

Energy

Commitment

“We recognized the need for balanced energy policies, which increase energy supplies and encourage more efficient energy use and conservation, including through new technologies.”

Chair’s Summary

Background

In the face of a growing realization over the dwindling supplies of conventional energy sources (in particular petro-chemical) and the damaging effects of climate change, G8 member states have committed themselves to developing and implementing energy policies that focus on innovation and sustainability. Particularly relevant is the adoption of renewable energy sources and technologies. These commitments dovetail with commitments of all G8 member-states, with the exception of the US, who have ratified the Kyoto Protocol on Climate Change. The Protocol’s limits on emission outputs become legally binding on members on 16 February 2005 following Russia’s ratification last November. More sustainable and renewable forms of energy will be a key concern next July at the Gleneagles G8 Summit in Scotland where climate change (along with Africa) will be the main focus of the agenda.

Assessment

Score	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		0	
European Union			1
Overall: 0.89			

Individual Country Compliance Breakdown

1. Canada: +1

Canada has complied with its G8 energy commitments. Canada has actively worked to sustain existing initiatives, maintaining involvement in the Generation IV International Forum (GIF) concerning nuclear energy, and clearing the way for new investment. The Canadian Ministry of Natural Resources is responsible for increasing and improving energy supply in Canada through public policy and the policy of crown corporations such as the Atomic Energy corporation.

The publicly funded corporation Atomic Energy Canada Limited (AECL) recommended in a publication on the 20 September, 2004 that permits and approvals for refurbishing old nuclear plants and building new nuclear plants would be essential by late 2004 in order to meet critical demand.²⁶⁵ Canada's phasing out of coal fueled energy by 2007²⁶⁶ is also dependent upon the success of refurbishment. In their "Corporate Plan Summary: 2004-2005 to 2008-2009," the AECL reaffirms its plans to continue development of the Advanced CANDU Reactor (ACR) whose simplified design should decrease costs of construction and increase efficiency. Moreover, the ACR's new technology is competitive in other applications such as desalination, hydrogen, and steam heat for oil sands application.²⁶⁷

Canada also continues to work with other countries under the auspices of Natural Resources Canada (NRCan), as demonstrated by its participation with nine other countries in the GIF since January of 2000. The GIF focuses on non-competitive aspects of nuclear power, such as providing a forum for training future nuclear scientists and engineers, looking at waste management techniques, and brainstorming future models.²⁶⁸

In an effort to encourage more efficient energy use, NRCan is advocating and publishing information on fuel efficiency and is trying to engage Canadians in the 1-Tonne challenge, a challenge designed to reduce personal energy use.²⁶⁹

2. France: +1

France has complied with its G8 energy commitments. French compliance can be seen in French budget decisions to increase spending on conservation of energy, the development of new technology, France's participation in the International Nuclear Energy Initiative (I-NERI) and Generation IV International Forum (GIF), and recent policy decisions that satisfy increasing energy demands with increasing energy supply.

In the October 2004 Budget presented to the National Assembly of France, French financing for the Agence de l'Environnement et de la Maîtrise de l'Energie (ADEME) was seen to have increased to 101.8 million euros by the end of June 2004. ADEME financed projects on conservation of energy (24.2 million) and spent most of its money on research and development of renewable resources (64.9 million in 2004).²⁷⁰

²⁶⁵ Torgerson, David F. "Next Steps for Meeting the Power Demand in Canada." CERT Energy Conference. Atomic Energy of Canada Limited. 20 September 2004. Consulted: 3 January 2005. <www.aecl.ca/images/up-DFT-Brussels.pdf> p2

²⁶⁶ Ibid, p7

²⁶⁷ "Corporate Plan Summary: 2004-2005 to 2008-2009" Summary of Information. Atomic Energy of Canada Limited. January 2004. Consulted: 2 January, 2005. <www.aecl.ca/images/up-04-05_CP_Summary.pdf> p16

