7. Renewable Energy [156]

Commitment

“We will facilitate development of local energy resources, including those based on core
generation technologies and on renewable energy, such as hydropower, wind power,
geothermal power, biomass, and the effective use of solar energy, to contribute to poverty
reduction and long-term energy sustainability in developing countries.”

Global Energy Security

Background

In the context of energy security, many G8 members have seen renewable energy technologies as a
means of opening up new sources of energy supply and tackling climate change and development,
particularly in the context of rapidly-industrializing developing nations whose per-capita energy use is
increasing quickly. This commitment parallels a similar commitment made at the 2005 Gleneagles
Summit to support renewable energy technologies for development.

Local renewable energy technologies are one of the key opportunities for both development and
carbon emissions mitigation efforts and G8 countries have shown some willingness to engage in both
bilateral and multilateral efforts to address these issues. A number of G8 members have participated
via the United National Framework Convention on Climate Change (UNFCCC) and associated Clean
Development Mechanism process to undertake or otherwise support internationally-recognized
projects. G8 members who are also members of NATO, APEC and other international fora have also
acted multilaterally to express support for expansion of renewable energy technologies in developing
countries.

However, at the 3-4 October 2006 Ministerial Meeting on the Gleneagles Dialogue on Climate Change,
Clean Energy, and Sustainable Development in Monterrey, Mexico, G8 members failed to concretely
re-iterate this commitment. The chair’s conclusions recognized the threat of climate change, the
importance of renewable energy resources and technologies and re-iterated the importance of
sustainable development for developing nations. Unfortunately, the communiqué did not explicitly
speak to the issue of renewable energy technologies in developing countries.260

Team Leader: Brian Kolenda

Assessment

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* Note: The Toronto team score for Russia is 0.

260 Chairs’ Conclusions from Ministerial Meeting on Gleneagles Dialogue on Climate Change, Clean Energy, and Sustainable
Canada: +1

Canada has complied with its G8 renewable energy commitment to renewable energy in developing nations. Notably, it participated in several meetings, which discussed the growth and application of renewable energy technologies in the developing world and supported several energy development projects since St. Petersburg.

Since the St. Petersburg Summit, the Clean Development Mechanism (CDM) Executive Board of the UNFCCC has approved four Canadian-supported energy development projects. Canada has authorized the participation of a number of Canadian firms in these projects, which include biomass energy plants in Malaysia. Importantly, the government of Canada is a direct participant in one project in particular, the El Canadá hydroelectric project, in Guatemala, which was approved in December 2006. Canada has supported the development of the project since 2004 via its membership on the board of the World Bank’s Prototype Carbon Fund, which it also funds.

At a NATO Parliamentary Assembly meeting on 17 November 2006 in Quebec, Canada and other NATO nations passed a Resolution on Improving Global Energy Security. Delegates agreed to "redouble support for research, development and investment in renewable energy resources" and to "work with developing country governments, business leaders and civil societies to advance energy efficiency ... while recognising that increased energy use in these regions is essential to their development".

Canada attended the November 2006 Asia-Pacific Economic Cooperation (APEC) Forum in Hanoi, Vietnam. Noting the rapidly increasing energy demands and concerns for environment, APEC leaders urged all member economies, including developing economies, to pursue programs to attract investments in the energy sector, cross-border energy trade, "development of new and renewable energy sources." Canada, through its membership in the APEC Energy Working Group (EWG), authorized the expenditure of USD50,000 in fall 2006 to launch the Local Banks Training Program for Financing Energy Efficiency and Renewable Energy Projects. The program, set to begin in January 2007, will develop understanding of renewable energy technologies among financial institutions in Mexico and other developing APEC economies.

Analyst: Sina Hariri

France: 0

France has made some progress towards complying with its St. Petersburg commitment to promote renewable energy in developing countries. Unfortunately, it has only announced funding for one such project since St. Petersburg.

France has notably undertaken a Kyoto Protocol Clean Development Mechanism project to comply with this commitment. On 31 August 2006, France’s Agence Français de Développement (AFD) concluded an agreement with the city of Durban, South Africa, to capture methane emissions from a rubbish dump in order to produce electricity. The project is one of the first that will enable South Africa to earn carbon credits through the CDM.

