment Agency launched an investigation into sewage treatment works after water companies admitted that they could be releasing unauthorized discharge into bodies of water.⁸²⁹ The investigation involved 2000 sewage treatment works, and offending companies will be fined or prosecuted. The EA mandated that water companies install monitors so the frequency and duration of sewage spills can be displayed.

On 30 November 2021, the UK government announced a new roadmap to work with farmers in creating a path to sustainable, subsidy-free agriculture by 2028.830 Measures in this plan aim to recover habitats and create new woodlands, eradicate endemic diseases in livestock, reduce yearly Direct Payments and reallocate the money for new grants, create a Farming Investment Fund to provide farmers with new technology and infrastructure and simplify the agriculture regulatory system.831

On 3 December 2021, the Environment Agency, the Norfolk Rivers Trust and the Norfolk City Council constructed a new wetland.⁸³² constructing new wetlands will improve the quality of water entering rivers and to create a safe habitat for native plants and fish.

On 7 December 2021, the UK government provided GBP116 million to invest in businesses developing projects to capture carbon emissions and atmospheric greenhouse gasses.⁸³³ Projects to use captured carbon to create energy are also funded.

On 15 December 2021, the Forestry Commission issued new regulations to help limit the propagation of an insect harmful to trees, the European spruce bark beetle.⁸³⁴ Under new requirements, landowners are supposed to look out for suspected trees, ensure that prohibitions to forbid unauthorized and suspect material are implemented and make sure that members of the forestry industry notify the Forestry Commission before any susceptible spruce trees are felled.

⁸²⁸ UK funding to support developing cities and regions transition to net zero by 2050, Department for Business, Energy and Industrial Strategy (London) 11 November 2021. Access Date: 28 November 2021. https://www.gov.uk/government/news/uk-funding-to-support-developing-cities-and-regions-transition-to-net-zero-by-2050

⁸²⁹ Water companies could face legal action after investigation launched into sewage treatment works, Department for Environment, Food and Rural Affairs (London). 18 November 2021. Access Date: 28 November 2021.

https://www.gov.uk/government/news/water-companies-could-face-legal-action-after-investigation-launched-into-sewage-treatment-works

⁸³⁰ Government unveils path to sustainable farming from 2021, Department for Environment, Food and Rural Affairs (London) 20 November 2020. Access Date: 5 January 2022. https://www.gov.uk/government/news/government-unveils-path-to-sustainable-farming-from-2021

⁸³¹ Government unveils path to sustainable farming from 2021, Department for Environment, Food and Rural Affairs (London) 20 November 2020. Access Date: 5 January 2022. https://www.gov.uk/government/news/government-unveils-path-to-sustainable-farming-from-2021

⁸³² New wetland habitats created in Norfolk, Environment Agency (Bristol) 3 December 2021. Access Date: 5 January 2022. https://www.gov.uk/government/news/new-wetland-habitats-created-in-norfolk

⁸³³ Government invests over £116 million to drive forward green innovation in the UK, Department for Business, Energy and Industrial Strategy (London) 7 December 2021. Access Date: 5 January 2022.

https://www.gov.uk/government/news/government-invests-over-116-million-to-drive-forward-green-innovation-in-the-uk ⁸³⁴ Forestry Commission introduces new controls on bark beetle tree pest, Department for Environment, Food and Rural Affairs (London) 15 December 2021. Access Date: 4 January 2022. https://www.gov.uk/government/news/forestry-commission-introduces-new-controls-on-bark-beetle-tree-pest

On 20 December 2021, the Environment Agency worked with the Wild Trout Trust to remove a flood bank in Manthorpe to create a new environment for native species.⁸³⁵ Not only can the restoration of England's wetlands encourage biodiversity, but wetland plants can also sequester carbon.

On 6 January 2021, the UK government announced a new plan to pay farmers and landowners if they take steps to preserve, improve and create natural habitats.⁸³⁶ Such actions include planting trees or creating woodlands and wetlands. These plans are set to have the effects of increasing natural habitats by 10,000 hectares, saving carbon and helping to protect about half of England's most threatened species.

