2. Energy: Efficiency and Diversification [26]

Commitment:

"On the demand side, it is important to make further efforts to improve energy efficiency as well as pursue energy diversification."

G8 Leaders Declaration on the World Economy

Assessment:

Country	Lack of Compliance -1	Work in Progress 0	Full Compliance +1
Canada		0	
France		0	
Germany			+1
Italy		0	
Japan		0	
Russia			+1
United Kingdom			+1
United States			+1
European Union			+1
Average Score			+0.56

Interim Compliance Score

Background:

Energy efficiency and diversification have been primary concerns for G8 members since the 2005 Gleneagles Summit, where emphasis was placed on the urgency of climate change. As part of the Gleneagles Plan of Action on Climate Change, Clean Energy and Sustainable Development, G8 members committed to "promote innovation, energy efficiency, conservation, improve policy, regulatory and financing frameworks."⁸⁸ Leaders agreed to take comprehensive action toward integrating renewable sources of energy into national power grids, calling for greater research and development and international cooperation.

At the 2006 St Petersburg Summit, the G8 reaffirmed the principles of the Gleneagles Plan through the St Petersburg Plan of Action: Global Energy Security, and emphasized the need to: 1) "strengthen and elaborate the system of national and multilateral energy efficiency statistics;" 2) "undertake necessary measures, including financial and tax incentives at home for the promotion of energy-efficient technologies, and the actual use of those available technologies on a wide-scale basis;" and 3) encourage further

⁸⁸ Climate Change, Clean Energy and Sustainable Development, Gleneagles Summit (Gleneagles) 8 July 2005. Date of Access: 15 January 2009. http://www.g8.utoronto.ca/summit/2005gleneagles/climatechange.html.

developments in nuclear technology, hydrogen fuels and renewable sources of energy such as wind, solar, hydro, biomass and geothermal.⁸⁹

Due to the surge in oil and food prices in early 2008, there was an even greater emphasis on energy efficiency and diversification at the Hokkaido-Toyako Summit. G8 leaders welcomed the formation of the International Partnership for Energy Efficiency Cooperation."⁹⁰ Further, they suggested "the enhancement of WTO negotiations on the elimination of tariff and non-tariff barriers to environmental goods and services" and emphasized the importance of investing in the development and commercialization of renewable sources of energy.⁹¹

Commitment Features:

There are two components to this commitment: improving energy efficiency and pursuing energy diversification. For full compliance, members must pursue both objectives. Measures to encourage energy efficiency or energy diversification may take a variety of forms, including research funding, government-funded or initiated pilot projects, or innovative power generation projects.

Scoring:

-1	Member implements no new measures to encourage energy efficiency AND no new measures to encourage energy diversification.
0	Member implements new measures to encourage energy efficiency OR new measures to encourage energy diversification.
1	Member implements new measures to encourage energy efficiency AND implements new measures to encourage energy diversification.

Lead Analyst: Kenta Hatamochi

Canada: 0

Canada has partially complied with its commitment to encourage energy efficiency and diversification. Canada has actively pursued energy diversification, but has not addressed energy efficiency in this compliance cycle.

http://www.g8.utoronto.ca/evaluations/2008hokkaido/2008-issues-080709.pdf.

G8 Research Group 2008 Interim Compliance Report

⁸⁹Gleneagles Plan of Action: Climate Change, Clean Energy and Sustainable Development, G8 Information Centre (Toronto), 8 July 2005. Date of Access: 19 November 2008. http://www.g8.utoronto.ca/summit/2006stpetersburg/energy.html.

⁹⁰ 2008 Hokkaido-Toyako G8 Summit Issue Area Assessment Report, G8 Information Center (Toronto), 9 July 2008. Date of Access: 12 November 2008.

⁹¹ 2008 Hokkaido-Toyako G8 Summit Issue Area Assessment Report, G8 Information Center (Toronto), 9 July 2008. Date of Access: 12 November 2008.

http://www.g8.utoronto.ca/evaluations/2008hokkaido/2008-issues-080709.pdf.