At a NATO Parliamentary Assembly meeting on 17 November 2006, France and other NATO nations passed a Resolution on Improving Global Energy Security. Delegates agreed to "redouble support for research, development and investment in renewable energy resources" and to "work with developing country governments, business leaders and civil societies to advance energy efficiency ... while recognising that increased energy use in these regions is essential to their development".

Analyst: Katherine Kanczuga

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262 Project 0606 : El Canadá Hydroelectric Project, UNFCCC Secretariat, (Bonn), 2 December 2006. Date of Access: 22 January 2006. cdm.unfccc.int/Projects/registered.html.
Germany: +1

Germany has fully complied with its St. Petersburg commitment to renewable energy in developing countries. Through oral commitments and verbal support as well as funding for both direct projects and third-party organizations focusing on renewable energy, Germany has made renewable energy a top international development priority.

Germany has provided funding for a number of multilateral and bilateral developing country renewable energy projects. On 17 November 2006, Stavros Dimas, the European Commission’s representative at the COP12 meetings in Nairobi, Kenya, announced that the “Government of Germany has agreed to contribute an additional EUR24 million” to the EU’s Global Energy Efficiency and Renewable Energy Fund” which will act to fund renewable energy projects in developing countries, particularly in Africa.268 At a bilateral economic meeting between Germany and Nepal on 28 and 29 November 2006, the German government committed special priority to projects relating to health, family planning, and promotion of local self-governance and development of renewable energy.269 On 6 October 2006 German Minister for the Environment, Nature Conservation and Nuclear Safety, Sigmar Gabriel, and Mehmet Güler, Turkish Minister of Energy and Natural Resources, jointly announced a strategic partnership for the increased use of renewables in Turkey. While no specific funding was announced, the partnership will focus on the development of biomass, wind, solar and geothermal energy via political, trade, industrial and scientific cooperation.270

On 19 October 2006 Gabriel also highlighted priority areas for the German Environment Ministry, as Germany takes over the presidency of both the G8 and the European Union in January 2007. In addition to focusing on ecological industrial policy, climate protection, energy efficiency, biodiversity and sustainable means of transport, his ministry will make renewable energy development a priority.

At a NATO Parliamentary Assembly meeting on 17 November 2006 Germany and other NATO nations passed a Resolution on Improving Global Energy Security. Delegates agreed to “redouble support for research, development and investment in renewable energy resources” and to “work with developing country governments, business leaders and civil societies to advance energy efficiency … while recognising that increased energy use in these regions is essential to their development”.271

Analyst: Fritz Bartel and Yuriy Zaitsev

Italy: 0

Italy has taken some steps to comply with its St. Petersburg commitment to develop renewable energy in developing countries, including via significant multilateral action. It has not yet, however, undertaken the funding of any specific renewable energy projects in developing countries.

Italy has been a key supporter of international efforts to promote renewable energy in developing countries. Italy, along with all G8 members, supported the May 2006 creation of the Global Bioenergy Partnership (GBEP) at the 14th Session of the UN Commission for Sustainable Development. Italy was a key proponent of this initiative,272 which aims “to promote bioenergy and to encourage the production, marketing and use of “green” fuels, with particular focus on developing countries.” Italy was selected as the first chair of the Secretariat of the GBEP, which was launched the week of 25 September 2006 at the headquarters of the UN Food and Agriculture Organization in Rome, Italy, and which is supported by the Italian Ministry for the Environment, Land and Sea.273

At a NATO Parliamentary Assembly meeting on 17 November 2006 Italy and other NATO nations passed a Resolution on Improving Global Energy Security. Delegates agreed to “redouble support for research, development and investment in renewable energy resources” and to “work with developing


country governments, business leaders and civil societies to advance energy efficiency ... while recognising that increased energy use in these regions is essential to their development.\textsuperscript{274}

Analyst: Giovanni Bruno

**Japan: +1**

Japan has taken a significant number of steps to comply with its G8 renewable energy commitments. Japan has participated multilateral and bilateral meetings which promoted and discussed the development and application of renewable energy technologies in developed and developing countries, particularly in Asia.