The United Kingdom has fully complied with its commitment to ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon. The United Kingdom continually provided funding to green initiatives and efforts to preserve nature, especially those in developing countries with less resources. The UK imposed binding legal restrictions and has conducted investigations on possible offenders to environmental laws. The United Kingdom also advanced the implementation of carbon sequestration initiatives and worked to restore degraded ecosystems.

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

Analyst: Erin Mulazimoglu

United States: +1

The United States of America has fully complied by ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon.

On 30 June 2021, the Environmental Protection Agency signed a three-year Memorandum of Understanding (MOU) with the New Mexico Farm & Livestock Bureau to expand joint activities aimed at reaching the goal of supporting sustainable farms in the region.⁸³⁷ The MOU expands the "communication, education and outreach" and promotion of sustainable agricultural training in order to foster better environmental maintenance. This will help the agriculture sectors of Arkansas, Louisiana, Oklahoma and Texas become more sustainable and environmentally conscious.

On 30 June 2021, the Environmental Protection Agency announced that they are awarding the Kansas Department of Health and Environment USD750,000 in funding as a part of the Farmer to Farmer grant program.⁸³⁸ The purpose of the funding is to improve "water quality, habitat, resilience" and the exchange of information between people in the AFLU sector to increase environmental protection. Additionally, this will help to advance sustainable agricultural practices and protect the surrounding ecosystems from degradation and water pollution.

Restored floodplain habitat helps rare/endangered species thrive, Environment Agency (Bristol) 20 December 2021. Access Date: 4 January 2022. https://www.gov.uk/government/news/restored-floodplain-habitat-helps-rareendangered-species-thrive Government unveils plans to restore 300,000 hectares of habitat across England, Department for Environment, Food and Rural Affairs (London) 6 January 2022. Access Date: 16 January 2022. https://www.gov.uk/government/news/government-unveils-plans-to-restore-300000-hectares-of-habitat-across-england

⁸³⁷ EPA, New Mexico Farm & Livestock Bureau Sign Pact to Expand Support for Sustainable Farming, Environmental Protection Agency (Washington D.C.) 30 June 2021. Date Accessed: 4 August 2021. https://www.epa.gov/newsreleases/epa-new-mexico-farm-livestock-bureau-sign-pact-expand-support-sustainable-farming.

⁸³⁸ EPA Awards \$750,000 to KDHE for Farm-Focused Project to Improve Water Quality, Environmental Protection Agency (Washington D.C.) 30 June 2021. Date Accessed: 4 August 2021. https://www.epa.gov/newsreleases/epa-awards-750000-kdhe-farm-focused-project-improve-water-quality.

On 1 July 2021, the Environmental Protection Agency announced that USD997,383 will be provided to the Sand County Foundation as a "Farmer to Farmer" grant.⁸³⁹ The funding will be used to finance efforts from farmers to improve "water quality, habitat and resilience." This will help to restore and protect ecosystem health.

On 23 September 2021, the US Department of Agriculture Secretary Tom Vilsack and the US Agency for International Department Administrator Samantha Power announced a planned multi-year investment of more than USD10 billion at the 23 September United Nations Food Systems Summit. 840 This investment will promote food systems transformation through innovation and climate-smart agriculture, improved infrastructure for food access and inclusive market opportunities, programs prioritizing women's and children's needs, improving nutrition, reducing food loss and waste and climate change mitigation and adaptation within the US and worldwide. USD 5 billion will be invested in strengthening food systems in the US, while USD 5 billion would contribute to Feed the Future (the US government's global hunger and food security initiative) over five years.

On 7 October 2021, the Environmental Protection Agency announced that they are granting USD498,673 to the Pennsylvania Department of Conservation and Natural Resources to "enhance its wetlands program for state parks and forests." This will help to increase the quality of water and protect natural resources in addition to restoring damage ecosystems.

On 12 October 2021, the Environmental Protection Agency granted USD292,324 in federal grant funding to the Virginia Institute of Marine Science.⁸⁴² This money will fund a project to "better understand the impact of climate change on wetlands restoration" for communities in Virginia and help to determine what can be done to better protect these ecosystems.

On 2 November 2021, President Joe Biden announced the US Methane Emissions Reduction Action Plan to push the US clean energy economy forward and create good-paying jobs.⁸⁴³ This plan aimed to reduce oil and gas industry methane emissions, landfill methane emissions, emissions by plugging oil and gas wells and remediating abandoned mines and agricultural methane emissions.