The Canadian promotes energy diversification with its ecoENERGY for Renewable Power Program, unveiled in early 2007. Canada has committed to invest CAD1.48 billion over ten years in subsidies for renewable or low-impact electricity generation.⁹² In August 2008, Member of Parliament James Lunney announced CAD1.1 million in government funding for the Cypress Creek Hydroelectric Project in British Columbia.⁹³ The project was described as low-impact, generating "clean, emissions-free electricity."⁹⁴

On 11 December 2008, Canada's Minister of the Environment Jim Prentice delivered a statement to delegates at the United Nations Climate Change Conference (UNFCCC). In his speech, Minister Prentice stressed the importance of "increasing global supplies of secure, affordable, and clean energy."⁹⁵ Furthermore, he highlighted Canada's recent commitment to "meet 90 per cent of its electricity needs from non-emitting sources such as hydro, nuclear, clean coal or wind power by 2020."⁹⁶

On 17 October 2008, Canadian and the European Union leaders met in Quebec City to discuss energy use and the environment.⁹⁷ Canada agreed to promote the use of clean coal technologies, integrate further renewable sources of energy, and strengthen research being conducted in the area of energy efficiency and diversification.⁹⁸

Thus, Canada has been awarded a score of 0 for pursuing energy diversification, but not energy efficiency.

Analyst: Kenta Hatamochi

France: 0

France has partially complied with its commitment to encourage energy efficiency and diversification.

On 23 October 2008, the French government approved a plan to phase out inefficient lighting. This agreement seeks to: (1) encourage the use of efficient lamps; (2) increase

⁹² ecoENERGY for Renewable Power, Government of Canada (Ottawa). Date of Access: 12 January 2009. <u>http://www.ecoaction.gc.ca/ECOENERGY-ECOENERGIE/power-electricite/index-eng.cfm</u>.

⁹³ Government of Canada Invests in British Columbia Renewable Energy Projects, Government of Canada (Vancouver Island) 22 August 2008. Date of Access: 12 January 2009. <u>http://ecoaction.gc.ca/news-nouvelles/20080822-eng.cfm</u>.

nouvelles/20080822-eng.cfm.
⁹⁴ Government of Canada Invests in British Columbia Renewable Energy Projects, Government of Canada (Vancouver Island) 22 August 2008. Date of Access: 12 January 2009. <u>http://ecoaction.gc.ca/news-nouvelles/20080822-eng.cfm</u>.

⁹⁵ Canada's Environment Minister Delivers National Statement at UNCCC (Poznan), 11 December 2008. Date of Access: 20 December 2008. <u>http://news.gc.ca/web/article-eng.do?m=/index&nid=427589</u>.

⁹⁶ Canada's Environment Minister Delivers National Statement at UNCCC (Poznan), 11 December 2008. Date of Access: 20 December 2008. <u>http://news.gc.ca/web/article-eng.do?m=/index&nid=427589</u>.

⁹⁷ 2008 Canada-EU Summit Statement, Government of Canada (Quebec City), 17 October 2008. Date of Access: 19 December 2008. <u>http://www.international.gc.ca/missions/eu-</u>ue/summits_sommets/summit_quebec-2008_joint-declaration-eng.asp

 ⁹⁸ 2008 Canada-EU Summit Statement, Government of Canada (Quebec City), 17 October 2008. Date of Access: 19 December 2008. <u>http://www.international.gc.ca/missions/eu-ue/summits_sommets/summit_quebec-2008_joint-declaration-eng.asp.</u>

the quality of efficient lamps already in the marketplace; and (3) provide better information and education to consumers.⁹⁹

France is pushing for "more demanding EU rules to reduce energy consumption in buildings" at the EU, where it held the presidency until December 2008.¹⁰⁰ In a briefing note released before an EU energy ministers' meeting in October, the French Presidency called energy efficiency a "top priority [...] the cornerstone of our ambitious policy to combat global warming, while enhancing business competitiveness and reducing the consumer energy bill."¹⁰¹

Thus, France has been awarded a score of 0 for implementing measures to promote energy efficiency, but not taking any action toward energy diversification.

