8. Climate Change: Mid-Term Emissions Reductions [26]

Commitment:

"Consistent with this ambitious long-term objective, we will undertake robust aggregate and individual mid-term reductions, taking into account that baselines may vary and that efforts need to be comparable."

G8 Muskoka Declaration: Recovery and New Beginnings

Assessment:

Country	Lack of Compliance	Work in Progress	Full Compliance
Canada	-1		
France			+1
Germany			+1
Italy		0	
Japan	-1		
Russia			+1
United Kingdom			+1
United States	-1		
European Union			+1
Average Score	+0,22		

Background:

G8 members have committed to the reduction of greenhouse gases in previous declarations and in several different forums. The first acknowledgement of anthropogenic climate change came during the 1989 Paris Summit. 498 Since 1989, commitments to reduce emissions have become a regular feature in G8 declarations. In 2005 at Gleneagles, all G8 members acknowledged the serious "challenges in tackling climate change, promoting clean energy and achieving sustainable development globally.",499

Commitments in the area of climate change have largely aligned with the consensus established by the United Nations Framework Convention on Climate Change (UNFCCC). The Kyoto Protocol to the UNFCCC institutionalized the process of setting a baseline year and reducing greenhouse gases (in absolute terms) in relation to that year. Subsequent commitments by G8 members have adopted this approach for both long and short-term targets.

At the 2008 Hokkaido Tokyo Summit, members committed to a long-term "goal of achieving at least 50% reduction of global emissions by 2050, recognizing that this global challenge can only be met by a global response." 500 In the near term, members committed to "ambitious economywide mid-term goals in order to achieve absolute emissions reductions."501 The G8 Research Group's 2008 Final Compliance Report found that all members (with the exception of the United

⁴⁹⁸ Economic Declaration 1989 Paris Summit, 16 July 1989. Date of Access: 1 November 2010. http://www.g7.utoronto.ca/summit/1989paris/communique/environment.html.

Gleneagles Official Documents - Climate Change, Clean Energy and Sustainable Development, 8 July 2005. Date of access: 24 November 2010.

http://www.g8.utoronto.ca/summit/2005gleneagles/climatechange.html.

⁵⁰⁰ Environment and Climate Change, Hokkaido Summit, 8 July 2008. Date of Access: 24 November 2010.

http://www.g8.utoronto.ca/summit/2008hokkaido/2008-climate.html.
Environment and Climate Change, Hokkaido Summit, 8 July 2008. Date of Access: 24 November 2010. http://www.g8.utoronto.ca/summit/2008hokkaido/2008-climate.html.

States) had set a mid-term goal; however, the report did not measure whether any action had been taken towards its fulfillment.⁵⁰²

Members reaffirmed this commitment at L'Aquila in 2009, calling for "an 80% or more reduction goal for developed countries by 2050," and reiterating "the need for significant mid-term targets consistent with the long term goals." A compliance study on mid-term targets was not conducted for the L'Aquila Summit in light of the potential for significant developments at the fifteenth Conference of Parties (COP 15) of the UNFCCC in Copenhagen on 7-19 December 2009. COP 15 subsequently fell short of setting a binding international legal agreement on targets and timeframes.

Commitment Features:

This commitment highlights two areas of action: first, setting a robust mid-term emissions reduction target, and second, demonstrating significant legislative or funding action in support of the target. To be awarded full compliance, a member must take action in both of these areas.

In the first area of action, G8 members have set an ambitious long-term target of reducing emissions of greenhouse gases in aggregate by 80 per cent or more by 2050, compared to 1990 or more recent years. While no timeline is specified for "mid-term," many countries have adopted the recommendations of the Copenhagen Accord and set a mid-term target in relation to 2020. ⁵⁰⁴ Thus to achieve full compliance, a member must first set a robust mid-term reduction target, and second demonstrate a significant legislative or funding commitment towards meeting that target.

Examples of significant legislative or funding commitments could include, but are not limited to: binding, national-level legislation limiting greenhouse gas emissions; the establishment or participation in a national emissions trading scheme; or significant investment in technology that will reduce greenhouse gas emissions in accordance with the principle of additionality. While baseline years may vary, the target must be communicated in terms of absolute emission reductions so that it is comparable to other national targets.

Scoring Guidelines:

-1	Member takes no significant legislative OR funding action to reduce		
	greenhouse gas emissions by 2020 AND does not announce plans for		
	significant reduction of future greenhouse gas reductions by 2020.		
0	Member takes significant legislative OR funding action to		
	reduce greenhouse gas emissions by 2020 OR announces plans for		
	significant reduction of future greenhouse gas reductions by 2020.		
+1	Member takes significant legislative AND funding action to reduce		
	greenhouse gas emissions by 2020.		

Lead Analyst: Hamish van der Ven

⁵⁰³ Chair's Summary, 10 July 2009. Date of Access: 24 November 2010. http://www.g8.utoronto.ca/summit/2009laquila/2009-summary.html.

⁵⁰² 2008 Hokkaido-Toyako G8 Summit Final Compliance Report, 30 June 2009. Date of Access: 24 November 2010. http://www.g7.utoronto.ca/evaluations/2008compliance-final/2008-g8compliance.pdf.

United Nations Framework Convention on Climate Change Draft Decision -/CP.15 Copenhagen Accord (Copenhagen) 18 December 2009. Date of Access: 1 November 2010. http://unfccc.int/resource/docs/2009/cop15/eng/107.pdf.

For a definition of 'additionality' see: CDM Project Developers Workshop, World Business Council for Sustainable Development (Bangalore) 3 February 2005. Date of Access: 24 November 2010. http://www.wbcsd.org/DocRoot/oMH7wF8hI2xp8UpdjTQY/additionality.pdf.

Canada: -1

Canada has not complied with its commitment to take robust legislative and funding action to reduce its greenhouse gas emissions by 2020 and announce plans for significant reduction of future greenhouse gas emissions by 2020.

Canada has stalled in its efforts to regulate domestic greenhouse gas (GHG) emissions. On 17 November 2010, the Climate Change Accountability Act, designated as Bill C-311, was defeated without parliamentary debate by the Canadian Senate. The Bill called for a reduction of greenhouse gas emissions of 25 per cent by 2020, using 1990 as the base year. This new goal would have been more ambitious than the 17 per cent below 2005 levels by 2020 that Canada is currently trying to achieve. Due to this decision, Canada has taken a significant step away from setting and achieving a robust mid-term GHG reduction target.

Canadian climate change policies are the subject of domestic and international criticism. On 7 December 2010, the Auditor General of Canada's office released the '2010 Fall Report of the Commissioner of the Environment and Sustainable Development.'509 The Canadian report focuses on three topics in detail: "How the federal government responds to oil spills from ships; how it monitors the quality and quantity of fresh water; and how it supports adaption to climate change impacts."510 The report takes into account environmental petitions received between 1 July 2009 and 30 June 2010⁵¹¹ and "admonishes the government for its lack of leadership around environmental issues."512 Internationally, "the non-governmental organization Germanwatch ranked Canada 54th out of 57 countries in its performance in halting climate change."513

Much of the international criticism stems from Canada's involvement in the Alberta Tar Sands. Keith Schneider, regular contributor to the New York Times, in Yale Environment 360, argues

⁵⁰⁷ Climate bill, Commons crushed in one blow, The Toronto Star (Toronto) 17 November 2010. Date of Access: 10 December 2010. http://www.thestar.com/news/sciencetech/environment/article/892053--climate-bill-commons-crushed-in-one-blow.

