



UNIVERSITY OF
TORONTO

MUNK
SCHOOL
OF
GLOBAL
AFFAIRS

Join the Global Conversation

G7 Research Group

The
G7 Research Group
at the Munk School of Global Affairs at Trinity College in the University of Toronto
presents the

2015 Schloss Elmau G7 Summit Interim Compliance Report

9 June 2015 to 20 February 2016

Prepared by

Michael Humeniuk, Jerome Newton, Christian Medeiros and Kaleem Hawa
with Caroline Bracht
G7 Research Group, University of Toronto

30 March 2016

www.g7.utoronto.ca
g8@utoronto.ca
[@g7_rg and @g8rg](https://twitter.com/g7_rg)

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

Chancellor Angela Merkel, Schloss Elmau, June 8, 2015

Contents

Preface	3
Executive Summary	5
Table A: 2015 Priority Commitments Selected for Assessment.....	6
Table B: 2015 Interim G7 Schloss Elmau Compliance Scores.....	7
Table C: 2015 Interim G7 Schloss Elmau Compliance Scores by Country.....	8
Table D: 2015 Interim G7 Schloss Elmau Compliance Scores by Commitment	8
1. Macroeconomic Policy: Foster Growth.....	9
2. Infrastructure: Infrastructure Investment.....	17
3. Climate Change: Growth Agenda	24
4. Financial Regulation: Tax Agenda.....	33
5. Nonproliferation: Arms Trade	40
6. Regional Security: Ukraine.....	46
7. Regional Security: Maritime.....	54
8. Human Rights: Migrants	63
9. Terrorism: Terrorists' Assets.....	72
10. Health: Coordinated Rapid Deployment	81
11. Health: National Action Plans	91
12. Health: Vaccines	99
13. Climate Change: Low-Carbon Strategies.....	106
14. Climate Change: Copenhagen Accord	117
15. Climate Change: Vulnerable Countries.....	125
16. Energy: Liberalizing Systems	136
17. Food and Agriculture: Voluntary Guidelines on the Responsible Governance.....	151

13. Climate Change: Low-Carbon Strategies

"[We] commit to develop long term national low-carbon strategies."

G7 Schloss Elmau Summit Declaration

Assessment

	Lack of Compliance	Work in Progress	Full Compliance
Canada		0	
France		0	
Germany			+1
Italy		0	
Japan	-1		
United Kingdom			+1
United States			+1
European Union			+1
Average		+0.38	

Background

Low-carbon strategies, also called low-emission development strategies (LEDS), are national economic development plans that require states to cut their carbon emissions. In 1992, low-carbon strategies were adopted in the United Nations Framework Convention on Climate Change (UNFCCC)⁶⁰⁴, and have since featured in the European Union's measures to find alternatives to greenhouse gas. The United Nations Development Programme, United Nations Environmental Programme and the World Bank have also incorporated low-carbon development programs.

The G7 has been committed to working towards climate sustainability in a formal capacity since the 2005 Gleneagles and 2007 Heiligendamm Summits.⁶⁰⁵ The leaders reiterated this commitment at the 2015 Elmau Summit and emphasized that "urgent and concrete action is needed to address climate change." Furthermore, the leaders supported climate change management strategies, including the UNFCCC policy of reducing greenhouse gas emissions 40 per cent to 70 per cent for 2050 as compared to 2010 levels, and the development and deployment of "innovative technologies" geared at transforming the energy sectors.⁶⁰⁶

Commitment Features

This commitment exclusively focuses on the development of long-term national low-carbon strategies. Member countries will not be evaluated on the extent of their implementation of these strategies.

Accordingly, short-term priority actions, which are sometimes included in national documents alongside longer-term measures (e.g., as in the Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development released by the Republic of Rwanda in October 2011), are not relevant to this commitment.⁶⁰⁷ As several media sources have noted, this commitment centres on creating a

⁶⁰⁴ Low Carbon Development, Sustainable Development Knowledge Platform, UN-DESA, n.d., Date of Access: 17 January 2016. <https://sustainabledevelopment.un.org/index.php?menu=1448>

⁶⁰⁵ G7 Elmau Progress Report, Federal Ministry for Economic Cooperation and Development (BMZ), May 2015, Date of Access: 18 January 2016. <http://www.bmz.de/g7/includes/Downloadarchiv/G7-Elmau-Progress-Report-2015-Biodiversity-A-vital-foundation-for-sustainable-development.pdf>

⁶⁰⁶ Leaders' Declaration: G7 Elmau Summit, 8 June 2015. Access Date: 18 January 2016. <http://www.g8.utoronto.ca/summit/2015elmau/2015-G7-declaration-en.html>

⁶⁰⁷ Republic of Rwanda – Green Growth and Climate Resilience: National Strategy for Climate Change and Low Carbon Development, United Nations Department of Economic and Social Affairs, n.d., Date of Access: 18 January 2016. <https://sustainabledevelopment.un.org/partnership/?p=2253>

low-carbon global economy “in the long-term,” with low-carbon targets set to 2050 and no-carbon targets set to 2100, so measures to develop shorter-term projects do not constitute compliance.⁶⁰⁸

Although the leaders’ declaration mentions “developing and deploying innovative technologies,” this commitment only concerns the development of strategy, not technology.