On 3 November 2021, the European Union Commissioner for Agriculture Janusz Wojciechowski released a joint press statement with United States Secretary of Agriculture Tom Vilsack that created a new transatlantic platform on agriculture intended to tackle the global challenges of climate change and foster sustainability.⁸⁴⁴ They promised to continue exchanging information with each other and collaborating on climate-smart

⁸³⁹ EPA Awards Nearly \$1 Million to Help Farmers in Wisconsin, Environmental Protection Agency (Washington D.C.) 1 July 2021. Access Date: 5 February 2022. https://www.epa.gov/newsreleases/epa-awards-nearly-1-million-help-farmers-wisconsin 840 Fact Sheet: Biden-Harris Administration Commit to End Hunger and Malnutrition and Malnutrition and Build Sustainable Resilient Food Systems, The White House (Washington D.C.) 23 September 2021. Access Date: 30 December 2021. https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/23/fact-sheet-biden-harris-administration-commit-to-end-hunger-and-malnutrition-and-build-sustainable-resilient-food-systems/

⁸⁴¹ EPA awards nearly \$500K to Pennsylvania to enhance wetlands on state parks, forests, Environmental Protection Agency (Washington D.C.) 7 October 2021. Access date: 5 February 2022. https://www.epa.gov/newsreleases/epa-awards-nearly-500k-pennsylvania-enhance-wetlands-state-parks-forests

⁸⁴² EPA awards \$292,324 to Virginia Institute of Marine Science to examine how climate change impacts wetlands, Environmental Protection Agency (Washington D.C.) 12 October 2021. Access Date: 5 February 2022. https://www.epa.gov/newsreleases/epa-awards-292324-virginia-institute-marine-science-examine-how-climate-change-impacts

Read Sheet: President Biden Tackles Methane Emissions, Spurs Innovations, and Supports Sustainable Agriculture to Build a Clean Energy Economy and Create Jobs, The White House (Washington, D.C.) 2 November 2021. Access Date: 30 December 2021. https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/02/fact-sheet-president-biden-tackles-methane-emissions-spurs-innovations-and-supports-sustainable-agriculture-to-build-a-clean-energy-economy-and-create-jobs/844 EU-US joint press statement, European Commission (Brussels) 3 November 2021. Access Date: 17 January 2021. https://ec.europa.eu/info/news/eu-us-joint-press-statement-2021-nov-03 en

solutions that can help agricultural producers, consumers and businesses moving forward. The agreement marks another step towards seeking sustainable production options in agriculture.

On 6 December 2021, the Environmental Protection Agency in coordination with other government officials announced that USD2.8 million will be provided to state and local government, nonprofits groups and community groups to "improve the health and ecosystem of Long Island Sound" in Connecticut and Vermont.⁸⁴⁵ This funding will aid efforts to protect these ecosystems and restore them to full health.

On 14 December 2021, France and the United States held the first meeting of the United States-France Bilateral Clean Energy Partnership in which ty supported the goals of the 26th United Nations Conference of the Parties on Climate Change (COP-26) to "accelerate the global transition to net zero and through, among other approaches and activities." Some of the key areas covered by the partnership include nuclear energy, scientific research and development, clean energy technology development and deployment and responsible and sustainable clean energy supply chains. This meeting saw extensive discussion on clean energy policies and carbon sequestration. Both countries have stated their commitment to leveraging technological innovation and its market deployment to achieve zero carbon emissions by 2050, and the next meeting of the United States-France Bilateral Clean Energy Partnership is scheduled for Washington D.C. in 2022.

On 16 December 2021, Assistant Secretary for Water and Science Tanya Trujillo announced actions that would advance the Department of the Interior's efforts to mitigate the impacts of drought and assist the public, Tribes and adjoining communities through investments with partners in the Colorado River Basin during the Colorado River Water Users Association's annual conference.⁸⁴⁷ The Interior Department officials signed important water conservation agreements with the Colorado River Indian Tribes and the Gila River Indian Community to supplement the USD 200 million investments aimed at reducing the risk of Lake Mead falling to critically low elevations over the next two years.