²⁶⁸ Ibid, p18

²⁶⁹ NRCan. November 2004. Consulted: January 7, 2005. <www.nrcan-nrcan.gc.ca/media/newsreleases/2004/200466_e.htm>

²⁷⁰ "Annexe No17: Economie, Finances et Industrie" *Loi de Finance pour 2005*. Assemblée Nationale. 13 October, 2004. Consulted: 7 January, 2005. <www.assemblee-nationale.fr/12/budget/plf2005/b1863-17.asp#P1206_69305> p34

France kept stable the spending for the Commissariat à l’Energie Atomique (CEA) which is responsible for technological developments in the nuclear field.²⁷¹ France also maintained its participation in the GIF’s research and development commitments.²⁷² In 2004, 11 new French initiatives were begun in conjunction with I-NERI and coordinated by CEA. I-NERI’s purpose is to address technical and scientific barriers to the current use of nuclear power, and fund research of next-generation energy systems.²⁷³ Nuclear energy is important for the organization Electricité de France (EDF), as nuclear energy provides 86% percent of its power in France.

EDF’s decision in late October 2004 to construct a European Pressurized Reactor, due to be completed in 2012, should also increase French energy supplies.²⁷⁴ EDF also advocates efficient energy use in buildings and in everyday life on its website.²⁷⁵

3. Germany: +1

Germany has demonstrated continual evidence of full compliance with their summit energy commitments. The German renewable energy industry’s workforce has continued to expand. Initial figures indicate that the German renewable energy job sector will witness continued growth. German manufacturers and distributors of solar energy equipment estimated double their output in 2004.²⁷⁶

Germany continues its lead as the world’s largest user of wind power.²⁷⁷ During the first week of November 2004, at the Third World Wind Energy Conference and Exhibition in Peking China, German Environment Minister Juergen Trittin and lawmaker Hermann Scheer shared the World Prize for Wind Energy “for their groundbreaking efforts to promote renewable energy sources in Germany.”²⁷⁸

Germany also hosted the International Renewable Energies Conference, held June 1-4 2004 in Bonn. This conference was hailed an international success,²⁷⁹ and produced the “Renewable

²⁷¹ Ibid, p27

²⁷² Ibid, p36

²⁷³ International Nuclear Energy Initiative. U.S. Department of Energy. October 24, 2004. Consulted: January 3, 2005. <www.ne.doe.gov/infosheets/i-neri.pdf>

²⁷⁴ Session Ordinaire de 2004-2005. Senat No76. 25 November, 2004. Consulted: 3 January 2005. < International Nuclear Energy Initiative. U.S. Department of Energy. October 24, 2004. Consulted: January 3, 2005. <www.ne.doe.gov/infosheets/i-neri.pdf> p26

²⁷⁵ “Recherche et Developpement.” Electricite de France. 2004. Consulted: 3 January, 2005. <www.edf.fr/index.php4?coe_i_id=20003>

²⁷⁶ Germany’s Federal Ministry for the Environment, Nature Conservation and Nuclear Safety: “Common Ground” March 2004.

www.bmu.de/infos/magazine/common/com0403/key_figure.html

²⁷⁷ German Embassy Ottawa: “Germany and the Kyoto Protocol” January 3rd 2005.

www.ottawa.diplo.de/en/05/Umweltpolitik/seite__kyoto.html

²⁷⁸ The German Embassy, Washington D.C. “The Week in Germany: Business and Technology” November 12, 2004. www.germany-info.org/relaunch/info/publications/week/2004/041112/economy2.html

²⁷⁹ International Conference for Renewable Energies, Bonn: “renewables 2004 a complete success” January 2nd 2005. www.renewables2004.de/

Energy Sources Act,” which entered into force on 1 August 2004²⁸⁰ All Ministers and Government Representatives present acknowledged that:

Renewable energies combined with enhanced energy efficiency, can significantly contribute to sustainable development, to providing access to energy, especially for the poor, to mitigating greenhouse gas emissions, reducing harmful air pollutants, thereby creating new economic opportunities, and enhancing energy security through cooperation and collaboration.²⁸¹