Analyst: Kenta Hatamochi

Germany: +1

Germany has fully complied with its commitment to encourage energy efficiency and diversification.

At a conference in Madrid with representatives from 51 countries, Germany, in collaboration with Spain and Denmark, announced that it would launch the International Renewable Energy Agency (IRENA) in January 2009.¹⁰² The agency will assist both industrialized and developing countries in promoting renewable energies, including aiding with financing and technology transfer.¹⁰³

On 3 October 2008, Germany increased funding for the UN Environment Programme (UNEP) by USD18 million for "funding projects supporting developing countries in clean energy; energy efficiency; adaptation to climate change in developing countries and boosting the capacity of developing economies for international negotiations."¹⁰⁴ German Environment Minister Sigmar Gabriel met with United Nations Under-Secretary General

⁹⁹ Incandescent Lamp Phase Out, 23 October 2008. Date of Access: 19 December 2008. http://www.iea.org/Textbase/pm/?mode=pm&id=4218&action=detail.

¹⁰⁰ France pushes for energy savings as 'security' issue, 9 October 2008. Date of Access: 20 December 2008.

http://www.euractiv.com/en/energy-efficiency/france-pushes-energy-savings-security-issue/article-176200. ¹⁰¹ Presidency Note, Council of the European Union (Brussels) 6 October 2008. Date of Access: 15 January 2009. <u>http://register.consilium.europa.eu/pdf/en/08/st13/st13827.en08.pdf</u>. ¹⁰² Breakthrough for the expansion of renewable energies;

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin), 25 October 2008. Date of Access: 12 December 2008. <u>http://www.bmu.de/english/current_press_releases/pm/42463.php</u>. ¹⁰³ Breakthrough for the expansion of renewable energies;

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Berlin), 25 October 2008. Date of Access: 12 December 2008. <u>http://www.bmu.de/english/current_press_releases/pm/42463.php</u>.

¹⁰⁴ German Government Invests \$18 Million to Support Clean Energy and Climate Change Adaptation, United Nations Environment Programme (Nairobi) 3 October 2008. Date of Access: 12 December 2008. <u>http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=548&ArticleID=5935&l=en</u>.

and UNEP Executive Director Achim Steiner at the UNEP Headquarters in Nairobi to make this announcement.¹⁰⁵

Germany has been awarded a score of +1 for introducing measures to support advances in both energy efficiency and diversification.

Analyst: Daniel Gatto

Italy: 0

Italy has partially complied with its commitment on energy efficiency and diversification. While Italy has pursued energy diversification, it has done little to support improved energy efficiency.

Italy has advanced a number of initiatives on energy diversification. On 3 October 2008, the Italian government made new allocations to retrofit public buildings for solar energy: EUR2 million for government agencies and EUR5 million for schools.¹⁰⁶ In a statement made in September 2008, Italy's Prime Minister Silvio Berlusconi said that Italy is working with the UK to develop nuclear and alternative sectors.¹⁰⁷ Finally, on 26 November 2008, Minister Prestigiacomo approved the use of biodegradable waste as a renewable energy source, in an initiative to turn waste from "problems to resource."¹⁰⁸

On 3 December 2008, the Italian government allocated EUR380 million to its Energy Efficiency and Sustainable Mobility initiatives.¹⁰⁹ The funds will provide grants for private companies and research labs that work to improve the production and distribution of energy from renewable resources.¹¹⁰

Action on energy efficiency has been uneven. Two international initiatives aim to improve energy efficiency abroad, but domestically Italy has rolled back an efficiency initiative. Through Italy's Mediterranean Renewable Energy Programme (MEDREP), Italy has promised to make a contribution of about EUR100,000 to the Renewable Energy and Energy Efficiency Partnership (REEEP) over a duration of 1-2 years for

¹⁰⁵ German Government Invests \$18 Million to Support Clean Energy and Climate Change Adaptation, United Nations Environment Programme (Nairobi) 3 October 2008. Date of Access: 12 December 2008. http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=548&ArticleID=5935&l=en.

