2003 Evian Interim Compliance Report Energy

Commitment:

2003 – 75: "We commit to participating in the International Conference on Renewable Energies, spring 2004 in Bonn".

Background:

The International Conference for Renewable Energies will take place from 1–4 June 2004 in Bonn, Germany. The Conference will attempt to address several issues relating to the use and development of renewable energies, such as wind, solar, water, and biomass. The conference will concentrate on the following three themes: the "formation of enabling political framework conditions allowing the market development of renewable energies"; "increasing private and public financing in order to secure reliable demand for renewable energies"; and, "human and institutional capacity building, and co-ordination and intensification of research and development".⁴⁷⁸

The G8 recognizes the importance of developing renewable energy sources and the long-term economic, social, and environmental advantages that will result. Each G8 member has shown a commitment to the research and development of renewables since the Evian Summit and all seem poised to help make Bonn 2004 a success.

Coore	Lack of Compliance	Work in Progress	Full Compliance
Score	1	0	+1
Canada		0	
France		0	
Germany		0	
Italy		0	
Japan		0	
Russia		0	
United Kingdom		0	
United States		0	
Overall		0.00	

Assessment:

Individual Country Compliance Breakdown:

1. Canada: 0

Throughout 2003 Canada has demonstrated its commitment to promoting the greater use of renewable energies in the form of both monetary contributions and direct formal statements. Despite the fact that Canada is not directly involved in the logistical planning of the 2004

⁴⁷⁸ Renewables 2004, www.renewables2004.de/en/2004/default.asp

Renewable Energies conference, its continued commitment to developing new environmentally efficient and safe renewable energy sources is indicative of Canada's dedication and support for work undertaken in this field.⁴⁷⁹

In October 2003 Minister of Natural Resources, Herb Dhaliwal, and U.S. Secretary of Energy, Spencer Abraham, affirmed their commitment to collaborate in accelerating the development of the hydrogen economy as part of their increased cooperation on energy.⁴⁸⁰ The aim of the work is to provide a secure form of clean and environmentally sound energy through the use of hydrogen technology. The two men stated that they will "seek to build on our ongoing collaboration and complementarities in our research efforts and actively explore and understand technology options, including renewable energy sources, for boosting the development of hydrogen energy".⁴⁸¹

For its part, the Canadian government has continued to conduct and support new research into the applicability of renewable energies such as hydrogen-fuel technologies. In 2003 Minister Dhaliwal announced a CDN\$4.5 million investment in three projects designed to develop and test hydrogen fuel-cell technologies and systems that would put them into widespread use.⁴⁸² On behalf of the Minister of Industry Canada, Alan Rock, Minister Dhaliwal also declared a CDN\$9.6-million dollar investment in a CDN\$32-million dollar research and development plan proposed by QuestAir Technologies Inc.⁴⁸³

On 25 and 26 November the Canadian government also held the Independent Power Producers' Society of Ontario's (IPPSO) 2003 Conference entitled "Completing the Power Equation: What's missing from the electricity market in Ontario?" in Toronto, Ontario. Of significance, in terms of Canada's commitment to the research and development of renewable energies, another conference was held in conjunction with the first called "Today's business opportunities in Green Power." At the conference key issues such as the economic and environmental benefits of green power for Ontario and Canada were discussed with specific attention directed toward Environment Canada's Guidelines on Renewable Low-Impact Electricity. The conference was

⁴⁷⁹ "International Steering Committee Membership," International Conference for Renewable Energies Website, www.renewables 2004.de/en/preparation/sc.asp, Date Accessed: January 10, 2004.

⁴⁸⁰ "Joint Statement On The Hydrogen Economy by the United States Department of Energy and Natural Resources Canada," October 16, 2003, Canadian Environmental Website, www.canadian

environmental.com/bin/cf_external_frameset.cfm?new_url=www.ec.gc.ca/Press/2003/030731_s_e.htm, Date Accessed: January 10, 2004.

⁴⁸¹ "Joint Statement On The Hydrogen Economy by the United States Department of Energy and Natural Resources Canada," October 16, 2003, Canadian Environmental Website, www.canadian

environmental.com/bin/cf_external_frameset.cfm?new_url=www.ec.gc.ca/Press/2003/030731_s_e.htm, Date Accessed: January 10, 2004.

