Renewable Energy

Commitment

"We resolved to take action to meet the challenges we face. The Gleneagles Plan of Action which we have agreed demonstrates our commitment. We will take measures to develop markets for clean energy technologies, to increase their availability in developing countries, and to help vulnerable communities adapt to the impact of climate change."

-Chairman's Summary (final press conference)[912]

Background

In the wake of rising oil prices, a growing demand of energy, and the need for sustainable development in the developing world, access to renewable energy is a key priority for all G8 member-states. These commitments dovetail with recognition of the need to limit greenhouse gases (GHGs), of the negative impacts of climate change, and to adapt to new environmental realties. With the exception of the United States (US), these commitments also support the G8 member-states' commitments to meet the targets of the Kyoto Protocol on Climate Change. The projected rise in the demand for energy in developing countries, particularly India and China, will make energy security one of the main issues on the agenda next July at the G8 Summit in St. Petersburg, Russia.

Team Leader: Adam Sheikh

Assessment

Score Country	Lack of Compliance -1	Work in Progress 0	Full Compliance +1
Canada			+1
France			+1
Germany			+1
Italy			+1
Japan			+1
Russia			+1
United Kingdom			+1
United States			+1
European Union			+1
Overall			**1.00**

Individual Country Compliance Breakdown

1. Canada: +1

The Canadian government complied with the G8 renewable energy commitment by participating in several international meetings and conferences promoting the development of markets for clean energy technologies, their availability in developing countries, and helping vulnerable communities adapt to the impact of climate change. On 24 September 2005, Canadian representatives participated in a World Bank

[912] Chair's Summery by Tony Blair, 2005 G8 Gleneagles Summit, (Gleneagles), 8 July 2005. Date of Access: 11 January 2006. http://www.g7.utoronto.ca/summit/2005gleneagles/summary.html.

meeting to launch an investment framework for clean energy and sustainable development. This framework convenes, among others, "senior representatives from regional development banks…and technology companies to explore practical solutions for achieving a less carbon intensive and more climate resilient development path" for developing countries.[913] Canada also sent a delegation to the first ministerial meeting of the Dialogue on Climate Change, Clean Energy, and Sustainable Development in London. This meeting explored the possibility of promoting "wider access to cleaner energy technologies", prioritized areas for "cooperation between developed and developing countries", and acknowledged the need for "incentives [to encourage] private sector investment."[914] On 19 September 2005, Environment Minister Stéphane Dion reaffirmed Canada's commitment to develop "initiatives in renewable energy along with targeted programs and tax incentives for environmental technologies."[915]

In November 2005, Environment Minister Stéphane Dion led Canada's delegation in support of the renewable energy gboals outlined in the political declaration of the International Renewable Energy Conference in Beijing (BIREC). From 24 November to 9 December 2005, Canada hosted the United Nations Climate Change Conference. The conference brought together parties of the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol signatories, both of which seek to recognize the importance of the developed world to "encourage the participation of developing countries in global efforts to combat climate change".[916] The conference adopted the Marrakesh Accords stressing the importance of capacity building and "developing innovative technologies through public and private sector involvement."[917] At the conference, Canada also committed to a declaration encouraging signatories "to consider issues related to the Arctic region['s]…vulnerability and adaptation to climate change."[918] As a continuation of the Aboriginal and Northern Communities Action Plan, Dion also reaffirmed Canada's support of "a targeted science and research program focused on… climate change impacts and adaptation, and the health and well-being of northern communities."[919]

Analyst: Katherine Kinley

2. France: +1

The French government fullfilled its G8 renerable energy commitment to develop markets for clean energy technologies. In August 2005, President Jauques Chirac called for a "loi-programme" authorizing the government to take measures which involve expenditures for research and development spanning several financial years.[920] By enacting such legislative proceedings, Chirac intends to stimulate "research programmes addressing the crucial challenges presented by the environment and climate change: for example, the fuel cell, solar energy and the clean car".[921] At an announcement in Reims on 15 January

[913] Work on Investment Framework for Clean Energy and Sustainable Development Launched: Finance and Development Ministers Address Climate Change, (Washington), 24 September 2005. Date of Access: 18 January 2006. http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20660008~menuPK:34463~pagePK:34370~piPK:34424~theSitePK:4607,00.html.

[914] Chairman's Conclusions, Ministerial meeting of the Dialogue on Climate Change, Clean Energy and Sustainable Development, 10 Downing Street, (London), 1 November 2005. Date of Access: 18 January 2006. http://ff.org/centers/csspp/library/co2weekly/20051117/20051128_04.html.

[915] Address by Environment Minister on cutting megatons of GHGs, Department of Environment, (Ottawa), 19 September 2005. Date of Access: 12 January 2006. http://www.ec.gc.ca/minister/speeches/2005/050915_s_e.htm.

[916] Developing Countries, Canada and the Kyoto Protocol, Government of Canada, (Ottawa), July 2001. Date of Access: January 2006. www.climatechange.gc.ca/cop/cop6_hague/english/developing_e/html.

[917] The Energy and Resources Institute, (New Delhi), February 2002. Date of Access: 16 January 2006. http://www.teriin.org/climate/cop7.htm.