Scoring Guidelines

-1	Member does not make any progress towards developing long-term national low-carbon strategies, or focuses solely on short term strategies/solutions.
0	Member makes some progress towards developing long-term national low-carbon strategies. This can take the form of working groups, pending legislation, a strategic review etc.
+1	Member has demonstrated clear progress in the development of a long-term national low-carbon strategy. Any proposed strategy must target low carbon by 2050 and no-carbon by 2100.

Lead Analyst: Sophia Glisch

Canada: 0

Canada has partially complied with its commitment to reach low-carbon levels by 2050, and no-carbon levels by 2100. While having not unveiled a national strategy, the country has committed to working alongside provinces in developing strategies to reduce carbon emissions on a per-province basis.⁶⁰⁹

The majority of the provinces have established carbon reduction goals, to varying degrees. On 29 January 2016, the federal, provincial, and territorial governments all announced their commitment to build upon the Declaration of the Premiers of Canada: Quebec Summit on Climate Change (14 April 2015). This declaration recognizes that “transition to a resilient and lower-carbon economy by 2050 is necessary to ensure the sustainable development of provinces and territories.”⁶¹⁰ The provinces also announced the creation of four committees, which will be under the leadership of the provincial and territorial Ministers of Energy. They will identify initiatives to be implemented that will further meet the shared goals identified in the Canadian Energy Strategy, which seeks to actively pursue lower greenhouse gas emissions, before reporting to the Provincial premiers in 2016.⁶¹¹

However, the country has yet to adopt any specific legislation limiting carbon emissions by 2050 and 2100. The provinces, for their part, are contributing in the following ways: British Columbia has committed to reduce greenhouse gas emissions to 80 per cent below 2007 levels by 2050.⁶¹² Alberta has committed to covering 78 per cent to 90 per cent of provincial emissions with a carbon-tax by 2030, as well as reducing emissions by 50 per cent below “business as usual” level, or 14 per cent below 2005 levels.^{613,614} Saskatchewan has committed to action for years, allowing legislation (the Management and Reduction of Greenhouse Gases Act), but without creating goals for 2050 or 2100.^{615,616} Ontario has committed to lowering its carbon

⁶⁰⁸ Canada agrees to ‘low-carbon’ strategy at G7, Toronto Star, 08 June 2016, Date of Access: 18 January 2016.

<http://www.thestar.com/news/canada/2015/06/08/canada-japan-said-blocking-g7-push-on-climate-change.html>

⁶⁰⁹ Federal, provincial, and territorial governments working together on first steps towards a pan-Canadian framework to address climate change, Government of Canada (Ottawa) 29 January 2016. Date of Access: 1 Feb 2016. <http://news.gc.ca/web/article-en.do?nid=1030449>.

⁶¹⁰ Declaration of the Premiers of Canada: Québec Summit on Climate Change, Government of Québec (Québec City) 14 April 2015. Date of Access: Feb 1 2016. <http://www.mddelcc.gouv.qc.ca/sommetclimat2015/pdf/Declaration-SommetCC-ANG.pdf>.

⁶¹¹ Canadian Energy Strategy, Council of the Federation (St. John’s) July 2015. Date of Access: Feb 1 2016.

http://www.canadaspremiers.ca/phocadownload/publications/canadian_energy_strategy_eng_fnl.pdf.

⁶¹² Climate Change, Government of British Columbia (British Columbia) 2015. Date of Access: Feb 1 2016.

<http://www2.gov.bc.ca/gov/content/environment/climate-change>.

⁶¹³ Climate Change and Emissions Management Act: Specified Gas Emitters Regulation, Government of Alberta (Edmonton) 2007. Date of Access: Feb 1 2016. http://www.qp.alberta.ca/1266.cfm?page=2007_139.cfm&leg_type=Regs&isbnln=9780779738151

⁶¹⁴ Climate Leadership Plan: Carbon Pricing, Government of Alberta (Alberta). Date of Access: Feb 1 2016.

<http://www.alberta.ca/climate-carbon-pricing.cfm>.

⁶¹⁵ Green Living, Government of Saskatchewan (Saskatchewan) 2013. Date of Access: Feb 1 2016.

<http://www.environment.gov.sk.ca/gogreen>.

emissions to 80 per cent below the 1990 level.⁶¹⁷ Manitoba has committed to reducing its emissions by over half from 2005 levels by 2050, and to be carbon-neutral by 2080.⁶¹⁸ Quebec has committed to 2020 levels 20 per cent below the 1990 emissions, and created a committee to look into reducing levels to 37.5 per cent below 1990 levels by 2030.^{619,620} New Brunswick has established guidelines for reductions of 10 per cent below 1990 levels by 2020, and 75 per cent to 85 per cent below 2001 levels by 2050.⁶²¹ Nova Scotia has committed to reducing emissions by 10 per cent from 1990 levels by 2020.⁶²² Prince Edward Island has committed to reducing emissions to 75 per cent to 85 per cent below 1990 levels by 2050.⁶²³ Newfoundland and Labrador has committed to reducing emissions to 10 per cent below 1990 levels by 2020, and 75 per cent to 85 per cent below 2001 levels by 2050;⁶²⁴ the Yukon territory has committed to capping emissions in 2010, reducing emissions by 20 per cent (from 2009) by 2015, and becoming carbon-neutral by 2020.⁶²⁵ The Northwest Territories has committed to returning to 2005 emissions levels by 2030, and Nunavut has not released any plan or commitment to carbon reduction goals.^{626,627}

Canada, on a provincial level, has thus begun to announce commitments for carbon reduction, to varying degrees. As a country, it has committed to continue to build upon these provincial commitments in the future, without having yet passed any official legislation.