On 17 December 2021, the Departments of the Interior, Agriculture and Homeland Security Federal Emergency Management Agency announced the establishment of a new Wildland Fire Mitigation and Management Commission.⁸⁴⁸ This commission would fulfill a key provision of the Bipartisan Infrastructure Law by recommending federal policies and strategies to prevent, mitigate, suppress and manage wildland fires and the rehabilitation of land affected from wildland fires more effectively.

On 20 December 2021, the US Fish and Wildlife Service announced that it would re-engage a Federal Advisory Committee, which would provide recommendations to the US Departments of the Interior and Agriculture to help advance wildlife and habitat conservation and to preserve the nation's hunting heritage.⁸⁴⁹ The Council would focus on policies that benefit wildlife resources; encourage partnership among the public,

^{845 \$2.8} Million in Grants Awarded to Improve the Health of Long Island Sound, Environmental Protection Agency (Washington D.C.) 6 December 2021. Access Date: 5 February 2022. https://www.epa.gov/newsreleases/28-million-grants-awarded-improve-health-long-island-sound

⁸⁴⁶ Joint Statement Issued by the United States and France Following the First Meeting of the United States-France Bilateral Clean Energy Partnership, Ministry for the Ecological Transition (Paris) 17 December 2021. Translation provided by Google Translate. Access Date: 17 January 2022. https://www.ecologie.gouv.fr/declaration-conjointe-emise-etats-unis-et-france-suite-premiere-reunion-du-partenariat-bilateral

⁸⁴⁷ Assistant Secretary Tanya Trujillo Outlines Drought Mitigation Initiatives During Annual Colorado River Basin Conference, US Department of the Interior (Washington D.C.) 16 December 2021. Access Date: 30 December 2021. https://www.doi.gov/pressreleases/assistant-secretary-tanya-trujillo-outlines-drought-mitigation-initiatives-colorado-river-basin-conference

⁸⁴⁸ Departments of the Interior, Agriculture and Homeland Security Jointly Establish New Wildland Fire mitigation and Management Commission, US Department of the Interior (Washington D.C.) 17 December 2021. Access Date: 30 December 2021.

https://www.doi.gov/pressreleases/departments-interior-agriculture-and-homeland-security-jointly-establish-new-wildland ⁸⁴⁹ Biden-Harris Administration Establishes Committee to Support Wildlife Conservation and Recreation Opportunities, US Department of the Interior (Washington D.C.) 20 December 2021. Access Date: 30 December 2021.

https://www.doi.gov/pressreleases/biden-harris-administration-establishes-committee-support-wildlife-conservation-and

sporting conservation organizations, and federal, state, Tribal, and territorial governments and benefit fair chase recreational hunting and safe recreational shooting sports.

On 10 January 2022, the Department of Agriculture and the Department of Natural Resources Conservation Service announced several new opportunities for climate smart agriculture in 2022.850 The goal of this initiative is to support and expand the adaptation of the conservation approach to address the issue of climate change and conserve natural resources.

The United States has fully complied to its commitment to ensure sustainable production in agriculture, the protection and conservation of ecosystems, the restoration of ecosystems and the sequestration of carbon. The US has done this by funding restoration and conservation initiatives for vulnerable ecosystems, encouraging the adoption of sustainable agricultural production through new initiatives and policies and by investing in carbon capture.

Thus, the US receives a score of +1.

Analyst: Xiyuan Chen

European Union: +1

The European Union has fully complied by ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems and the sequestration of carbon.

On 21 June 2021, the European Commission announced that it is increasing preparations for the 2021 forest fire season to help protect and conserve Europe's forests which is home to large amounts of integral biodiversity.⁸⁵¹ The preparations include setting up large fleets of firefighting planes and helicopters and issuing guidelines to EU members on how to prevent wildfires from spreading. This early action will help increase the resilience of forests and help limit the damage that wildfires wreak on the ecosystems and biodiversity.

On 25 June 2021, the European Parliament and Council reached a provisional political agreement on the new Common Agricultural Policy (CAP) to introduce a "fairer, greener, more animal friendly and flexible CAP."852 The new policy will help the agriculture, forestry and land use sectors transition to be more sustainable and environmentally mindful. There are also stipulations in the policy that ensure that farms dedicate "at least 3 per cent of arable land" to biodiversity and guarantees that "all wetlands and peatlands will be protected."