[918] Statement on Climate Change in the Arctic Region, United Nations Climate Change Conference COP 11 and COP/MOP1, (Montreal), 9 December 2005. Date of Access: 11 January 2006. http://www.ec.gc.ca/press/2005/051209_s_e.htm.

[919] Address by Environment Minister at the Opening Ceremony Arctic Day Parallel Event United Nations Climate Change Conference, Department of Environment, (Montreal), 6 December 2005. Date of Access: 12 January 2006. http://www.ec.gc.ca/minister/speeches/2005/051206_s_e.htm.

[920] Speech by President Jacques Chirac on research and policy for industry, Présidence de la République (Reims), 30 August 2005. Date of Access: 15 January 2006. http://www.elysee.fr/elysee/anglais/speeches_and_documents/2005/research_and_policy_for_industry_speech_by_m_jacques_chirac.31311.html.

[921] Speech by President Jacques Chirac on research and policy for industry, Présidence de la République (Reims), 30 August 2005. Date of Access: 15 January 2006.

2006, the President also highlighted his intent to fund the "development of new technologies" such as the ITER project. He explained that these "will open new avenues towards the development of an energy which is almost unlimited and has no impact on the climate".[922]

On 14 November 2005, Prime Minister Dominique de Villepin announced "Plan Climat 2005", further committing France to developing markets for clean energy technologies and increasing their avaliability in developing countires.[923] De Villepin restated France's commitment to clean technologies in the Rhone-Alps region with support of UK firm EDF, and encouraged French companies to continue investing in wind and solar power.[924] He also promised a tax credit increase of 50% to private individuals who repurchace electricty from solar panels, and a doubling of the tax credit for collective, tertiary and industrial solar panel installastions.[925] Finally, De Villepin reiterated the need to develop international partnerships for sustainable development through research, innovation, and clean technologies.[926]

On 7 December 2005, President Chirac attended the Montreal UN Climate Change Conference pledging to increaseing the avaliability of clean technologies in developing countires and help vulnerable communities adapt to the impact of climate change. France endorsed the conference's adoption of the Marrakesh Accords which stress the importance of capacity building and "developing innovative technologies through public and private sector involvement".[927] In addition, the President articulated the need for scientific cooperation to "develop new energy sources, cleaner technologies, [and to]…help poor countries cope with the consequences of climate change".[928] At the end of the conference, France also commited to a statement on Climate Change in the Arctic Region which encouraged signing parties "to consider issues related to the Arctic region['s]… vulnerability and adaptation to climate change".[929]

Analyst: Adam Sheikh and Jennifer Francis

3. Germany: +1

The German government complied with its G8 renewable energy commitments. In a policy statement to the German Bundestag, Chancellor Angela Merkel reiterated the importance of a sound energy policy with a "high degree of environmental compatibility".[930] Chancellor Merkel also pledged to "canvass

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http://www.elysee.fr/elysee/anglais/speeches_and_documents/2005/research_and_policy_for_industry_speech_by_m_jacques_chirac.31311.html.

[922] Speech by President Jacques Chirac on research and policy for industry, Présidence de la République (Reims), 30 August 2005. Date of Access: 15 January 2006. http://www.elysee.fr/elysee/anglais/speeches_and_documents/2005/research_and_policy_for_industry_speech_by_m_jacques_chirac.31311.html.

[923] Intervention du Premier ministre aux rendez-vous "Climat 2005," Bureau du Premier Ministre, (Paris), 14 Novembre 2005. Date of Access: 13 January 2006. http://www.premier-ministre.gouv.fr/acteurs/interventions-premier-ministre_9/discours_498/intervention-premier-ministre-rendez_54371.html.

[924] Intervention du Premier ministre aux rendez-vous "Climat 2005," Bureau du Premier Ministre, (Paris), 14 Novembre 2005. Date of Access: 13 January 2006. http://www.premier-ministre.gouv.fr/acteurs/interventions-premier-ministre_9/discours_498/intervention-premier-ministre-rendez_54371.html.

[925] Intervention du Premier ministre aux rendez-vous "Climat 2005," Bureau du Premier Ministre, (Paris), 14 Novembre 2005. Date of Access: 13 January 2006. http://www.premier-ministre.gouv.fr/acteurs/interventions-premier-ministre_9/discours_498/intervention-premier-ministre-rendez_54371.html.

[926] Intervention du Premier ministre aux rendez-vous "Climat 2005," Bureau du Premier Ministre, (Paris), 14 Novembre 2005. Date of Access: 13 January 2006. http://www.premier-ministre.gouv.fr/acteurs/interventions-premier-ministre_9/discours_498/intervention-premier-ministre-rendez_54371.html.

[927] The Energy and Resources Institute, (New Delhi), February 2002. Date of Access: 16 January 2006. http://www.teriin.org/climate/cop7.htm.

[928] Speech by President Jacques Chirac at the Eleventh session of the Conference of the parties to the Climate Change Convention, Présidence de la République (Montreal), 7 December 2005. Date of Access: 15 January 2006. http://www.elysee.fr/elysee/anglais/speeches_and_documents/2005/message_from_m_jacques_chirac_president_of_the_republic_at_the_eleventh_session_ot_the_conference_of_the_parties_to_the_climate_change_convention.37258.html.

