



The G7 Research Group presents the

## 2021 G7 Cornwall Summit Interim Compliance Report

14 June 2021 to 1 February 2022

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“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 .....	6
The Compliance Gap Between Members .....	6
Future Research and Reports .....	6
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 .....	12
2. Health: Vaccine Equity .....	44
3. Health: Disease Prevention .....	55
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 .....	176
9. Environment: Marine Health and Litter .....	201
10. Energy: Renewables .....	226
11. Energy: Coal .....	249
12. Trade: Free Trade .....	276
13. Gender: Education Equality .....	298
14. Democracy: China .....	315
15. Regional Security: Addressing Instability .....	333
16. Development: Sustainable Growth in Africa .....	368
17. Infrastructure: Build Back Better .....	386
18. Human Rights: Forced Labour .....	407
19. Digital Economy: Open Internet .....	427
20. Macroeconomics: Strong, Resilient, Sustainable, Balanced and Inclusive Growth .....	446
21. International Cooperation: Research Transparency .....	509
22. International Cooperation: Research and Knowledge Sharing .....	530

## 21. International Cooperation: Research Transparency

“Collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.”

*2021 Open Societies Statement*

### Assessment

	No Compliance	Partial Compliance	Full Compliance
Canada			+1
France		0	
Germany		0	
Italy		0	
Japan		0	
United Kingdom			+1
United States		0	
European Union			+1
Average		+0.38 (69%)	

### Background

Scientific innovation and collaboration on global issues have been consistent priorities of the G7. More recently, intergovernmental organizations have acknowledged the damage that misconduct in research has on scientific advancement, economic competitiveness, health, national security and the motivation of public officials.<sup>2796</sup> Additionally, the recent COVID-19 pandemic has shown how international collaboration can result in rapid scientific advances that can save lives.<sup>2797</sup> Given the diversity of global challenges faced, the G7 recognizes the importance of collaboration between nations and of the ambition that drives innovation.

The 1978 Bonn Summit marked the first time G7 leaders highlighted the need to conduct joint and coordinated research to address a global problem.<sup>2798</sup> Leaders specifically addressed the development of renewable energy and aimed to discover and innovate new energy sources and find more efficient uses of existing sources through research.

At the 1985 Bonn Summit, G7 leaders emphasized that international cooperation in research and technology in major projects should be enhanced to maximize scientific potential.<sup>2799</sup> Thus, they committed to ensuring that shared participation, responsibility, and adequate rules concerning access to the results achieved, the transfer of technology, and the use of technologies involved would be present in future scientific projects.

At the 1990 Houston Summit, G7 leaders agreed that successfully integrating environmental and economic goals required decision-makers in government and industry to have expanded cooperative scientific and economic research and analysis on the environment.<sup>2800</sup> Thus, the G7 leaders supported accelerated scientific research, analysis on the potential impacts of climate change, and potential responses of various countries.

<sup>2796</sup> Best Practices for Ensuring Scientific Integrity and Preventing Misconduct, Organisation for Economic Co-operation and Development (Paris) 28 November 2007. Access Date: 25 September 2021. <https://www.oecd.org/science/inno/40188303.pdf>

<sup>2797</sup> Data for international health emergencies: governance, operations and skills, Royal Society of Canada (Ottawa) 31 March 2021. Access Date: 26 October 2021. [https://rsc-src.ca/sites/default/files/DES7289\\_3\\_S7%20Statement\\_Data\\_EN\\_FINAL.pdf](https://rsc-src.ca/sites/default/files/DES7289_3_S7%20Statement_Data_EN_FINAL.pdf)

<sup>2798</sup> Declaration, G7 Information Centre Group (Toronto) 17 July 1978. Access Date: 25 September 2021. <http://www.g7.utoronto.ca/summit/1978bonn/communique.html>

<sup>2799</sup> The Bonn Economic Declaration: Towards Sustained Growth and Higher Employment, G7 Information Centre (Toronto) 4 May 1985. Access Date: 25 September 2021. <http://www.g7.utoronto.ca/summit/1985bonn/communique.html>

<sup>2800</sup> Houston Economic Declaration, G7 Information Centre (Toronto) 11 July 1990. Access Date: 25 September 2021. <http://www.g7.utoronto.ca/summit/1990houston/declaration.html>

The leaders also discussed the launching of the Human Frontier Science Program, which they hoped would make positive contributions to the advancement of basic research in life sciences for the benefit of all people.

At the 1995 Halifax Summit, G7 leaders discussed the challenges of the upcoming 21st century and asked for closer international cooperation in safeguarding the financial system.<sup>2801</sup> They agreed on the deepening of cooperation among regulators and supervisory agencies to ensure an integrated approach to enhancing the transparency necessary to monitor and contain risks. The leaders also agreed that transparent and accountable governance, investment in people, and environmental protection are the foundations of sustainable development and are essential to reinforcing national efforts.

At the 2006 St. Petersburg Summit, G8 leaders agreed to promote global innovation by developing the “knowledge triangle,” consisting of education, research, and innovation.<sup>2802</sup> They acknowledged that as scientific progress becomes increasingly global, international collaboration is essential to find solutions to global challenges, and called for improved scientific research and exchanges between states. The leaders also committed to involving scientists from developing countries in efforts to further develop the Global HIV Vaccine Enterprise and welcomed the Government of Russia’s initiative to involve Eastern European and Central Asian countries in its activities through the establishment of a regional coordination mechanism.<sup>2803</sup>

At the 2007 Heiligendamm Summit, G8 leaders agreed on innovation as one of the crucial drivers of economic growth and agreed to promote innovation, research, and development.<sup>2804</sup> They also recognized the need for innovation to be protected worldwide and identified Intellectual Property Rights (IPRs) as a precondition for innovation.

At the 2012 Camp David Summit, G8 leaders committed to the New Alliance for Food Security and Nutrition as part of a shared commitment to achieve global food security.<sup>2805</sup> As part of the Alliance, G8 leaders pledged to share relevant agricultural data available from G8 countries with African partners, explore approaches that could expand African access to nutritional technologies developed by national research institutions, and develop a policy research agenda.

At the 2016 Ise-Shima Summit, G7 leaders committed to taking concrete actions for advancing global health as elaborated in the G7 Ise-Shima Vision for Global Health and emphasized promoting research and development in other health areas.<sup>2806</sup> The leaders also recognized that innovation was critical for an effective global response to the climate challenge and committed to playing a leading role in Mission Innovation. Additionally, G7 leaders pledged support for scientific work to enhance global ocean observation and assessment for the science-based and sustainable use of marine resources.

At the 2020 US Virtual Summit G7 leaders recognized that the challenges related to the COVID-19 pandemic need a coordinated international approach based on scientific evidence, consistent with democratic values and utilizing the strengths of private enterprise through encouraging cooperative research and

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<sup>2801</sup> Halifax Summit Communiqué, G7 Information Centre (Toronto) 16 June 1995. Access Date: 24 September 2021. <http://www.g7.utoronto.ca/summit/1995halifax/communique/index.html>

<sup>2802</sup> Education for Innovation Societies in the 21st Century, G7 Information Centre (Toronto) 16 July 2006. Access Date: 24 September 2021. <http://www.g7.utoronto.ca/summit/2006stpetersburg/education.html>

<sup>2803</sup> Fight Against Infectious Disease, G7 Information Centre (Toronto) 16 July 2006. Access Date: 24 September 2021. <http://www.g7.utoronto.ca/summit/2006stpetersburg/education.html>

<sup>2804</sup> Chair’s Summary, G7 Information Centre (Toronto) 8 June 2007. Access Date: 24 September 2021. <http://www.g7.utoronto.ca/summit/2007heiligendamm/g8-2007-summary.pdf>

<sup>2805</sup> Fact Sheet: G8 Action on Food Security and Nutrition, G7 Information Centre (Toronto) 18 May 2012. Access Date: 24 September 2021. <http://www.g7.utoronto.ca/summit/2012campdavid/g8-food-security-factsheet.html>

<sup>2806</sup> G7 Ise-Shima Leaders' Declaration, G7 Information Centre (Toronto) 27 May 2016. Access Date: 25 September 2021. <http://www.g7.utoronto.ca/summit/2016shima/ise-shima-declaration-en.html>

collaboration in scientific and technological fields.<sup>2807</sup> They also agreed to increase coordinated research efforts through voluntary support for the global alliance Coalition for Epidemic Preparedness and Innovation (CEPI).

### **Commitment Features**

At the 2021 Cornwall Summit, G7 leaders committed to “collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.” This commitment can be broken down into two parts and to receive full compliance, G7 members must take action in both. These parts are: “Collaborate on science-based responses to global challenges,” and “drive innovation by calling on every nation to increase their research transparency and integrity.”

“Collaborate” is understood to mean a coordinated, synchronous activity that is the result of a continued attempt to construct and maintain a shared conception of a problem.<sup>2808</sup> Compliance can be achieved by two or more G7 members working to solve the same issue and consistently sharing data and/or creating joint initiatives to implement positive changes until the next summit. G7 members that collaborate with non-G7 members would only count for partial compliance, unless the G7 member collaborates with non-members in addition to working with other G7 members.

In the context of the commitment, “science-based responses” refers to decisions made using knowledge about or study of the natural world based on facts learned through experiments and observation.<sup>2809</sup> This includes, but is not limited to, empirical data, geographic measurements and analyzed lab experiments.

“Global challenges” are understood to mean any major trend, shock or development that has the potential for serious global impacts.<sup>2810</sup> Examples of current global challenges include the COVID-19 pandemic and climate change, both of which continue to have negative impacts on the health and security of people and the global economy.

“Drive” is understood to mean urging relentlessly to continuous exertion.<sup>2811</sup> In the context of the commitment, it refers to urging continuous exertion to innovate.