⁵⁰⁸ Climate bill, Commons crushed in one blow, The Toronto Star (Toronto) 17 November 2010. Date of Access: 10 December 2010. http://www.thestar.com/news/sciencetech/environment/article/892053--climate-bill-commons-crushed-in-one-blow.

⁵⁰⁹ 2010 Fall Report of the Commissioner of the Environment and Sustainable Development, Office of the Auditor General of Canada (Ottawa) 7 December 2010. Date of Access: 10 December 2010. http://www.oag-bvg.gc.ca/internet/English/parl cesd 201012 e 34435.html.

http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201012_e_34435.html.

510 2010 Fall Report of the Commissioner of the Environment and Sustainable Development, Office of the Auditor General (Ottawa), 7 December 2010, Date of Access: 20 January 2011. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201012_00_e_34423.html.

511 2010 Fall Report of the Commissioner of the Environment and Sustainable Development, Office of the

⁵¹¹ 2010 Fall Report of the Commissioner of the Environment and Sustainable Development, Office of the Auditor General (Ottawa), 7 December 2010, Date of Access: 20 January 2011. http://www.oag-bvg.gc.ca/internet/English/parl cesd 201012 00 e 34423.html.

⁵¹² Harper government lax on climate change issues, report says, The Globe and Mail (Toronto) 7 December 2010. Date of Access: 10 December 2010.

 $\underline{http://www.theglobeandmail.com/news/politics/harper-government-lax-on-climate-change-issues-report-says/article 1828178/.$

says/article1828178/.
 Climate change talked about, but not worried about: Poll, The Gazette (Montreal) 10 December 2010.
 Date of Access: 10 December 2010.

 $\underline{http://www.montrealgazette.com/business/Climate+change+talked+about+worried+about+Poll/3954424/st} ory.html.$

⁵⁰⁶ Climate bill, Commons crushed in one blow, The Toronto Star (Toronto) 17 November 2010. Date of Access: 10 December 2010. http://www.thestar.com/news/sciencetech/environment/article/892053--climate-bill-commons-crushed-in-one-blow.

that: "so far, government officials have shown little concern for the environmental consequences of this new fossil-fuel development boom." He quotes the Pembina Institute, a Canadian Environmental Think Tank, stating that the tar sands are "the fastest-growing source of CO2 emissions in Canada." S15

Despite domestic and international criticism, Canada has made some effort to address its GHG emissions, although these efforts have not been commensurate with the 'robust' measures promised in the Muskoka commitment. On 20 July 2010, the Government of Canada invested CA\$2.2 million in CO2 storage research under the auspices of the Canada-US Clean Energy Dialogue. On 20 July 2010, Natural Resources Canada, along with the governments of Manitoba, Saskatchewan, and Alberta, announced CA\$6.6 million in funding for the Prairies Regional Adaptation Collaborative. The Collaborative is meant to "help Canadians in the Prairie provinces deal with the impacts of climate change on water resources and forest and grassland ecosystems." On 1 September 2010, the Government of Canada announced that new fuel content regulations will come into effect on 15 December 2010 as part of Canada's Renewable Fuels Strategy. The regulations require "an average renewable fuel content of five per cent in gasoline." On 1 October 2010, the Government of Canada announced the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations for the 2011-2016 model years. These are meant to reduce the green house gas emissions of 2016 models by 25 per cent lower compared to "vehicles that were sold in Canada in 2008." In an ongoing collaboration with the U.S. government to "establish common North American standards for regulating GHGs

September 2010. Date of Access: 10 December 2010. http://e360.yale.edu/feature/a_high-

eng.php.
⁵¹⁸ Governments Work Together to Address Climate Change, Natural Resources Canada (Regina), 20 July 2010. Date of Access: 20 January 2011. http://www.nrcan-rncan.gc.ca/media/newcom/2010/201055-eng.php.

eng.php.
⁵¹⁹ Government of Canada Releases Final Regulations for Renewable Fuel Content in Gasoline,
Environment Canada (Ottawa) 1 September 2010. Date of Access: 10 December 2010.

http://ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=2D84D5D6-F152-4F5F-A4B9-BE973BE6821B.

Government of Canada Releases Final Regulations for Renewable Fuel Content in Gasoline, Environment Canada (Ottawa) 1 September 2010. Date of Access: 10 December 2010. http://ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=2D84D5D6-F152-4F5F-A4B9-BE973BE6821B.

Canada Announces Final GHG Emission Regulations for New Light-Duty Vehicles, Environment Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=3C7732ED-B2B7-4E45-8A54-A495500E58DB

⁵²² Canada Announces Final GHG Emission Regulations for New Light-Duty Vehicles, Environment Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=3C7732ED-B2B7-4E45-8A54-A495500E58DB.

risk energy boom sweeps across north america/2324/.

515 A High-Risk Energy Boom Sweeps Across North America, Yale Environment 360 (New Haven) 30 September 2010. Date of Access: 10 December 2010. http://e360.yale.edu/feature/a_high-risk_energy_boom_sweeps_across_north_america/2324/.

⁵¹⁶ Canada and US Invest in Leading Carbon Capture and Storage Project, Natural Resources Canada (Ottawa) 20 July 2010. Date of Access: 10 December 2010. http://www.nrcan-rncan.gc.ca/media/newcom/2010/201053-eng.php

rncan.gc.ca/media/newcom/2010/201053-eng.php.
517 Governments Work Together to Address Climate Change, Natural Resources Canada (Regina), 20 July 2010. Date of Access: 20 January 2011. http://www.nrcan-rncan.gc.ca/media/newcom/2010/201055-eng.php.

from new light-duty vehicles,"523 these regulations are similar to those already present in the United States 524

Canada has made a commitment to address climate change in the developing world. On 1 October 2010, the Government of Canada announced CA\$400 million in funding as part of Canada's commitment under the Copenhagen Accord. 525 This financing "represents Canada's largest ever contribution to support international efforts to address climate change,"526 and represents Canada's 2010 contribution to the "fast-start financing promised by developing countries" and is meant to "support climate change mitigation, including financing for adaptation, capacity building, technology transfer and reducing greenhouse gas emissions from deforestation in developing countries."528

Thus, Canada has been awarded a score of -1 for failing to take action on climate change commensurate with the scope of the Muskoka commitments.

Analyst: Ioana Sendroiu

France: +1

France has complied with its commitment to take significant legislative and funding action to reduce greenhouse gas emissions by 2020.

France shares the European Union's (EU) objective to reduce greenhouse gas (GHG) emissions by 20 per cent below 1990 levels by 2020. 529 In July 2010, Jean-Louis Borloo, the French Minister for Ecology, Energy, Sustainable Development and Town and Country Planning, issued

http://unfccc.int/files/meetings/application/pdf/europeanunioncphaccord app1.pdf.

⁵²³ Canada Announces Final GHG Emission Regulations for New Light-Duty Vehicles, Environment Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. $\underline{http://www.ec.gc.ca/default.asp?lang=En} \& n=714D9AAE-1 \& news=3C7732ED-B2B7-4E45-8A54-1ABPAAE-1AB$ A495500E58DB.

524 Canada Announces Final GHG Emission Regulations for New Light-Duty Vehicles, Environment

Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=3C7732ED-B2B7-4E45-8A54-A495500E58DB.

⁵²⁵ Government of Canada Announces Details of Major Investment to International Climate Change, Environment Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=454E8F15-55C2-4A70-9FC0-249B35E5DD80.

⁵²⁶ Government of Canada Announces Details of Major Investment to International Climate Change, Environment Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=454E8F15-55C2-4A70-9FC0-

²⁴⁹B35E5DD80.
527 Government of Canada Announces Details of Major Investment to International Climate Change, Environment Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=454E8F15-55C2-4A70-9FC0-249B35E5DD80.