[929] Statement on Climate Change in the Arctic Region, United Nations Climate Change Conference COP 11 and COP/MOP1, (Montreal), 9 December 2005. Date of Access: 11 January 2006. http://www.ec.gc.ca/press/2005/051209_s_e.htm.

[930] Policy Statement by Federal Chancellor Dr. Angela Merkel in the German Bundestag, (Berlin), 30 November 2005. Date of Access: 20 December 2005. http://www.bundesregierung.de/en/-,10001.929347/regierungserklaerung/Policy-Statement-by-Federal-Ch.htm.

strongly for climate protection projects in line with the Kyoto Protocol" during trips abroad, and to promote the export of German technologies in the energy field.[931]

Germany played a key role in supporting China's hosting of the Beijing International Renewable Energy Conference 7-8 November 2005.[932] At the conference, German Federal Minister for the Environment, Nature Conservation, and Nuclear Safety, Jurgen Trittin, reaffirmed Germany's leading role in promoting renewable energy and encouraged more research and development to increase demand and reduce market costs.[933] The conference resulted in the Beijing Declaration on Renewable Energy for Sustainable Development.[934] All government representatives in attendance pledged to "substantially increase with a sense of urgency the global share of renewable energy in the total energy supply".[935] They also emphasized the need for further international cooperation in developing nations to enhance national capacities for research and development and establish markets for renewable energy.[936]

Germany, in partnership with the United States, also formed a Working Group on Energy, Development, and Climate Change whose inaugural meeting took place 12 August 2005 in Berlin.[937] Representatives from both countries resolved to "strengthen donor cooperation in developing countries consistent with the G8 Gleneagles Plan of Action."[938]

At the Montreal Climate Change Conference form 28 November to 9 December 2005, German Environment Minister Sigmar Gabriel announced that the German government "is ready to move forward on our commitments under 3.9 of the [Kyoto] Protocol" and called for the establishment of carbon markets by 2012.[939] Mr. Gabriel also announced that the Clean Development Mechanism "is an important guarantee for technology transfer and sustainable development," and pledged US$1 million to fund the Executive Board.[940] Minister Gabriel also reaffirmed Germany's commitment to renewable energy, stating that for environmental and economic reasons "the national and global expansion of renewable energies is a high priority" for the new German Government.[941] Germany also committed to a declaration encouraging signing parties "to consider issues related to the Arctic region['s]… vulnerability and adaptation to climate change."[942]

Analyst: Matthew Chomyn

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[931] Policy Statement by Federal Chancellor Dr. Angela Merkel in the German Bundestag, (Berlin), 30 November 2005. Date of Access: 20 December 2005. http://www.bundesregierung.de/en/-,10001.929347/regierungserklaerung/Policy-Statement-by-Federal-Ch.htm.

[932] Beijing International Renewable Energy Conference 2005: List of Organizers. Date of Access: 3 January 2006. http://www.birec2005.cn/news_show.asp?ClassId=1&id=3.

[933] Address by Federal Minister Jurgen Trotten at Beijing International Renewable Energy Conference, (Beijing), 8 November 2005. Date of Access: 30 December 2005. http://www.birec2005.cn/pdf/%B1%D5%C4%BB%CA%BD%20d%20Trittin%D3%A2%CE%C4.pdf.

[934] Address by Federal Minister Jurgen Trotten at Beijing International Renewable Energy Conference, 8 November 2005. Date of Access: 30 December 2005. http://www.birec2005.cn/pdf/%B1%D5%C4%BB%CA%BD%20d%20Trittin%D3%A2%CE%C4.pdf.

[935] Beijing Declaration on Renewable Energy For Sustainable Development, (Beijing), 8 November 2005. Date of Access: 3 January 2006. http://www.birec2005.cn/news_show.asp?ClassId=16&id=35.

[936] Beijing Declaration on Renewable Energy for Sustainable Development, (Beijing), 8 November 2005. Date of Access: 3 January 2006. http://www.birec2005.cn/news_show.asp?ClassId=16&id=35.

[937] United States, Germany Convene Panel on Energy, Climate Change, United States Department of State, (Washington), 19 August 2005. Date of Access: 28 December 2005. http://usinfo.state.gov/gi/Archive/2005/Aug/22-678299.html.

[938] United States, Germany Convene Panel on Energy, Climate Change, United States Department of State, (Washington), 19 August 2005. Date of Access: 28 December 2005. http://usinfo.state.gov/gi/Archive/2005/Aug/22-678299.html.

[939] Speech by German Environment Minister Sigmar Gabriel in the Plenary Session of Ministerial Segment, UN Climate Change Conference, (Montreal), 7 December 2005. Date of Access: 3 January 2006. http://www.ottawa.diplo.de/en/05/Umweltpolitik/datei__gabriel__e,property=Daten.pdf.

[940] Speech by German Environment Minister Sigmar Gabriel in the Plenary Session of Ministerial Segment, UN Climate Change Conference, (Montreal), 7 December 2005. Date of Access: 3 January 2006. http://www.ottawa.diplo.de/en/05/Umweltpolitik/datei__gabriel__e,property=Daten.pdf.