For these reasons, Canada has been awarded a partial score of 0.

Analyst: Mitchell Mittelstaedt

France: 0

France has partially complied with its commitment to develop long-term national low-carbon strategies.

Much of France's action on climate change in 2015 involved preparation for the 21st Conference of Parties (COP21) held in November to December of the same year. On 16 July 2015, COP21 President and Minister of Foreign Affairs and International Development Laurent Fabius issued a joint statement alongside Mexican Secretary of Social Development José Antonio Meade Kuribrena, as a demonstration of the two country's commitment to addressing climate change. The statement claimed that "Mexico and France have decided to

⁶¹⁶ Climate Change, Government of Saskatchewan (Saskatchewan) 2013. Date of Access: Feb 1 2016.

<http://environment.gov.sk.ca/climatechange>.

⁶¹⁷ Climate change strategy, Government of Ontario (Ontario) 23 December 2015. Date of Access: Feb 1 2016.

<https://www.ontario.ca/page/climate-change-strategy>.

⁶¹⁸ Manitoba's Climate Change and Green Economy Action Place (Manitoba) December 2015. Date of Access: Feb 1 2016.

<http://www.gov.mb.ca/conservation/climate/pdf/mb-climate-change-green-economy-action-plan.pdf>.

⁶¹⁹ Québec in Action: Greener by 2020, Government of Québec (Québec) 2012. Date of Access: Feb 1 2016.

http://www.mddelcc.gouv.qc.ca/changements/plan_action/pacc2020-en.pdf.

⁶²⁰ Special consultation on establishing a 2030 greenhouse gas (GHG) emission reduction target for Québec in the order of 37.5 per cent, compared to 1990 levels, Government of Québec (Québec). Date of Access: 1 Feb 2016.

<http://www.mddelcc.gouv.qc.ca/changementsclimatiques/consultations/cible2030/index-en.htm>.

⁶²¹ Guidelines for Greenhouse Gas Management for Industrial Emitters in New Brunswick, Government of New Brunswick (New Brunswick) July 2015. Date of Access: 1 Feb 2016. <http://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Climate-Climatiques/GuidelinesForGreenhouseGasManagement.pdf>.

⁶²² Toward a Greener Future: Nova Scotia's Climate Change Action Plan, Government of Nova Scotia (Nova Scotia) January 2009. Date of Access: 1 Feb 2016. <http://climatechange.novascotia.ca/sites/default/files/uploads/ccap.pdf>.

⁶²³ Prince Edward Island and Climate Change: A Strategy for Reducing the Impacts of Global Warming, Government of Prince Edward Island (Charlottetown). Date of Access: 1 Feb 2016. http://www.gov.pe.ca/photos/original/env_globalstr.pdf.

⁶²⁴ Charting our Course: Climate Change Action Plan 2011, Government of Newfoundland Labrador (Newfoundland Labrador) 2011. Date of Access: 1 Feb 2016 http://www.exec.gov.nl.ca/exec/ccee/publications/climate_change.pdf.

⁶²⁵ Yukon Government Climate Change Action Plan: Progress Report, Government of Yukon (Yukon) December 2015.

http://www.env.yk.ca/air-water-waste/documents/CCAP_progressreport_eng_2015.pdf.

⁶²⁶ Northwest Territories Greenhouse Gas Emission Summary Report 2015, Government of the Northwest Territories (Northwest Territories) 2015. Date of Access: 1 Feb 2016 http://www.enr.gov.nt.ca/sites/default/files/final_4-nwt_greenhouse_gas_summary_report_2015.pdf.

⁶²⁷ Greenhouse Gas Strategy, Government of Northwest Territories (Northwest Territories). Date of Access: 1 Feb 2016.

<http://www.enr.gov.nt.ca/fr/node/3698>.

step up their cooperation on climate change by encouraging the establishment of strategic alliances fostering the transfer of clean technologies and scientific knowledge, and strengthening national capacities to ease the transition to a carbon-free economy. The two countries will also work together on soil decontamination, ocean acidification, and such areas as sustainable waste management and sustainable transportation.”⁶²⁸ In addition, the statement “[urged] the countries in a position to do so to set out in 2020 indicative targets for lowering the carbon intensity of their economies by 2050.”

On 17 August 2015, France passed an energy transition law that placed a cap on French nuclear power production, reducing its contribution to France’s electricity production from 75 per cent to 50 per cent.⁶²⁹ The law aims to bring renewable energy to 23 per cent of gross energy consumption by 2020 and 32 per cent by 2030, with the ultimate goal of having renewable energy account for 40 per cent of the country’s electricity production.^{630,631}

Furthermore, on 28 September 2015, during the United Nations General Assembly in New York, France confirmed its commitment to increasing its annual climate finance from EUR3 billion to EUR5 billion by 2020 as part of a global commitment to mobilize \$100 billion to support climate efforts in developing countries.⁶³² Additionally, France pledged to increase its annual climate adaptation finance to EUR1 billion by 2020.⁶³³

Notably, on 23 November 2015, France adopted its own low-carbon strategy (*stratégie nationale bas-carbone*, or SNBC) in anticipation for COP21. The strategy entails reducing greenhouse gas emissions by 40 per cent by 2030 (as compared to 1990 levels) and 75 per cent by 2050. The government has set five-year carbon budgets, or greenhouse gas emission limits, till 2028. The SNBC outlines sector-specific recommendations for transition into a low-carbon economy.⁶³⁴