⁵²⁸ Government of Canada Announces Details of Major Investment to International Climate Change, Environment Canada (Ottawa) 1 October 2010. Date of Access: 10 December 2010. http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=454E8F15-55C2-4A70-9FC0-249B35E5DD80.

⁵²⁹ Expression of willingness to be associated with the Copenhagen Accord and submission of the quantified economy-wide emissions reductions targets for 2020, European Commission (Brussels) 28 January 2010. Date of Access: 9 December 2010.

a public call for the EU to increase its target to 30 per cent below 1990 levels by 2020. 530 France has already reduced its domestic GHG emissions to its Kyoto target, ⁵³¹ currently ranks fourth amongst European Union members in total greenhouse gas emissions, ⁵³² and continues to find innovative means of reducing domestic GHG emissions. In July 2010, French Minister for Ecology, Energy, Sustainable Development and Marine Affairs, Jean-Louis Borloo, released a long-term strategy to reduce carbon dioxide emissions using a combination of incentives for consumers (such as using "eco-labels" and public education campaigns) and punishment for producers who fail to meet "public-procurement requirements." This strategy builds on and borrows from Grenelle⁵³⁴ and Grenelle 2, a forum established by French President Nicolas Sarkozy in 2007 to discuss and enact policy for environmentally friendly and sustainable development.535

France is an emerging leader in clean energy and GHG measurement. Grenelle 2, passed on 12 July 2010,⁵³⁶ seeks to innovate in key sectors like: "renewable energies, green chemistry, biomaterials, and energy and CO2 storage" by offering financial support for innovation. 538 The law seeks to educate the French public and expand the installation of energy meters in buildings that use heating technologies. 539 Grenelle 2 will also require companies with more than 500 employees situated in communities larger than 50,000 monitor their carbon dioxide emissions by

⁵³⁰ UK, Germany and France: Europe must cut emissions 30% to capture "low carbon economic opportunities, Climate Progress (Washington) 15 July 2010. Date of Access: 12 December 2010. http://climateprogress.org/2010/07/15/uk-germany-france-europe-cut-emissions-by-30/.

Non-industrial emissions key for meeting Kyoto targets, European Environment Agency (Copenhagen) 12 November 2009. Date of Access: 10 December 2010.

http://www.eea.europa.eu/pressroom/newsreleases/non-industrial-emissions-key-for-meeting-kvototargets/#.

⁵³² Greenhouse gas profiles: GHG trends and projections in France, European Environment Agency (Copenhagen) October 2010. Date of Access: 10 December 2010.

http://www.eea.europa.eu/themes/climate/ghg-country-profiles/tp-report-country-profiles/france-

greenhouse-gas-profile-summary-1990-2020.pdf.

533 Innovation plays key role in French sustainable-development plan Environmental Technologies Action Plan, European Commission (Brussels) 29 October 2010. Date of Access: 18 November 2010. http://ec.europa.eu/environment/etap/inaction/policynews/577 en.html.

⁵³⁴ Repères – les indicateurs de la stratégie nationale de développement durable 2010-2013, Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 1 July 2010. Date of Access: 20 November 2010. http://www.developpement-durable.gouv.fr/IMG/pdf/RepIDDc.pdf.

⁵³⁵ Présentation du Grenelle Environnement, Ministère de l'Écologie, du Développement durable, des Transports et du Logement. (Paris) 1 October 2010. Date of Access: 10 December 2010. http://www.legrenelle-environnement.fr/-Qu-est-ce-que-le-Grenelle-.html.

⁵³⁶ Grenelle 2: Réduire les consommations d'énergie et le contenu en carbone de la production. Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 28 October 2010. Date of Access: 20 November 2010. http://www.developpement-durable.gouv.fr/Grenelle-2-Reduire-les.html.

⁵³⁷ Innovation plays key role in French sustainable-development plan. European Commission (Brussels) 29 October 2010. Date of Access: 18 November 2010.

http://ec.europa.eu/environment/etap/inaction/policynews/577 en.html.

⁵³⁸ Innovation plays key role in French sustainable-development plan, European Commission (Brussels) 29 October 2010. Date of Access: 18 November 2010.

http://ec.europa.eu/environment/etap/inaction/policynews/577 en.html.

⁵³⁹ Grenelle 2: Réduire les consommations d'énergie et le contenu en carbone de la production, Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 28 October 2010. Date of Access: 20 November 2010. http://www.developpement-durable.gouv.fr/Grenelle-2-Reduire-les.html.

2012 and develop a reduction plan the same year.⁵⁴⁰ Lastly, Grenelle 2 will increase supervision over carbon dioxide capture and storage facilities to ensure development, coordination and security. 541 The law contains "19 indicators to track progress on sustainable development", 542 including "France's total carbon footprint — including emissions from imports — as well as the more standard total domestic greenhouse-gas emissions" this information will be "made public every year from 2011."544

Clean energy production is a cornerstone of France's GHG reduction plans. France aims to increase research and development funding by €1 billion between 2010 and 2012 to "match the level of investment in civil nuclear research" in order to move away from carbon-based energy. 546 All civil society installations in agriculture will run from photovoltaic panels, and the time required to transition private individuals over to photovoltaic panels will be regulated to two months.⁵⁴⁷ The costs of this transition will be shared by the taxpayer and the producer.⁵⁴⁸

France is taking steps to ensure its international commitments are implemented domestically. In July 2010, Energy Minister Jean Louis Borloo chaired the Comité Interministériel pour le Développement Durable, adopted a framework and guideline for all private and public stakeholders to ensure consistency and solidarity of French commitments in national and global climate initiatives 549

Thus, France has been awarded a score of +1 for having complied with its commitment to take significant legislative and funding action to reduce greenhouse gas emissions by 2020.

October 2010. Date of Access: 18 November 2010.

http://ec.europa.eu/environment/etap/inaction/policynews/577_en.html.

543 Innovation plays key role in French sustainable-development plan. European Commission (Brussels) 29 October 2010. Date of Access: 18 November 2010.

http://ec.europa.eu/environment/etap/inaction/policynews/577 en.html.

⁵⁴⁴ Innovation plays key role in French sustainable-development plan. European Commission (Brussels) 29 October 2010. Date of Access: 18 November 2010.

http://ec.europa.eu/environment/etap/inaction/policynews/577 en.html.

⁵⁴⁵ Innovation plays key role in French sustainable-development plan, European Commission (Brussels) 29 October 2010. Date of Access: 18 November 2010.

http://ec.europa.eu/environment/etap/inaction/policynews/577 en.html.

546 Innovation plays key role in French sustainable-development plan, European Commission (Brussels) 29 October 2010. Date of Access: 18 November 2010.

http://ec.europa.eu/environment/etap/inaction/policynews/577 en.html.

Grenelle 2: Réduire les consommations d'énergie et le contenu en carbone de la production, Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 28 October 2010. Date of Access: 20 November 2010. http://www.developpement-durable.gouv.fr/Grenelle-2-Reduire-les.html. ⁵⁴⁸ Grenelle 2: Réduire les consommations d'énergie et le contenu en carbone de la production, Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 28 October 2010. Date of Access: 20 November 2010. http://www.developpement-durable.gouv.fr/Grenelle-2-Reduire-les.html. ⁵⁴⁹ Stratégie nationale de développment durable 2010-2013 vers une économie verte et equitable, Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 23 August 2010. Date of

Access: 20 November 2010. http://www.developpementdurable.gouv.fr/spip.php?page=article&id article=17670.