Such participation included the dialogue between Japanese and Chinese delegations held in Tokyo on 30 August 2006, to discuss climate change. Japan agreed to further cooperate with China on Clean Development Mechanism (CDM) projects including renewable energy. Both countries emphasized the importance of continuing talks and agreed to hold a further meeting in China in 2007 to discuss specific details of any renewable energy projects.\textsuperscript{275}

Japan’s New Energy and Industrial Technology Development Organization (NEDO) also co-organized the “International Workshop on Renewable Energy/Energy Efficiency and the Clean Development Mechanism” with the Indonesian Ministry of the Environment on 29 August 2006. At the conference, Ken Okaniwa, representative of the Embassy of Japan stressed the importance of renewable energies and Indonesia’s “considerable potential with regard to energy conservation and new energy”.\textsuperscript{276}

On 9 September 2006, Prime Minister Koizumi signed a joint statement with the government of the Philippines, agreeing to technical cooperation between both nations to utilize sustainable energy for rural electrification, and encouraged the use of renewable energies as alternative fuels for transport\textsuperscript{277}. Japan took further initiative on 10 September 2006 at the Asia-Europe Meeting (ASEM 6) in Helsinki, where Prime Minister Koizumi encouraged ASEM developed nations to provide the financial and technical assistance to ASEM developing countries in order to “scale up” their use of new and renewable energy sources.\textsuperscript{278}

Prime Minister Shinzo Abe signed a joint statement on 15 December 2006 with India, forming a strategic partnership recognizing the importance of securing the energy needs of both countries and encouraging greater cooperation in the energy sector, including on energy efficiency and renewable energy.\textsuperscript{279}

Japan attended the November 2006 Asia-Pacific Economic Cooperation (APEC) Forum in Hanoi, Vietnam. Noting the rapidly increasing energy demands and concerns for environment, APEC leaders urged all member economies, including developing economies, to pursue programs to attract investments in the energy sector, cross-border energy trade, “development of new and renewable energy sources.”\textsuperscript{280} Japan, through its membership in the APEC Energy Working Group (EWG), authorized the expenditure of USD50,000 in fall 2006 to launch the Local Banks Training Program for Financing Energy Efficiency and Renewable Energy Projects. The program, set to begin in January 2007, will develop understanding of renewable energy technologies among financial institutions in Mexico and other developing APEC economies.\textsuperscript{281}

Analyst: Sina Hariri


Russia: +1

Russia has complied with its St. Petersburg commitment to promote renewable energy in developing nations. Notably, Russia has acted to enhance analysis of the energy poverty problem in the developing world.

On 3 November 2006, the Russian Ministry of Industry and Energy and UNESCO announced the creation a joint International Center for Sustainable Energy Development to deal with various energy security issues, including that of energy poverty in developing countries.  

The goal of this initiative is to foster exchange of transnational experiences in the sphere of energy analysis, informational exchange and identifying optimal ways of development of energy potential of different countries, primarily that of Russia, in order to provide effective policies on sustainable world energy development. At the Center presentation, Russian Minister of Industry and Energy Victor Khristenko said that "leading world countries" needed to adopt common measures to deal with "insufficient access of people from the poorest countries to modern energy sources". His statement, however, did not deal with the issue of renewable energy in particular.


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Analysts: Natalia Churkina and Katherine Kanczuga

United Kingdom: +1

Since the United Kingdom devised a climate change strategy at the 2005 G8 summit in Gleneagles, Scotland, the UK has remained the major driving force in advancing renewable energy and has fully complied with its St. Petersburg commitment in this area.

The UK is a leading investor country in the Clean Development Mechanism (CDM) and has supported a significant number of CDM renewable energy projects in developing countries. On 15 November 2006, UK Environment Secretary, David Miliband highlighted his government’s commitment that the “Kyoto Protocol’s Clean Development Mechanism played an important role in helping to spread low carbon solutions.” He goes on to say that the UK “will support CDM projects as a vital symbol of global commitment”. These sentiments have been backed up by hard facts; the UK is “ranked first in the world in terms of approved CDM projects with 112 approved and authorised projects.” A review of all projects registered by the CDM Executive Board indicates that of the 54 projects approved since

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the St. Petersburg Summit where the UK has supported British firms’ participation, 44 have featured the generation of renewable energy and/or electricity cogeneration. These projects include, among other initiatives, 13 methane recovery and electricity generation projects in Mexico, 12 such projects in India, and a total of nearly 140 MW of wind power capacity in China. It must be noted, however, that all of these projects are being privately funded and UK government involvement is limited to authorization under the Kyoto Protocol CDM mechanism.

In addition, at a NATO Parliamentary Assembly meeting on 17 November 2006 the United Kingdom and other NATO nations passed a Resolution on Improving Global Energy Security. Delegates agreed to “redouble support for research, development and investment in renewable energy resources” and to “work with developing country governments, business leaders and civil societies to advance energy efficiency ... while recognising that increased energy use in these regions is essential to their development.”