¹⁰⁶ Solar announcement for public buildings, Ministry of the Environment and the Protection of Land and Sea (Rome), 3 October 2008. Date of Access: 12 December 2008.

http://www.minambiente.it/index.php?id_doc=636&id_oggetto=3. ¹⁰⁷ Berlusconi: 'Solid economy in Italy', Corriere della Sera (Milan) 10 September 2008. Date of Access: 12 December 2008.

http://www.corriere.it/politica/08 settembre 10/berlusconi brown economia 76f4ca64-7f48-11dd-a664-00144f02aabc.shtml.

¹⁰⁸ Environment; Prestigiacomo: "More biodegradable waste and less C02 to produce energy"; Ministry of the Environment and the Protection of Land and Sea (Rome), 26 November 2008. Date of Access: 12 December 2008. http://www.minambiente.it/index.php?id_doc=1238&id_oggetto=2.

¹⁰⁹ Success of the Made in Italy announcement: 429 innovative projects presented by three thousand companies and one thousand research centers, Ministry of Economic Development (Rome) 3 December 2008. Date of Access: 8 December 2008. http://www.industria2015.ipi.it/file/com_stampa_madeinitaly.pdf. ¹¹⁰ PII Target on Energy Efficiency, Ministry of Economic Development (Rome). Date of Access: 8 December 2008. http://www.industria2015.ipi.it/index.php?id=4.

projects to be carried out by the public and private sectors in Algeria, Egypt, Libya, Morocco and Tunisia.¹¹¹ Italy is also working with the governments of Tunisia and Morocco to evaluate and carry out energy diversification and efficiency measures through the Climate Development Mechanism, outlined in the Kyoto Protocol.¹¹²

However, the Italian Government cancelled a 55 per cent rebate on the *Imposta sul Reddito delle Persone Fisiche* tax on 28 November 2008.¹¹³ The rebate granted homeowners who had installed energy efficient utilities a reduced income tax rate.

Italy's public commitment to energy efficiency and diversification has been variable in this compliance cycle. On 20 October 2008, the EU Council of Environment Ministers met in Luxemburg.¹¹⁴ At the meeting, a dispute between the Italian and the EU administrations continued on the 20-20-20 plan. The 20-20-20 package commits members to reduce CO2 emissions by 20 per cent, increase energy efficiency by 20 per cent and increase the proportion of renewable energy to 20 per cent.

The disagreement reached the point where Italy threatened to veto the deal, leading Prestigiacomo to be accused of "sabotage."¹¹⁵ By 11 December 2008, however, Prime Minister Berlusconi stated that the accord was "going towards a compromise."¹¹⁶ EU environment ministers met the following day in Brussels and Italy agreed on a reduced target for Italy, 17 per cent renewable energy.¹¹⁷

Despite conflict over precise targets, Italy has invested in programs that pursue energy diversification. Italy has undermined its own efforts on energy efficiency, however. Thus, Italy has been awarded a score of 0.

http://www.minambiente.it/index.php?id_doc=627&id_oggetto=3.

http://www.minambiente.it/index.php?id_doc=635&id_oggetto=3.

¹¹¹ Renewable Energy and Energy Efficiency Partnership (REEEP), Ministry of the Environment and the Protection of Land and Sea (Rome), 23 October 2008. Date of Access: 12 December 2008. http://www.minambiente.it/index.php?id_doc=643&id_oggetto=3.

¹¹² Solar thermal power in the residential sector, Ministry of the Environment and the Protection of Land and Sea (Rome), 6 August 2008. Date of Access: 12 December 2008.