As well as becoming a signatory to this act, Germany took a leadership role for 12 commitments, including the Renewable energy sources act (EEG), and the Geothermal energy Initiative.²⁸²

During the Renewables conference German Federal Chancellor Gerhard Schröder announced:

We need to bring about a radical increase in energy efficiency. We said that we cannot wait until all the countries of the world finally get around to signing and ratifying the Kyoto Protocol ... We need to act now if we want to make electricity and heating based on renewable energy sources available to a billion people by the year 2015.²⁸³

4. Italy: +1

Italy’s performance in meeting their G8 summit commitments has thus far been mixed.

Italy has performed favorably with new developments of renewable energy technologies and participation in multilateral energy projects. However, recent announcements surrounding Italy’s affiliation to the Kyoto Protocol have thrown their intent to comply in the long term into question, but not sufficiently to downgrade their compliance rating. Recent studies by the European Environment Agency (EEA) on projected compliance to Kyoto target emissions report that:

The EEA's projections show that at present ... Italy... [is] on course for above-target emissions, ... even with use of the Kyoto mechanisms and additional measures planned.²⁸⁴

Italy’s Environment Minister Altero Matteoli announced the country’s proposal for eventual discontinuation of their involvement in Kyoto, citing that:

²⁸⁰ German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety: “The Renewable Energy Sources Act entered into force on 1 August 2004” January 3rd 2005.

www.bmu.de/en/1024/js/download/eeg_en/

²⁸¹ International Conference for Renewable Energies, Bonn: “Political Declaration” June 4 2004.

www.renewables2004.de/en/2004/outcome_declaration.asp

²⁸² International Conference for Renewable Energies, Bonn: List of actions and commitments, International Action Programme” August 30 2004. www.renewables2004.de/en/2004/outcome_actionprogramme.asp

²⁸³ International Conference for Renewable Energies, Bonn: “Speech given by Chancellor Gerhard Schröder” June 3 2004, www.renewables2004.de/

²⁸⁴ BBC News, Alex Kirby “ Europe can reach Kyoto target” December 21, 2004 news.bbc.co.uk/1/hi/sci/tech/4112743.stm

Kyoto in its current form would be useless without the agreement of some of the world's biggest polluters. 'The first phase of the protocol ends in 2012, after that it is unthinkable to go ahead without the United States, China and India'²⁸⁵.

Italy has pledged 400,000 US dollars to a Belize-based Caribbean Community Climate Change Centre (CCCCC) to cover its operation costs for 2005 and to assist the centre for five years. Furthermore, Italy has pledged 100,000 US dollars for a pilot project on renewable energy for the centre "to improve the ability of people living in communities at risk of climate change related phenomena to adopt more sustainable lifestyles"²⁸⁶.

The Italian government Authority for Electricity and Gas launched a formal inquest in order to establish the possible liability of Italian power operators in the 2003 blackout.²⁸⁷

Italy also plans to expand that countries renewable energy program. The Italian government has announced plans with General Electric for the implementation of the largest wind power project to date in the expansion of their wind power program, the addition in 2004–05 of 71 of GE's 1.5-megawatt wind turbines.²⁸⁸ Also, in January of 2005, Italy's Authority for Electricity and Gas are set to put "white certificates" into practice. These new "energy efficiency certificates"²⁸⁹ are designed to act as incentives for companies to initiate emission reducing projects, so as to assist in reducing their greenhouse gas emissions, in support of their Kyoto Compliance.²⁹⁰

5. Japan: +1

Japan has complied with its Savannah summit energy commitment.

According to the Japanese government, the "underlying goal of Japan's energy policy is to attain the 3Es, energy security, economic growth and environmental protection simultaneously."²⁹¹ For

²⁸⁵ The Peninsula: "Italy calls for end to Kyoto climate limits after 2012" December 16, 2004.

www.thepeninsulaqatar.com/Display_news.asp?section=World_News&subsection=Rest+of+the+World&month=December2004&file=World_News2004121625013.xml

²⁸⁶ BBC Monitoring Americas, London: "Italy to support Belize-based Caribbean climate monitoring project"

London: Dec 15, 2004. pg. 1.