On 30 June 2021, the European Commission introduced a "Long-Term vision for the EU's rural areas" which includes proposals for a Rural Pact and a Rural Action Plan to make rural and farm areas more resilient.⁸⁵³ The purpose of the plans is to foster sustainable production and facilitate a green transition for the agriculture, farming and forestry sectors. Examples of climate focused initiatives in the plan include calls to preserve resources and green "farming activities to counter climate change."

On 5 July 2021, the European Commission launched the EU Code of Conduct on Responsible Food Business and Marketing Practices as a part of the existing Farm to Fork Strategy that aims to increase

⁸⁵⁰ USDA Offers Expanded Conservation Program Opportunities to Support Climate Smart Agriculture in 2022, US Department of Agriculture (Washington D.C.) 10 January 2022. Access Date: 31 January 2022. https://www.usda.gov/media/press-releases/2022/01/10/usda-offers-expanded-conservation-program-opportunities-support

⁸⁵¹ Forest fires: European Commission is stepping up its preparations for the forest fire season 2021, European Commission (Brussels) 21 June 2021. Date Accessed: 4 August 2021. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3093.
852 Political agreement on new Common Agricultural Policy; fairer, greener, more flexible, European Commission (Brussels) 25 June 2021. Date Accessed: 4 August 2021. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2711.
853 Long-term vision for rural areas: for stronger, connected, resilient, prosperous EU rural areas, European Commission (Brussels) 30 June 2021. Date Accessed: 4 August 2021. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3162.

sustainable and healthy food options and reduce the environmental impact of the agricultural sector.⁸⁵⁴ Some aspects of the new strategy include improving sustainable production in the food value chain and reducing greenhouse gas emissions.

On 14 July 2021, the European Commission adopted the "Fit for 55" plan which includes several propositions to change the EU's climate, energy, land use, transport and taxation policies in order to reduce net greenhouse gas emissions in 2030 by at least 55% in comparison to 1990 levels.⁸⁵⁵ The proposal is comprehensive: it will require the EU Emissions Trading System to lower the cap on emissions for certain industries every year and increase its annual rate of reduction; Member States are encouraged to spend their emissions trading revenues on climate and energy-related projects; it expects Member States to be responsible for removing carbon from the atmosphere; the EU Forest Strategy plans to improve the resilience and quantity of EU forests by planting an additional 3 billion trees across Europe by 2030; the Renewable Energy Directive will increase renewable energy production to over 40%; and a new Carbon Border Adjustment Mechanism will place a carbon price on imports for targeted products to prevent Member States from pushing carbon-intensive production outside of the Union. The adoption marks a concrete step towards executing the European climate law and satisfies the objectives of sustainable production, promoting protection of land and forestry and the reduction of carbon emissions.

On 13 October 2021, the European Investment Bank (EIB) implemented a new Climate Adaptation Plan which aims to triple climate adaptation finance. In addition to reviewing future projects for their financial risk from climate change, the EIB will promote climate-smart digital technologies for agriculture and infrastructure resilient against the effects of climate change. European Commission Executive Vice President Frans Timmermans sees the EIB's plan as integral because "every euro spent on flood or wildfire protection or on climate resilient agriculture saves many euros spent on the devastating consequences of ever more frequent extreme weather events." Overall, the EIB's Adaptation Plan helps to support initiatives directed towards protection and conservation, particularly in agriculture.

On 3 November 2021, European Union Commissioner for Agriculture Janusz Wojciechowski released a joint press statement with United States Secretary of Agriculture Tom Vilsack that created a new transatlantic platform on agriculture intended to tackle the global challenges of climate change and foster sustainability.⁸⁵⁷ They promised to continue exchanging information with each other and collaborating on climate-smart solutions that can help agricultural producers, consumers and businesses moving forward. The agreement marks another step towards seeking sustainable production options in agriculture.

On 9 November 2021, EU participants at United Nations Climate Change Conference agreed that there is a need for a global transition towards more sustainable food systems. S58 In order to develop climate-resilient food systems, the participants recognized that soil and nutrient management practices as well as management of livestock must be improved. The discussion illustrates growing support for reviving agricultural ecosystems to be more climate conscious and sustainable.