Analyst: Giovanni Bruno

United States: 0

Since the 2006 St. Petersburg G8 summit, the United States has taken some steps toward the development and support of local energy in developing countries. Through verbal support and participation in international organizations, the United States has shown support for the energy development goals of the summit and has authorized one relevant multilateral project but has not directly contributed to any energy development initiatives in developing countries.

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Analyst: Fritz Bartel

European Union: +1

The European Union has registered a high level of compliance with its St. Petersburg Renewable Energy commitment. In addition to its leaders speaking out about the importance of renewable energy projects for development, the EU has undertaken a number of concrete projects aimed at expanding renewable energy initiatives in developing countries.

At the 2006 EU Energy Conference in November 2006, EU Commission President José Manuel Barroso spoke about the importance of developing country energy projects for the EU. He highlighted a meeting he had had with African leaders in Brussels and said that the EU “must work more closely with Sub-Saharan Africa. Several African countries have substantial energy resources, and yet their

populations have the lowest rate of access to energy services in the world, hampering all aspects of development.\textsuperscript{296} At the same conference, EU Energy Commissioner Andris Piebalgs highlighted several specific EU renewable energy efforts in African countries. The Africa-Europe Partnership on Infrastructure, which was created in December 2005, is set to "develop cross-border and regional energy infrastructure" in African countries.\textsuperscript{297} According to Piebalgs, "the first batch of projects is ready for approval by the end of" 2006.\textsuperscript{298} The EU had completed in November 2006 a call for proposals for its Africa-Caribbean-Pacific-EU Energy Facility program, which "focuses on improving access to energy", and projects are expected to begin in 2007. Approved in 2004, the program is "a EUR250 million Energy Facility to increase access to modern energy services for people in Africa, the Caribbean and the Pacific".\textsuperscript{299} The COOPENER programme was created in 2004 and "is an initiative aiming at promoting renewable energy sources and energy efficiency in developing countries, as well as sustainable energy services for poverty alleviation".\textsuperscript{300} Funding for projects has been provided through 2008 in many cases, but in December 2006 the European Commission earmarked funding of EUR730 million for the Intelligent Energy Europe initiative, which focuses on research into renewable technologies and of which the COOPENER programme is a part, for the 2007-2013 period.\textsuperscript{301}

On 10 October 2006, the European Commission proposed a project to create a "global risk capital fund to mobilise private investment in energy efficiency and renewable energy projects in developing countries and economies in transition."\textsuperscript{302} The European Union would provide EUR80 million in funding for the Global Energy Efficiency and Renewable Energy Fund (GEEREF) over the next four years with a further EUR20 million being provided by "other public and private sources". The Commission projects that the fund would provide financing for projects of a total value of EUR1 billion.

EU leaders have also re-iterated their commitment to renewable energy in developing nations in multilateral fora. On 17 November 2006, Stavros Dimas, the European Commission’s representative at the 2006 UN Climate Change Conference in Nairobi, Kenya, remarked that the EU is "fully aware of the need to increase access to affordable, secure and sustainable energy in developing countries, particularly in Africa... The Global Energy Efficiency and Renewable Energy Fund, or GEEREF, recently launched by the European Commission is a very concrete example of how to make capital and technology transfer work in practice."\textsuperscript{303}

Analyst: Brian Kolenda

\textsuperscript{297} ec.europa.eu/comm/external_relations/energy/energy_conference_2006/final_brochure.pdf.
\textsuperscript{298} ec.europa.eu/development/body/theme/energy/initiative/africa-europe-partnership-infrastructure.htm.
\textsuperscript{300} ec.europa.eu/comm/external_relations/energy/energy_conference_2006/final_brochure.pdf.
\textsuperscript{301} europa.eu/scadplus/leg/en/lvb/r12532.htm
\textsuperscript{304} ec.europa.eu/energy/intelligent/index_en.html
\textsuperscript{305} Commission proposes €100 million global risk capital fund for developing countries to boost energy efficiency and renewables, European Commission, (Brussels), 6 October 2006. Date of Access: 5 January 2006.
\textsuperscript{306} europa.eu/rapid/pressReleasesAction.do?reference=IP/06/1329&format=HTML&aged=0&language=EN&guiLanguage=en
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