[941] Statement by German Environment Minister Sigmar Gabriel at the UN Climate Change Conference, (Montreal), 7 December 2005. Date of Access: 2 January 2006. http://www.bmu.de/english/press_statements_speeches/doc/36381.php.

[942] Statement on Climate Change in the Arctic Region, United Nations Climate Change Conference COP 11 and COP/MOP1, (Montreal), 9 December 2005. Date of Access: 11 January 2006. http://www.ec.gc.ca/press/2005/051209_s_e.htm.

4. Italy: +1

The Italian government achieved full compliance with its G8 renewable energy commitments. As co-organizer of the Mediterranean Renewable Energy Partnership (MEDREP), the Italian Ministry for the Environment and Territory developed markets for clean technologies in both developed and developing Mediterranean countries.[943] The principle goals of the Italian government are to bring sustainable energy services to rural populations and increase the amount of renewable energy along the Mediterranean.[944] In October 2005 Italy hosted the Photovoltaic Mediterranean Conference to promote solar electricity as a source of clean energy.[945] At the conference Environment and Territory Minister, Altero Matteoli, and the President of the Regione Sicilia, Salvatore Caffaro, reiterated Italy's commitment to renewable energies in Mediterranean countries by building "strong cooperative links to create the basis for an effective economy linked to the use of renewable energy sources".[946]

At the G8 Gleneagles Summit Italy accepted the responsibility to lead a Global Bioenergy Partnership to "promote collaboration between developed and developing countries, and propose solutions to the issues of trade barriers," market development, and the sharing of new research and technologies.[947] Italy's Global Bioenergy Partnership has not yet materialized since the July 2005 Summit. Nevertheless, in November 2005 Director General of the Italian Ministry of Environment and Territory Corrado Clini emphasized his support of the Global Bioenergy Partnership, the need to create markets for renewables, and the need to build international programs for the adaptation to climate change in developing countries.[948]

Analyst: Joanna Dafoe

5. Japan: +1

The government of Japan has taken several steps to comply with their G8 renewable energy commitments in both the domestic and international sphere. At Gleneagles, Japan publicized a policy document outlining their climate change initiatives and commitment to the Millennium Development Goals to diffuse energy-efficient and environment-friendly technologies to developing countries.[949] Japan pledged to continue its contribution to the International Energy Agency (IEA) "to set up international benchmark[s] for assessing sectoral energy-efficiency performance and to promote research in the related fields."[950]

Japan participated in numerous international conferences and meetings to increase the availability of clean energy technologies markets in both developed and developing countries. For instance, on 24 September 2005 Finiance Minister Sadakazu Tanigaki participated in a meeting at the World Bank to launch an Investment Framework for Clean Energy and Sustainable Development. This framework convenes, among others, "senior representatives from regional development banks … and technology companies to explore practical solutions for achieving a less carbon intensive and more climate resilient

[943] Gleneagles Plan of Action: Climate Change, Clean Energy, and Sustainable Development, 2005 G8 Gleneagles Summit, (Gleneagles), 7 July 2005. Date of Access: 4 January 2006. http://www.g8.gov.uk/Files/KFile/PostG8_Gleneagles_CCChangePlanofAction.pdf.
[944] Mediterranean Renewable Energy Programme, Ministry for the Environment and Territory, (Rome), 6 October 2005. Date of Access: 4 January 2006. http://www.pvmed.org/index.php?id=31.
[945] Mediterranean Renewable Energy Programme, Ministry for the Environment and Territory, (Rome), 6 October 2005. Date of Access: 13 January 2006. http://www.pvmed.org/index.php?id=6.
[946] Address by the Honourable Salvatore Cuffaro, 1st Photovoltaic Mediterranean Conference, (Catania), 5-6 October 2005. Date of Access: 19 January 2006. http://www.pvmed.org/fileadmin/documents/pdf/Cuffaro%20_EN.pdf.
[947] UK Presidency G8 Factsheet: Renewables, 2005 G8 Gleneagles Summit, (Gleneagles), 7 July 2005. Date of Access: 4 January 2006. http://www.fco.gov.uk/Files/kfile/5%20Renewables,0.doc.
[948] Energy Emission: The Challenge of Climate change, Embassy Magazine, (Ottawa), 23 November 2005. Date of Access: 19 January 2006. http://www.embassymag.ca/html/index.php?display=story&full_path=/2005/november/23/challenge/.
[949] Japan's Climate Change Initiative, The Ministry of Foreign Affairs of Japan, (Tokyo), July 2005. Date of Access: January 16 2006. http://www.mofa.go.jp/policy/environment/warm/cop/initiative.pdf.
[950] Japan's Climate Change Initiative, The Ministry of Foreign Affairs of Japan, (Tokyo), July 2005. Date of Access: January 16 2006. http://www.mofa.go.jp/policy/environment/warm/cop/initiative.pdf.