.

⁸⁵⁴ Farm to Fork Strategy: 65 companies and associations sign the EU Code of Conduct on Responsible Food Business and Marketing Practices, European Commission (Brussels) 5 July 2021. Date Accessed: 4 August 2021. https://ec.europa.eu/commission/presscorner/detail/en/ip 21 3385.

⁸⁵⁵ European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions, European Commission (Brussels) 14 July 2021. Access Date: 16 January 2021. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3541 856 The EIB Climate Adaptation Plan, European Investment Bank (Luxembourg) 13 October 2021. Access Date: 17 January 2021. https://www.eib.org/attachments/publications/the eib climate adaptation plan en.pdf

⁸⁵⁷ EU-US joint press statement, European Commission (Brussels) 3 November 2021. Access Date: 17 January 2021. https://ec.europa.eu/info/news/eu-us-joint-press-statement-2021-nov-03_en

⁸⁵⁸ COP26: participants recognise the need for sustainable food systems to ensure global food security and achieve climate objectives, European Commission (Brussels) 9 November 2021. Access Date: 17 January 2021.

 $https://ec.europa.eu/info/news/cop26-participants-recognise-need-sustainable-food-systems-ensure-global-food-security-and-achieve-climate-objectives-2021-nov-09_en$

On 15 November 2021, the European Council adopted a new EU forest strategy for 2030.⁸⁵⁹ The measures aim to promote sustainable forest management; provide economic incentives for forest owners and operators to implement climate-smart practices; promote non-wood products such as cork, honey and medicinal plants; offer education and training for workers in forest-based industries; protect the EU's current primary and old-growth forests and establish a legally binding instrument for ecosystem restoration. The proposal will work in conjunction with the EU's "Fit for 55" carbon-neutral program, in addition to focusing on conserving natural resources and regenerating ecosystems.

On 17 November 2021, the European Commission adopted new initiatives to help realize the objectives of the European Green Deal, including through the proposal of new rules to stop deforestation. Additionally the commission presented a new soil strategy to restore the health and resilience of Europe's soil to protect nature and improve agriculture. Sol

On 2 December 2021, the European Council adopted the CAP for the duration of 2023-2027.⁸⁶² Traditionally, CAP accounts for nearly a third of the EU's budget and aims to offer affordable and safe food for citizens, guarantee a fair standard of living for farmers, and preserve natural resources. The new legislation will direct a quarter of payments towards green farming practices – making it the most environmentally ambitious CAP on record – to secure a more sustainable future for European farmers.

The European Union has fully complied with its commitment to ensuring its policies encourage sustainable production, the protection and conservation of ecosystems, the regeneration of ecosystems, and the sequestration of carbon. The EU persistently adopted measures aimed at preserving forests and natural resources, restoring degraded ecosystems and fostering sustainable production in agriculture by updating the CAP and implementing new farming strategies. The EU has also worked scrupulously to develop new strategies that will reduce carbon use and make production methods more climate conscious.

Thus, the EU receives a score of +1.

Analyst: Chiara Barsanti

_

⁸⁵⁹ Council adopts conclusions on the new EU forest strategy for 2030, Council of the EU (Brussels) 15 November 2021. Access Date: 17 January 2021. https://www.consilium.europa.eu/en/press/press-releases/2021/11/15/council-adopts-conclusions-on-the-new-eu-forest-strategy-for-2030/

⁸⁶⁰ European Green Deal: Commission adopts new proposals to stop deforestation, innovate sustainable waste management and make soils healthy for people, nature and climate, European Commission (Brussels) 17 November 2021. Access Date: 5 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip 21 5916

⁸⁶¹ European Green Deal: Commission adopts new proposals to stop deforestation, innovate sustainable waste management and make soils healthy for people, nature and climate, European Commission (Brussels) 17 November 2021. Access Date: 5 February 2022. https://ec.europa.eu/commission/presscorner/detail/en/ip 21 5916

⁸⁶² Council adopts fairer, greener and more performance-based farming policy for 2023-2027, Council of the EU (Brussels) 2 December 2021. Access Date: 17 January 2021. 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/