From 30 November to 12 December 2015, France hosted the COP21 for the United Nations Framework Convention on Climate Change (UNFCCC). At the EU level, France had advocated for a reduction in greenhouse gas emissions by 40 per cent by 2030, followed by a reduction of 60 per cent by 2040.⁶³⁵

On 12 December 2015, a historic global climate mandate, subsequently referred to as the Paris Agreement, was reached at COP21 in Paris, where 195 countries agreed to keep the global temperature rise below 2°C above pre-industrial levels and to make efforts towards limiting the figure to below 1.5°C. The first global evaluation following the agreement is to take place in 2023, and then further evaluations will occur at five-year intervals to follow.⁶³⁶

While France has both taken pivotal steps to combat climate change on a global scale and also proposed a national low-carbon strategy with targets set to 2050, the strategy does not include no-carbon targets by 2100,

⁶²⁸ Joint statement by Laurent Fabius and his Mexican counterpart, José Antonio Meade Kuribrena, on climate change, France Diplomatie 16 July 2015. Date of Access: 4 February 2016. <http://www.diplomatie.gouv.fr/en/french-foreign-policy/climate/events/article/joint-statement-by-laurent-fabius-and-his-mexican-counterpart-jose-antonio>.

⁶²⁹ La transition énergétique pour la croissance verte, Ministère de l’Écologie, du Développement Durable, et de l’Énergie 10 February 2015. Date of Access: 4 February 2016. <http://www.developpement-durable.gouv.fr/Titre-I-Objectifs>.

⁶³⁰ Texte Adopté n. 519, Assemblée Nationale 26 May 2015. Date of Access: 4 February 2016. <http://www.assemblee-nationale.fr/14/ta/ta0519.asp>.

⁶³¹ French energy law dodges decisions on nuclear cuts, Reuters 22 July 2015. Date of Access: 4 February 2016. <http://www.reuters.com/article/france-energy-bill-idUSL5N10242K20150722>.

⁶³² Overview of Announced Climate Finance Pledges, United Nations. Date of Access: 4 February 2016. <http://newsroom.unfccc.int/financial-flows/climate-finance-building-ahead-of-paris-overview-of-recent-announcements/>.

⁶³³ List of Recent Climate Funding Announcements, United Nations. Date of Access: 4 February 2016. <http://newsroom.unfccc.int/financial-flows/list-of-recent-climate-funding-announcements/>.

⁶³⁴ Adoption of the national low-carbon strategy for climate, Gouvernement.fr 27 November 2015. Date of Access: 4 February 2016. <http://www.gouvernement.fr/en/adoption-of-the-national-low-carbon-strategy-for-climate>.

⁶³⁵ Climate, France Diplomatie 26 January 2016. Date of Access: 4 February 2016. <http://www.diplomatie.gouv.fr/en/french-foreign-policy/climate/>.

⁶³⁶ Adoption of the Paris Agreement, United Nations 12 December 2015. Date of Access: 4 February 2016. <http://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf>.

and therefore falls short of the commitment. France has thus received a score of 0 for its progress towards developing long-term national low-carbon strategies.

Analyst: Ahmed Hasan

Germany: +1

Germany has fully complied with its commitment to develop long-term national low-carbon strategies in order to achieve reduced emissions targets set for 2050 and emissions neutrality by 2100.

At the Elmau Summit of June 2015, the G7 mandated the formation of the “Carbon Market Platform” to develop low-carbon strategies. As current G7 President, Germany led its formation; its first event took place in Berlin from 8–9 October 2015. The aim of this initiative is to provide an annual platform for developing market strategies to improve approaches to reducing greenhouse gas emissions. As the founding state, Germany will act as its chair for an initial three-year period, accompanied by a rotating co-chair.⁶³⁷ On 12 December 2015, German Federal Environment Minister Barbara Hendricks also announced that Germany is inviting the international community to join the G7 Carbon Market Platform.⁶³⁸

On 9 June 2015, the German Federal Government mandated the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) to begin the dialogue process to create the “Climate Action Plan for 2050.” The primary aim of this plan is to limit global temperature increases to 2°C above pre-Industrial Revolution levels by opening dialogue with the federal states, municipalities, associations and citizens before being formally adopted by German Cabinet in 2016.⁶³⁹ The plan emphasizes the need to achieve the 2°C goal via long-term decarbonization and emissions neutrality.⁶⁴⁰

On 30 November 2015, in an address to 21st Conference of the Parties in Paris, Chancellor Angela Merkel reiterated Germany’s commitments to limit rising global temperatures and reduce domestic emissions by 80–95 per cent by 2050 by transforming sectors such as industrial production, mobility, energy generation, thermal insulation and energy efficiency.⁶⁴¹

Also on 30 November 2015, Germany announced its collaboration with Norway, Sweden, Luxembourg, Switzerland and the World Bank Group to develop the USD500 million “Transformative Carbon Asset Facility” (TCAF) initiative. This initiative aims to help developing countries develop low-carbon economies and reduce emissions by providing policy advice and financial incentives beginning in 2016.⁶⁴²

In conjunction with the TCAF initiative, on 30 November 2015, Germany and 12 other national governments formally launched the Carbon Pricing Leadership Coalition with the World Bank and

⁶³⁷ Carbon Market Platform: Strategic Dialogue on Carbon Markets and the Regulatory Environment, Federal Ministry for the Environment (Berlin). Date of Access: 2 February 2016.

http://www.bmub.bund.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/kohlenstoffmarkt_handout_en_bf.pdf.