development path" for developing countries.[951] On 1 November 2005 Japanese representatives attended the first Ministerial meeting of the Dialogue on Climate Change, Clean Energy, and Sustainable Development in London. This meeting, explored the possibility to promote "wider access to cleaner energy technologies," prioritized areas for "cooperation between developed and developing countries," and acknowledged the need for "incentives [to encourage] private sector investment."[952] Japan also sent a delegation from 24 November to 9 December 2005 to the Montreal UN Climate Change Conference which adopted the Marrakech Accords stressing the importance of capacity building and "developing innovative technologies through public and private sector involvement."[953] Finally, on 12 January 2006 at the ASEAN Regional Forum in Sydney, Australia, Japan joined six other developed countries in launching the Asia-Pacific Partnership for Clean Development and Climate. This partnership aims to develop existing and emerging "cleaner, more efficient technologies and practices among the Partners through concrete and substantial cooperation".[954]

Furthermore, from 20 to 21 October 2005, Japan hosted the Fourth Informal Meeting on Further Actions Against Climate Change in Tokyo. Participants highlighted the significance of, and the need to improve the Clean Development Mechanism System as a means to encourage sustainable development through cleaner energy technologies.[955]

Environment Minister Yuriko Koike also announced a domestic policy, the Kyoto Protocol Target Achievement Plan, in September 2005 at the Preparatory Meeting of Ministers for the Eleventh Session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP11) and the First Session of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol (COP/MOP1) in Ottawa, Canada. This domestic policy includes the Team Minus 6% initiative which encourages "all Japanese people [to] tackle global warming" through a six-step action plan which, among other things, encourages the development of markets for clean energy technologies.[956]

Analyst: Katherine Kinley

6. Russia: +1

The Russian government fulfilled it G8 renewable energy commitments. Russian President Vladimir Putin assumed the G8 Presidency in 2006 and committed himself to the issue of renewable energy by identifying energy security as a one of three major focuses for the upcoming St. Petersburg summit.[957] At a Russian Security Council meeting in the Kremlin, President Putin stated that conserving energy, and searching for break-through technologies and environmentally friendly energy sources are necessities for promoting energy security.[958] The President also stated that Russia is drafting the relevant initiatives and proposals in preparation for G8 discussions with full intention of partaking in their implementation.[959]

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[951] Work on Investment Framework for Clean Energy and Sustainable Development Launched: Finance and Development Ministers Address Climate Change, (Washington), 24 September 2005. Date of Access: 18 January 2006. http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20660008~menuPK:34463~pagePK:34370~piPK:34424~theSitePK:4607,00.html.

[952] Chairman's Conclusions, Ministerial meeting of the Dialogue on Climate Change, Clean Energy and Sustainable Development, 10 Downing Street, (London), 1 November 2005. Date of Access: 18 January 2006. http://ff.org/centers/csspp/library/co2weekly/20051117/20051128_04.html.

[953] The Energy and Resources Institute, (New Delhi), February 2002. Date of Access: 16 January 2006. http://www.teriin.org/climate/cop7.htm.

[954] Charter of the Asia-Pacific Partnership on Clean Development and Climate, (Sydney), 12 January 2006. Date of Access: January 18 2006. http://www.dfat.gov.au/environment/climate/ap6/charter.html.

[955] Overview and Evaluation: The Fourth Informal Meeting on Further Actions Against Climate Change, The Ministry of Foreign Affairs of Japan, (Tokyo), 25 October 2005. Date of Access: 16 January 2006. http://www.mofa.go.jp/policy/environment/warm/cop/overview0510.html.

[956] Environment Ministry Promotes "Team Minus 6%" Global Warming Campaign, Japan for Sustainability, 10 August 2005. Date of Access: 16 January 2006. http://www.japanfs.org/db/database.cgi?cmd=dp&num=1069&dp=data_e.html.

[957] St. Petersburg Summit Dates, G8 Information Centre, (Toronto), 22 December 2005. Date of Access: January 2006. www.g8.utoronto.ca/whatsnew/2006dates051222.html.

[958] Russia Drafting Energy Security Proposals for G8 Summit – Putin, Agencia Internacional de Noticias, 24 December 2005. Date of Access: January 2006. http://www.noticias.info/asp/aspComunicados.asp?nid=131113.

[959] Russia Drafting Energy Security Proposals for G8 Summit – Putin, Agencia Internacional de Noticias, 24 December 2005. Date of Access: January 2006. http://www.noticias.info/asp/aspComunicados.asp?nid=131113.

Russia has also participated in several international meetings and conferences promoting the development of markets for clean energy technologies, their availability in developing countries, and for helping vulnerable communities adapt to the impact of climate change. For instance, on 24 September 2005 Russian representatives participated in a meeting at the World Bank to launch an Investment Framework for clean energy and sustainable development. This framework convenes, among others, "senior representatives from regional development banks … and technology companies to explore practical solutions for achieving a less carbon intensive and more climate resilient development path" for developing countries.[960] Russian representatives also attended the first Ministerial meeting of the Dialogue on Climate Change, Clean Energy, and Sustainable Development in London. This meeting explored the possibility of promoting "wider access to cleaner energy technologies and prioritizing areas for "cooperation between developed and developing countries." This ministerial also acknowledged the need for "incentives [to encourage] private sector investment".[961] Finally, Russia sent a delegation from 24 November to 9 December 2005 to the Montreal UN Climate Change Conference which adopted the Marrakesh Accords stressing the importance of capacity building and "developing innovative technologies through public and private sector involvement".[962] At the conference, Russia committed to a declaration encouraging signing parties "to consider issues related to the Arctic region['s]… vulnerability and adaptation to climate change."[963]