“Innovation” is understood as the embodiment of an idea in a technology, product or process that is new and creates value.<sup>2812</sup> An innovation is the implementation of a new or significantly improved product (good or service), or process which derives from creative ideas, technological progress, a new marketing method, a new organizational method in business practices, workplace organization or external relations. Innovation covers a wide range of domains with science and technology as the core.

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<sup>2807</sup> G7 Leaders’ Statement, G7 Information Centre (Toronto) 16 March 2020. Access Date: 23 September 2021. <http://www.g7.utoronto.ca/summit/2020usa/covid-200316.html>

<sup>2808</sup> PISA 2015 Collaborative Problem-Solving Framework, Organisation for Economic Co-operation and Development (Paris) July 2017. Access Date: 25 September 2021. <https://www.oecd.org/pisa/pisaproducts/Draft%20PISA%202015%20Collaborative%20Problem%20Solving%20Framework%20.pdf>

<sup>2809</sup> Science, Merriam-Webster (Springfield) n.d. Access Date: 26 September 2021. <https://www.merriam-webster.com/dictionary/science>

<sup>2810</sup> Global Challenges and their Impact on International Humanitarian Action, United Nations Office for the Coordination of Humanitarian Affairs (New York) January 2010. Access Date: 26 October 2021. <https://www.unocha.org/sites/unocha/files/Global%20challenges%20and%20their%20impact%20on%20international%20humanitarian%20action.pdf>

<sup>2811</sup> Drive, Merriam-Webster (Springfield) n.d. Access Date: 26 October 2021. <https://www.merriam-webster.com/dictionary/drive>

<sup>2812</sup> Compliance Coding Manual for International Institutional Commitments, G7 and G20 Research Groups (Toronto) 12 November 2020. Access Date: 26 October 2021 [http://www.g7.utoronto.ca/compliance/Compliance\\_Coding\\_Manual\\_2020.pdf](http://www.g7.utoronto.ca/compliance/Compliance_Coding_Manual_2020.pdf)

“Calling on” is understood to mean promoting or motioning others to associate with the mentioned requirement.<sup>2813</sup> In the context of the commitment, “others” refers to every nation and the “mentioned requirement” refers to increasing their research transparency and integrity.

“Increase” refers to something becoming progressively greater in amount, number, or intensity.<sup>2814</sup> In the context of the commitment, it refers to research transparency and integrity becoming greater.

“Transparency” is understood to mean something being open, frank and candid.<sup>2815</sup> In the context of the research, it can refer to the obligation to make data, analysis, methods and the researcher’s interpretive choices visible in a way that allows others to evaluate them.<sup>2816</sup>

“Integrity” is understood to mean the consistent alignment of, and adherence to, shared ethical values, principles, and norms for upholding and prioritising the public interest over private interests in the public sector.<sup>2817</sup> Calling on increased research integrity is often closely linked to transparency, and can include calling on increased accountability of research errors, open communication of findings and the respect of all research participants.

Full compliance, or a score of +1, for this commitment requires G7 members to satisfy both commitment targets. They must take strong actions to “collaborate on science-based responses to global challenges” and “drive innovation by calling on every nation to increase their research transparency and integrity.” As well, this commitment is subject to a depth analysis which includes both domestic and international actions. Examples of strong domestic actions include, but are not limited to, allocating money towards science-based research to impact issues such as climate change and global hunger and creating programs or governmental departments dedicated to specific research. Examples of strong international action can include, but are not limited to, ratifying treaties whose purpose is to encourage scientific innovation and/or encourage transparency in that research.

Partial compliance, or a score of 0, will be assigned to G7 members if one of the following scenarios takes place: the member satisfies only one of the commitment targets, either collaborating on science-based responses to global challenges with other G7 members or making efforts to drive innovation by calling on every nation to increase their research transparency and integrity, or the member takes only weak action on both parts of the commitment. Examples of weak action include, but are not limited to, attending a meeting that discusses the importance of scientific collaboration and/or research transparency, and verbally reaffirming the commitment but taking no strong steps to achieve any part of it.

Non-compliance, or a score of –1, will be assigned to G7 members who satisfy neither of the commitment targets by neither collaborating on science-based responses to global challenges with other G7 members nor making efforts to drive innovation by calling on every nation to increase their research transparency.

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<sup>2813</sup> Compliance Coding Manual for International Institutional Commitments, G7 and G20 Research Groups (Toronto) 12 November 2020. Access Date: 26 October 2021 [http://www.g7.utoronto.ca/compliance/Compliance\\_Coding\\_Manual\\_2020.pdf](http://www.g7.utoronto.ca/compliance/Compliance_Coding_Manual_2020.pdf)

<sup>2814</sup> Increase, Merriam-Webster (Springfield) n.d. Access Date: 26 October 2021. <https://www.merriam-webster.com/dictionary/increase>

<sup>2815</sup> Compliance Coding Manual for International Institutional Commitments, G7 and G20 Research Groups (Toronto) 12 November 2020. Access Date: 23 September 2021 [http://www.g7.utoronto.ca/compliance/Compliance\\_Coding\\_Manual\\_2020.pdf](http://www.g7.utoronto.ca/compliance/Compliance_Coding_Manual_2020.pdf)

<sup>2816</sup> Transparency in Qualitative Research, Princeton University (Princeton) n.d. Access Date: 26 September 2021. <https://www.princeton.edu/~amoravcs/library/TransparencyinQualitativeResearch.pdf>

<sup>2817</sup> OECD Recommendation on Public Integrity, Organisation for Economic Co-operation and Development (Paris) n.d. Access Date: 25 September 2021. <https://www.oecd.org/gov/ethics/recommendation-public-integrity/>

**Scoring Guidelines**

-1	The G7 member has not taken any or has taken insufficient steps to collaborate on science-based responses to global challenges with other G7 members NOR made any efforts to drive innovation by calling on every nation to increase their research transparency and integrity.
0	The G7 member has taken strong steps to collaborate on science-based responses to global challenges with other G7 members OR made efforts to drive innovation by calling on every nation to increase their research transparency and integrity, OR the G7 member has only taken partial action on both components.
+1	The G7 member has taken strong steps to collaborate on science-based responses to global challenges with other G7 members AND made efforts to drive innovation by calling on every nation to increase their research transparency and integrity.

*Compliance Director: Sofia Shatrova*

*Lead Analyst: Madison Skoblo*

**Canada: +1**

Canada has fully complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 15 June 2021, the Natural Sciences and Engineering Research Council of Canada (NSERC) announced its partnership with the US National Science Foundation.<sup>2818</sup> The partnership will allow both countries to collaborate on science and emerging technology research to promote economic well-being and technological creativity.

On 25 June 2021, NSERC and the Federal Ministry of Education and Research of Germany (BMBF) jointly selected ten projects to deepen both countries' collaborative hydrogen research.<sup>2819</sup> The projects aim to lead to findings that advance hydrogen as a major renewable source worldwide, putting Canada and Germany at the forefront of the new green hydrogen economy and fight against climate change. These projects also set a precedent for future joint activities, as agreed at the Cornwall G7 summit between Prime Minister Justin Trudeau and Germany's Chancellor Angela Merkel.

On 29 June 2021, Minister of Infrastructure and Communities Catherine McKenna announced Canada's entry into the Coalition on Disaster Resilient Infrastructure.<sup>2820</sup> The Coalition promotes the resilience of infrastructure systems to better resist climate change, and allows climate experts around the world to advance innovative and sustainable climate change solutions.

<sup>2818</sup> New US-Canada partnership announced for collaboration in research and innovation, Natural Sciences and Engineering Research Council of Canada (Ottawa) 15 June 2021. Access Date: 30 January 2022. [https://www.nserc-crsng.gc.ca/Media-Media/NewsDetail-DetailNouvelles\\_eng.asp?ID=1271](https://www.nserc-crsng.gc.ca/Media-Media/NewsDetail-DetailNouvelles_eng.asp?ID=1271)

<sup>2819</sup> Strong impetus for the German-Canadian hydrogen cooperation, Federal Ministry of Education and Research (Berlin) 25 June 2021. Translation provided by Google Translate. Access Date: 15 December 2021. <https://www.bmbf.de/bmbf/sharedocs/pressemitteilungen/de/starke-impulse-fuer-die-deutsche-wasserstoffkooperation.html>

<sup>2820</sup> Government of Canada joins the Coalition on Disaster Resilient Infrastructure, Infrastructure Canada (Ottawa) 29 June 2021. Access Date: 19 December 2021. <https://www.canada.ca/en/office-infrastructure/news/2021/06/government-of-canada-joins-the-coalition-on-disaster-resilient-infrastructure.html>

On 6 July 2021, Health Canada published improved Development Safety Update Reports alongside the Medicines and Healthcare products Regulatory Agency.<sup>2821</sup> The report aims to improve the safety of patients in clinical trials globally to increase trial transparency and thus improve the quality of international research.

On 12 July 2021, the Government of Canada released new National Security Guidelines for Research Partnerships.<sup>2822</sup> The Guidelines will require Canadian researchers to complete security risk assessment before submitting grant applications for projects involving collaboration with foreign countries. This requirement aims to preserve Canada's scientific collaboration with other countries while protecting Canadian intellectual property against foreign theft and interference. The guidelines aim to promote research openness and transparency in Canada and the countries with which it collaborates.<sup>2823</sup>

On 6 August 2021, Minister of Innovation, Science and Industry François-Philippe Champagne announced that the National Research Council of Canada (NRC) would provide 114 research projects with more than CAD23 million in funding.<sup>2824</sup> The funds will allow NRC scientists to collaborate with international academics on projects to improve virus diagnosis and environmental sustainability.

On 3 November, Minister Champagne met with US Secretary of Commerce Gina Raimondo to outline a plan to increase cross-border COVID-19 collaboration between the US and Canada.<sup>2825</sup> Under the plan, Secretary Raimondo and Minister Champagne agreed to share approaches on enhancing security of software supply chains and expand work on net-zero industrial transformation and renewable energy sources.