²⁸⁷ Autorita per l'Energia Elettrica e il Gas: "Launch of formal inquest into the blackout of 28 September 2003"

Milan, 11 September 2004.

216.239.37.104/translate_c?hl=en&langpair=it%7Cen&u=www.autorita.energia.it/inglese/press/eng_index.htm&prev=/language_tools

²⁸⁸ GE Energy: "GE Energy Enters Italian Wind Industry: *Enel to Purchase 71 GE Wind Turbines*" Atlanta GA, June 16 2004. www.gepower.com/about/press/en/2004_press/061604.htm

²⁸⁹ Autorita per l'Energia Elettrica e il Gas: "White certificates market to step closer Energy conservation companies can now be accredited on-linens and open for business" Milan, 6 November 2004.

216.239.37.104/translate_c?hl=en&langpair=it%7Cen&u=www.autorita.energia.it/inglese/press/eng_index.htm&prev=/language_tools

²⁹⁰ Autorita per l'Energia Elettrica e il Gas: "White certificates market to step closer Energy conservation companies can now be accredited on-linens and open for business" Milan, 6 November 2004.

216.239.37.104/translate_c?hl=en&langpair=it%7Cen&u=www.autorita.energia.it/inglese/press/eng_index.htm&prev=/language_tools

²⁹¹ Japan- National Energy Policy and Energy Overview. energytrends.pnl.gov/japan/ja004.htm

years now, Japan has been working to diversify its energy portfolio away from oil (most of which it must import from the Middle East).²⁹²

Japan is actively involved in researching new energy technologies, particularly of the nuclear type. One main thrust of Japanese energy research is nuclear fusion, and Japan is currently bidding to be the host country of the proposed experimental International Thermonuclear Experimental Reactor.²⁹³ In addition, Japan continues its 10-year energy plan for the expansion of its nuclear energy program by 30% by 2011. This is expected to entail the construction of 9 to 12 new nuclear power plants by this end-date. In addition, Japan aims to have 41% of its national electrical power generation derived from nuclear energy by 2011 as well — drastically reducing the portion derived from coal, oil and gas which currently accounts for 62% of electrical production

Japan has also implemented strict energy efficiency measures to ensure energy efficiency in industrial and transportation sectors.²⁹⁴ Despite being the world's fourth largest energy consumer and second largest energy importer (after the United States), Japan's energy intensity (energy use per unit of GDP) is among the lowest in the developed world.²⁹⁵ Nevertheless, it should be noted that currently, wind, solar and geothermal energy (renewable and non-emission creating sources of energy) only account for 2% of Japan electricity production.²⁹⁶

Japan has ratified the Kyoto Protocol and is committed to reducing its climate change causing emission to 6% below 1990 levels by 2011. This commitment is expected to prompt Japan to invest in more renewable energy sources and more efficient uses of energy to meet its emission thresholds. As an example of this, Japan continues to implement the “Top Runner Program” which calls for dramatic increases in the use of renewable energy sources by 2010. Solar energy's installed capacity is expected to reach 5,000 megawatt (MW) by 2010, while the wind power and geothermal energy targets are 300 MW and 1,000 MW, respectively. Situated upon a series of active volcanic systems, Japan has significant potential for geothermal electricity generation. Nevertheless, potential sites are difficult to develop, because almost all are located in National Parks.²⁹⁷

6. Russia: +1

Russia, in its energy policy, has demonstrated compliance with its 2004–05 G8 energy summit commitments. Russia is moving towards expanding both its energy production and potential and existing markets for that energy.

²⁹² Ibid.

²⁹³ EU tempts Japan on fusion deal. news.bbc.co.uk/1/hi/sci/tech/4016995.stm

²⁹⁴ Ibid.