Analyst: Adam Sheikh and Jennifer Francis

7. United Kingdom: +1

The United Kingdom (UK) government initiated many projects on renewable energy to develop the market for clean energy technologies and has thus registered full compliance with its Gleneagles commitment on renewable energy. In July 2005, the Department of Trade and Industry, and the Department of Environment, Food, and Rural Affairs published the Second Annual Report on the Implementation of the Energy White Paper.[964] The report announced the implementation of the Renewables Obligation Order, a new goal to achieve 15.4% of energy within the UK from renewable sources by the year 2015/16.[965] As a result of this increased target for renewable energy, the Department of Trade and Industry anticipates increased investor confidence in renewable energy and the development of markets for clean energy technologies.[966] The report also published a list of funded renewable energy projects including: £42 million toward a large-scale wave and tidal farm, a 'clear skies' capital grants scheme for micro-hydro powered households, and £500 million toward Carbon Abatement Technologies.[967] The UK also

[960] Work on Investment Framework for Clean Energy and Sustainable Development Launched: Finance and Development Ministers Address Climate Change, (Washington), 24 September 2005. Date of Access: 18 January 2006. http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20660008~menuPK:34463~pagePK:34370~piPK:34424~theSitePK:4607,00.html.

[961] Chairman's Conclusions, Ministerial meeting of the Dialogue on Climate Change, Clean Energy and Sustainable Development, 10 Downing Street, (London), 1 November 2005. Date of Access: 18 January 2006. . http://ff.org/centers/csspp/library/co2weekly/20051117/20051128_04.html.

[962] The Energy and Resources Institute, (New Delhi), February 2002. Date of Access: 16 January 2006. http://www.teriin.org/climate/cop7.htm.

[963] Statement on Climate Change in the Arctic Region, United Nations Climate Change Conference COP 11 and COP/MOP1, (Montreal), 9 December 2005. Date of Access: 11 January 2006. http://www.ec.gc.ca/press/2005/051209_s_e.htm.

[964] Creating a Low Carbon Economy: Second Annual Report on the Implementation of the Energy White Paper, Department of Trade and Industry, (London), July 2005. Date of Access: 3 January 2006. http://www.dti.gov.uk/energy/sepn/secondannualreport.pdf.

[965] Planning Policy Statement 22: Renewable Energy, Office of the Deputy Prime Minister, (London) 2004. Date of Access: 18 December 2005. http://www.odpm.gov.uk/index.asp?id=1143914#TopOfPage.

[966] Renewable Energy, Department of Trade and Industry, (London), April 2004. Date of Access: 18 December 2005. http://www.dti.gov.uk/renewables/business_pdfs/investingbrochure.pdf.

[967] Creating a Low Carbon Economy: Second Annual Report on the Implementation of the Energy White Paper, Department of Trade and Industry, (London), July 2005. Date of Access: 3 January 2006. http://www.dti.gov.uk/energy/sepn/secondannualreport.pdf.

continues to be the largest donor to the Renewable Energy and Energy Efficiency Partnership (REEEP), an NGO focusing on policy-related elements of renewable energy promotion.[968]

At the 2006 Montreal UN Climate Change Conference, the UK adopted two decisions regarding the availability of clean energy technologies in developing countries.[969] The first, entitled *Further Guidance Relating to the Clean Development Mechanisms* (CDM), promotes the use of renewable biomass energy in developing countries as a means for Annex I countries to meet their Kyoto Protocol targets.[970] The second decision, entitled *Guidance Relating to the CDM*, will have the executive board of the UNFCCC agree on a definition of renewable energy sources in order to ensure a more consistent and systematic assessment of renewable energies in developing countries.[971] The UK also committed to a declaration to encourage signing parties "to consider issues related to the Arctic region['s]… vulnerability and adaptation to climate change".[972]

Analyst: Joanna Dafoe

8. United States: +1

The United States government fully complied with their G8 renewable energy commitments. By enacting national legislation and funding several long-term projects, the US federal government committed itself to develop domestic markets for clean energy technologies. For instance, on 10 August 2005, the US enacted the Transportation Equity Act (H.R. 3, H.Rept. 109-203) which "has provisions for clean (renewable) fuels, energy conservation, and advanced vehicle technologies".[973] This legislation supports the 2005 Energy Policy Act which requires that the US government "obtain 7.5 percent of its electrical power from renewable sources of energy by 2013".[974] In order to facilitate this program, the US Department of Energy announced that it "will provide federal energy managers, natural gas utilities, and manufacturers with training [and] instruction on commercially available energy efficiency and renewable energy technologies."[975] Furthermore, on 15 July 2005 the US Department of Agriculture announced a "US$11.4 million to guarantee loans to farmers, ranchers, and small rural businesses for renewable energy and energy efficiency projects."[976] This was followed by another commitment on 9 January 2006 to "provide more than US$19 million in grants to support renewable energy projects."[977] Many of the US' national programs parallel their State commitments to develop markets for clean energy technologies