⁶³⁸ Hendricks: We need to put a price on carbon, Federal Ministry for the Environment (Berlin) 12 December 2015. Date of Access: 1 February 2016. [http://www.bmub.bund.de/en/press/press-releases/detailansicht-en/artikel/minister-hendricks-we-need-to-put-a-price-on-carbon/?tx_ttnews\[per%cent\]5BbackPid\[per%cent\]5D=197&cHash=0601e84eab766d4aec8a511bd9cce28](http://www.bmub.bund.de/en/press/press-releases/detailansicht-en/artikel/minister-hendricks-we-need-to-put-a-price-on-carbon/?tx_ttnews[per%cent]5BbackPid[per%cent]5D=197&cHash=0601e84eab766d4aec8a511bd9cce28).

⁶³⁹ About the Climate Action Plan 2050 of the German Federal Government, Federal Ministry for the Environment (Berlin). Date of Access: 1 February 2016. <http://www.klimaschutzplan2050.de/en/dialogue-process/>.

⁶⁴⁰ Climate Action Plan 2050, Federal Ministry for the Environment (Berlin) 9 June 2015. Date of Access: 3 February 2016.

http://www.bmub.bund.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/klimaschutzplan_2050_impulspapier_en_bf.pdf.

⁶⁴¹ Statement by Federal Chancellor Angela Merkel at the United Nations Climate Change Conference, the Federal Government of Germany (Berlin) 30 November 2015. Date of Access: 3 February 2016.

https://www.bundesregierung.de/Content/EN/Reden/2015/2015-11-30-merkel-paris-un_en.html?nn=709674.

⁶⁴² New \$500 million initiative to boost large scale climate action in developing countries, The World Bank (Washington, DC) 30 November 2015. Date of Access: 2 February 2016.

<http://www.worldbank.org/en/news/press-release/2015/11/30/new-500-million-initiative-to-boost-large-scale-climate-action-in-developing-countries>.

International Monetary Fund. This coalition aims to help countries reduce carbon emissions through carbon pricing policies.⁶⁴³

On 9 December 2015, the BMUB pledged USD7 million in conjunction with the British Children's Investment Fund to assist developing states to establish initiatives to measure greenhouse gas levels using the newly established monitoring, reporting and verification trust fund. By establishing a transparent system to monitor emissions and their environmental effects, the German government hopes to ensure that countries' pledges for reduced 2050 emissions will be met. Approximately 20 countries will receive support, including Costa Rica, Ghana and Vietnam.⁶⁴⁴

Finally, on 12 December 2015, Germany signed the Paris Agreement alongside 195 other countries, including the European Union. By signing the Paris Agreement, Germany pledged to uphold internationally binding commitments to limit global warming to well below 2°C above pre-industrial revolution levels by developing long-term low-carbon strategies. The Paris Agreement also calls for non-binding efforts to limit temperatures to 1.5°C, as well as emissions neutrality by 2050.⁶⁴⁵

Due to domestic legislative initiatives and international funding commitments to develop long-term low-carbon strategies, Germany has aptly demonstrated its commitment to ensuring the development of low-carbon strategies both nationally and in partnership with the international community.

Germany therefore receives a compliance score of +1.

Analyst: Riam Kim Mc-Leod

Italy: 0

Italy has partially complied with its commitment to develop long-term low-carbon strategies in order to achieve reduced carbon emissions by 2050 and emissions neutrality by 2100.

On 6 June 2015, the Italian Federal Ministry of Environment, Land and Sea implemented the National Adaptation Strategy, which provides a national framework to develop strategies to achieve goals such as eventual carbon emissions neutrality and low global temperatures.⁶⁴⁶ While this plan addresses long-term low-carbon strategies, the brunt of its strategic focus lies in the Climate Adaptation Strategy, which establishes specific short-term objectives to be updated every five years.⁶⁴⁷

On 30 November 2015, at the 2015 COP21 Leaders Event, Italian Prime Minister Matteo Renzi announced Italy's pledge of EUR4 billion towards fighting climate change from 2015 to 2020.⁶⁴⁸ Although a short-term pledge, on 7 December 2015, Italian Minister for the Environment Gian Luca Galletti asserted the

⁶⁴³ Heads of State and CEOs Declare Support for Carbon Pricing to Transform Global Economy, Carbon Pricing Leadership Coalition 30 November 2015. Date of Access: 3 February 2016. <http://www.carbonpricingleadership.org/news/>.

⁶⁴⁴ Germany helps developing countries establish methods for measuring climate gases, Federal Ministry for the Environment (Berlin) 2 December 2015. Date of Access: 2 February 2016. http://www.bmub.bund.de/en/press/press-releases/detailansicht-en/artikel/germany-helps-developing-countries-establish-methods-for-measuring-climate-gases/?tx_ttnews_per cent5BbackPid per cent5D=197&cHash=f66c099201f1debc6cb08d18ef5f0a5d.

⁶⁴⁵ Climate summit makes history, Federal Ministry for the Environment (Berlin) 12 December 2015. Date of Access: 1 February 2016. http://www.bmub.bund.de/en/press/press-releases/detailansicht-en/artikel/climate-summit-makes-history/?tx_ttnews_per cent5BbackPid per cent5D=4141&cHash=d761590deb99e7efaf8dcda790b5ac38.