²⁹⁵ “Japan Country Analysis Brief,” Department of Energy — Energy Information Administration (Washington D.C.) August 2004. Date of Access: 15 January 2005 [www.eia.doe.gov/emeu/cabs/japan.html]

²⁹⁶ “Japan Country Analysis Brief,” Department of Energy — Energy Information Administration (Washington D.C.) August 2004. Date of Access: 15 January 2005 [www.eia.doe.gov/emeu/cabs/japan.html]

²⁹⁷ “Japan Country Analysis Brief,” Department of Energy — Energy Information Administration (Washington D.C.) August 2004. Date of Access: 15 January 2005 [www.eia.doe.gov/emeu/cabs/japan.html]

According to a Rice University study, “Energy is likely to be a key plank to Russia’s diplomacy in the East. There are many economic, political and geopolitical drivers that are pressing Moscow to consider exporting energy to Asia, despite the massive capital investment needed to do so.”²⁹⁸

On June 10, 2004 Russian President Vladimir Putin met with Japanese Minister Junichiro Koizumi. The two countries’ leaders among other issues discussed energy cooperation. As a result, a Draft Long-Term Program of Russian- Japanese Cooperation in the Field of Energy was handed to the Japanese side (the document concerns the energy supplies and infrastructure).²⁹⁹

In October of 2004 construction has begun on the first electric wind complex in Russia. It is hoped that this complex will significantly contribute to the budget of the Leningradsky oblast without harming the local environment. The government of the United States and the Global Ecological Fund will provide financing for the project costs (US \$100 million). Among the current partners are: General Electric Energy, ABB, Princeton Energy Resources International (PERI).³⁰⁰ (*my translation from Russian)

On October 20, 2004 Igor Yusufov, the Russian President’s Special Envoy for International Energy Cooperation and a Foreign Ministry Ambassador at Large, met with US Ambassador to Moscow Alexander Vershbow. During the conversation a number of specific energy investment projects with the participation of leading US oil and gas companies, such as Russia’s entrance to the American market with liquefied natural gas, were discussed. It was also noted that the adoption of a new Subsoil Law in Russia would “serve the further improvement of its investment image.”³⁰¹ These talks aim to expand the market for Russian energy.

A Plenary Session of Fourth All-Russia Oil and Gas Week took place in Moscow during the last week of October.³⁰²

On November 20-21, 2004 Russia participated in 12th APEC Economic Leaders’ Meeting in Santiago Chile. Russian Energy Minister joined other Energy Ministers in implementation and enhancement of the APEC Security Initiative, as a result of “global concerns about high oil prices, and in keeping with our commitment to promote energy security, sustainable development and common prosperity with the APEC region.”³⁰³

Most significantly, on 22 October 2004 the State Duma (Russia’s lower house) approved of Russian membership in the Kyoto Protocol, followed by the Federation Council (Russia’s upper

²⁹⁸ “The Energy Dimension in Russian Global Strategy”, Baker Institute Study, published by the James A. Baker III Institute for Public Policy of Rice University, October 2004, p.10

²⁹⁹ Ministry of Foreign Affairs,

www.ln.mid.ru/Bl.nsf/arh/23D9E7BFD1F20B33C3256EB000528A41?OpenDocument

³⁰⁰ News, “RBK” (October 18, 2004), www.rambler.ru/db/news/msg.html?s=10324&mid=5170651

³⁰¹ Ministry of Foreign Affairs,

www.ln.mid.ru/Brp_4.nsf/arh/1DAFD240D7023F20C3256F34003F23A6?OpenDocument

³⁰² Ministry of Foreign Affairs,

www.ln.mid.ru/Brp_4.nsf/arh/B1D888D140ACAC3AC3256F3A003C6B48?OpenDocument

³⁰³ Ministry of Foreign Affairs, www.ln.mid.ru/Ns-

dipecon.nsf/arh/37BFE401179233CAC3256F5E00466149?OpenDocument

house) on 27 October 2004. President Putin signed the bill in November 2004 bringing Russia into the emission reduction regime and also bringing the Protocol itself into legally binding effect. Russian ratification is likely to compel Russia to pursue the development of more sustainable energy sources as well as improving the efficiency of current energy use in order to meet Kyoto thresholds. Nevertheless, it should be noted that as Kyoto benchmarks are set in relation to 1990 emission levels, the collapse of Russia's manufacturing base since then (and thus its emission levels) will make Moscow's compliance rather easy.³⁰⁴