⁵⁴⁰ Grenelle 2: Réduire les consommations d'énergie et le contenu en carbone de la production, Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 28 October 2010. Date of Access: 20 November 2010. http://www.developpement-durable.gouv.fr/Grenelle-2-Reduire-les.html. Grenelle 2: Réduire les consommations d'énergie et le contenu en carbone de la production, Ministère de l'écologie, du développement durable, des transports et du logement (Paris) 28 October 2010. Date of Access: 20 November 2010. http://www.developpement-durable.gouv.fr/Grenelle-2-Reduire-les.html. ⁵⁴² Innovation plays key role in French sustainable-development plan. European Commission (Brussels) 29

Analysts: Jasmine Hamade and Hamish van der Ven

Germany: +1

Germany has fully complied with its commitment to take significant legislative and funding action to reduce greenhouse gas emissions by 2020.

Germany is aiming for more ambitious reduction targets than those called for at the Muskoka Summit. Muskoka called for a 50 per cent reduction of carbon emissions compared to 1990 levels by 2050, 550 Germany is aiming for an 80 per cent reduction of greenhouse gases by 2050, 551 starting with a mid-term target of 40 per cent by 2020. Germany remains committed to "ambitious EU climate protection targets in order for Europe to also take the lead in the climate protection negotiations." Germany has already reduced its domestic greenhouse gas emissions to below targets set by the European Union Emission Trading Scheme 554 and currently ranks first amongst European Union members in total greenhouse gas emissions.

Germany continues to lead the EU in measurement, monitoring and verification. Since the German Government released its Perspectives for Germany — a "national strategy for sustainable development" in 2002, it has continued to measure its successes and failures actively in "21 different areas [and] show the extent to which the development in the economy, the environment and the society meets the expectations and goals set." ⁵⁵⁷

⁵⁵⁰ Muskoka Declaration: Recovery and New Beginnings, 26 June 2010. Date of Access: 21 January 2011. http://www.g8.utoronto.ca/summit/2010muskoka/communique.html.

Energy Concept for an Environmentally Sound, Reliable and Affordable Energy Supply, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 28 September 2010. Date of Access: 18 November 2010.

http://www.bmu.de/files/english/pdf/application/pdf/energiekonzept bundesregierung en.pdf.

⁵⁵² Energy Concept for an Environmentally Sound, Reliable and Affordable Energy Supply, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 28 September 2010. Date of Access: 18 November 2010.

http://www.bmu.de/files/english/pdf/application/pdf/energiekonzept bundesregierung en.pdf.

⁵⁵³ Germany a Driving Force in International Climate Protection Process, The German Missions in the United States, (Washington) date unknown. Date of Access: 18 November 2010.

http://www.germany.info/Vertretung/usa/en/06 Climate Business Science/01 Climate Energy Envir/01 Gov Climate/01/ InternationalPolicy.html.

⁵⁵⁴ Non-industrial emissions key for meeting Kyoto targets, European Environment Agency (Copenhagen) 12 November 2009. Date of Access: 10 December 2010.

 $[\]underline{\text{http://www.eea.europa.eu/pressroom/newsreleases/non-industrial-emissions-key-for-meeting-kyototargets/\#}.$

targets/#.

555 Greenhouse gas profiles: GHG trends and projections in Germany, European Environment Agency (Copenhagen) October 2010. Date of Access: 10 December 2010.

http://www.eea.europa.eu/themes/climate/ghg-country-profiles/tp-report-country-profiles/germany-greenhouse-gas-profile-summary-1990-2020.pdf.

⁵⁵⁶ Sustainable Development in Germany: Indicator Report 2010, Statistisches Bundesamt (Wiesbaden) September 2010. Date of Access: 8 December 2010.

 $[\]frac{http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/EN/Content/Publikationen/SpecializedPublications/EnvironmentEconomicAccounting/Indicators2010, property=file.pdf.}$

⁵⁵⁷ Sustainable Development in Germany: Indicator Report 2010, Statistisches Bundesamt (Wiesbaden) September 2010. Date of Access: 8 December 2010.

 $[\]underline{http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/EN/Content/Publikationen/SpecializedPublications/EnvironmentEconomicAccounting/Indicators2010, property=file.pdf.$

Germany is also a world leader in sustainable energy generation. In January 2011, the Chair of the German Advisory Council on the Environment (SURD), Prof. Dr. Faulstich, presented Federal Environment Minister Norbert Röttgen with a special report indicating that Germany can have a 100 per cent renewable energy supply by 2050.⁵⁵⁸ Plans to fund this initiative will start with an increase in research and development funding in 2011 through the establishment of an "energy efficiency fund at the Federal Ministry of Economics and Technology."⁵⁵⁹ "Kreditanstalk fur Wiederaufbau will initiate a special Offshore Wind Energy Programme in 2011 with a total credit volume of €5 billion at market rates of interest."⁵⁶⁰In recognizing that CO2 emitting technology will continue to play a prominent role in delivering energy for decades, on 14 July 2010, Germany's Federal Economics Minister Rainer Brüderle and Federal Environment Minister Norbert Röttgen announced a "joint draft act on the demonstration and application of technologies for the capture, transport and permanent storage of carbon dioxide (CO2)."⁵⁶¹ "By agreeing on the draft act, we are giving German industry the opportunity to swiftly develop this key technology and use new export opportunities worldwide."⁵⁶²

On 5 July 2010, Germany's Federal Environment Minister Norbert Röttgen announced a "two-step process for reducing the feed-in tariff for solar energy." This initiative hopes to reduce the gap between "the rapidly sinking costs of photovoltaic systems and the slow reduction of support rates" and help legitimize the expansion of renewable energy production.

20 December 2010, Germany's Federal Environment Minister announced new provisions on CO2 emissions in light commercial vehicles in order to significantly reduce fuel consumption of vehicles by 2020, "as an incentive to comply with the targets, vehicle manufacturers will face severe fines if they exceed them." 565

⁵⁵⁸ 100% renewable electricity supply by 2050, Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (Berlin) 26 January 2011. Date of Access: 10 February 2011. http://www.bmu.de/english/current_press_releases/pm/46959.php.

Energy Concept for an Environmentally Sound, Reliable and Affordable Energy Supply, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 28 September 2010. Date of Access: 18 November 2010.

 $[\]underline{\underline{http://www.bmu.de/files/english/pdf/application/pdf/energiekonzept_bundesregierung_en.pdf.}$

⁵⁶⁰ Energy Concept for an Environmentally Sound, Reliable and Affordable Energy Supply, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 28 September 2010. Date of Access: 18 November 2010.

http://www.bmu.de/files/english/pdf/application/pdf/energiekonzept bundesregierung en.pdf.

⁵⁶¹Bruderle and Rottgen: CCS act an important step for a future technology, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 14 July 2010. Date of Access: 22 January 2011. http://www.bmu.de/english/current_press_releases/pm/46238.php.

⁵⁶² Bruderle and Rottgen: CCS act an important step for a future technology, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 14 July 2010. Date of Access: 22 January 2011. http://www.bmu.de/english/current press releases/pm/46238.php.

Rottgen welcomes Mediation Committee conclusions on support for solar energy, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 6 July 2010. Date of Access: 21 January 2011. http://www.bmu.de/english/current_press_releases/pm/46206.php.

Rottgen welcomes Mediation Committee conclusions on support for solar energy, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 6 July 2010. Date of Access: 21 January 2011. http://www.bmu.de/english/current_press_releases/pm/46206.php.

⁵⁶⁵ Federal Environment Minister welcomes agreement on light commercial vehicles, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin) 20 December 2010. Date of Access: 21 January 2011. http://www.bmu.de/english/current_press_releases/pm/46853.php.