[968] REEEP Disburses €1 million for Global Clean Energy Projects, Sustainable Development International, 10 May 2005. Date of Access: 19 January 2006. http://www.sustdev.org/index.php?option=com_content&task=view&id=513&Itemid=36.
[969] Decisions Adopted by the COP/MOP1, United Nations Framework Convention on Climate Change. Date of Access: 18 January 2006 http://unfccc.int/meetings/cop_11/items/3394.php.
[970] Further Guidance Relating to the Clean Development Mechanism, United Nations Framework Convention on Climate Change, (Montreal), 9 December 2005. Date of Access: 19 January 2006.
http://unfccc.int/files/meetings/cop_11/application/pdf/cmp1_24_4_further_guidance_to_the_cdm_eb_cmp_4.pdf.
[971] Guidance Relating to the Clean Development Mechanism, United Nations Framework Convention on Climate Change, (Montreal), 9 December 2005. Date of Access: 19 January 2006.
http://unfccc.int/files/meetings/cop_11/application/pdf/cmp1_21_guidance_relating_to_the_cdm.pdf.
[972] Statement on Climate Change in the Arctic Region, United Nations Climate Change Conference
COP 11 and COP/MOP1, (Montreal), 9 December 2005. Date of Access: 11 January 2006.
http://www.ec.gc.ca/press/2005/051209_s_e.htm.
[973] Report for Congress: Energy Efficiency and Renewable Energy Legislation in the 109th Congress, Congressional Research Service at the Library of Congress, (Washington), 18 August 2005. Date of Access: 11 January 2006.
http://fpc.state.gov/documents/organization/57959.pdf.
[974] U.S. Government Exceeds its Goal for Renewable Energy Use, US Department of Energy, (Washington), 3 November 2005. Date of Access: 11 January 2006. http://www.eere.energy.gov/femp/newsevents/detail.cfm/news_id=9508.
[975] Energy Department Parters with Industry to Improve Efficienty and Reduce Energy Costs, US Department of Energy, (Washington), 10 November 2005. Date of Access: 11 January 2006.
http://www.eere.energy.gov/femp/newsevents/detail.cfm/news_id=9522.
[976] USDA Guarantees up to $200 Million in Clean Energy Loans, US Department of Energy, (Washington), 20 July 2005. Date of Access: 11 January 2006.
http://www.eere.energy.gov/femp/newsevents/detail.cfm/news_id=9210.
[977] USDA Offers $19 Million for Business, Emphasizing Renewals, US Department of Energy, (Washington), 18 January 2006. Date of Access: 19 January 2006.
http://www.eere.energy.gov/femp/newsevents/detail.cfm/news_id=9667.

including Massachusetts, Connecticut,[978] and Texas which enacted legislation to double its renewable energy requirement.[979]

The US government also demonstrated its commitment to increase the availability of clean energy technologies in developing countries and help vulnerable communities adapt to climate change. At the Beijing International Renewable Energy Conference on 7 November 2005, the US reiterated its commitment to reduce the price of renewable energy technologies to make them cost-competitive" and assure their widest possible use.[980] To fulfil this commitment the US, "in partnership with UNEP and others…developed a 'geospatial toolkit' that helps users identify renewable energy technologies appropriate for their situation."[981]

From 24 November to 9 December 2005 the US sent a delegation to the Montreal UN Climate Change Conference. The conference adopted the Marrakesh Accords stressing the importance of capacity building and "developing innovative technologies through public and private sector involvement."[982] In Montreal, Head US Delegate Paula Dobriansky highlighted the US' "fifteen bilateral partnerships with both developed and developing countries," and their collaborative work to explore renewables with China.[983] The US also committed to a statement on Climate Change in the Arctic Region which encouraged signing parties "to consider issues related to the Arctic region['s]… vulnerability and adaptation to climate change".[984]

Analyst: Adam Sheikh

9. European Union: +1

The European Union (EU) complied with Gleneagles' renewable energy commitments. The EU pursued the development of markets for clean energy technologies. The Energy Community Treaty established an integrated energy market within the EU, extending the application of the acquis communautaire – including energy, environmental, and renewables aspects of the legislation decided at the EU level – across thirty-four European nations.[985] In addition, members of the European Parliament called for incentives for renewable energy production as well as "fair and free access to the grid and non-discriminatory tariffs."[986] The Biomass Action Plan, announced by the European Commission on 7