7. United Kingdom: +1

The United Kingdom of Great Britain and Northern Ireland has shown their willingness to comply with 2004 — 05 G8 Energy commitments.

The British Government has stated it believes “renewable energy developments can be accommodated where technology is viable and when environmental, social and economic impacts can be addressed.”³⁰⁵ As a result, the policies of a new document on renewable energy (Planning Policy Statement 22: Renewable Energy- PPS22) enable local planning authorities to follow a set of requirements for renewable energy in new buildings and existing developments. According to the Minister for Planning Keith Hill: “Although wind energy is expected to make a significant contribution to meeting our 10% renewable energy target by 2010, these policies will apply equally to all other renewable energy technologies.”³⁰⁶

Along with other countries, Britain actively participated in a creation of the new partnership, the Renewable Energy and Energy Efficiency Partnership (REEEP), that aims at “bringing together technology, expertise, political will and funding to encourage countries looking to develop their sustainable energy markets.”³⁰⁷

As part of the Energy White Paper, Britain introduced the largest expansion of renewable energy in the world: the 15 new offshore wind farms, that will produce enough electricity for 4 million homes and will be able to power more than one in six house holds in Britain by 2010.³⁰⁸

The Community Energy programme received a grant of £5.2 million to “refurbish existing and install new community heating schemes...to heat low- income households, hospitals and other public buildings. The scheme will help to reduce bills and cut greenhouse gas emissions.”³⁰⁹

On August 2, 2004 a £50million Marine Research Development Fund was announced to help UK Businesses explore “the potentially huge benefits of the UK's wave and tidal flows, which are the greatest in Europe.”³¹⁰

³⁰⁴ “Kyoto Ratification” *Washington Post* (Washington D.C.) 6 November 2004. Date of Access: 15 January 2005 [www.washingtonpost.com/wp-dyn/articles/A29459-2004Nov5.html].

³⁰⁵ News (Aug 9th, 2004), Office of the Prime Minister, www.number-10.gov.uk/output/page6225.asp

³⁰⁶ Ibid

³⁰⁷ News, Office of the Prime Minister, www.number-10.gov.uk/output/page4709.asp

³⁰⁸ Ibid.

³⁰⁹ Ibid.

³¹⁰ Ibid.

On October 28, 2004 Britain's Foreign Secretary, together with the Department of Trade and Industry and the Department of Environment, Food and Rural Affairs launched an International Energy Strategy that will address global climate change issues and strive to ensure secure and affordable energy supply.³¹¹ On November 30, 2004 an extra £140million was added to the Warm Front initiative that aims to eradicate fuel poverty in England.³¹²

On December 15, 2004 UK Minister for Environment, Food and Rural Affairs Margaret Beckett announced in Buenos Aires that her department "will contribute £2.5million to REEEP in the 2005–06 fiscal year."³¹³

A Pre — Budget Report of 2005 "confirmed the government's intention to consider the introduction of a Green Landlord Scheme" that aims to identify "further effective ways to improve household energy efficiency in the short and longer term."³¹⁴

8. United States: 0

The Bush administration begins its second term in Washington in partial compliance with the Sea Island Summit energy commitment. Under this administration, US energy policy remains focused on the development of domestic coal and petroleum reserves and technologies. A second objective of US policy is the development of new technologies to further improve America's domestic capacity for energy production from other sources and thus reduce its reliance on foreign producers.