CDM in Morocco, Ministry of the Environment and the Protection of Land and Sea (Rome), 29 September 2008. Date of Access: 12 December 2008.

¹¹³ Energia: la questione degli incentivi per l'efficienza, Unine Provincie d'Italia (Rome) 2 December 2008. Date of Access: 10 December 2008. <u>http://www.upinet.it/upinet/contr_edit.bfr</u>.

¹¹⁴ Costs, capabilities and the role of China are why Rome and the EU disagree; La Reppublica (Rome) 19 October 2008. Date of Access: 12 December 2008.

http://www.repubblica.it/2008/10/sezioni/ambiente/clima-vertice-ue-2/clima-vertice-2/clima-vertice-ue-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima-vertice-2/clima

¹¹⁵ Kyoto, Italy distances itself further; La Reppublica (Rome), 10 December 2008. Date of Access: 12 December 2008. <u>http://www.repubblica.it/2008/10/sezioni/ambiente/clima-vertice-ue-2/italia-classifica.html?ref=search</u>. ¹¹⁶ EU, new French draft, Berlusconi is now optimistic; La Reppublica (Rome), 11 December 2008. Date of

¹¹⁶ EU, new French draft, Berlusconi is now optimistic; La Reppublica (Rome), 11 December 2008. Date of Access: 12 December 2008. <u>http://www.repubblica.it/2008/10/sezioni/ambiente/clima-vertice-ue-</u>2/gioprno-vertice.html?ref=search.

¹¹⁷ The challenge of clean energy Made in Italy, Il Sole 24 Ore (Milan), 12 December 2008. Date of Access: 12 December 2008.

http://www.ilsole24ore.com/art/SoleOnLine4/Economia%20e%20Lavoro/2008/12/energia-rinnovabileaper-20-2020-europa.shtml?uuid=958a9b10-c86e-11dd-baf9-fbc7a4fc4e23&DocRulesView=Libero.

Japan: 0

Japan has partially complied with its commitment to improve energy efficiency and encourage energy diversification. While Japan has made modest efforts to promote energy diversification, it has not pursued energy efficiency improvements in this compliance cycle.

On 11 November 2008, the Japanese Government formulated a new Action Plan for Promoting the Introduction of Solar Power Generation.¹¹⁸ Furthermore, on 9 December 2008, the Ministry of Economy, Trade, and Industry set up the Study Group on Solar System Industry Strategy to discuss further directions of the national energy policy.¹¹⁹

In February 2009, Japan plans to carry out its 33rd Energy and Environment Exhibition. The exhibition will feature different kinds of energy conservation and energy-saving technologies.¹²⁰ This event, however, is not a new initiative.

Japan has a good record of government support for energy-efficient technological innovations. It also has an efficient and well-funded renewable energy research and development program.¹²¹ Although the Japanese government has continued its support of the country's ongoing commitments to energy conservation and diversification, it has not introduced any new initiatives since the Hokkaido-Toyako Summit, apart from the solar power generation plan. Thus, Japan has been awarded a score of 0.

Analyst: Danara Dourdoussova

Russia: +1

Russia has fully complied with its commitment to improve energy efficiency and encourage energy diversification. It has implemented a number of new government programs to address both energy efficiency and diversification.

On 4 June 2008, President Dmitri Medvedev signed a decree that encouraged the Russian government to adopt energy-efficient measures. The legislation called for the allocation of "funds in the 2009-2011 federal budget for renewable energy technologies and [the

¹¹⁸ Action Plan for Promoting the Introduction of Solar Power Generation, Ministry of Economy, Trade and Industry (Tokyo), 11 November 2008. Date of Access: 7 December 2008. <u>http://www.meti.go.jp/english/press/data/nBackIssue20081111_01.html</u>.