On 14 January 2022, Minister of Health Jean-Yves Duclos announced the creation of the Centre for Research on Pandemic Preparedness and Health Emergencies with an ongoing investment of CAD18.5 million per year.<sup>2826</sup> The Research Center collaborates with federal departments and agencies and domestic and international stakeholders to enhance Canada's capacity to research and mobilize knowledge to prevent, prepare for, respond to and recover from existing and future pandemics and public health emergencies.

Canada has fully complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. Canada has taken strong action to collaborate on scientific research with G7 members by creating partnerships and guidelines and allocating funds. Canada has also created guidelines that encourage international research transparency.

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<sup>2821</sup> MHRA releases guidance in collaboration with Health Canada to improve patient safety in clinical trials through improving the quality of Development Safety Update Reports, Medicines and Healthcare products Regulatory Agency (London) 6 July 2021. Access Date: 23 December 2021. <https://www.gov.uk/government/news/mhra-releases-guidance-in-collaboration-with-health-canada-to-improve-patient-safety-in-clinical-trials-through-improving-the-quality-of-development-s>

<sup>2822</sup> Government of Canada takes action to protect Canadian research and intellectual property, Innovation, Science and Economic Development Canada (Ottawa) 12 July 2021. Access Date: 30 January 2022. <https://www.canada.ca/en/innovation-science-economic-development/news/2021/07/government-of-canada-takes-action-to-protect-canadian-research-and-intellectual-property.html>

<sup>2823</sup> How can I assess risks in partnerships? Executive Summary of *National Security Guidelines for Research Partnerships*, Government of Canada (Ottawa) 12 July 2021. Access Date: 30 January 2022. [https://science.gc.ca/eic/site/063.nsf/eng/h\\_98256.html](https://science.gc.ca/eic/site/063.nsf/eng/h_98256.html)

<sup>2824</sup> Government of Canada funding research collaborations for breakthrough technologies, National Research Council Canada (Ottawa) 6 August 2021. Access Date: 30 January 2022. <https://www.canada.ca/en/national-research-council/news/2021/08/government-of-canada-funding-research-collaborations-for-breakthrough-technologies.html>

<sup>2825</sup> Joint Readout on Cooperation between the U.S. Department of Commerce and Innovation, Science and Economic Development Canada, U.S. Department of Commerce (Washington, D.C.) 3 November 2021. Access Date: 30 January 2022. <https://www.commerce.gov/news/press-releases/2021/11/joint-readout-cooperation-between-us-department-commerce-and-innovation>

<sup>2826</sup> Government of Canada creates Centre for Research on Pandemic Preparedness and Health Emergencies, Canadian Institutes of Health Research (Ottawa) 14 January 2022. Access Date: 16 January 2022. <https://www.canada.ca/en/institutes-health-research/news/2022/01/government-of-canada-creates-centre-for-research-on-pandemic-preparedness-and-health-emergencies.html>

Thus, Canada has received a score of +1.

*Analyst: Qianai Cheng*

### **France: 0**

France has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 6 July 2021, Minister for Higher Education, Research and Innovation Frédérique Vidal announced the 2nd National Plan for Open Science.<sup>2827</sup> The plan aims to triple the budget for open science from EUR5 million to EUR15 million, with a target of 100 per cent open access publications by 2030. This plan has an international component by contributing to France's commitments to transparency of public action within the framework of the Open Government Partnership, which involves more than 70 countries worldwide, including United Kingdom, United States, Canada, Germany and Italy.<sup>2828</sup>

On 9 August 2021, the Intergovernmental Panel on Climate Change published its Sixth Assessment Report of the Intergovernmental Panel on Climate Change, which French scientists co-authored alongside 250 scientists from over 60 countries.<sup>2829</sup> The report outlined climate change trends and reaffirmed the need to globally reduce greenhouse gas emissions.

On 3 September 2021, France hosted the International Union for Conservation of Nature World Conservation Congress.<sup>2830</sup> 1500 members representing more than 160 states, government agencies, economic development agencies, scientific and university institutions, businesses, civil society and indigenous peoples met in support of biodiversity research and conservation efforts.<sup>2831</sup>

On 15 September 2021, France, Germany, and the United Kingdom announced they were extending their partnership in neutron research.<sup>2832</sup> The three states signed an agreement that extends their longstanding cooperation as the sponsors of the Laue-Langevin Institute from 2024 to 2033. In this new period, the three signatory G7 members expect a total of EUR1 billion in contributions. The extended partnership will continue to grant experts access to world-class neutron radiation research, which has wide-ranging applications in understanding and treating COVID-19, Alzheimer's, and improving batteries for electric cars.

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<sup>2827</sup> INRAE committed to open science, National Institute of Agricultural Research (Paris) 6 July 2021. Access Date: 19 March 2022. <https://www.inrae.fr/en/inrae-committed-open-science>

<sup>2828</sup> The Minister of Higher Education, Research and Innovation, Frédérique Vidal, announces a 2<sup>nd</sup> National Plan for Open Science, Ministry of Higher Education, Research and Innovation (Paris) 6 July 2021. Access Date: 19 March 2022. <https://www.enseignementsup-recherche.gouv.fr/fr/la-ministre-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation-frederique-vidal-annonce-48548>

<sup>2829</sup> France welcomes the publication of the first volume of the IPCC's Sixth Assessment Report - Press release (9 August 2021), Ministry for Europe and Foreign Affairs (Paris) 9 August 2021. Access Date: 30 January 2022. <https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate-and-environment/news/article/france-welcomes-the-publication-of-the-first-volume-of-the-ipcc-s-sixth>

<sup>2830</sup> World Conservation Congress, International Union for Conservation of Nature (Gland) n.d. Access Date: 30 January 2022. <https://www.iucn.org/about/world-conservation-congress>.

<sup>2831</sup> IUCN Director General's statement for the UN Biodiversity Conference, International Union for Conservation of Nature (Gland) 11 October 2021. Access Date: 22 December 2021. <https://www.iucn.org/news/secretariat/202110/iucn-director-generals-statement-un-biodiversity-conference>

<sup>2832</sup> Germany, France, and the United Kingdom extend their partnership in neutron research, Federal Ministry of Education and Research (Berlin) 15 September 2021. Translation provided by Google Translate. Access Date: 21 December 2021. <https://www.bmbf.de/bmbf/shareddocs/pressemitteilungen/de/2021/09/150921-Neutronenforschung.html>

On 28 September 2021, French pharmaceutical company Sanofi announced the halt of its own mRNA-based COVID-19 vaccine development due to the challenges of competing with BioNTech.<sup>2833</sup> Instead, Sanofi will collaborate with British company GlaxoSmithKline to bring another COVID-19 vaccine to the market.

On 2 November 2021, Director of Sustainable Development of the French Space Agency Laurence Monnoyer-Smith and Chief Executive of the UK Space Agency Paul Bate announced MicroCarb, a joint British and French satellite mission intended to monitor atmospheric carbon dioxide.<sup>2834</sup> MicroCarb will become operational in 2023, and will collect data essential to monitoring international efforts to meet Paris Agreement climate targets.

On 18 November 2021, the Ministry of Research of France and the German Federal Ministry of Education and Research launched a series of Franco-German joint projects to strengthen both states' knowledge, technology transfer and cutting-edge research in the field of artificial intelligence (AI).<sup>2835</sup> France and Germany will provide funding worth around EUR12 million to 20 projects that pool research strengths and create the foundation for developing cutting-edge technologies in the two countries. German Federal Minister of Education and Research Anja Karliczek said this was an important contribution to the “development of trustworthy AI made in Europe” and the strengthening of “technological sovereignty.”

On 25 November 2021, France attended the Sixth Ministerial Meeting of the East Mediterranean Gas Forum and committed to engaging governments, businesses, and the private sector to use financing and technologies to reduce carbon emissions.<sup>2836</sup> Ministers present at the meeting also committed to working together to develop joint initiatives for climate action before the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change.

France has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. France has demonstrated strong leadership in issues of climate change, the COVID-19 pandemic, biodiversity preservation and green energy initiatives in close collaboration with G7 and foreign countries. However, France has not taken action to call on nations to increase research transparency.

Thus, France receives a score of 0.

*Analyst: Xiaolong (James) Wang*

### **Germany: 0**

Germany has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 18 June 2021, the Federal Ministry for Economic Cooperation and Development announced that they will support the Institut Pasteur in Senegal by providing EUR20 million to finance the production of

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<sup>2833</sup> Sanofi ditches mRNA COVID-19 vaccine after rivals' success, Reuters (London) 28 September 2021. Access Date: 24 December 2021. <https://www.reuters.com/business/healthcare-pharmaceuticals/frances-sanofi-announces-positive-update-mrna-based-covid-19-vaccine-candidate-2021-09-28/>

<sup>2834</sup> UK and France reach new agreement on climate change mission, UK Space Agency (Swindon) 2 November 2021. Access Date: 23 December 2021. <https://www.ukspace.org/uk-and-france-reach-new-agreement-on-climate-change-mission/>

<sup>2835</sup> Karliczek: Together with France, we are promoting trustworthy “AI made in Europe”, Federal Ministry of Education and Research (Berlin) 18 November 2021. Translation provided by Google Translate. Access Date: 22 December 2021. <https://www.bmbf.de/bmbf/shareddocs/pressemitteilungen/de/2021/11/181121-Deu-Frz-KI-Projekte.html>

<sup>2836</sup> 6th EMGF Ministerial Meeting – November 25th, 2021, East Mediterranean Gas Forum (Cairo) 25 November 2021. Access Date: 30 January 2022. [https://emgf.org/gva\\_event/6th-emgf-ministerial-meeting-november-25th-2021/](https://emgf.org/gva_event/6th-emgf-ministerial-meeting-november-25th-2021/)

COVID-19 vaccines.<sup>2837</sup> The funding will help the Institut utilize science-based approaches to tackle the COVID-19 pandemic by increasing domestic vaccine production potential.