Increased development of domestic energy sources through the expansion of the American coal and oil sectors is the cornerstone of current US energy policy. In November of 2004 Energy Secretary Abraham confirmed the primacy of coal in the administration's energy policy when he described coal as America's "most abundant and economical source of fuel," and "as a key factor in our nation's future energy security."³¹⁵ In order to further develop this resource the administration has "laid out a 10-year, \$2 billion commitment to the development of clean coal technology."³¹⁶ Increasing exploitation of US oil reserves will also continue under this administration. As Secretary Abraham recently noted, it is likely that the President's energy policy will be passed by the Senate, including the provision allowing for exploration and drilling in Alaska's arctic national wildlife refuge. The administration expects this source may yield an

³¹¹ Foreign and Commonwealth Office, www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1007029391638&a=KArticle&aid=1098795432758

³¹² News, Office of the Prime Minister, www.number-10.gov.uk/output/page6689.asp

³¹³ Foreign and Commonwealth Office, www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1059738704019&a=KArticle&aid=1101395030604

³¹⁴ Ministry of Finance, Pre-Budget Report 2005, p.6, www.hm-treasury.gov.uk/spending_review/spend_sr04/press/spend_sr04_press10.cfm

³¹⁵ Remarks to the National Coal Council by Energy Secretary Abraham. 10 November 2004. <www.energy.gov>

³¹⁶ *ibid*

additional 1.5 million barrels of oil per day for the US.³¹⁷ The expansion of existing energy sectors also includes an increased commitment to nuclear power generation.³¹⁸

Additionally, current American energy policy is focused on developing new technologies and new sources of energy, and expanding underdeveloped sectors. In July of 2004 Secretary Abraham announced awards for “five new cost-shared research projects to help meet the Nation’s growing demand for natural gas.”³¹⁹ These awards also include eleven new projects that focus on “solving the remaining issues in developing solid oxide fuel cell (SOFC) systems for commercial use.”³²⁰ In addition the administration has “initiated a public-private partnership between DOE and the nation’s automakers to accelerate the development of hydrogen fuel cell vehicles.”³²¹

While the President’s declarations identify efficiency and conservation as elements of US energy policy,³²² concrete policy initiatives promoting energy conservation are scarce. Additionally, any focus on efficiencies addresses only the supply side rather than the consumption of energy by businesses or the private sector. The US should, therefore, take further measures to develop and implement energy conservation policies in order to balance its energy policy and bring it into full compliance with the Sea Island commitment.

9. European Union: +1

The European Union is currently in compliance with the Sea Island Summit energy commitment. EU policy commits the community to the development of biofuels and renewable energies in tandem with an emphasis on efficiencies and new technologies. These have been accompanied by the progress of the European Union — Russia Energy Dialogue and continuation of the EU’s fusion program.³²³ Andris Pieblags, Commissioner-designate for Energy, recently identified several critical elements of energy policy for the EU. These include “creating a better linkage

³¹⁷ “Abraham: Alaska Drilling, Energy Policy to Clear Senate”. Reuters wire story. New York Times: January 4, 2005. <www.nytimes.com/reuters/politics-energy-usa-policy>.

³¹⁸ “We are...pursuing Generation IV nuclear technologies...” Remarks to the National Petroleum Council by Energy Secretary Abraham. 1 December 2004. <www.energy.gov>

³¹⁹ “DOE to Help Develop Advanced Energy Exploration Tools and Technologies”. <www.fossil.energy.gov/news/techlines/2004/tl_advanced_diagnostics.html>

³²⁰ “New Fuel Cell Projects to Continue Progress to Zero Emissions Energy”. 19 July 2004. <www.fossil.energy.gov/news/techlines/2004/tl_seca_awards071904.html>

³²¹ Remarks to the National Petroleum Council by Energy Secretary Abraham. 1 December 2004. <www.energy.gov>

³²² “We will develop and deploy the latest technology to provide a new generation of cleaner and more efficient energy sources. We will promote strong conservation measures.” President Bush commenting on the nomination of Sam Bodman as Energy Secretary. “President Nominates Sam Bodman as Secretary of Energy”. 10 December 2004. <www.whitehouse.gov/news/releases/2004/12.html>