¹¹⁹ Establishment of the Study Group on Solar System Industry Strategy, the Ministry of Economy, Trade and Industry (Tokyo), 9 December 2008. Date of Access: 11 December 2008. http://www.meti.go.jp/english/press/data/nBackIssue20081209 03.html.

¹²⁰ Thirty third Energy and Environment Exhibition Official Guide, the Energy Conservation Center (Tokyo). Date of Access: 8 December 2008 <u>http://www.enex.info/language/index.html</u>.

¹²¹ Executive Summary of the Energy Policies of the IEA Countries – Japan, International Energy Agency 2008 (Tokyo). 2008 Date of Access: December 9, 2008. http://www.iea.org/Textbase/npsum/Japan2008SUM.pdf.

provision of] subsidies for specific projects."¹²² This initiative promotes both energy efficiency and diversification.

Further, the Government of Russia and the International Finance Corporation (IFC) agreed to continue their cooperation on Russia's long-term financial investment in energy efficiency projects.¹²³ An example of this cooperation was the agreement signed between IFC and Russia's MDM Bank at the end of July 2008, which was aimed at extending energy efficiency financing to smaller, local companies.¹²⁴ MDM Bank will be given a USD35 million loan to lend out for energy efficiency projects.¹²⁵

The Russian government has further recognized that much of its construction sector does not build with energy efficiency in mind. ¹²⁶ In order to tackle this problem, a draft law on Energy Saving and Improving Energy Efficiency was put forward to the Russian Parliament on 17 October 2008.¹²⁷ The government will give grants to development firms, other businesses and municipalities to spend on energy-efficient technology.¹²⁸ Businesses that own the most inefficient business will face fines.¹²⁹

Russia has also taken further action on energy diversification. In September 2008, Rosnanotekh (Russian State Corporation for Nanotechnologies) signed a strategic cooperation agreement with Oerlikon, a major producer of equipment for manufacturing solar cells.¹³⁰ Additionally, in October 2008, Prime Minister Vladimir Putin supported a proposal made by Rosatom (Russian Federal Agency for Atomic Energy) to invest in polysillicon production and to construct a solar equipment plant in Krasnoyarsk Region to produce solar modules.

On 16 January Vladimir Putin signed the decree on the main directions of governmental policy in the sphere of energy efficiency on the base of renewable energy. According to

¹²² Renewable Energy in Russia's Future. 9 August 2008 Date of Access: 6 December 2008. http://eng.globalaffairs.ru/numbers/24/1219.html.

¹²³ The interview with vice-president of IFC. 17 September 2008 Date of Access: 6 December 2008. http://www.prime-tass.ru/news/show.asp?id=726&ct=interviews.

¹²⁴ IFC Expands Energy Efficiency Program in Russia in Partnership with MDM Bank. 18 July 2008 Date of Access: 6 December 2008.

http://www.ifc.org/ifcext/media.nsf/content/SelectedPressRelease?OpenDocument&UNID=64EDCE2662 AC3D7F8525748D004B0C27. ¹²⁵ IFC Expands Energy Efficiency Program in Russia in Partnership with MDM Bank. 18 July 2008 Date

¹²⁵ IFC Expands Energy Efficiency Program in Russia in Partnership with MDM Bank. 18 July 2008 Date of Access: 6 December 2008.

http://www.ifc.org/ifcext/media.nsf/content/SelectedPressRelease?OpenDocument&UNID=64EDCE2662 AC3D7F8525748D004B0C27.

¹²⁶ Moscow will develop energy-efficient buildings, 24 October 2008. Date of Access: 6 December 2008. http://www.reeep.org/index.php?assetType=news&assetId=172.

¹²⁷ Moscow will develop energy-efficient buildings, 24 October 2008. Date of Access: 6 December 2008. http://www.reeep.org/index.php?assetType=news&assetId=172.

¹²⁸ Moscow will develop energy-efficient buildings, 24 October 2008. Date of Access: 6 December 2008. http://www.reeep.org/index.php?assetType=news&assetId=172.