On 25 June 2021, the Federal Ministry of Education and Research of Germany (BMBF) and the Natural Sciences and Engineering Research Council of Canada jointly selected ten projects to deepen both countries' collaborative hydrogen research.<sup>2838</sup> The projects aim to lead to findings that advance hydrogen as a major renewable source worldwide, putting Canada and Germany at the forefront of the new green hydrogen economy and fight against climate change. These projects also set a precedent for future joint activities, as agreed at the Cornwall G7 summit between Canada's Prime Minister Justin Trudeau and Chancellor Angela Merkel.

On 30 June 2021, Germany and the United Kingdom issued a joint declaration of intent on German-British foreign policy cooperation.<sup>2839</sup> Both states agreed on a shared global responsibility to deepen their cooperation on artificial intelligence, cybersecurity, climate change and COVID-19. Germany and the United Kingdom committed to promoting a multilateral approach to address these global issues, primarily by using international organizations and agreements as the "leading and coordinating authority."

On 16 July 2021, the Government of Germany contributed to the drafting of a proposal adopted by the European Commission for a "Council Recommendation on 'A Pact for Research and Innovation in Europe.'"<sup>2840</sup> The Pact will update policy coordination and monitoring for EU Member States regarding the best practices for exchanging research.

On 21 July 2021, Germany and the United States launched the German-American Climate and Energy Partnership.<sup>2841</sup> The partnership seeks to encourage close collaboration on research and action plans to reduce domestic emissions and aid emerging countries in their energy transition efforts. Particularly, the German-American partnership aims to support Central and Eastern European countries in tackling climate change. Both states pledged investments of at least USD1 billion in Ukraine to promote renewables, facilitate the development of hydrogen-powered energy, accelerate coal phase-out and support carbon neutrality.

On 25 August 2021, Finance Minister Olaf Scholz announced the federal government's intention to create an international climate club.<sup>2842</sup> The club aims to give the implementation of the Paris Agreement an additional boost internationally by ensuring states commit to ambitious climate goals and take appropriate measures. The club would define minimum standards and promote coordinated climate protection between states. This initiative also serves as an invitation to scientists across borders to get involved in the club's design.

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<sup>2837</sup> Minister Müller and Institut Pasteur give the go-ahead for setting up corona vaccine production in Africa, Federal Ministry for Economic Cooperation and Development (Berlin) 18 June 2021. Translation provided by Google Translate. Access Date: 8 March 2022. <https://www.bmz.de/de/aktuelles/archiv-aktuelle-meldungen/aufbau-einer-corona-impfstoffproduktion-in-afrika-84088>

<sup>2838</sup> Strong impetus for the German-Canadian hydrogen cooperation, Federal Ministry of Education and Research (Berlin) 25 June 2021. Translation provided by Google Translate. Access Date: 15 December 2021.

<https://www.bmbf.de/bmbf/shareddocs/pressemitteilungen/de/starke-impulse-fuer-die-deutsch-adische-wasserstoffkooperation.html>

<sup>2839</sup> Joint declaration of intent by Foreign Minister Heiko Maas and British Foreign Minister Dominic Raab on German-British foreign policy cooperation, Ministry of Foreign Affairs (Berlin) 30 June 2021. Translation provided by Google Translate Access Date: 20 December 2021. <https://www.auswaertiges-amt.de/de/newsroom/gbr-joint-declaration/2468906>

<sup>2840</sup> Commission adopts proposals for a Pact for Research and Innovation in Europe, European Commission (Brussels) 16 July 2021. Access Date: 8 March 2022. [https://ec.europa.eu/info/news/commission-adopts-proposal-pact-research-and-innovation-europe-2021-jul-16\\_en](https://ec.europa.eu/info/news/commission-adopts-proposal-pact-research-and-innovation-europe-2021-jul-16_en)

<sup>2841</sup> Joint statement of USA and Germany in support of Ukraine, European energy security and our climate goals, Ministry of Foreign Affairs (Berlin) 21 July 2021. Translation provided by Google Translate. Access Date: 15 December 2021. <https://www.auswaertiges-amt.de/de/newsroom/gemeinsame-erklaerung-usa-und-deutschland/2472074>

<sup>2842</sup> Federal government wants to found international climate club, Federal Ministry of Finance (Berlin) 25 August 2021. Translation provided by Google Translate. Access Date: 16 December 2021.

<https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2021/08/20210825-bundesregierung-will-internationalen-klimaclub-gruenden.html>

On 23 September 2021, Foreign Minister Heiko Maas called on all members of the Alliance for Multilateralism to promote a strong, inclusive and effective multilateral system to tackle global health and climate challenges.<sup>2843</sup> Minister Maas stressed the advantages of cooperation in the fight against the pandemic and urged other states to participate in international mechanisms like the World Health Organization's COVAX and the Access to COVID-19 Tools Accelerator.

On 27 September 2021, the Foreign Ministry hosted the Third Berlin Conference on Climate and Security.<sup>2844</sup> With the participation of eight Foreign Ministers and State Secretaries, the 2021 Berlin Climate and Security Conference served as a platform to strengthen collaboration, research, and innovation between states to address climate change and its related drivers of conflict and instability.<sup>2845</sup> Foreign Ministers, State Secretaries and partner organizations shared best practices to inform multilateral, regional, and local approaches to forward-looking and preventive policymaking.

On 15 September 2021, Germany, France, and the United Kingdom announced they were extending their partnership in neutron research.<sup>2846</sup> The three states signed an agreement that extends their longstanding cooperation as the sponsors of the Laue-Langevin Institute from 2024 to 2033. In this new period, the three signatory G7 members expect a total of EUR1 billion in contributions. The extended partnership will continue to grant experts access to world-class neutron radiation research, which has wide-ranging applications in understanding and treating COVID-19, Alzheimer's, and improving batteries for electric cars.

On 2 November 2021, the Federal Foreign Office hosted a digital conference on climate, peace and security.<sup>2847</sup> The conference was a high-level side event at COP26 that built multilateral momentum to establish principles for climate action to advance peace and stability.<sup>2848</sup> Speakers highlighted the importance of "cross-border, cross-sector, and multilateral projects" and stressed the need to accelerate "agricultural innovation and forecast-based financing." State Secretary of the Federal Foreign Office Miguel Berger announced a substantive multilateral initiative to bring together experts and drive forward research, innovation and joint action on climate, peace and stability.<sup>2849</sup>

On 8 November 2021, the Federal Ministry for Economic Cooperation and Development announced more robust support for climate change adaptation in developing countries following the COP26 in Glasgow.<sup>2850</sup> Germany committed a total of EUR150 million, of which EUR100 million will be devoted to the Global

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<sup>2843</sup> #Multilateralism Matters: Ministerial meeting of the Alliance for Multilateralism, Ministry of Foreign Affairs (Berlin) 23 September 2021. Translation provided by Google Translate. Access Date: 22 December 2021. <https://www.auswaertiges-amt.de/de/aussenpolitik/-/2484204>

<sup>2844</sup> Welcome address by Foreign Minister Heiko Maas at the opening of the Third Berlin Conference on Climate and Security, Ministry of Foreign Affairs (Berlin) 27 September 2021. Translation provided by Google Translate. Access Date: 15 December 2021. <https://www.auswaertiges-amt.de/de/newsroom/-/2483630>

<sup>2845</sup> Summary: Berlin Climate and Security Conference 2021, Berlin Climate and Security Conference (Berlin) 8 October 2021. Access Date: 16 December 2021. <https://berlin-climate-security-conference.de/>

<sup>2846</sup> Germany, France, and the United Kingdom extend their partnership in neutron research, Federal Ministry of Education and Research (Berlin) 15 September 2021. Translation provided by Google Translate. Access Date: 21 December 2021. <https://www.bmbf.de/bmbf/shareddocs/pressemitteilungen/de/2021/09/150921-Neutronenforschung.html>

<sup>2847</sup> World Climate Conference: The security policy effects of climate change in focus, Ministry of Foreign Affairs (Berlin) 31 October 2021. Translation provided by Google Translate. Access Date: 15 December 2021. <https://www.auswaertiges-amt.de/de/aussenpolitik/themen/klima/cop26/2493334>

<sup>2848</sup> Climate, Peace and Stability: Weathering Risk Through COP and Beyond, Weathering Risk (Berlin) 2 November 2021. Access Date: 16 December 2021. <https://weatheringrisk.org/en/event/climate-peace-and-stability-weathering-risk-through-cop-and-beyond>

<sup>2849</sup> World Climate Conference: The security policy effects of climate change in focus, Ministry of Foreign Affairs (Berlin) 31 October 2021. Translation provided by Google Translate. Access Date: 15 December 2021. <https://www.auswaertiges-amt.de/de/aussenpolitik/themen/klima/cop26/2493334>

<sup>2850</sup> Germany is supporting the Adaptation Fund with €50 million, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 8 November 2021. Access Date: 30 January 2022. [https://www.international-climate-initiative.com/en/news/article/germany\\_is\\_supporting\\_the\\_adaptation\\_fund\\_with\\_eur50\\_million](https://www.international-climate-initiative.com/en/news/article/germany_is_supporting_the_adaptation_fund_with_eur50_million)

Environment Facility fund for least developed countries and EUR50 million to the Adaptation Fund. Development Minister Gerd Müller stated that “Germany is leading the way” and other countries “must now follow suit,” including G7 members.

On 18 November 2021, the BMBF and the Ministry of Research of France launched a series of Franco-German joint projects to strengthen both states’ knowledge, technology transfer and cutting-edge research in the field of artificial intelligence (AI).<sup>2851</sup> Germany and France will provide funding worth around EUR12 million to 20 projects that pool research strengths and create the foundation for developing cutting-edge technologies in the two countries. Minister Karliczek said this was an important contribution to the “development of trustworthy AI made in Europe” and the strengthening of “technological sovereignty.”