Thus, Germany has been awarded +1 for taking significant legislative and funding action to reduce greenhouse gas emissions by 2020.

Analyst: Jasmine Hamade

Italy: 0

Italy has partially complied with its commitment to take significant legislative and funding action to reduce greenhouse gas emissions by 2020.

Italy remains over-reliant on the purchase of carbon offsets to meet its greenhouse gas (GHG) reduction targets. Italy recently opposed the European Union's intended reform of the EU Emissions Trading Scheme (EU-ETS). According to the Environmental Investigation Agency, Italy allows up to 15 per cent of its emissions reductions under the EU ETS to be met by offsets. These projects are seen as a cheap and easy way of reducing emissions, and they diminish incentive to make reductions at home.

Despite a dependence on carbon offset purchases, Italy has made some progress towards legislating a mid-term GHG reduction target. On 5 November 2010, the National Reform Plan for sustainable growth by 2020 was approved by the Italian government. The National Reform Plan includes a target reduction of greenhouse gas emissions to a fixed rate of 20 per cent, in accordance with the European level, by 2020. The National Reform Plan includes a target reduction of greenhouse gas emissions to a fixed rate of 20 per cent, in accordance with the European level, by 2020.

Italy is a laggard amidst an otherwise progressive European Union. Nonetheless, Italy successfully legislated a mid-term GHG reduction target. Thus, Italy has been awarded a score of 0 for taking significant legislative action to reduce greenhouse gas emissions by 2020.

Analyst: Nerin Ali

Japan: -1

Japan has not complied with its commitment to take significant legislative and funding action to reduce its greenhouse gas emissions by 2020.

Japan recently postponed plans to implement a national emissions trading scheme. On 28 December 2010, the Japanese Government bowed to business interests who warned that there would be job losses if Japan implemented emissions regulations while overseas trading partners have failed to do so. ⁵⁷⁰ As the fifth largest GHG emitter in the world, Japan's decision represents a blow to the EU's hopes that other major emitters will join its progressive stance on climate change. ⁵⁷¹

⁵⁶⁶ Italy, Firms Stall EU Carbon Reform: Critics, Reuters (London) 18 November 2010. Date of Access: 7 December 2010. http://www.reuters.com/article/idUSTRE6AH4CM20101118?pageNumber=1.

⁵⁶⁷ Italy, Firms Stall EU Carbon Reform: Critics, Reuters (London) 18 November 2010. Date of Access: 7 December 2010. http://www.reuters.com/article/idUSTRE6AH4CM20101118?pageNumber=1.

⁵⁶⁸ Berlusconi Says Italy Approved 2020 'National Reform Plan,' Bloomberg BuisnessWeek (Bloomberg) 5.November 2010. Date of Access: 9 December 2010. http://www.businessweek.com/news/2010-11-05/berlusconi-says-italy-approved-2020-national-reform-plan-.html.

⁵⁶⁹ Europa 2020: Il Programa Nazionale di Riforma (PNR), Governo Italiano (Rome) 8 November 2010. Date of Access: 9 December. http://www.governo.it/GovernoInforma/Dossier/PNR/obiettivi.html.

⁵⁷⁰ Japan shelves carbon emissions trading scheme, Reuters (London) 28 December 2010. Date of Access 10 February 2011. http://www.reuters.com/article/2010/12/28/us-climate-japan-idUSTRE6BR06120101228.

⁵⁷¹ Japan shelves carbon emissions trading scheme, Reuters (London) 28 December 2010. Date of Access 10 February 2011. http://www.reuters.com/article/2010/12/28/us-climate-japan-idUSTRE6BR06120101228.

Japan recently reversed its support of the Kyoto Protocol. On 2 December 2010, the Japanese delegation to the Cancun Environment and Development Negotiations announced that Japan would not be open to "supporting the continuation of the Kyoto protocol." On the same day of the negotiations, Japan also opposed a fee meant to support certain Joint Implementation projects.⁵⁷³ Japan released a statement in December 2010 calling for the establishment of a new "internationally legally-binding framework with the participation of all major economies." 574 Japan sees the Kyoto protocol as neither fair nor effective, and stated that it is harmful to extend country "obligations under the Kyoto Protocol after 2012." 575

Domestic GHG reduction policies have lacked the robustness mandated by the Muskoka commitment. Seiji Ikkatai of Kyoto University, writing for the East Asia Forum, asserts that Japanese climate change policy is not working. 576 Ikkatai argues that: "Neither the voluntary measures imposed on industry nor the information campaigns developed in an attempt to reduce household emissions are significant enough to make a serious impression on GHG emissions." 577 Furthermore, he asserts that "it is difficult to expect further substantial CO2 reductions from Japanese companies" ⁵⁷⁸ due to a lack of existing strong regulations as well as "no concrete plans by the central government to introduce economic measures such as carbon taxes and cap and trade "579

Japan's efforts to reduce GHG emissions have largely been limited to rhetoric. On 2 September 2010, Japan and 13 Caribbean countries met in Tokyo and agreed to "cooperate in curbing global warming."580 On 26 October 2010, Japan hosted a meeting of ministers from many countries in an effort to deal with greenhouse gas emissions from deforestation. 581

⁵⁷²Earth Negotiations Bulletin: Cancun Highlights Thursday 2 December 2010, International Institute for Sustainable Development Reporting Services (New York) 2 December 2010. Date of Access: 10 December 2010. http://www.iisd.ca/vol12/enb12491e.html.

⁵⁷³ Earth Negotiations Bulletin: Cancun Highlights Thursday 2 December 2010, International Institute for Sustainable Development Reporting Services (New York) 2 December 2010. Date of Access: 10 December 2010. http://www.iisd.ca/vol12/enb12491e.html.

⁵⁷⁴ Japan's position regarding the Kvoto Protocol, Ministry of Foreign Affairs of Japan (Tokyo) December 2010. Date of Access: 21 January 2011.

http://www.mofa.go.jp/policy/environment/warm/cop/kp pos 1012.html.

⁵⁷⁵ Japan's position regarding the Kyoto Protocol, Ministry of Foreign Affairs of Japan (Tokyo) December 2010. Date of Access: 21 January 2011.

http://www.mofa.go.jp/policy/environment/warm/cop/kp_pos_1012.html.

576 Climate change policies in Japan, East Asia Forum (Canberra) 1 December 2010. Date of Access: 10 December 2001. http://www.eastasiaforum.org/2010/12/01/climate-change-policies-in-japan/.

⁵⁷⁷ Climate change policies in Japan, East Asia Forum (Canberra) 1 December 2010. Date of Access: 10 December 2001. http://www.eastasiaforum.org/2010/12/01/climate-change-policies-in-japan/.

⁵⁷⁸ Climate change policies in Japan, East Asia Forum (Canberra) 1 December 2010. Date of Access: 10 December 2001. http://www.eastasiaforum.org/2010/12/01/climate-change-policies-in-japan/.

⁵⁷⁹ Climate change policies in Japan, East Asia Forum (Canberra) 1 December 2010, Date of Access: 10 December 2001. http://www.eastasiaforum.org/2010/12/01/climate-change-policies-in-japan/.

⁵⁸⁰ Japan, Caribbean nations discuss climate change, assistance for Haiti, The Japan Times Online (Tokyo) 3 September, 2010. Date of Access: 10 December 2010. http://search.japantimes.co.jp/cgibin/nn20100903a7.html.

Ministers advocate conservation of forests to curb climate change, The Japan Times Online (Tokyo) 27 October, 2010. Date of Access: 10 December 2010. http://search.japantimes.co.jp/cgibin/nn20101027a8.html.