¹²⁹ Moscow will develop energy-efficient buildings, 24 October 2008. Date of Access: 6 December 2008. http://www.reeep.org/index.php?assetType=news&assetId=172.

¹³⁰ Solar Power Projects in Russia: Private and State Initiatives. Date of access: 6 December 2008. http://climateintel.com/category/renewable-energy/.

this decree any company investing into renewables will receive a subsidy for each kWh produced.¹³¹

Thus, Russia has been awarded a score of +1 for implementing new measures to encourage both energy efficiency and diversification.

Analyst: Yulia Ovchinnikova

United Kingdom: +1

The United Kingdom has fully complied with its commitment to improve energy efficiency and diversification. New initiatives have addressed both energy efficiency and diversification.

On 26 November 2008, the UK government passed the Energy Act 2008, which implements the legislation of the 2007 Energy White Paper.¹³² The Act includes measures to promote energy diversification.¹³³ In part, it strengthens an existing initiative, the Renewables Obligation, which requires energy suppliers to sell renewable power, in a percentage of its business that increases each year.¹³⁴

The UK Government has also announced a trial program to distribute 3,000 "intelligent" refrigerators. The fridges will use "dynamic demand technology," designed to be compatible with some sources of renewable energy, including wind and wave, which are generated intermittently."¹³⁵

On 11 September 2008, The Department for Environment, Food and Rural Affairs (DEFRA) announced that the government will draft legislation that will require energy companies to invest an estimated GBP910 in making homes more energy-efficient. ¹³⁶ GBP350 million of the funding from energy suppliers will be dedicated towards a new Community Energy Saving Programme. The program will require local councils, voluntary organizations, and energy companies to ensure that low-income households have access to energy savings measures.¹³⁷

¹³¹ Consumers will pay for renewables, newspaper Kommersant №8(4063), 20 January 2009. Date of access: 1 February 2009. <u>http://www.kommersant.ru/doc.aspx?DocsID=1105596</u>.

¹³² Energy Act 2008, Department for Business Enterprise and Regulatory Reform (London) 2008. Date of Access: 7 December 2008. <u>http://www.berr.gov.uk/whatwedo/energy/act/page40931.html</u>.

 ¹³³ Energy Act 2008, Department for Business Enterprise and Regulatory Reform (London), 2008. Date of Access: 7 December 2008. <u>http://www.berr.gov.uk/whatwedo/energy/act/page40931.html</u>.
¹³⁴ What is the Renewables Obligation? Department for Business Enterprise and Regulatory Reform. Date

¹³⁴ What is the Renewables Obligation? Department for Business Enterprise and Regulatory Reform. Date of Access: 15 January 2009.

http://www.berr.gov.uk/whatwedo/energy/sources/renewables/policy/renewables-obligation/what-is-renewables-obligation/page15633.html

¹³⁵ UK set to trial 'smart fridges,' The Guardian, 2 December 2008. Date of Access: 9 December 2008. <u>http://www.guardian.co.uk/environment/2008/dec/02/energy-efficient-dynamic-demand-fridges</u>.

¹³⁶ Save Money, Save Energy: Government takes action on family fuel bills, Department for Environment, Food and Rural Affairs (London) 11 September 2008. Date of Access: 11 December 2008 <u>http://www.defra.gov.uk/news/2008/080911a.htm</u>.

¹³⁷ Save Money, Save Energy: Government takes action on family fuel bills, Department for Environment, Food and Rural Affairs (London) 11 September 2008. Date of Access: 11 December 2008 <u>http://www.defra.gov.uk/news/2008/080911a.htm</u>.

On 1 December 2008, the Committee on Climate Change (CCC) was established as an autonomous body, to advise the UK Government on climate change issues, including how to foster a low carbon economy. The committee aims to monitor progress in "reducing emissions and achieving carbon budgets."¹³⁸ It has already released suggestions on: (1) decarbonising electricity generation; (2) promoting effective energy use in buildings and industry; (3) reducing domestic transport emissions; and (4) reducing carbon production emitted from international aviation and shipping.¹³⁹

Thus, the UK has been awarded a score of +1 for introducing initiatives that address both energy efficiency and diversification.