[978] Massachusetts and Connecticut Offer Renewable Energy Funding, US Department of Energy, (Washington), 14 December 2005. Date of Access: 11 January 2006. http://www.eere.energy.gov/femp/newsevents/detail.cfm/news_id=9592.
[979] Texas More than Doubles its Renewable Energy Requirement, US Department of Energy, (Washington), 3 August 2005. Date of Access: 11 January 2006. http://www.eere.energy.gov/femp/newsevents/detail.cfm/news_id=9249.
[980] Address by Jonathan Margolis, Special Representative for Sustainable Development at the Beijing International Renewable Energy Conference, US Department of State, (Washington), 7 November 2005. Date of Access: 11 January 2005. http://www.state.gov/g/oes/rls/rm/56785.htm.
[981] Address by Jonathan Margolis, Special Representative for Sustainable Development at the Beijing International Renewable Energy Conference, US Department of State, (Washington), 7 November 2005. Date of Access: 11 January 2005. http://www.state.gov/g/oes/rls/rm/56785.htm.
[982] The Energy and Resources Institute, (New Delhi), February 2002. Date of Access: 16 January 2006. http://www.teriin.org/climate/cop7.htm.
[983] Address by Dr. Paula Dobriansky, Under Secretary for Democracy and Global Affairs and Head of U.S. Delegation to COP 11 at the Eleventh Session of the Conference of the Parties to the UN Framework Convention on Climate Change in Montreal, US Department of State, (Washington), 7 December 2005. Date of Access: 11 January 2006. http://www.state.gov/g/rls/rm/2005/57830.htm
[984] Statement on Climate Change in the Arctic Region, United Nations Climate Change Conference COP 11 and COP/MOP1, (Montreal), 9 December 2005. Date of Access: 11 January 2006. http://www.ec.gc.ca/press/2005/051209_s_e.htm.
[985] An integrated market for electricity and gas across 34 European Countries, European Commission, (Brussels), 25 October 2005. Date of Access: 30 December, 2005. http://www.europa.eu.int/rapid/pressReleasesAction.do?reference=MEMO/05/397&format=HTML&aged=0&language=EN&guiLanguage=en.
[986] MEPs ask for mandatory EU target for renewable energies, European Parliament Press Service, (Brussels), 29 September 2005. Date of Access: 2 January 2006. http://www.europarl.eu.int/news/expert/infopress_page/051-674-272-9-39-909-20050922IPR00573-29-09-2005-2005--false/default_en.htm.

December 2005, sets out to increase the production of biomass energy by "creating market-based incentives to its use and removing barriers to the development of the market".[987]

The EU also promoted international cooperation on renewable energy technologies. The European Parliament adopted a resolution stating that the use of alternative energy sources must be tackled with both high consumers and with developing countries. The EU will achieve this goal by integrating a sustainable energy provision into its development cooperation policy.[988] Energy Commissioner Andris Piebalgs reaffirmed the EU's commitment to clean energy technologies arguing that the EU "should work actively to build global alliances to explore more viable use of renewable energy sources, especially in the developing world."[989] This was reinforced by a Joint EU Development Policy Statement released on 22 November 2005 stating that an "adaptation to the negative effects of climate change will be central in the community's support to [Less Developed Countries (LDCs)] and small island development states."[990] The EU also created bilateral strategic partnerships with India and China for further research and development of new energy technologies "which will improve cooperation on climate change, including clean energy and energy efficiency, and will promote sustainable development."[991]

The European Commission also contributed to the organization of the Beijing International Renewable Energy Conference, held from 7 to 8 November 2005.[992] Commissioner Stavros Dimas stated that the conference was "a clear signal of the Commission's interest to work with China and other important partners in furthering global environmental issues such as renewable energy."[993] The European Commission is also a signatory to the Beijing Declaration on Renewable Energy for Sustainable Development, acknowledging the need for further international cooperation to establish markets for renewable energy, and create capacity for further research and development of clean energy technologies.[994]

Analyst: Matthew Chomyn

[987] Communication from the European Commission: Biomass Action Plan, (Brussels), 7 December 2005. Date of Access: 2 January 2005. http://europa.eu.int/comm/energy/res/biomass_action_plan/doc/2005_12_07_comm_biomass_action_plan_en.pdf.
[988] Time for action on energy efficiency and supply diversity, European Parliament Press Service, (Brussels), 4 October 2005. Date of Access: 2 January 2006. http://www.europarl.eu.int/news/expert/infopress_page/051-671-272-9-39-909-20050921IPR00564-29-09-2005-2005--true/default_en.htm.
[989] Address by EU Energy Commissioner Andris Piebalgs at the European Parliament, (Strasbourg), 28 September 2005. Date of Access: 3 January 2006.
http://www.europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/05/558&format=HTML&aged=1&language=EN&guiLanguage=en.
[990] Joint EU Development Policy Statement, (Brussels), 22 November 2005. Date of Access: 2 January 2006.
http://ue.eu.int/ueDocs/cms_Data/docs/pressdata/en/gena/87092.pdf.
[991] 2695th Transport, Telecommunications and Energy Council Meeting, European Council, (Brussels), 1/5 December 2005. Date of Access: December 29, 2005. http://ue.eu.int/ueDocs/cms_Data/docs/pressdata/en/trans/87389.pdf.
[992] Keynote Speech by Commissioner Stavros Dimas at Beijing International Renewable Energy Conference, (Beijing), 7 November 2005. Date of Access: 30 December 2005. http://www.birec2005.cn/pdf/%BF%AA%C4%BB%CA%BD%200945-1000%20Dimas%D3%A2%CE%C4.pdf.
[993] Keynote Speech by Commissioner Stavros Dimas at Beijing International Renewable Energy Conference, (Beijing), 7 November 2005. Date of Access: 30 December 2005. http://www.birec2005.cn/pdf/%BF%AA%C4%BB%CA%BD%200945-1000%20Dimas%D3%A2%CE%C4.pdf.
[994] Beijing Declaration on Renewable Energy for Sustainable Development, (Beijing), 8 November 2005. Date of Access: 3 January 2006. http://www.birec2005.cn/news_show.asp?ClassId=16&id=35.