Despite rhetorical commitments to combating climate change, Japan has taken neither significant legislative nor funding action to reduce its greenhouse gas emissions.

Thus, Japan has been awarded a score of -1 for not taking significant legislative or funding action to reduce greenhouse gas emissions by 2020.

Analyst: Ioana Sendroiu

Russia: +1

Russia has fully complied with the commitment to reduce greenhouse gas emissions by 2020.

At the 2010 United Nations Climate Change Conference in Cancun, Russia reaffirmed its commitment to achieve 15-25 per cent emission reduction by 2020 with a base year of 1990.⁵⁸² The commitment was made at the UN Climate Change Summit in Copenhagen in 2009.⁵⁸³

On 30 July 2010 the Russian Ministry of Economic Development approved the rules of register of investment projects aimed at greenhouse gas emission reduction under Article 6 of the Kyoto Protocol. 584

In July 2010, Russia approved 15 clean energy projects that "have the potential to generate 30 million carbon offsets." In addition to this move, in January 2011, Russian state company Gazprom Neft sold 290,000 tonnes of CO2 emission rights to the Mitsubishi Corp. This was "one of the first such credit deliveries from Russia" to help meet emission targets under the Kyoto Protocol. 587

On 3 September 2010, the Russian Government adopted a "strategic plan for the development of hydrometeorology and related fields up to 2030." The strategy takes into account ongoing and anticipated climate changes. It provides for, inter alia, support for monitoring of climate and weather influence on agriculture, developing of agriculture sector adaptation to climate change strategy and minimization of negative influence of dangerous weather events on agriculture. 589

http://unfccc.int/files/meetings/cop_16/statements/application/pdf/101209_cop16_hls_russia.pdf.

http://unfccc.int/files/meetings/cop_15/application/pdf/russianfederation_cph10.pdf.

⁵⁸² Statement by the Adviser to the President of the Russian Federation, Russian Federation (Cancun) 9 December 2010. Date of Access: 11 February 2011.

⁵⁸³ Letter of the Russian Federal Service for Hydrometeorology and Environmental Monitoring to the Executive Secretary of the UNFCCC Secretariat, United Nations Framework Convention on Climate Change (Copenhagen) 8 December 2010. Date of Access: 11 February 2011.

Order of the Russian Ministry of Economic Development No. 352 of 30 July 2010, Russian Ministry of Economic Development (Moscow) 30 July 2010. Date of Access: 21 January 2011. http://merit.consultant.ru/doc.asp?ID=1380.

Russia approves first Kyoto CO2 offset projects, Reuters (London) 26 July 2010. Date of Access: 21 January 2011. http://www.reuters.com/article/idUSTRE66P3I920100726.

⁵⁸⁶ Gazprom unit delivers CO2 rights to Mitsubishi, Reuters (Tokyo) 7 January 2011. Date of Access: 21 January 2011. http://www.reuters.com/article/idUSTOE70604S20110107.

⁵⁸⁷ Gazprom unit delivers CO2 rights to Mitsubishi, Reuters (Tokyo) 7 January 2011. Date of Access: 21 January 2011. http://www.reuters.com/article/idUSTOE70604S20110107.

Frime Minister Vladimir Putin signs Executive Order No. 1458-r of September 3, 2010, Prime Minister of Russia (Moscow) 14 September 2010. Date of Access: 21 January 2011. http://premier.gov.ru/eng/events/messages/12185/.

Strategic plan for the development of hydrometeorology and related fields up to 2030, Government of Russia (Moscow) 3 September 2010. Date of Access: 3 November 2010. http://government.ru/media/2010/9/14/34847/file/1458R pril.doc.

On 7 September 2010, the Russian Government announced a US\$10 million contribution to the Global Environment Facility (GEF) for 2011-2014.⁵⁹⁰ The GEF is the "financial mechanism for both the UN Convention on Biological Diversity and the UN Framework Convention on Climate Change" and supports projects in climate change mitigation and adaptation.⁵⁹² The GEF will help implement such projects in Russia and abroad.⁵⁹³

On 27 December 2010, the Russian Government approved the State Programme On Energy Conservation and Energy Efficiency Until 2020.⁵⁹⁴ One of the anticipated results of the programme implementation is a reduction of greenhouse gas emissions in the amount of 2.4 billion tonnes of CO2 equivalent from 2011 to 2020. This will be achieved by promoting energy conservation and energy efficiency in energy generation and transmission, communal infrastructure, industry, agriculture, transportation and housing.⁵⁹⁵ About RUB7 billion (US\$233 million) will be budgeted for this program's implementation in 2011.⁵⁹⁶

Thus, Russia has been awarded a score of +1 for setting a midterm reduction target and having taken significant legislative and funding action to reduce greenhouse gas emissions by 2020.

Analyst: Irina Grechukhina

United Kingdom: +1

The United Kingdom (UK) has complied with its commitment to take significant legislative and funding action to reduce greenhouse gas emissions by 34 per cent by 2020.

In pursuit of this commitment, the UK Government has announced a specific mid-term emissions reduction target, has made available additional funding, taken regulatory steps, and provided informal support. The UK Government has set a mid-term reduction target consistent with the European Union's goal of at least 20 per cent below 1990 levels by 2020.

The UK's commitment to robust mid-term reductions has been supported by a significant funding increase. On 20 October 2010, the Department of Energy and Climate Change announced that it would increase environmental spending by 21 per cent.⁵⁹⁷ This includes an investment of £1

⁵⁹⁰ Executive Order No. 1494-r of 7 September 2010, Government of Russia (Moscow) 7 September 2010. Date of Access: 21 January 2011. http://government.ru/docs/12071/.

⁵⁹¹ Areas of Work, Global Environment Facility (Washington). Date of Access: 21 January 2011. http://www.thegef.org/gef/Areas_work.

⁵⁹² Climate change, Global Environment Facility (Washington). Date of Access: 21 January 2011. http://www.thegef.org/gef/climate_change

http://www.thegef.org/gef/climate_change.

593 Background materials for the September 2, 2010 Government Presidium meeting, Government of
Russia (Moscow) 2 September 2010. Date of Access: 2 February 2011. http://government.ru/docs/12007/.

594 Executive Order No. 2446-r of 27 December 2010, Government of Russia (Moscow) 27 December
2010. Date of Access: 7 February 2011. http://government.ru/gov/results/13912/.

⁵⁹⁵ State Programme On Energy Conservation and Energy Efficiency Until 2020, Government of Russia (Moscow) 27 December 2010. Date of Access: 7 February 2011. http://government.ru/media/2011/1/20/38402/file/2446.doc.

Prime Minister Vladimir Putin chairs a meeting of the Russian government, Government of Russia (Moscow) 21 October 2010. Date of Access: 7 February 2011. http://premier.gov.ru/eng/events/news/12655/.