⁴⁸² "Government of Canada Supports Innovative Hydrogen-Fuel Projects," Canadian Environmental Website, www.canadianenvironmental.com/bin/cf_external_frameset.cfm?new_url= www.nrcan.gc.ca /media/newsreleases/2003/200338 e.htm, Date Accessed: June 10, 2004.

⁴⁸³ "Government of Canada Supports Innovative Hydrogen-Fuel Projects," Canadian Environmental Website, www.canadianenvironmental.com/bin/cf_external_frameset.cfm?new_url= www.nrcan.gc.ca /media/newsreleases/2003/200338_e.htm, Date Accessed: June 10, 2004.

intended to encourage and promote the greater use and development of "green power" including renewable energies.⁴⁸⁴

Canada is committed to innovation in the renewable energy sector however, it has yet to publicly commit to attending the 2004 International Conference on Renewable Energies in Bonn, Germany.

2. France: 0

The strengthening of international co-operation on global observation has been a subject of many statements by various members of the French government over the months following the Evian Summit in June 2003.

In 2002 France received the Award for best national project from Renewable Energy for Europe.⁴⁸⁵ ADEME (agence de l'environnement et de la maitrise de l'energie) negotiated a State-Region plan that will develop renewable energy until the year 2006.

In his opening speech at the "Sommet De Dialogue 5+5" in Tunis-Tunisia on 5 December 2003, President Jacques Chirac spoke of the need for North African and European countries to work together in key economic and environmental sectors including energy:

"En encourageant et en dynamisant l'integration economique migraine, en amen ant le Maroc, l'Algerie et la Tunisie a travailed ensemble, avec l'Europe, dans les secteurs economiques prioritaires comme l'energie, la gestion d'eau, les transports ou encore les technologies d'information, ces cooperations erigeron le Maghreb en region <<p>epilote>>, dont l'exemple aura vocation a rayonner et a s'etendre a tous les pay de la rive Sud."⁴⁸⁶

The objective of coordinated efforts between European and developing countries was also addressed at the Sommet Franco-Britannique Environnment (Franco-British Environmental Summit) on 24 November 2003. In a joint declaration at the Summit, the French representative reconfirmed France's commitment to realizing the goals of the Evian Action Plan:

"Durant la presidence britannique et au-dela, le Rotaume-Uni et la France travaillerent ensemble pour: cooperer dans le domaine de l'efficacite energetique; mettre en uvre la partie energie du plan d'action adopte a Evian par les chefs de government en juin 2003; faire en sorte que les activites de la communaute internationale sur les technologies nouvelles et emergentes progressent de facon coordonnee. Ils travailleront, a fin que leur cooperation active en matiere d'energies durables (initiative europeenne REEEP-

⁴⁸⁴ "Completing the Power Equation: What's missing from the electricity market in Ontario?" Natural Resources Canada Website, www.newenergy.org/conf/updatedprogram .html, Accessed January 10, 2004.

⁴⁸⁵ Renewable Energy for Europe, "Take-off campaign for Renewable Energy Sources in France,"

europa.eu.int/comm/energy/en/renewable/idae_site/deploy/prj006/prj006_1.html

⁴⁸⁶ Government of France: "Discours D'Ouverture De Monsieur Jacques Chirac, President De La Republic Francaise Lors Du Sommet Du Dialogue 5+5" December 5, 2003. www.elysee.fr/anh/disc/disc_.htm.

paternalist pour les energies durables et la maitrise d'energie-etc) et leur soutien a la conference de Bonn sur l'energies renouvelable...³⁴⁸⁷

The French National Strategy for sustainable development taken from the Evian action plan was reviewed and presented to the council of ministers on 22 December 2003 by Mme. Tokia Saifi, Secretary of State for Sustainable Development. The communication predicted that the majority of the strategy's measures could be achieved by the end of 2004, but did not outline the specific steps that need to be taken:

"C'est ainsi que 80% des mesures prevues par la Strategie nationale dont l'echeance intervient avant la fin de 2004 sont realisee ou en cours de mise en oeuvre"⁴⁸⁸