⁶⁴⁶ Strategia Nazionale di Adattamento ai Cambiamenti Climatici, Ministry for the Environment (Rome) 6 June 2015. Date of Access: 3 February 2016. http://www.minambiente.it/sites/default/files/archivio/allegati/clima/strategia_adattamentoCC.pdf.

⁶⁴⁷ Climate Adaptation Strategy (Decree of the Ministry of Environment, Land and Sea 0000086/CLE), Grantham Research Institute (London) 2015. Date of Access: 2 February 2016. <http://www.lse.ac.uk/GranthamInstitute/law/climate-adaptation-strategy-decree-of-the-ministry-of-environment-land-and-sea-0000086cle/>.

⁶⁴⁸ Leaders Event, UNFCCC (Paris) 30 November 2015. Date of Access: 3 February 2016. <https://unfccc6.meta-fusion.com/cop21/events/2015-11-30-14-45-leaders-event-statements-by-heads-of-state-and-government-la-loire-part-2/his-excellency-mr-matteo-renzi-prime-minister-of-italy>.

importance of using this pledge to achieve carbon neutrality by 2100 and limit rising global temperatures. He also declared that Italy should commit more funding to achieve these goals.⁶⁴⁹

Also at the 21st Conference of the Parties (COP21) on 30 November 2015, Italy joined 12 other national governments in launching the Carbon Pricing Leadership Coalition (CPLC). The CPLC aims to reduce carbon emissions by helping states implement efficient carbon pricing policies such as carbon taxes and cap-and-trade systems.⁶⁵⁰

On 12 December 2015, Italy, along with 195 other countries including the European Union, signed the COP21 Paris Agreement. By signing this agreement, Italy commits to internationally binding obligations to limit global warming to well below 2°C above pre-Industrial Revolution levels by developing long-term low-carbon strategies. The Paris Agreement also calls for non-binding efforts to limit temperatures to 1.5°C and to achieve emissions neutrality by 2050.⁶⁵¹

On 15 December 2015, the European Commission approved the new “Interreg” program between Italy and Slovenia focusing on four priorities, of which the second is “cooperating for low carbon strategies.” Although the majority of funding is coming from the European Regional Development Fund, Italy and Slovenia are co-financing EUR13.7 million for this project.⁶⁵²

Although Italy has pledged some funding and initiated some legislative action, its initiatives focus primarily on short-term strategies. Italy has not yet clearly stated a national low-carbon strategy.

Italy therefore receives a score of 0 for making some progress towards developing long-term low-carbon strategies.

Analyst: Riam Kim Mc-Leod

Japan: -1

Japan has not complied with its commitment to develop long-term low-carbon strategies in order to achieve reduced carbon emissions by 2050 and emissions neutrality by 2100.

Prior to the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris, the Japanese government presented, on 17 July 2015, a draft report of its intended nationally determined contribution (INDC). This report outlined greenhouse gas emission reduction goals and strategies for environmental sustainability.⁶⁵³

According to its INDC, Japan is aiming for a 26 per cent reduction of 2013 emission levels by 2030. Japan experienced its second highest emission rate on record over the year of 2013 (up by 10.8 per cent from 1990 levels), after all nuclear reactors were discontinued and replaced with coal power plants following the

⁶⁴⁹ Clima: Galletti, irrinunciabile rimanere entro due gradi surriscaldamento e decarbonizzazione, Ministry for the Environment (Rome) 7 December 2015. Date of Access: 2 February 2016. <http://www.minambiente.it/comunicati/clima-galletti-irrinunciabile-rimanere-entro-due-gradi-surriscaldamento-e>.

⁶⁵⁰ Leadership Coalition, Carbon Pricing Leadership, 2015. Date of Access: 3 February 2016. <http://www.carbonpricingleadership.org/leadership-coalition>.

⁶⁵¹ Clima: Galletti, accordo storico per il futuro, Italia c’è a pieno titolo, Ministry for the Environment (Rome) 12 December 2015. Date of Access: 3 February 2016. <http://www.minambiente.it/comunicati/clima-galletti-accordo-storico-il-futuro-italia-ce-pieno-titolo>.

⁶⁵² Programming period 2014-2020, Interreg Italia-Slovenija (Trieste) 15 December 2015. Date of Access: 3 February 2016. http://www.ita-slo.eu/programme/programming_period_14_20/.

⁶⁵³ Submission of Japan’s Intended Nationally Determined Contribution, Government of Japan 17 July 2015. Access Date: 4 February 2016. http://www4.unfccc.int/submissions/INDC/Published_per cent20Documents/Japan/1/20150717_Japan's_per cent20INDC.pdf.

Fukushima disaster in 2011.⁶⁵⁴ Furthermore, the Japanese government is planning to significantly increase country's active coal power plants.⁶⁵⁵

These plans fall far short of low-carbon 2050 goals, both by providing very short-term projections and not scaling to significant reductions by 2050. Under these conditions, Japan's coal consumption will remain an important source of energy for Japan until at least 2030.⁶⁵⁶ Independent research has been done to show that more significant emission reduction goals are in fact feasible (at least a 25 per cent reduction from 1990 levels without nuclear energy).^{657,658}

The Japanese government has laid out a strategy for environmental sustainability focuses on the short term, does not address carbon consumption concerns and does not measure up adequately to the reduction targets of other major emitters.

Therefore Japan has received a score of -1.

Analyst: Hussain Jasim

United Kingdom: +1

The United Kingdom has fully complied with its commitment to develop long-term low-carbon strategies to achieve low carbon levels by 2050 and no-carbon levels by 2100.