Department of Energy and Climate Change: HMT Spending Review Press Release, Department of Energy and Climate Change (London) 20 October 2010. Date of Access: 21 January 2011. http://www.decc.gov.uk/en/content/cms/news/csr hmt releas.aspx.

billion on commercial carbon capture and storage demonstration plants, ⁵⁹⁸ a commitment of £600 million of funding for the Renewable Heat Initiative, to be launched in 2011, and £200 million for the development of low-carbon energy technologies. ⁵⁹⁹ On 25 October 2010, Prime Minister David Cameron complemented this funding with a pledge of £60 million for the purpose of establishing high standard offshore wind manufacturing capabilities in British port cities. The Prime Minister declared this initiative to be aimed at supporting private developers in the field of offshore wind energy. ⁶⁰⁰

The UK has taken considerable steps towards reducing energy consumption and improving energy production. On 20 July 2010, Minister for the Cabinet Office Francis Maude launched a new Energy Efficiency Code in order to guide the public administration's May 2010 pledge to reduce its carbon emissions by ten per cent. The Energy Code provides the basis for cooperation between the public administration and its private contractors in the pursuit of this pledge. Furthermore on 11 November 2010, Energy Minister Charles Hendry approved the development by the Wattenfall Group of a 16 turbine wind farm in Northumberland. 602

The efforts noted above are complemented by additional informal actions in support of reducing GHG emissions by 2020. On 15 November 2010, the Foreign and Commonwealth Office hosted a meeting between business leaders from the United Kingdom and India. On this occasion, the business leaders of both countries jointly announced a Charter of Principles as foundation for cooperation in the development of low-carbon technologies.⁶⁰³

The United Kingdom has taken robust legislative and funding measures to reduce its mid-term GHG emissions. Thus, the UK has been awarded a score of +1 for taking significant legislative and funding action to reduce greenhouse gas emissions by 2020.

Analyst: Robert Schuster

United States: -1

The United States has not complied with its commitment to take significant legislative or funding action to reduce greenhouse gas emissions by 2020.

⁵⁹⁸ Department of Energy and Climate Change: HMT Spending Review Press Release, Department of Energy and Climate Change (London) 20 October 2010. Date of Access: 21 January 2011. http://www.decc.gov.uk/en/content/cms/news/csr hmt releas.aspx.

Department of Energy and Climate Change: HMT Spending Review Press Release, Department of Energy and Climate Change (London) 20 October 2010. Date of Access: 21 January 2011. http://www.decc.gov.uk/en/content/cms/news/csr hmt releas.aspx.

October 2010. Date of Access: 14 November 2010. http://www.number10.gov.uk/news/latest-news/2010/10/pm-announces-60m-to-establish-offshore-wind-manufacturing-56155.

Government calls on contractors to help cut carbon emissions, Cabinet Office (London) 20 July 2010. Date of Access: 14 November 2010.

http://www.cabinetoffice.gov.uk/newsroom/news_releases/2010/100720-carbon.aspx.

Approval given for wind turbines in Northumberland, BBC News UK Edition (London) 11 November 2011. Date of access: 15 November 2010. http://www.bbc.co.uk/news/uk-england-tyne-11738402.
Business kick-start low carbon collaboration between UK and India, Guardian UK (London) 16

November 2010. Date of Access: 21 January 2011. http://www.guardian.co.uk/sustainable-business/business-collaboration-carbon-uk-india.

President Barack Obama took office in 2008 amidst high hopes that his administration would move the United States into a leadership role on climate change. 604 However, progress at the federal level has remained elusive.

While the United States has set a mid-term reduction goal of 17 per cent below 2005 levels by 2020, 605 the U.S. Congress continues to block any meaningful legislative commitment to climate change mitigation. In July 2010, the U.S. Senate announced it would not put the 'Clean Energy Jobs and American Power Act' to a vote because it did not have the votes to pass. 606 The Bill would have committed the United States to a nation-wide cap-and-trade program aimed at reducing greenhouse gas emissions by 17 per cent below 2005 levels by 2020.

The United States has made several budgetary commitments to emissions reductions. Implementation of the clean energy provisions of the 2009 'American Recovery and Reinvestment Act' is ongoing. An estimated US\$80 billion of the stimulus package was directed towards clean energy projects. 608 Projects supported by the investment include: wind, solar, and geothermal energy production; modernization of the national electric grid; improvements to residential and commercial energy efficiency; development of carbon capture and storage facilities, and, development of clean fuel technology. 609 However, it remains to be seen how much of the stimulus package will actually be dispersed.

Some progress has been made towards monitoring and cataloguing greenhouse gas (GHG) emissions. In November 2010, the US Environmental Protection Agency (EPA) finalized reporting requirements for GHG emissions from large sources and suppliers in the United States. 610

In October 2010, the US EPA announced a program to reduce greenhouse gas emissions and improve fuel efficiency of medium and heavy-duty vehicles. 611 The proposed rules would reduce GHG emissions by 250 million metric tons over the life of vehicles sold between 2014-2018. 612

⁶⁰⁴ Obama victory spells hope for climate change, Greenpeace East Asia (Beijing) 5 November 2008. Date of Access: 11 December 2010. http://www.greenpeace.org/eastasia/news/obama-climate-change.

⁶⁰⁵ The Fifth U.S. Climate Action Report – Executive Summary, U.S. Department of State (Washington) 1 June 2010. Date of Access: 11 December 2010. http://www.state.gov/documents/organization/140010.pdf. 606 Who Killed the Climate Bill?, Foreign Policy (Washington) 23 July 2010, Date of Access: 11 December 2010. http://www.foreignpolicy.com/articles/2010/07/23/who killed the climate bill.

⁶⁰⁷ Clean Energy Jobs and American Power Act, Open Congress for the 111th United States Congress (Washington) 2 February 2010. Date of Access: 11 December 2010. http://www.opencongress.org/bill/111-

⁶⁰⁸ Progress Report: The Transformation to a Clean Energy Economy, The White House Office of the Vice President (Washington) 15 December 2009. Date of Access: 11 December 2010. http://www.whitehouse.gov/administration/vice-president-biden/reports/progress-report-transformation-

clean-energy-economy.

609 Progress Report: The Transformation to a Clean Energy Economy, The White House Office of the Vice President (Washington) 15 December 2009. Date of Access: 11 December 2010.

http://www.whitehouse.gov/administration/vice-president-biden/reports/progress-report-transformationclean-energy-economy.

Greenhouse Gas Reporting Program, US Environmental Protection Agency (Washington) 8 December

^{2010.} Date of Access: 11 December 2010.

http://www.epa.gov/climatechange/emissions/ghgrulemaking.html.

⁶¹¹ EPA and NHTSA Propose First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles: Regulatory Announcement, US Environmental Protection Agency (Washington) 25 October 2010. Date of Access: 11 December 2010. http://www.epa.gov/otaq/climate/regulations/420f10901.htm.

Following an Executive Order in October 2009, the federal government is currently working towards an internal GHG reduction target of 28 per cent below 2008 levels by 2020. The Department of Defense announced it will reduce greenhouse gas emissions from non-combat activities by 34 per cent by 2020 and the Department of the Treasury will reduce its emissions by 33 per cent. Page 14.

The United States has been awarded a score of -1 for failing to take action commensurate with the scope of the 2010 Muskoka commitments.

Analyst: Hamish van der Ven

European Union: +1

The European Union (EU) has fully complied with its commitment to take significant legislative and funding action to reduce greenhouse gas emissions by 2020.

In pursuit of this commitment, the EU has specified an explicit mid-term emissions reduction target. On 28 January 2010, the EU, in compliance with its commitments as party to the Copenhagen Accord, announced an emissions reduction target of 20 to 30 per cent by 2020 based on 1990 emissions levels. Furthermore, the EU has not only released funding, but has also made legislative changes, taken enforcement action, and released regulatory guidelines.

The EU is encouraging climate change mitigation at the municipal level. On 15 September 2010, the European Commission Directorate-General for the Environment provided funding for the European Mobility Week 2010. This event enabled municipal authorities across the EU to testrun novel low-carbon services and infrastructure programs. The European Commission strongly encouraged municipal governments to adopt at least one of the programs tested during the Mobility Week. Mobility Week.