France, as a member of the European Union, made a commitment at the UNFCCC COP-9 meetings in December of 2003 to contribute money to the new Special Climate Change Fund and the Least Developed Countries Fund.⁴⁸⁹ Sustainable development was also addressed in the France's budget for 2004. One of the "Grandes Orientations" for 2004 presented in the budget is to fight climate change and to further develop the national strategy for sustainable development. The budget provides ADEME with funds to undertake "actions en faveur de l'elimination des dechets et des nuisances et maitrise de l'energie". Specifically, ADEME will receive:

"d'une capacite d'engagement de 167 million d'euros a laquelle s'ajoutent 31 millions d'euros en provenance desministeres de l'industrie et de la recherché, consacree notamment a la maitrise de l'energie, les dechets menagers, la depollution des sols, la pollution atmospherique et le suivi de la qualite de l'air..."⁴⁹⁰

On 10 September 2003 the French Ministry of Industry, Resources and Environment released a report promoting the development of wind power at the local level.⁴⁹¹ Local initiatives like the one in the city of Clermont-Ferrand, which was recently allocated an annual budget of €150 000, help promote the development of renewable energy throughout France.⁴⁹²

Jean-Louis Bal, the Assistant Director of the Renewable Energy Department of ADEME is participating in the planning of Renewables 2004 as a member of the International Steering Committee (ISC).⁴⁹³

⁴⁸⁷Government of France: "Sommet Franco-Britannique Environnement Declaration Conjointe" November 24, 2003. www.elysee.fr/ong/disc/disc_.htm.

⁴⁸⁸ Government of France: "Communication en conseil des ministres du 22 decembre: Tokia Saifi dresse un bilan positif de la mise en oeuvre de la Strategie nationale de developpment durable adoptee en juin 2003" December 23, 2003. www.environnement.gouv.fr/actua/com2003/decembre/23-sndd.htm.

⁴⁸⁹ "Summary of the Ninth Conference of the Parties to the UN Framework Convention on Climate Change: 1-12 December 2003" Vol.12, No.231. Monday, December 15, 2003. www.iisd.ca/vol12/enbl22311.html.

⁴⁹⁰ Government of France: "Projet de loi de finances pour 2004-Depenses" January 6, 2004. www.minefi.gouv.fr/PLF2004.

 ⁴⁹¹ Comité de Liason Énergies Renouvelables, "Promotion de l'énergie éolienne terrestre à l'attention des préfets,"
22 September 2003 www.cler.org/info/article.php3?id article=977.

⁴⁹² Comité de Liason Énergies Renouvelables, "La Ville de Clermont-Ferrand oeuvre pour la MDE et les EnR," 9 October 2003 www.cler.org/info/article.php3?id_article=973.

⁴⁹³ Renewables 2004, "ISC Members," www.renewables2004.de/pdf/Members_ISC.pdf

3. Germany: 0

The German Bundestag adopted a law on compensation for electricity generated by solar radiation energy on 27 November 2003. The law will most likely enter into force early in 2004, after a December reading in the Bundesrat.⁴⁹⁴ The law is a clarification of the Renewable Energy Sources Act (EEG), which had not discussed compensation for this energy source. The EEG addresses compensation for those using biomass, hydropower, and geothermal power and provides a bonus for electricity obtained through fuel cells.⁴⁹⁵ This legal amendment shows commitment to the Action Plan goals concerning the acceleration of research, development and diffusion of energy technologies.⁴⁹⁶

Germany is also in the midst of its preparations for the "Renewables 2004" conference to be held in Bonn next June. The Organizing Committee for this conference includes representatives from the Federal Ministry for Economic Cooperation and Development (BMZ), the Federal Ministry for the Environment, Natural Conservation, and Nuclear Safety (BMU), the Federal Foreign Office (AA), and the City of Bonn as well as the Conference Secretariat. The International Steering Committee (ISC) has already had its Constituent meeting, 11-12 June 2003 and a second meeting 15-16 December 2003. The National Advisory Committee (NAC) held its first constituent meeting on 26 May 2003. The thematic background papers for the conference will cover the following topics: rationale for renewable energies, targets, national policy instruments, level playing field, financing renewable energies, clean development mechanism and joint implementation, research and development, capacity development, international institution arrangements, potentials and demands, traditional use of biomass, and gender⁴⁹⁷.