On 23 November 2021, Minister Maas highlighted Germany’s pursuit of multilateral solutions as a cornerstone of the country’s foreign policy.<sup>2852</sup> Minister Maas stressed Germany’s significant contribution to the vaccination program COVAX, now totalling EUR2.2 billion and 100 million vaccine doses, making Germany the second-largest supporter worldwide of this initiative.

On 1 December 2021, the BMBF announced the beginning of research at the International Green Hydrogen Future Laboratory.<sup>2853</sup> Minister Karliczek stressed the importance of green hydrogen as an alternative renewable energy source to tackle climate change. The Laboratory will bring together researchers from Europe, North America, South America and Australia for up to three years to develop technologies for the clean production of green hydrogen.

On 20 December 2021, Chancellor Olaf Scholz announced a joint plan of action between Germany and Italy to deepen bilateral relations with respect to COVID-19, climate change, digitalization, and security.<sup>2854</sup> The plan for bilateral cooperation emphasizes the imperative of collaboration between both states to achieve high vaccination rates, investment in modern technologies, successful digitalization and economic strength and competitiveness.

Germany has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. While Germany has taken actions to collaborate on science-based responses to global challenges – such as COVID-19, climate change, and security – with other G7 members, it has fallen short in driving innovation by calling on other states to increase their research transparency and integrity.

Thus, Germany receives a score of 0.

*Analyst: Daniel Corredor Llorente*

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<sup>2851</sup> Karliczek: Together with France, we are promoting trustworthy “AI made in Europe”, Federal Ministry of Education and Research (Berlin) 18 November 2021. Translation provided by Google Translate. Access Date: 22 December 2021.

<https://www.bmbf.de/bmbf/shareddocs/pressemitteilungen/de/2021/11/181121-Deu-Frz-KI-Projekte.html>

<sup>2852</sup> Opening speech by Foreign Minister Heiko Maas at the Berlin Foreign Policy Forum of the Körber Foundation, Ministry of Foreign Affairs (Berlin) 23 November 2021. Translation provided by Google Translate. Access Date: 16 December 2021.

<https://www.auswaertiges-amt.de/de/newsroom/maas-koerber/2497280>

<sup>2853</sup> Karliczek: International future laboratory researches new climate-neutral technologies for the production of green hydrogen, Federal Ministry of Education and Research (Berlin) 1 December 2021. Translation provided by Google Translate. Access Date: 22 December 2021. <https://www.bmbf.de/bmbf/shareddocs/pressemitteilungen/de/2021/12/011221-IZGW.html>

<sup>2854</sup> “We are firmly committed to fighting the coronavirus pandemic together,” The Federal Government (Berlin) 20 December 2021. Access Date: 26 December 2021. <https://www.bundesregierung.de/breg-en/search/bk-scholz-italy-1992640>

## Italy: 0

Italy has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 31 October 2021, Italy and the United Kingdom co-hosted the United Nations Climate Change Conference (COP26) as part of a Presidency Partnership.<sup>2855</sup> The conference refined the UN's 2030 agenda and the Paris Agreement for all participating countries.<sup>2856</sup> Participating countries also committed to accelerating the transition to zero emission vehicles and called on all developed countries to improve collaboration to facilitate a global transition to these vehicles.

On 25 November 2021, the Italian Ambassador in Cairo Giampaolo Cantini attended the 6th Ministerial Meeting for the East Mediterranean Gas Forum (EMGF).<sup>2857</sup> The ministers endorsed the EMGF 2022 budget and agreed to work together towards co-developing joint initiatives for climate action. The meeting was also attended by the Cypriot, Egyptian, Greek, Israeli, Jordanian and Palestinian Ministers of Energy, as well as French Director General for Global Affairs, Ministry of Europe and Foreign Affairs Jean-Baptiste Lemoyne as heads of delegations of the EMGF member countries. The European Union and United States attended as observers.<sup>2858</sup>

On 26 November 2021, Italy and France signed space cooperation and energy agreements as part of the Enhancement Cooperation Treaty.<sup>2859</sup> The treaty aims to strengthen cooperation in the energy, technology and space fields.<sup>2860</sup>

On 3 December 2021, Prime Minister Mario Draghi attended the Rome Med-Mediterranean Dialogues.<sup>2861</sup> Draghi urged Mediterranean countries to form a “joint energy policy” and promote the development of renewables including wind and solar power by using their extensive gas reserves. He also encouraged Mediterranean countries to “go beyond bilateral relations” and increase collaboration to address climate change.

On 20 December 2021, Prime Minister Draghi met with German Chancellor Olaf Scholz to discuss the COVID-19 pandemic, economic recovery and climate change.<sup>2862</sup> Both parties agreed to boost cooperation in

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<sup>2855</sup> The UK-Italy Partnership, UN Climate Change Conference UK 2021 (London) n.d. Access Date: 15 January 2022.

<https://ukcop26.org/pre-cop/>

<sup>2856</sup> COP26 Declaration on Accelerating The Transition To 100% Zero Emission Cars And Vans, UN Climate Change Conference UK 2021 (London) 11 October 2021. Access Date: 28 November 2021. <https://ukcop26.org/cop26-declaration-on-accelerating-the-transition-to-100-zero-emission-cars-and-vans/>

<sup>2857</sup> 6th EMGF Ministerial Meeting, East Mediterranean Gas Forum (Cairo) 25 November 2021. Access Date: 13 December 2021. [https://emgf.org/gva\\_event/6th-emgf-ministerial-meeting-november-25th-2021/](https://emgf.org/gva_event/6th-emgf-ministerial-meeting-november-25th-2021/)

<sup>2858</sup> Speech of Eng. Tarek El Molla, Minister of Petroleum and Mineral Resources, at the Sixth Ministerial Meeting of the East Mediterranean Gas Forum (EMGF), Ministry of Petroleum & Mineral Resources (Cairo) 25 November 2021. Access Date: 13 December 2021. [https://www.petroleum.gov.eg/en/media-center/news/news-pages/Pages/mop\\_25112021\\_01.aspx](https://www.petroleum.gov.eg/en/media-center/news/news-pages/Pages/mop_25112021_01.aspx)

<sup>2859</sup> Joint press statements by PM Draghi and President Macron, Italian Government (Rome) 26 November 2021. Access Date: 29 November 2021. <https://www.governo.it/en/articolo/joint-press-statements-pm-draghi-and-president-macron/18669>

<sup>2860</sup> Italy and France sign agreement on space launchers, Reuters (London) 27 November 2021. Access Date: 29 November 2021. <https://www.reuters.com/lifestyle/science/italy-france-sign-agreement-space-launchers-2021-11-26/>

<sup>2861</sup> Prime Minister Draghi's address at the 'Rome Med-Mediterranean Dialogues' opening ceremony, Presidency of the Council of Ministers (Rome) 3 December 2021. Access Date: 24 December 2021. <https://www.governo.it/en/articolo/prime-minister-draghi-s-address-rome-med-mediterranean-dialogues-opening-ceremony/18732>

<sup>2862</sup> PM Draghi meets with Chancellor Scholz, introduction by Prime Minister Draghi, Presidency of the Council of Ministers (Rome) 20 December 2021. Access Date: 24 December 2021. <https://www.governo.it/en/articolo/pm-draghi-meets-chancellor-scholz-introduction-prime-minister-draghi/18863>

science, technology and research in fields such as “hydrogen, microelectronics and batteries for electric cars” to fight against climate change and promote digital transition.

Italy has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. Italy collaborated with G7 members and Mediterranean countries on research relating to the COVID-19 pandemic and climate change. As a co-host of COP26, Italy also expressed its willingness to cooperate with foreign countries on sustainability issues. However, Italy did not call on nations to increase their research transparency and integrity.

Thus, Italy receives a score of 0.

*Analyst: Xiaolong (James) Wang*

### **Japan: 0**

Japan has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 22 June 2021, Minister of Economy, Trade, and Industry Hiroshi Kajiyama announced the launch of the Asia carbon capture, utilization and storage (CCUS) Network.<sup>2863</sup> This platform will allow for the sharing of knowledge across industry, academia and government for the use of CCUS methods across Asia.

On 8 July 2021, the Government of Japan and the International Atomic Energy Agency signed a Terms of Reference (TOR) regarding the management of Advanced Liquid Processing System treated water from Tokyo Electric Power Company’s Fukushima Daiichi Nuclear Power Station.<sup>2864</sup> The TOR are intended to increase the transparency of water treatment for the international community based on environmental monitoring and review missions.

On 11 August 2021, Director General of the Trade Policy Bureau Matsuo Takehiko and Director General of the Trade and Economic Cooperation Bureau Iida Yoichi signed a memorandum of cooperation with Thailand’s Ministry of Digital Economy and Society’s Digital Economy Promotion Agency and the Ministry of Industry’s Department of Industrial Promotion.<sup>2865</sup> The memorandum confirms cooperation for promoting Lean IoT Plant Management and Execution, a human resource development project that improves productivity through technology and increases Thailand’s manufacturing capacity through sustainable methods.

On 27 October 2021, the Ministry of Environment and the Association of Southeast Asian Nations (ASEAN) established a new ASEAN-Japan climate action agenda.<sup>2866</sup> The agenda aims to make climate change a core aspect of ASEAN climate action and increase cooperation. The agenda is based on the use of transparency, mitigation, and adaptation, for decarbonization.