³²³ While rejecting cooperation with Russia on the EU fusion project Mr. Pieblags confirmed the EU commitment to this endeavour. Andris Pieblags, speaking at a hearing on his candidacy for the position of Commissioner of Energy held by the Committee on Industry, Research, and Energy. Energy and Transport in Europe Digest. No. 116, November 19, 2004. <europa.eu.int/comm/energy_transport/mm_dg/newsletter/nl116-2004-11-18_en.html>.

between energy...and research policies [...] reducing energy demand, [and] promoting renewable energy sources.”³²⁴

A commitment to alternative energy sources and new technologies is primary to EU energy policy. The Commission has established a priority to “increase energy diversity”³²⁵ and to meet a target of producing 21% of Europe’s electricity consumption from renewable energy sources.³²⁶ Additionally, the commission will “propose a Community action plan for energy from biomass by the end of 2005.”³²⁷ These policies have been matched by a pledge to the continuing development of wind, hydro, biomass, geothermal, and solar energy technologies.³²⁸ Mr. Pieblags further stressed the EU’s commitment to efficiency, conservation, and technological development when he explained “energy and research policies should be directly linked, with the aim to support technological development and more efficient energy use.”³²⁹

The EU has also worked to establish and improve relations with energy producing states in order to increase energy supplies in Europe.³³⁰ In fact, the EU-Russian relationship on energy has developed to the point where 30% of the EU’s oil needs and 50% of its gas needs are met with Russian supply.³³¹ Moreover, the Commissioner-designate has acknowledged the continuing importance of Russia as a supplier of energy for the EU.³³²

While, at present, EU energy policy meets the requirements of the Sea Island commitment, the Community’s current policies may lead to an increasing supply deficit for the EU. With less strenuous policy commitments to nuclear power as a source of energy,³³³ and an increasing commitment to sources which presently offer limited potential,³³⁴ the EU may become even more heavily dependent on external sources of energy to meet its increasing demand.³³⁵ The EU may need to further develop its policies in order to increase supplies as the global demand for energy continues to grow significantly.

³²⁴ *ibid.*

³²⁵ “An Energy Outlook for Europe — From Today into the Next 30 Years.” Speech by Loyola de Palacio, Vice-President of the European Commission, Commissioner for Transport and Energy. 15 June 2004. Energy and Transport in Europe Digest. No. 98. 18 June 2004. <europa.eu.int/comm/energy_transport/mm_dg/newsletter/nl99-2004-06-18_en.html>.

³²⁶ Electricity From Renewable Energy Sources: Encouraging Green Electricity in Europe. <europa.eu.int/comm/energy/res/publications/doc/2004_brochure_green_en.pdf>. 8.

³²⁷ *Ibid.* 14.

³²⁸ *Ibid.* 6-7.

³²⁹ Pieblags’ testimony.

³³⁰ “I am ready to establish even stronger relations with Russia, which has always been and important supplier to the EU.” Pieblags’ testimony.

³³¹ Presentation of Christian Cleutin, Director, European Commission Coordinator of the EU-Russian Energy Dialogue. November 2004. <europa.eu.int/comm/energy/russia/presentations/doc/2004_berlin_en.pdf>.

³³² “...supplies from Russia will be of vital importance for long term economic growth.” Palacio speech.

³³³ “...as a proportion of total energy consumption, nuclear power was diminishing.” Pieblags’ testimony.

³³⁴ “...renewable energy offers limited potential. Unless decisive new action is taken, it now appears that the share of renewable electricity is unlikely to reach the 21% target by 2010 which the Commission set three years ago.” Palacio speech.

³³⁵ “External energy dependency could reach 70% of our needs in 2020.” *Ibid.*

Compiled by Christopher Collins, Anna Klishevych, Aaron Raths,
Virginia Schenk and Tasha Schmidt