Although Germany is the host of the 2004 International Conference on Renewable Energies and has thus confirmed its attendance, until the conference actually takes place, a compliance score cannot be assigned. As such, Germany, is awarded a "work in progress" until its attendance is confirmed in June 2004.

4. Italy: 0

Italy hosted the 9th United Nations Framework Convention on Climate Change (UNFCCC, COP-9) in Milan from 1–12 December 2003. The goal of the conference was to assess the progress of the member governments in addressing the climate change issue.⁴⁹⁸ Italian representatives made a strong showing at the convention:

⁴⁹⁴ Government of Germany: "Course is set for promoting solar energy" November 28, 2003. www.bmu.de/en/800/js/topics/renewableenergy/solar energy.

⁴⁹⁵Government of Germany: Joint Press Statement by the Federal Environment Ministry and the Federal Ministry of Economics and Labour. "Ministries agree on the further development of the Renewable Energy Sources Act" November 5, 2003. www.bmu.de/en/800/js/news/pressrelease0311105. *NOTE: also see linked background paper: www.bmu.de/de/800/js/English/renewable/background_paper.

⁴⁹⁶ "Science And Technology for Sustainable Development: A G8 Action Plan".

www.g8.fr/evian/english/navigation/2003 g8 summit/summit documents/science and technology for sustainable _development-a_g8_action_plan.html. ⁴⁹⁷Government of Germany: "Renewables2004" www.renewables2004.delen/cd/default.asp.

⁴⁹⁸ "Milan Conference To Promote Stronger National Action On Climate Change"

www.un.org/News/Press/docs/2003/envdev743.doc.htm.

"Altero Matteoli, Italy's Minister for the Environment and Territory, said COP-9 provided an opportunity to identify new and stronger initiatives for combating climate change. Roberto Formigoni, President of the Region of Lombardy, stressed the importance of regional action on climate change, while Gabriel Albertini, Mayor of Milan, said delegates must take long-term views of climate change, its impacts, and the well-being of future generations. Luigi Cocchiaro, for the President of the Province of Milan, called for increased implementation in the areas of transport and renewable energy".⁴⁹⁹

Domestically, Italy has had some energy troubles in 2003. A major blackout occurred in September that has been used to criticize Italy's dependence on imported power. Italy imports approximately 17 percent of its power, while other European countries import only about 2 percent on average, as the building of new power plants within the country has been prevented by environmental opposition groups.⁵⁰⁰

Corrado Clini, the Director General of the Ministry for the Environment and Territory is participating in the planning of Renewables 2004 as a member of the International Steering Committee (ISC).⁵⁰¹

5. Japan: 0

Natural resources are scarce in Japan and traditional energy resources are no exception as 80 percent of the energy supply comes from overseas and 50 percent is dependent on oil alone.⁵⁰² As a result Japan seeks to develop new energy initiatives that focus on the development of innovative renewable energies. In the foreign policy arena, Japan includes the promotion of the diffusion of renewable energy to developing countries and various multilateral and bilateral energy research and development initiatives.⁵⁰³

On 19 July 2003 the Prime Ministers of Japan and the UK released a joint statement on the environment that outlined each country's intention to collaborate on renewable energy initiatives.⁵⁰⁴ The leaders pledged to exchange "information and experience in order to better understand the challenges associated with a greater volume of renewables and embedded generation in the national grid", and to work "together to promote renewables internationally, through such initiatives as the Renewable Energy Efficiency Partnership and the Energy Literacy Initiative".⁵⁰⁵

⁵⁰² Japanese Agency for Natural Resources and Energy, "New Energy Policy,"

⁴⁹⁹ "Summary of the Ninth Conference of the Parties to the UN Framework Convention on Climate Change: 1-12 December 2003" December 15, 2003. www.iisd.ca/vol12/enb12231e.html.

⁵⁰⁰ BBC News: "Blackout exposes Italy power crisis" September 29, 2003.

news.bbc.co.uk/l/hl/world/Europe/3147810.stm.