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<sup>2863</sup> “Asia CCUS Network” has launched, Ministry of Economy, Trade and Industry (Tokyo) 22 June 2021. Access Date: 21 December 2021. [https://www.meti.go.jp/english/press/2021/0622\\_001.html](https://www.meti.go.jp/english/press/2021/0622_001.html)

<sup>2864</sup> The Government of Japan signed on IAEA's support for handling of ALPS treated water at TEPCO's Fukushima Daiichi Nuclear Power Station, Ministry of Economy, Trade and Industry (Tokyo) 9 July 2021. Access Date: 21 December 2021. [https://www.meti.go.jp/english/press/2021/0709\\_001.html](https://www.meti.go.jp/english/press/2021/0709_001.html)

<sup>2865</sup> METI and Thailand's Ministry of Industry and Ministry of Digital Economy and Society Sign a Memorandum of Cooperation toward Promoting LIPE, Which Will Help Achieve Thailand 4.0, Ministry of Economy, Trade and Industry (Tokyo) 11 August 2021. Access Date: 21 December 2021. [https://www.meti.go.jp/english/press/2021/0811\\_001.html](https://www.meti.go.jp/english/press/2021/0811_001.html)

<sup>2866</sup> Outcome of the Japan-ASEAN Summit Meeting on Environmental Cooperation, Ministry of the Environment (Tokyo) 27 October 2021. Access Date: 21 December 2021. <https://www.env.go.jp/en/headline/2547.html>

On 10 November 2021, the Ministry of the Environment and the United States Office of Special Presidential Envoy for Climate announced an initiative for Global Subnational Zero Carbon promotion.<sup>2867</sup> The project aims for both countries to cooperate to promote climate action globally for a decarbonized society.

On 10 January 2022, Minister of Economy, Trade and Industry Hagiuda Koichii announced the ASIA-Japan Investing for the Future Initiative.<sup>2868</sup> The initiative aims to enhance economic cooperation within Asia through future investment for the post-pandemic era. It also aims to increase the importance of sustainability in rural and urban areas and promote innovation to address climate change and urbanization.

Japan has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. Japan has collaborated with other countries on science-based responses to global challenges, such as climate change, by entering into bilateral agreements aimed at meeting climate targets. However, Japan has failed to drive innovation through increased transparency and integrity.

Thus, Japan receives a score of 0.

*Analyst: Fiorella Maria Gaveglione-Fernandez*

### **United Kingdom: +1**

The United Kingdom has fully complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 18 June 2021, the UK's Centre for the Environment, Fisheries and Aquaculture Science (Cefas) committed to providing marine pollution expertise to Sri Lanka following the X-Press Pearl container vessel fire.<sup>2869</sup> Cefas will collaborate with Sri Lankan emergency response teams to analyze the consequences for marine and coastal habitats and help prepare them to avoid future incidents. This collaboration will allow for the protection of the marine environment and mitigation of the fire's short-term impacts.

On 30 June 2021, the UK and Germany issued a joint declaration of intent on German-British foreign policy cooperation.<sup>2870</sup> Both states agreed on a shared global responsibility to deepen their cooperation on artificial intelligence, cybersecurity, climate change and COVID-19. The UK and Germany committed to promoting a multilateral approach to address these global issues, primarily by using international organizations and agreements as the "leading and coordinating authority."

On 6 July 2021, the Medicines and Healthcare products Regulatory Agency published improved Development Safety Update Reports alongside Health Canada.<sup>2871</sup> The report aims to improve the safety of

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<sup>2867</sup> Announcement of launch of "Global Subnational Zero Carbon Promotion Initiative" by Japan and United States of America, Ministry of the Environment (Tokyo) 19 November 2021. Access Date: 21 December 2021. <https://www.env.go.jp/en/headline/2558.html>

<sup>2868</sup> ASIA-Japan Investing for the Future Initiative Announced, Ministry of Economy, Trade and Industry (Tokyo) 10 January 2022. Access Date: 16 January 2022. [https://www.meti.go.jp/english/press/2022/0110\\_001.html](https://www.meti.go.jp/english/press/2022/0110_001.html)

<sup>2869</sup> UK Government marine experts to support Sri Lanka with X-press Pearl pollution response, Centre for Environment Fisheries and Aquaculture Science (Lowestoft) 18 June 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/uk-government-marine-experts-to-support-sri-lanka-with-x-press-pearl-pollution-response>

<sup>2870</sup> Joint declaration of intent by Foreign Minister Heiko Maas and British Foreign Minister Dominic Raab on German-British foreign policy cooperation, Ministry of Foreign Affairs (Berlin) 30 June 2021. Translation provided by Google Translate Access Date: 20 December 2021. <https://www.auswaertiges-amt.de/de/newsroom/gbr-joint-declaration/2468906>

<sup>2871</sup> MHRA releases guidance in collaboration with Health Canada to improve patient safety in clinical trials through improving the quality of Development Safety Update Reports, Medicines and Healthcare products Regulatory Agency (London) 6 July 2021. Access Date: 23 December 2021. <https://www.gov.uk/government/news/mhra-releases-guidance-in-collaboration-with-health-canada-to-improve-patient-safety-in-clinical-trials-through-improving-the-quality-of-development-s>

patients in clinical trials globally to increase trial transparency and thus improve the quality of international research.

On 15 September 2021, Prime Minister Boris Johnson announced the launch of AUKUS, a security partnership with the UK, Australia and the United States.<sup>2872</sup> The partnership aims to enhance technology sharing, promote integration of defense-related science, technology and supply chains.

On 15 September 2021, the UK, France, and Germany announced they were extending their partnership in neutron research.<sup>2873</sup> The three states signed an agreement that extends their longstanding cooperation as the sponsors of the Laue-Langevin Institute from 2024 to 2033. In this new period, the three signatory G7 members expect a total of EUR1 billion in contributions. The extended partnership will continue to grant experts access to world-class neutron radiation research, which has wide-ranging applications in understanding and treating COVID-19, Alzheimer's, and improving batteries for electric cars.

On 16 September 2021, Prime Minister Johnson established a Partnership for the Future with the Prince of Abu Dhabi Sheikh Mohammed Bin Zayed Al Nahyan.<sup>2874</sup> The partnership will promote sustainable prosperity through agreements among oil and energy companies for decarbonization and the exchange of technologies and knowledge.

On 29 October 2021, the UK Intellectual Property Office launched a consultation on how the copyright and patent system should deal with Artificial Intelligence (AI).<sup>2875</sup> The consultation seeks to create a framework that encourages innovation in AI, while preserving intellectual property rights.

From 31 October to 13 November 2021, the UK and Italy co-hosted the United Nations Climate Change Conference as part of a Presidency Partnership.<sup>2876</sup> The conference refined the UN's 2030 agenda and the Paris Agreement for all participating countries.<sup>2877</sup> Participating countries also committed to accelerating the transition to zero emission vehicles and called on all developed countries to improve collaboration to facilitate a global transition to these vehicles.

On 2 November 2021, the UK Space Agency provided funding for MicroCarb, a joint British and French satellite mission intended to monitor atmospheric carbon dioxide.<sup>2878</sup> The UK will commit a further GBP3.9 million to measure greenhouse gas emissions caused by human activity.

On 2 November 2021, Prime Minister Johnson and Indian Prime Minister Narendra Modi launched the Green Grids Initiative.<sup>2879</sup> The initiative aims to accelerate the transition towards renewable energy sources

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<sup>2872</sup> UK, US and Australia launch new security partnership, Prime Minister's Office (London) 15 September 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/uk-us-and-australia-launch-new-security-partnership>

<sup>2873</sup> Germany, France, and the United Kingdom extend their partnership in neutron research, Federal Ministry of Education and Research (Berlin) 15 September 2021. Translation provided by Google Translate. Access Date: 21 December 2021. <https://www.bmbf.de/bmbf/shareddocs/pressemitteilungen/de/2021/09/150921-Neutronenforschung.html>

<sup>2874</sup> United Kingdom – United Arab Emirates Joint Communiqué: a Partnership for the Future, Prime Minister's Office (London) 16 September 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/united-kingdom-united-arab-emirates-joint-communiqué-a-partnership-for-the-future>

<sup>2875</sup> Artificial Intelligence and IP: Consultation on copyright and patents legislation, Intellectual Property Office (Newport) 29 October 2021. Access Date: 23 December 2021. <https://www.gov.uk/government/news/artificial-intelligenceand-ip-consultation-on-copyright-and-patents-legislation>

<sup>2876</sup> The UK-Italy Partnership, UN Climate Change Conference UK 2021 (London) n.d. Access Date: 15 January 2022. <https://ukcop26.org/pre-cop/>

<sup>2877</sup> COP26 Declaration on Accelerating The Transition To 100% Zero Emission Cars And Vans, UN Climate Change Conference UK 2021 (London) 11 October 2021. Access Date: 28 November 2021. <https://ukcop26.org/cop26-declaration-on-accelerating-the-transition-to-100-zero-emission-cars-and-vans/>

<sup>2878</sup> UK and France reach new agreement on climate change mission, UK Space Agency (Swindon) 2 November 2021. Access Date: 23 December 2021. <https://www.ukspace.org/uk-and-france-reach-new-agreement-on-climate-change-mission/>

and increase the interconnectivity of electricity grids worldwide. The initiative will bring together governments and businesses who will collaborate to provide global access to sustainable energy.

On 2 November 2021, Foreign Secretary Liz Truss announced GBP110 million of financial support to the ASEAN Catalytic Green Finance Facility.<sup>2880</sup> The funds will provide Southeast Asian countries with the necessary infrastructure to develop sustainable infrastructure projects such as renewable energy and clean transportation.

On 4 November 2021, the UK signed a joint statement of intent with the United States to increase collaboration on quantum science and technologies.<sup>2881</sup> The statement outlined priorities for joint research and noted the ability of quantum technologies to revolutionize medical diagnosis, drug discovery and cyber security.

On 4 November 2021, Minister for Africa Vicky Ford and Zambian Minister for Foreign Affairs Stanley K. Kakubo signed the Green Growth Compact.<sup>2882</sup> The compact will drive investment and trade between the UK and Zambia and will create the opportunity for collaboration among regarding research and innovation for renewable energy, urban planning and development.