The UK has shown its commitment to reduce global greenhouse gas emissions by billing the Climate Change Act 2008 which aims to achieve a legally binding goal of an 80 per cent emissions reduction from 1990 levels by 2050. This act aims to improve carbon management and help the transition to a low-carbon economy.⁶⁵⁹ The 80 per cent emissions reduction aim is consistent with limiting global temperature rise under 2°C. The act has established a five-yearly carbon budgets system to ensure its regular progress towards the long-term target. It also serves to provide a level of predictability for UK firms and households to plan and invest for low-carbon economy.⁶⁶⁰

A progress report released in January 2016 to the European Commission, outlines some of the long-term progress to reduce carbon emissions. It shows data on renewable energy generation and consumption for renewable electricity, heat, transport sectors, biomass use, commodity prices and greenhouse gas savings. Good progress has been made towards the 2020 Renewable Energy Target. For instance, the average final renewable energy consumption of 6.3 per cent successfully exceeded the interim target of 5.4 per cent set by the Renewable Energy Directive for 2013–2014. One of the ambitious objectives is to meet 30 per cent of electricity consumption from renewables in 2020, through the use of onshore wind and solar generation. The UK remains on track to reach its goal by showing that almost a fifth of electricity was regenerated from

⁶⁵⁴ Japan's 2030 climate pledge leaves room for coal expansion, Sophie Yeo 21 July 2015. Access Date: 4 February 2016. <http://www.carbonbrief.org/japans-2030-climate-pledge-leaves-room-for-coal-expansion>.

⁶⁵⁵ Japan to get more coal-fired power plants thanks to Environment Ministry policy reversal, 9 February 2016. Date of Access: 15 February 2016. <http://www.japantimes.co.jp/news/2016/02/09/national/japan-to-get-more-coal-fired-power-plants-thanks-to-environment-ministry-policy-reversal/#.VsnnHZMrJp8>

⁶⁵⁶ Japan to clarify its energy future- coal to remain an important source of energy, 25 February 2015. Date of Access: 4 February 2016. <http://www.worldcoal.org/japan-clarify-its-energy-future-coal-remain-important-source-energy>

⁶⁵⁷ Japan Releases Underwhelming Climate Action Commitment, Mengpin Ge and Taryn Fransen 23 July 2015. Access Date: 4 February 2016. <http://www.wri.org/blog/2015/07/japan-releases-underwhelming-climate-action-commitment>.

⁶⁵⁸ Japan Can Go Much Further than its Rumored Emissions-Reduction Target, Thomas Damassa, Taryn Fransen and Takeshi Kuramochi 28 April 2015. Access Date: 4 February 2016. <http://www.wri.org/blog/2015/04/japan-can-go-much-further-its-rumored-emissions-reduction-target>.

⁶⁵⁹ Policy paper 2010 to 2015 government policy: greenhouse gas emissions, Department for Environment Food and Rural Affairs; Department of Energy and Climate Change 8 May 2015. Date of Access: 5 February 2016.

<https://www.gov.uk/government/publications/2010-to-2015-government-policy-greenhouse-gas-emissions/2010-to-2015-government-policy-greenhouse-gas-emissions>

⁶⁶⁰ Carbon Budgets and targets, Committee on Climate Change. Date of Access: 5 February 2016.

<https://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/>.

renewables in 2014. Moreover, the UK's National Renewable Energy Action Plan has initiated the first Renewable Heat Incentive, a GBP400 million annual fund that supports households and businesses which convert to renewable heat. The government has also offered additional support and increased the budget to GBP1.15 billion in 2020/21. Furthermore, it is tackling the problem at source by phasing out all unabated coal-fired power stations by 2025.⁶⁶¹

On 30 November 2015, at the leaders' event at the 21st Conference of the Parties in Paris, the UK's Prime Minister, David Cameron, announced that the world needs a deal with a "binding legal mechanism" that includes a "five-year review" against the targets.⁶⁶² In addition, he suggested that the deal needs to have financial support for the poorest and most vulnerable countries. The UK committed to increase their support to international climate finance by at least 50 per cent and to provide at least GBP5.8 billion between 2016 and 2021.⁶⁶³

The government is investing in ways to reduce its greenhouse gas emissions by ensuring secure, low-carbon energy supplies to 2050 without jeopardizing its economy. It has been proactive in keeping its commitment, by creating an award-winning 2050 Calculator, a user-friendly model which lets a range of audiences explore ways in which the UK can best meet energy needs while reducing emissions. Using real scientific data, the public can create their own UK emissions reduction pathway and explore the wider implications of their pathway. This interactive tool is not only engaging and unique, but it also raises awareness amongst the people. The 2050 Calculator has been shown to be effective and it received over 100 responses from across the energy and climate change community in 2011, eight months after its launch.⁶⁶⁴

The Fifth Carbon Budget: The next step towards a low-carbon economy, published by the Committee on Climate Change in November 2015, outlined several ways to reduce carbon emissions. It also included the progress towards meeting carbon budgets while having the cost-effective path to 2050.⁶⁶⁵

Thus, the UK receives a compliance score of +1 for its comprehensive strategies towards developing long-term low-carbon strategies for 2050.

Analyst: Christelle Ah Sen

United States: +1

The United States has fully complied with its commitment to develop long term national low-carbon strategies.