⁵⁰¹Renewables 2004, "ISC Members," www.renewables2004.de/pdf/Members_ISC.pdf

www.enecho.meti.go.jp/english/policy/new_energy/policy.html

⁵⁰³ Japanese Ministry of Foreign Affairs, "Strategy and Approaches of Japan's Energy Diplomacy,"

www.mofa.go.jp/policy/energy/diplomacy.html

⁵⁰⁴ Japan Ministry of Foreign Affairs, "Joint Statement by the Prime Ministers of Japan and the United Kingdom: Tackling Environmental Challenges Together," 19 July 2003

www.mofa.go.jp/region/europe/uk/pmv0307/environment.html

⁵⁰⁵ Ibid.

On 7 August 2003 the Third Meeting of the US-Japan High-Level Consultations on Climate Change took place.⁵⁰⁶ Both states noted that their research and development effort are "contributing greatly to the implementation of the G8 Summit Action Plan on Science and Technology for Sustainable Development".⁵⁰⁷ An Annex to the Joint Statement outlined US-Japan Joint Science and Technology Projects, including the research and development of renewable and alternative energy technologies, resources and products.⁵⁰⁸

Two members of the International Steering Committee (ISC) for the Renewables 2004 conference in Bonn originate from Japan: Tsutomu Higuchi, Director Policy and Planning Division, Energy Conservation and Renewable Energy, Agency of Natural Resource and Energy of the Ministry of Economy, Trade and Industry (METI), representing the Japanese government; and, Takashi Tomita, Group Deputy General Manager and Division General Manager of Solar Systems Division, Solar Systems Group of the SHARP Corporation, representing a Japanesebased private firm.⁵⁰⁹

6. Russia: 0

The Russian Federation has undertaken many initiatives in order to show their commitment to the spirit of the Spring 2004 International Conference on Renewable Energies in Bonn, Germany. However, only goals have been set concerning Russian energy initiatives and no real figures or capital investment promises have as of yet been put forth to achieve these goals.

Among these initiatives is a G8 Plan that was released by the Russian Ministry of Foreign Affairs, in which they explicitly state that they will "support efforts aimed at substantially increasing the share of renewable energy sources in global energy use".⁵¹⁰ In this document they also outline their support for a number of other issues concerning technological availability and greater dialogue concerning energy issues, however, there has not been any definitive plan set out in order to achieve these goals. The Russian Federation did continue to show their enthusiasm for future dialogue concerning energy by hosting the World Climate Change Conference from 29 September - 3 October 2003 that was opened by Russian President Vladimir V. Putin.

In addition, the EU-Russia Energy Technology Centre (OPET Russia) is continuing their efforts to "provide a forum for the exchange of ideas and information on energy technologies"⁵¹¹ between Russia and the EU, which will aid in the Bonn conference's expectation to form the "establishment of a follow-up process ... [to] assure the monitoring of goals, measures, actions

⁵⁰⁶ Japanese Ministry of Foreign Affairs, "Third Meeting of the U.S.-Japan High-Level Consultations on Climate Change Joint Statement," 7 August 2003 www.mofa.go.jp/policy/environment/warm/cop/joint0308.html 507 Ibid.

⁵⁰⁸ Ibid.

⁵⁰⁹ Renewables 2004. "ISC Members." www.renewables2004.de/pdf/Members ISC.pdf

⁵¹⁰Ministry of Foreign Affairs for the Russian Federation, "Science and Technology for Sustainable Development," 5 June, 2003, www.ln.mid.ru/Bl.nsf/arh/CEF9ABE827A4EB4243256D3D004F398A?OpenDocument

⁵¹¹ EIR Development Partners, "EU-RUSSIA Energy Technology Centre – OPET RUSSIA," www.eir.gr/html/main frame.php?URL=areas

and other political obligations, and, second, secure the linkage to other international processes".⁵¹²

Oleg Borisowitsch Plushnikow of the Ministry for Energy of the Russian Federation is participating in the planning of Renewables 2004 as a member of the International Steering Committee (ISC).⁵¹³