On 8 November 2021, Minister for Asia Amanda Milling announced that the UK would be providing GBP274 million to the Climate Action for Resilient Asia (CARA) programme.<sup>2883</sup> CARA aims to help people adapt to climate change and funds projects that conserve biodiversity. Minister Milling emphasized that climate change “does not respect borders” and discussed collaboration with governments to promote low carbon growth and resilience to climate change.

On 15 November 2021, International Trade Secretary Marie Trevelyan announced that the UK would provide over GBP217 million to Turkey’s largest solar facility.<sup>2884</sup> Once completed, the facility will deliver clean energy to over 2 million Turkish households and will aid Turkey in its transition towards green energy.

On 29 November 2021, the Central Digital and Data Office launched an “algorithmic transparency standard” for government departments and public sector organizations.<sup>2885</sup> The standard aims to strengthen the UK’s position as a leader in trustworthy AI by managing the potential for bias in algorithmic decision making and supports other UK organizations in advocating for AI transparency and trustworthiness.

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<sup>2879</sup> UK and India launch new grids initiative to deliver clean power to the world, Prime Minister's Office (London) 2 November 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/uk-and-india-launch-new-grids-initiative-to-deliver-clean-power-to-the-world>

<sup>2880</sup> Truss announces major investment in clean infrastructure in Asia, Foreign, Commonwealth & Development Office (London) 2 November 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/truss-announces-major-investment-in-clean-infrastructure-in-asia>

<sup>2881</sup> New joint statement between UK and US to strengthen quantum collaboration, Department for Business, Energy & Industrial Strategy (London) 4 November 2021. Access Date: 29 January 2022. <https://www.gov.uk/government/news/new-joint-statement-between-uk-and-us-to-strengthen-quantum-collaboration>

<sup>2882</sup> Green Growth Compact agreement between the UK and Zambia, Foreign, Commonwealth & Development Office (London) 5 November 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/green-growth-compact-agreement-between-the-uk-and-zambia>

<sup>2883</sup> UK announces £274m boost to climate resilience across Indo-Pacific, Foreign, Commonwealth & Development Office (London) 8 November 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/uk-announces-274m-boost-to-climate-resilience-across-indo-pacific>

<sup>2884</sup> UK to provide £217 million for Turkish solar project, UK Export Finance (London) 15 November 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/uk-to-provide-217-million-for-turkish-solar-project>

<sup>2885</sup> UK government publishes pioneering standard for algorithmic transparency, Central Digital and Data Office (London) 29 November 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/uk-government-publishes-pioneering-standard-for-algorithmic-transparency>

On 8 December 2021, the Department for Digital, Culture, Media and Sport announced the UK's collaboration with the United States on a bilateral innovation prize challenges to advance privacy-enhancing technologies.<sup>2886</sup> The challenge aims to build on the innovation already existing in this area and use the power of emerging technologies to deal with global issues such as COVID-19 while protecting “privacy, accountability, and transparency.”

On 21 December 2021, the UK signed an agreement with the UN Office for Outer Space Affairs (UNOOSA) to address the information gap for space-related climate actions.<sup>2887</sup> The agreement aims to facilitate coherence of activities using space for climate action, such as satellites measuring carbon emissions and deforestation and strengthening the space sector's contribution to climate change.

On 12 January 2022, the Alan Turing Institute, supported by the British Standards Institution and the National Physical Laboratory, was selected to launch the AI Standards Hub.<sup>2888</sup> The Hub aims to shape global AI technical standards and increasing the UK's contribution to those standards, which will help the UK harness the power of AI and use it to support innovation.

The United Kingdom has fully complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. The UK has collaborated with G7 members and African and East Asian countries on initiatives addressing climate and health issues. The UK has also shown its commitment to transparency and integrity in innovation through regulation of rapidly emerging technologies including AI.

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

*Analyst: Fiorella Maria Gaviglio-Fernández*

### **United States: 0**

The United States has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 15 June 2021, the US National Institute of Standards and Technology (NIST) agreed to renew its cooperation with the European Commission's Joint Research Centre (JRC).<sup>2889</sup> The NIST and JRC will work together over the next five years in eight fields including environment and climate, food safety and healthcare measurements to implement objectives that will help various nations face future challenges.

On 21 July 2021, the US and Germany launched the German-American Climate and Energy Partnership.<sup>2890</sup> The partnership seeks to encourage close collaboration on research and action plans to reduce domestic emissions and aid emerging countries in their energy transition efforts. Particularly, the German-American

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<sup>2886</sup> US and UK to partner on prize challenges to advance Privacy-Enhancing Technologies, Department for Digital, Culture, Media & Sport (London) 8 December 2021. Access Date: 23 December 2021. <https://www.gov.uk/government/news/us-and-uk-to-partner-on-prize-challenges-to-advance-privacy-enhancing-technologies>

<sup>2887</sup> UNOOSA and United Kingdom sign agreement to map global space-related climate action efforts, United Nations Office for Outer Space Affairs (Vienna) 21 December 2021. Access Date: 29 January 2022. <https://www.unoosa.org/oosa/en/informationfor/media/2021-unis-os-563.html>

<sup>2888</sup> New UK initiative to shape global standards for Artificial Intelligence, Department for Digital, Culture, Media and Sport (London) 12 January 2022. Access Date: 16 January 2022. <https://www.gov.uk/government/news/new-uk-initiative-to-shape-global-standards-for-artificial-intelligence>

<sup>2889</sup> New arrangement boosts EU-US science cooperation to support innovation, European Commission (Brussels) 15 June 2021. Access Date: 30 January 2022. <https://ec.europa.eu/jrc/en/news/new-arrangement-boosts-eu-us-science-cooperation-support-innovation>

<sup>2890</sup> Joint statement of USA and Germany in support of Ukraine, European energy security and our climate goals, Ministry of Foreign Affairs (Berlin) 21 July 2021. Translation provided by Google Translate. Access Date: 15 December 2021. <https://www.auswaertiges-amt.de/de/newsroom/gemeinsame-erklaerung-usa-und-deutschland/2472074>

partnership aims to support Central and Eastern European countries in tackling climate change. Both states pledged investments of at least US\$1 billion in Ukraine to promote renewables, facilitate the development of hydrogen-powered energy, accelerate coal phase-out and support carbon neutrality.

On 15 September 2021, British Prime Minister Boris Johnson announced the launch of AUKUS, a security partnership with United Kingdom, Australia and the United States.<sup>2891</sup> The partnership aims to enhance technology sharing, promote integration of defense-related science, technology and supply chains.

On 3 November, Secretary of Commerce Gina Raimondo met with Canada's Minister of Innovation, Science and Industry François-Philippe Champagne to outline a plan to increase cross-border COVID-19 collaboration between the US and Canada.<sup>2892</sup> Under the plan, Raimondo and Champagne agreed to share approaches on enhancing security of software supply chains and expand work on net-zero industrial transformation and renewable energy sources.

On 3 November 2021, European Union Commissioner for Agriculture Janusz Wojciechowski and United States Secretary of Agriculture Secretary Tom Vilsack announced a joint statement on a newly created transatlantic collaboration platform on agriculture.<sup>2893</sup> In the statement, the two members reaffirmed EU-U.S. collaboration to address global challenges by developing sustainable and climate-smart agricultural production.

On 4 November 2021, the US government issued a joint statement with the UK addressing cooperation between the NIST and UK National Physical Laboratory on quantum science and technology.<sup>2894</sup> The two nations aim to increase their collaboration on quantum technologies, which have the potential to “revolutionize everything” and protect the changing environment.

On 10 November 2021, the US Office of Special Presidential Envoy for Climate and Japan's Ministry of the Environment announced an initiative for Global Subnational Zero Carbon promotion.<sup>2895</sup> The project aims for both countries to cooperate to promote climate action globally for a decarbonized society.

On 6 January 2022, the US government signed a defense collaboration deal with Japan.<sup>2896</sup> The deal aims to counter emerging defense threats to space and cyber through joint investments and innovation by the US and Japan. Scientists and engineers from both countries will be able to collaborate to address defense issues.<sup>2897</sup>

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<sup>2891</sup> UK, US and Australia launch new security partnership, Prime Minister's Office (London) 15 September 2021. Access Date: 21 December 2021. <https://www.gov.uk/government/news/uk-us-and-australia-launch-new-security-partnership>

<sup>2892</sup> Joint Readout on Cooperation between the U.S. Department of Commerce and Innovation, Science and Economic Development Canada, U.S. Department of Commerce (Washington D.C.) 3 November 2021. Access Date: 30 January 2022. <https://www.commerce.gov/news/press-releases/2021/11/joint-readout-cooperation-between-us-department-commerce-and-innovation>

<sup>2893</sup> U.S., EU Launch Collaboration Platform on Agriculture, Department of Agriculture (Washington D.C.) 3 November 2021. Access Date: 19 December 2021. <https://www.usda.gov/media/press-releases/2021/11/03/us-eu-launch-collaboration-platform-agriculture>

<sup>2894</sup> The United States and United Kingdom Issue Joint Statement to Enhance Cooperation on Quantum Information Science and Technology, The White House (Washington D.C.) 4 November 2021. Access Date: 30 January 2022. <https://www.whitehouse.gov/ostp/news-updates/2021/11/04/the-united-states-and-united-kingdom-issue-joint-statement-to-enhance-cooperation-on-quantum-information-science-and-technology/>

<sup>2895</sup> Announcement of launch of "Global Subnational Zero Carbon Promotion Initiative" by Japan and United States of America, Ministry of the Environment (Tokyo) 19 November 2021. Access Date: 21 December 2021. <https://www.env.go.jp/en/headline/2558.html>

<sup>2896</sup> Joint Statement of the U.S.-Japan Security Consultative Committee ("2+2"), U.S. Department of Defense (Washington D.C.) 6 January 2022. Access Date: 30 January 2022. <https://www.defense.gov/News/Releases/Release/Article/2891314/joint-statement-of-the-us-japan-security-consultative-committee-22/>

<sup>2897</sup> US, Japan to Launch New Defense Research and Development Agreement, Voice of America (Washington D.C.) 6 January 2022. Access Date: 30 January 2022. <https://www.voanews.com/a/us-japan-to-launch-new-defense-research-and-development-agreement-/6386408.html>

The United States has partially complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. The US has taken strong actions to collaborate on scientific-based research to solve global issues with G7 members. However, the US has not called on other countries to increase their research transparency and integrity.