In August 2015, President Barack Obama released the final Clean Power Plan. This plan established the first set of national standards to limit carbon pollution from power plants, in conjunction with prior limits placed

⁶⁶¹ Third Progress Report on the Promotion and Use of Energy from Renewable Sources for the United Kingdom, Department of Energy and Climate Change 21 January 2016. Date of Access: 5 February 2016.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/493857/3RD_UK_PROGRESS_REPORT_ON_RENEWABLE_ENERGY.pdf.

⁶⁶² Paris climate summit: David Cameron warns "earth is in peril"- as it happened, The Telegraph 30 November 2015. Date of Access: 5 February 2016. <http://www.telegraph.co.uk/news/earth/paris-climate-change-conference/12024206/Paris-climate-change-conference-LIVE-world-leaders-meet-for-UN-talks.html>.

⁶⁶³ List of Recent Climate Funding Announcements, United Nations Conference on Climate Change. Date of Access: 5 February 2016. <http://www.cop21.gouv.fr/en/list-of-recent-climate-funding-announcements/>.

⁶⁶⁴ Exploring how the UK can meet the 2050 emission reduction target using the web-based 2050 Calculator, Climate change and energy-guidance, Department of Energy and Climate Change 23 January 2013. Date of Access: 5 February 2016.

<https://www.gov.uk/guidance/2050-pathways-analysis>.

⁶⁶⁵ The Fifth Carbon Budget: The next step towards a low-carbon economy, Committee on Climate Change, November 2015. Date Accessed: 5 February 2016. <https://documents.theccc.org.uk/wp-content/uploads/2015/11/Committee-on-Climate-Change-Fifth-Carbon-Budget-Report.pdf>.

on soot and other toxic emissions.⁶⁶⁶ The Clean Power Plan also set out standards to reduce carbon dioxide emissions by 32 per cent from 2005 levels by 2030.⁶⁶⁷ In addition, the Clean Power Plan is also significant, for driving aggressive investments in clean energy technologies that will continue to lower the costs of renewable energy.

President Obama's Clean Power Plan also highlights continued US action on climate change. Through aiming for reductions in emissions from power plants, the largest source of US greenhouse gas emissions, the Clean Power Plan is the capstone of prior steps by the Obama administration to reduce emissions.⁶⁶⁸ The proposed Federal Implementation Plan, released by the US Environmental Protection Agency at the same time as the Clean Power Plan, will provide a model for states to implement individual low-carbon strategies. The Federal Implementation Plan will also ensure that the Clean Power Plan standards are achieved in every state.⁶⁶⁹

In addition, the 2014 US-China Joint Presidential Statement on Climate Change also emphasized the commitments of both countries to a transition to low-carbon and climate resilient economies.⁶⁷⁰ This was reaffirmed at the 2015 United Nations Climate Change Conference. The US and China published a joint vision for the conference, in which both countries recognized the importance of national low-carbon strategies.⁶⁷¹ The importance of US-China commitments to a transition to low-carbon and climate resilient economies cannot be ignored, representing historic cooperation in their efforts to reduce carbon emissions.

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

Analyst: Sarah Tan

European Union: +1

The European Union has fully complied with its commitment to the development of long-term national low carbon strategies.

The European Union also continues to monitor and push progress on meeting its 2020 and 2030 emissions targets. On 6 November 2015, the EU held the sixth Emissions Trading Scheme Compliance Conference, at which participants met to improve the quality the scheme and to determine how to improve the emissions trading system.⁶⁷²

On 2 March 2016, the European Commission published its framework for Union-wide implementation of the December 2015 Paris climate agreement. It also set a timeline for its 12-month legislative agenda, which includes "proposals for an Effort-Sharing Decision for sectors not covered by the EU Emission Trading Scheme and on land use, land use change and forestry (LULUCF), legislation to set up a reliable and

⁶⁶⁶ Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants, The White House, 3 August 2015, Date of Access: 4 February 2016. <https://www.whitehouse.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards>

⁶⁶⁷ Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants, The White House, 03 August 2015, Date of Access: 4 February 2016. <https://www.whitehouse.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards>

⁶⁶⁸ Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants, The White House, 3 August 2015, Date of Access: 4 February 2016. <https://www.whitehouse.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards>

⁶⁶⁹ Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants, The White House, 3 August 2015, Date of Access: 4 February 2016. <https://www.whitehouse.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards>

⁶⁷⁰ U.S.-China Joint Presidential Statement on Climate Change, The White House, 25 September 2015, Date of Access: 4 Feb 2016. <https://www.whitehouse.gov/the-press-office/2015/09/25/us-china-joint-presidential-statement-climate-change>

⁶⁷¹ U.S.-China Joint Presidential Statement on Climate Change, The White House 25 September 2015. Date of Access: 4 February 2016. <https://www.whitehouse.gov/the-press-office/2015/09/25/us-china-joint-presidential-statement-climate-change>

⁶⁷² 6th EU ETS Compliance Conference, European Commission (Brussels) 6 November 2015. Date of Access: 22 March 2016. http://ec.europa.eu/clima/events/articles/0109_en.htm

transparent climate and energy governance mechanism for the post-2020 period, and the necessary policy proposals to adapt the EU's regulatory framework in order to put energy efficiency first and to foster EU's role as a world leader in the field of renewable energy.”⁶⁷³

The European Union has therefore been awarded a score of +1.

Analyst: Sarah Tan

⁶⁷³ Climate Action: Europe readies next steps to implement the Paris Agreement, European Commission (Brussels) 2 March 2016.
Date of Access: 22 March 2016. http://europa.eu/rapid/press-release_IP-16-502_en.htm