7. United Kingdom: 0

The UK's new initiatives concerning climatic change point towards active participation at the Bonn conference. In February 2003 the government released a report entitled "Energy White Paper: Our energy future - creating a low carbon economy" which outlined the UK's attitude toward climatic change and contained many proposals to help slow or stop it. In it, British Prime Minister Tony Blair stated: "We are showing leadership by putting the UK on a path to a 60% reduction in its carbon dioxide emissions by 2050".⁵¹⁴

The UK government also sent out a news release in May 2003 entitled "Fuelling the Future -Fuels Cells Launched in London", where UK Fuel Cells (Funded in part by the UK government) was launched. A key statement in this launch was that "Government and the research community must pull together, and Fuel Cells UK will play the leading role in making this happen".⁵¹⁵

In December 2003 plans for the UK largest wind farm were passed. The 130 megawatt wind farm at Hadyard Hill in South Ayrshire will provide enough electricity to meet the average electricity needs of 80,000 homes. A spokesperson from Scottish and Southern Energy, the firm in charge of the project, noted that this initiative will help meet "the UK Government's new target of generating 15% of electricity from renewable sources by 2015".⁵¹⁶ The UK Government has also approved wind farm plans in Wales⁵¹⁷, offshore England⁵¹⁸

A UK renewable energy charity, Environment Trust, is developing blueprints for a twodirectional tidal lagoon to harness tides in Swansea Bay, Wales, that can generate up to 30 megawatts of power on incoming and outgoing tide.⁵¹⁹ Plans are under consideration to harness the Atlantic Ocean's energy in Cornwall, which could produce up to 30 megawatts of electricity.⁵²⁰

Solar panels are being rented out at a subsidized rate to home owners in Leicester, England, where the city council plans to meet its target of generating 20 percent of energy from renewable

⁵¹² International Conference for Renewable Energy, www.renewables2004.de/en/2004/outcome.asp

⁵¹³Renewables 2004, "ISC Members," www.renewables2004.de/pdf/Members_ISC.pdf

⁵¹⁴Department of Trade and Industry, United Kingdom, "Our Energy Future - creating a low carbon economy", February 2003, www.managenergy.net/download/r189.pdf

⁵¹⁵ Department of Trade and Industry, United Kingdom, "Fuelling the Future - Fuel Cells UK Launched in London" 07 May, 2004, www.wired-gov.net/WGArticle.asp?WCI=htmArticleView&WCU=ARTCL%5FPKEY%3D16969

⁵¹⁶ BBC News, " 'Largest' wind farm plans passed," 23 December 2003 news.bbc.co.uk/1/hi/scotland/3345243.stm

⁵¹⁷ BBC News, "Giant windfarm plan unveiled," 18 December 2003 news.bbc.co.uk/1/hi/wales/3329257.stm

⁵¹⁸ BBC News, "Britain unveils wind energy plans," 18 December 2003 news.bbc.co.uk/1/hi/england/3329537.stm

⁵¹⁹ BBC News, "Tidal power plan for Swansea Bay," 24 November 2003

news.bbc.co.uk/1/hi/wales/south_west/3234548.stm

⁵²⁰ BBC News, "Wave power plan unveiled," 30 October 2003 news.bbc.co.uk/1/hi/england/cornwall/3228677.stm

sources by 2020.⁵²¹ Solar panels were also installed on the roof of Powys County Hall in Wales, which provide enough power to light to whole building.⁵²²

On 23 October 2003 the UK launched the Renewable Energy and Energy Efficiency Partnership (REEEP). The event brought together energy and environment ministers from around the world to discuss the identification and removal of regulatory barriers to market development on a regional basis, matching finance with renewable and energy efficiency projects, and the provision of strategic direction and communications.⁵²³

The Foreign and Commonwealth Office (FCO) is requesting applications for funds from the Global Opportunities Fund, Climate Change and Energy Programme. The FCO already committed £4.6 million in FY 2003/04 and plans to commit £3.6 million in FY 2004/05. The Programme aims to "promote change in the governance of international energy resources and systems to help secure the UK's medium-term global climate change objectives" and targets the following countries: Angola, Brazil, China, India, Indonesia, Kazakhstan, Mexico, Nigeria, Philippines, Russia, and South Africa.⁵²⁴