⁶¹² EPA and NHTSA Propose First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles: Regulatory Announcement, US Environmental Protection Agency (Washington) 25 October 2010. Date of Access: 11 December 2010. http://www.epa.gov/otaq/climate/regulations/420f10901.htm.

613 President Obama signs an Executive Order Focused on Federal Leadership in Environmental, Energy, and Economic Performance, The White House Office of the Press Secretary (Washington) 5 October 2009. Date of Access: 11 December 2010. http://www.whitehouse.gov/the-press-office/President-Obama-signs-an-Executive-Order-Focused-on-Federal-Leadership-in-Environmental-Energy-and-Economic-Performance.

614 Leading by Example – Making the Federal Government More Sustainable, The White House Council on Environmental Quality (Washington) 4 February 2010. Date of Access: 11 December 2010. http://www.whitehouse.gov/blog/2010/02/04/leading-example-making-federal-government-more-sustainable.
615 Expression of willingness to be associated with the Copenhagen Accord and submission of the

cuantified economy-wide emissions reduction targets for 2020, Executive Secretary United Nations Framework Convention on Climate Change (Bonn) 28 January 2010. Date of Access: 6 December 2010. http://unfccc.int/files/meetings/application/pdf/europeanunioncphaccord_appl.pdf.

⁶¹⁶ European Mobility Week 2010: 'Travel Smarter, Live Better', Europa (Brussels) 15 September 2010. Date of Access: 17 November 2010.

 $\underline{\text{http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1131\&format=HTML\&aged=0\&language=EN\&guiLanguage=en.}$

⁶¹⁷ European Mobility Week 2010: 'Travel Smarter, Live Better', Europa (Brussels) 15 September 2010. Date of Access: 17 November 2010.

 $\underline{http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1131\&format=HTML\&aged=0\&language=EN\&guiLanguage=en.}$

The EU Emissions Trading Scheme (ETS) remains an integral part of the EU's efforts to meet its mid-term reduction targets. On 9 July 2010, the European Union passed a Decision on the 2013 cap for its Emissions Trading Scheme (ETS). The cap has been determined at 1,926,876,368 trading allowances, signifying a prescribed reduction of 5.22 per cent since 2010. 619

Moreover, the European Union has started consolidating its environmental degradation legislation. On 28 June 2010, the European Commission started a consultation process aimed at producing a review of the 1985 Environmental Impact Assessment Directive. The review is aimed at introducing changes in order to accommodate recent developments in European Union environmental policy as well as case law. The review specifically targets the harmonization of assessment criteria, the improvement of trans-boundary coordination, as well as the development of synergies between separate environmental policy fields.

In the vein of legislative reform, the European Union adopted a new Directive on Industrial Emissions on 8 November 2010. The Directive consolidates seven pieces of previous legislation and needs to be transposed into Member State domestic law within two years of its passing. The Directive specifically targets the harmonization of Best Available Technologies standards for reducing industrial emissions, as well as the elimination of administrative burdens in the field of emissions reduction technologies. The impact of these burdens is projected to amount to $\mathfrak{E}32$ billion.

Furthermore, the European Commission has taken enforcement action in cases where its Member States have failed to reasonably comply with European Union legislation. On 30 September 2010, the European Commission urged Austria, the Czech Republic, Germany, Poland, and Slovenia to comply with maximum levels of PM10 particle emissions (i.e. sulphur dioxide, nitrogen dioxide, lead, coarse particles, carbon monoxide, benzene, and ground-level ozone) as mandated by Directive 2008/50/EC. This affords the reprimanded Member States two months to comply with the Directive or to reasonably request an extension. After this period, the European Commission will refer the case to the European Court of Justice. On the same day, the European

⁶¹⁸ Emissions trading: Questions and Answers concerning the Commission Decision on the EU ETS cap for 2013, Europa (Brussels) 9 July 2010. Date of Access: 6 December 2010.

 $[\]underline{http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/10/314\& language=EN.}$

Emissions trading: Questions and Answers concerning the Commission Decision on the EU ETS cap for 2013, Europa (Brussels) 9 July 2010. Date of Access: 6 December 2010. http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/10/314&language=EN.

⁶²⁰ EU adopts stricter rules on industrial emissions, Europa (Brussels) 8 November 2010. Date of Access: 16 November 2010.

 $[\]label{lem:http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1477\&format=HTML\&aged=0\&language=EN\&guiLanguage=en. \\$

⁶²¹ EU adopts stricter rules on industrial emissions, Europa (Brussels) 8 November 2010. Date of Access: 16 November 2010.

 $[\]frac{http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1477\&format=HTML\&aged=0\&language=EN\&guiLanguage=en.}{EN\&guiLanguage=en.}$

Environment: Commission asks for views on revamping environmental impact assessments, Europa (Brussels) 6 July 2010. Date of Access: 17 November 2010.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/901&format=HTML&aged=0&language=EN&guiLanguage=en.

⁶²³ Air quality: Commission urges five Member States to comply with EU Legislation, Europa (Brussels) 30 September 2010. Date of Access: 17 November 2010.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1265&format=HTML&aged=0&language=EN&guiLanguage=en.

Commission requested Greece to comply with the mandatory reporting requirements under the Integrated Pollution Prevention and Control Directive. This Directive demands reports for every three-year period and Greece has failed to provide its 2006-2008 submission. On 28 October 2010, the European Commission urged France and Hungary to comply with maximum levels of PM10 emissions as required by Directive 2008/50/EC. On 28 October 2010, the European Commission urged Belgium to comply with maximum levels of PM10 as well as PM2.5 (i.e. fine dust particles) as required by Directive 2008/50/EC. On this same day, the European Commission also referred Sweden to the European Court of Justice regarding the matter of 26 Swedish industrial installations whose environmental permits had expired. Permits had originally been introduced by the Integrated Pollution Prevention Control Directive of 1996 which was subsequently codified by Directive 2008/1/EC.

The European Union supplemented these efforts with further regulatory measures. On 29 October 2010, the European Commission published guidelines on the development of renewable energy projects within areas governed by the Natura 2000 framework on biodiversity. This framework mandates sustainable managements for certain European regions. The guidelines are aimed at avoiding clashes between wind energy developments and biodiversity conservation. 628

The EU continues to prove its effectiveness as a supranational source of leadership in climate change policy. Thus, the EU has been awarded a score of +1 for taking significant legislative and funding action towards reducing greenhouse gas emissions by 2020.

Analyst: Robert Schuster

⁶²⁴ Industrial emissions: Commission asks Greece to comply with EU Legislation, Europa (Brussels) 30 September 2010. Date of Access: 17 November 2010.

 $[\]underline{\text{http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1259\&format=HTML\&aged=0\&language=EN\&guiLanguage=en.}\\$

⁶²⁵ Environment: Commission urges France and Hungary to comply with EU air quality rules, Europa (Brussels) 28 October 2010. Date of Access: 17November 2010.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1420&format=HTML&aged=0&language=EN&guiLanguage=en.

⁶²⁶ Environment: Commission urges Belgium to adopt measures to implement air quality legislation, Europa (Brussels) 28 October 2010. Date of Access: 17 November 2010.

 $[\]label{lem:http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1414&format=HTML&aged=0&language=EN&guiLanguage=en. \\$

⁶²⁷ Environment: Commission takes Sweden to Court over missing industrial permits, Europa (Brussels) 28 October 2010. Date of Access: 17 November 2010.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1412&format=HTML&aged=0&language=EN&guiLanguage=en.

⁶²⁸ Guidelines to reconcile wind energy development and biodiversity policy, Europa (Brussels) 29 October 2010. Date of Access: 16 November 2010.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1450&format=HTML&aged=0&language=EN&guiLanguage=en.