Thus, the United States receives a score of 0.

*Analyst: Qianai Cheng*

### **European Union: +1**

The European Union has fully complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity.

On 14 June 2021, the European Commission launched 11 new European partnerships to boost investments in research and innovation and make Europe the first climate-neutral continent.<sup>2898</sup> The partnerships feature a “twin green and digital transition” to advance digitalization alongside decarbonization and receive EUR22 billion from private partners and EU member states. The partnerships will “tackle emissions from energy-intensive industries” and develop and supply “high-performance batteries, sustainable fuels, artificial intelligence tools, data technologies, robotics and more.”

On 16 June 2021, the European Commission adopted the roadmap of Horizon Europe for the 2021-2022 period.<sup>2899</sup> The roadmap outlines the objectives and specific topic areas that will receive EUR14.7 billion in funding for research and development. EUR5.8 billion will be invested in research and innovation to support the European Green Deal; EUR4 billion will be invested in digital tools and research to maximize innovations in healthcare, green energy and food production; EUR1.9 billion will be directed to the modernization of healthcare systems and the improvement of research capacities for COVID-19 vaccine development. The roadmap also dedicates actions to deepen the EU’s cooperation with other states through multilateral initiatives in biodiversity preservation, ocean research and global health.

On 15 July 2021, the European Parliament Committee on Industry, Research and Energy Committee adopted new rules to boost data sharing across the EU.<sup>2900</sup> The new rules in the EU Data Governance Act aim to increase trust in data sharing and facilitate the re-use of data held by public institutions, including certain health, agricultural and environmental data previously unavailable. According to Members of the European Parliament (MEPs), enhanced data sharing can help create new products and innovations in the EU, unlocking the potential of research centres, start-ups and businesses in fields like artificial intelligence, climate change and healthcare.

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<sup>2898</sup> Commission and industry invest €22 billion in new European Partnerships to deliver solutions to major societal challenges, European Commission (Brussels) 14 June 2021. Access Date: 19 December 2021.

[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_2943](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2943)

<sup>2899</sup> Commission to invest €14.7 billion from Horizon Europe for a healthier, greener and more digital Europe, European Commission (Brussels) 16 June 2021. Access Date: 19 December 2021.

[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_2993](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2993)

<sup>2900</sup> Data governance: new rules to boost data sharing across the EU, European Parliament (Strasbourg) 16 July 2021. Access Date: 14 December 2021. <https://www.europarl.europa.eu/news/en/press-room/20210708IPR08014/data-governance-new-rules-to-boost-data-sharing-across-the-eu>

On 16 July 2021, the European Commission adopted a proposal for a “Council Recommendation on ‘A Pact for Research and Innovation in Europe.’”<sup>2901</sup> The Pact will update policy coordination and monitoring for EU Member States regarding the best practices for exchanging research.

On 22 July 2021, the European Commission announced EUR120 million in research funding for projects tackling COVID-19 and its variants.<sup>2902</sup> The Commission short-listed 11 projects involving 312 research teams from 40 countries, including 38 participants from 23 countries outside the EU. The projects will support clinical trials for new treatments and vaccines, develop a network of experts within and outside of Europe, widen access to research infrastructure and share data, expertise and resources across borders. The projects will also “maximize synergies” at all levels of government and avoid the “duplication of research efforts,” enabling the EU and other countries to better tackle the ongoing pandemic and anticipate future ones.

On 15 September 2021, the European Parliament extended the mandate of the European Centre for Disease Prevention and Control.<sup>2903</sup> The renewed mandate asks that EU member states “develop national preparedness and response plans, and provide timely, comparable and high-quality data.” According to MEPs, this legislative initiative strengthens the EU’s crisis prevention, preparedness, and response to ongoing and future cross-border health threats. It also calls for increased cooperation and the exchange of information, expertise and best practices between member states in addressing global health challenges.

On 28 September 2021, the Council of the European Union adopted a global approach to research and innovation.<sup>2904</sup> Ministers of all EU member states agreed on the importance of rules-based multilateral cooperation and dialogue to address social, environmental, health, digital and economic challenges. Ministers also identified openness and international cooperation with third countries as “essential factors” in driving forward research and innovation. Ministers committed to mobilizing science, technology and innovation and tailoring the EU’s bilateral cooperation in research and innovation in an open manner.

On 29 September 2021, the European Commission launched five collaborative missions to tackle global health and climate challenges.<sup>2905</sup> The missions support research and innovations to deliver on the Commission’s main priorities by 2030 and are funded by Horizon Europe’s EUR95.5 billion budget.<sup>2906</sup> The Adaptation to Climate Change mission aims to support at least 150 European regions to become climate resilient, the Cancer mission aims to improve the lives of more than 3 million people via prevention and treatment, the Restore our Oceans and Waters mission aims to protect Europe’s marine ecosystems, the Climate-neutral and smart cities mission aim to deliver 100 climate-positive European cities and the Soil Deal for Europe mission aims to secure healthy soils in Europe via 100 living labs and lighthouses.

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<sup>2901</sup> Commission adopts proposals for a Pact for Research and Innovation in Europe, European Commission (Brussels) 16 July 2021. Access Date: 8 March 2022. [https://ec.europa.eu/info/news/commission-adopts-proposal-pact-research-and-innovation-europe-2021-jul-16\\_en](https://ec.europa.eu/info/news/commission-adopts-proposal-pact-research-and-innovation-europe-2021-jul-16_en)

<sup>2902</sup> Coronavirus: Commission steps up research funding with €120 million for 11 new projects to tackle the virus and its variants, European Commission (Brussels) 22 July 2021. Access Date: 19 December 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_3803](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3803)

<sup>2903</sup> European Health Union: better disease prevention and cross-border cooperation, European Parliament (Strasbourg) 15 September 2021. Access Date: 14 December 2021. <https://www.europarl.europa.eu/news/en/press-room/20210910IPR11907/european-health-union-better-disease-prevention-and-cross-border-cooperation>

<sup>2904</sup> Council agrees on a global approach to research and innovation, Council of the European Union (Brussels) 28 September 2021. Access Date: 19 December 2021. <https://www.consilium.europa.eu/en/press/press-releases/2021/09/28/council-agrees-on-a-global-approach-to-research-and-innovation/>

<sup>2905</sup> Commission launches EU missions to tackle major challenges, European Commission (Brussels) 29 September 2021. Access Date: 19 December 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_4747](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_4747)

<sup>2906</sup> Horizon Europe, European Commission (Brussels) 29 April 2021. Date Access: 19 December 2021. [https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)

On 14 October 2021, the European Commission’s Innovation Council announced funding for start-ups working on breakthrough innovations that address global challenges.<sup>2907</sup> The Council selected 65 start-ups and small and medium-sized enterprises from 16 countries. Together, these companies will receive EUR363 million in funding to develop and scale up breakthrough innovations in healthcare, digital technologies, energy, biotechnology and space. These companies were selected under the guidelines of Horizon Europe—the EU program for research and innovation—and the European Innovation Council Accelerator.

On 21 October 2021, the European Parliament demanded more transparent COVID-19 vaccine policies in the EU.<sup>2908</sup> In a new resolution, the European Parliament called for legislation to make the “process of researching, purchasing and distributing COVID-19 vaccines more transparent.” According to MEPs, more transparency could help counter vaccine hesitancy and disinformation in the continent, which are obstacles in the fight against COVID-19.

On 28 October 2021, the European Parliament adopted new legislation to address cybersecurity threats, which are the fastest-growing form of crime worldwide.<sup>2909</sup> The new legislation requires EU countries to “meet stricter supervisory and enforcement measures” and “harmonize their actions regimes.” The directive serves as a framework for better cooperation and information sharing between EU member states and authorities on cybersecurity.

The European Union has fully complied with its commitment to collaborate on science-based responses to global challenges and drive innovation by calling on every nation to increase their research transparency and integrity. The EU has launched partnerships, missions, and enacted legislation to invest in research, development and innovation in cooperation with member states and non-member states. International cooperation has primarily focused on climate change, digitalization, global health and security. The EU has also repeatedly called on its 27 members to increase their research efforts, as well as their transparency and integrity, at the European Parliament, the European Commission and the European Council.

Thus, the European Union receives a score of +1.

*Analyst: Daniel Corredor Llorente*

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<sup>2907</sup> European Innovation Council announces new wave of start-up champions, European Commission (Brussels) 14 October 2021. Access Date: 19 December 2021. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_5225](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_5225)

<sup>2908</sup> COVID-19: Parliament wants more transparent EU vaccine policies, European Parliament (Strasbourg) 21 October 2021. Access Date: 14 December 2021. <https://www.europarl.europa.eu/news/en/press-room/20211014IPR14927/covid-19-parliament-wants-more-transparent-eu-vaccine-policies>

<sup>2909</sup> Cybersecurity: MEPs strengthen EU-wide requirements against threats, European Parliament (Strasbourg) 28 October 2021. Access Date: 14 December 2021. <https://www.europarl.europa.eu/news/en/press-room/20211022IPR15610/cybersecurity-meps-strengthen-eu-wide-requirements-against-threats>