Robert Mason of the Climate Change and Renewable Energy Team in the Environment Policy Department of the Foreign and Commonwealth Office is participating in the planning of Renewables 2004 as a member of the International Steering Committee (ISC).⁵²⁵

8. United States: 0

In 2001, approximately 86 percent of the energy consumed in the United States came from coal, oil and natural gas. About 8 percent came from nuclear power plants and the remaining 6 percent from renewable energy resources.⁵²⁶ The United States Department of Energy is pursuing several policy initiatives utilizing different strategies to research and address issues surrounding climate change, energy efficiency and renewable energy sources. Due to this process several governmental departments have been developed including the Office of Energy, Efficiency and Renewable Energy, the Office of Fossil Energy and the Office of Nuclear Energy, Science and Technology. In 2002, the President required the Department of Energy to improve the current voluntary emission reduction registration program. He has also established a Committee on Climate Change Science and Technology Integration.⁵²⁷ One of the Bush administration's newest

⁵²¹ BBC News, "Green energy for rent," 9 September 2003 news.bbc.co.uk/1/hi/england/leicestershire/3095124.stm ⁵²² BBC News, "Sun's energy powers Powys," 9 September 2003 news.bbc.co.uk/1/hi/wales/mid/3093242.stm

 ⁵²³ Foreign and Commonwealth Office, "Global Partnership for Sustainable Energy Launched in London," 23

October 2003 www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1007029391638&a=K Article&aid=1065717742247

⁵²⁴ Foreign and Commonwealth Office, "Global Opportunities Fund,"

www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1070989563933

⁵²⁵ Renewables 2004, "ISC Members," www.renewables2004.de/pdf/Members_ISC.pdf

⁵²⁶ United States Department of Energy, "Contribution of Renewable Energy to the United States Energy Supply," www.eere.energy.gov/consumerinfo/refbriefs/da8.html

⁵²⁷ United States Department of Energy, "Climate Change," www.energy.gov/engine/content.do?BT_CODE=ST_SS4

policies, following the refusal to ratify the Kyoto Protocol, emphasizes increased research and further negotiations within the United Nations framework.⁵²⁸

In 2002, the G8 Energy Minister's Meeting was held in Detroit. Leaders promised to explore new sources of energy and finalized recommendations on energy security, sustainability and alternative fuel technologies.529

The US government is particularly focussed on the development of hydrogen fuel cells. President Bush launched his Hydrogen Fuel Initiative by pledging US\$1.2 billion over five years in research funding in his 2003 State of the Union Address.⁵³⁰ On 17 July 2003 Secretary of Energy Spencer Abraham announced that 13 firms and educational institutions in twelve states would receive US\$75 million in "cost-shared awards to fund new research in advanced fuel cell technology for vehicles, buildings and other applications".⁵³¹ On 31 July 2003 Abraham announced the release of two solicitations, amounting to US\$200 million over four to five years, to support the President's Hydrogen Fuel Initiative.⁵³² On 17 September 2003 Abraham announced the allocation of US4.2 million to 10 research projects aimed at resolving obstacles to fuel cell use.⁵³³ On 28 October 2003 the Department of Energy launched an effort to introduce science students across the US to the promise of hydrogen and fuel cell technology.⁵³⁴ Finally on 20 November 2003 Abraham's, along with Ministers representing 14 other states and the European Commission, signed an agreement that formally established the International Partnership for the Hydrogen Economy (IPHE). Abraham noted that the "vision of the International Partnership for the Hydrogen Economy is that a participating country's consumers will have the practical option of purchasing a competitively priced hydrogen power vehicle, and be able to refuel it near their homes and places of work, by 2020". 535

⁵²⁸ G8 Research Group, "Issue Objectives for the Genoa Summit Meeting 2001: Environment," www.g8.utoronto.ca/evaluations/2001genoa/objectives/environment.html

⁵²⁹ G8 Research Group, "The 2001 G8 Compliance Report," www.g8.utoronto.ca/evaluations/index.html#2001

⁵³⁰ US Department of Energy, "Energy Department Awards \$75 Million for Advanced Hydrogen Fuel Cell R&D," 17 July 2003

www.energy.gov/engine/content.do?PUBLIC ID=13801&BT CODE=PR PRESSRELEASES&TT CODE=PRES SRELEASE ⁵³¹ Ibid.

⁵³² US Department of Energy, "DOE Solicits Bids for \$200 Million Hydrogen Production, Delivery and Storage Projects," 31 July 2003

www.energy.gov/engine/content.do?PUBLIC ID=13890&BT CODE=PR PRESSRELEASES&TT CODE=PRES SRELEASE

⁵³³ US Department of Energy, "Fuel Cells to Advance Zero-Emissions Energy in the Economy," 17 September 2003 www.energy.gov/engine/content.do?PUBLIC_ID=14162&BT_CODE=PR_PRESSRELEASES&TT_CODE=PRES SRELEASE

⁵³⁴ US Department of Energy, "DOE Launches Hydrogen and Fuel Cell Technology Education Effort in Nation's Schools," 28 October 2003

www.energy.gov/engine/content.do?PUBLIC ID=14363&BT CODE=PR PRESSRELEASES&TT CODE=PRES **SRELEASE**

⁵³⁵ US Department of Energy, "Secretary of Energy Abraham Joind International Community to Establish the International Partnership for the Hydrogen Economy," 20 November 2003

www.energy.gov/engine/content.do?PUBLIC_ID=14481&BT_CODE=PR_PRESSRELEASES&TT_CODE=PRES SRELEASE

On 8 August 2003 Secretary of Energy Spencer Abraham announced the allocation of US\$2.2 million to seven Native American tribes to support the development of renewable energy resources on tribal lands. The funds will help develop wind, solar, and biomass energy projects throughout the US.⁵³⁶ On 13 August 2003 Abraham announced the provision of US\$17 390 442 for 187 energy efficiency and renewable energy projects in 48 states. The funds will support the development of "renewable energy sources such as wind, solar, geothermal and biomass".⁵³⁷ On 5 September 2003 the US Department of Agriculture and the US Department of Energy announced the allocation of US\$23 million through a joint grant program to 19 biomass research, development and demonstration projects.⁵³⁸

USAID supports the Global Village Energy Partnership (GVEP), which "seeks to increase access to modern energy services to those in developing countries around the world, in a manner that enhances economic and social development and reduces poverty".⁵³⁹ The GVEP partners developed and developing countries with multilateral organizations, private firms, and NGOs, furthering The Clean Energy Initiative (CEI) launched at the WSSD in 2002.

The US has also recently released joint statements with India⁵⁴⁰, Japan⁵⁴¹ and South Africa⁵⁴² that have focussed on their partnerships in the areas of climate change and renewables.

David K. Garman, the Assistant Secretary for Energy Efficiency and Renewable Energy of the Department of Energy is participating in the planning of Renewables 2004 as a member of the International Steering Committee.⁵⁴³

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⁵³⁶ US Department of Energy, "Energy Department Awards Spur Development Of Tribes' Renewable Energy Resources," 8 August 2003

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⁵³⁷ US Department of Energy, "Energy Department to Award \$17.3 Million for 187 Energy-Saving Projects," 13 August 2003

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⁵³⁸ US Department of Energy, "USDA and Energy Department Award \$23 Million in Joint Biomass Research and Development Initiative," 5 September 2003

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⁵³⁹ US Department of State, "The Global Village Energy Partnership: U.S. Contribution," 11 September 2003 www.state.gov/g/oes/rls/fs/2003/19909.htm

⁵⁴⁰ US Department of State, "Overview of the U.S.-India Climate Change Partnership," 11 November 2003 www.state.gov/g/oes/rls/rm/2003/26110.htm

⁵⁴¹ US Department of State, "Joint Statement of the United States and Japan on High-Level Consultation on Climate Change," 7 August 2003 www.state.gov/g/oes/rls/or/23114.htm

⁵⁴² US Department of State, "United States-South Africa Joint Statement on Climate Change," 28–29 July 2003 www.state.gov/g/oes/rls/or/22912.htm

⁵⁴³ Renewables 2004, "ISC Members," www.renewables2004.de/pdf/Members_ISC.pdf