Analyst: Yinsey Wang

United States: +1

The United States has fully complied with its commitment to improve energy efficiency and diversification. It has addressed both energy efficiency and diversification.

On 6 October 2008, the US Department of Energy (DOE) established awards "for research, development, and demonstration of Enhanced Geothermal Systems (EGS) for next-generation geothermal energy technologies."¹⁴⁰ The Department of Energy has committed to provide up to USD43.1 million over a period of four years to award recipients in the public and private sectors. ¹⁴¹ This funding promotes energy diversification.

On 22 August 2008, the DOE announced that it will provide over USD26 million, given Congressional approval, to the development of energy-efficient industrial processes in the steel and other energy-intensive industries.¹⁴² The main goal is to reduce the energy intensity of the US manufacturing sector.¹⁴³

On 26 September 2008, the DOE Office of Energy Efficiency and Renewable Energy announced the first phase of awards, valued at USD15 million, for the Net-Zero Energy Commercial Building Initiative (CBI). The award will come in form of technical assistance. American companies will work together with the Department's laboratories to

 ¹³⁸ About the CCC, Committee on Climate Change (London), 2008. Date of Access: 9 December 2008.
<u>http://www.theccc.org.uk/about-ccc/</u>.
¹³⁹ Building a low-carbon economy - the UK's contribution to tackling climate change (London), 1

¹³⁹ Building a low-carbon economy - the UK's contribution to tackling climate change (London), 1 December 2008. Date of Access: 9 December 2008. <u>http://www.theccc.org.uk/reports/</u>.

¹⁴⁰ DOE Funds 21 Research, Development and Demonstration Projects for up to \$78 Million to Promote Enhanced Geothermal Systems, US Department of Energy. (Reno) October 6 2008. Date of Access: 11 December 2008. <u>http://www.energy.gov/news/6624.htm</u>.

¹⁴¹ DOE Funds 21 Research, Development and Demonstration Projects for up to \$78 Million to Promote Enhanced Geothermal Systems, US Department of Energy. (Reno) October 6 2008. Date of Access: 11 December 2008. <u>http://www.energy.gov/news/6624.htm</u>.

¹⁴² DOE Announces \$26 Million to Develop Energy-efficient Processes for US Industry, US Department of Energy, 22 August 2008. Date of Access: 12 December 2008. <u>http://www.energy.gov/news/6486.htm</u>.

¹⁴³ DOE Announces \$26 Million to Develop Energy-efficient Processes for US Industry, US Department of Energy, 22 August 2008. Date of Access: 12 December 2008. <u>http://www.energy.gov/news/6486.htm</u>.

bring energy-saving technologies to the market and produce design solutions to yield energy savings in their commercial buildings.¹⁴⁴

Thus, the United States has been awarded a score of +1 for undertaking energy efficiency and diversification initiatives of a variety of forms.

Analyst: Danara Dourdoussova

European Union: +1

The European Union has fully complied with its commitment to improve energy efficiency and diversification. New policies and programs address both energy efficiency and diversification.

After a long period of negotiation, in December, EU leaders approved part of the 20-20-20 climate change plan.¹⁴⁵ They agreed to boost the EU's use of renewables to 20 per cent of consumption by 2020.¹⁴⁶ The third component of the 20-20-20 plan, to reduce energy consumption by 20 per cent through efficiency improvements, has not yet been formally approved.¹⁴⁷

On 8 December 2008, member states of the European Union agreed to phase out incandescent light bulbs by 2012. By switching to energy saving bulbs, EU citizens will save 40TWh, which is equivalent to the energy consumption of 11 million European households. Furthermore, the European Commission seeks to impose restrictions on other products such as consumer electronics, white goods, and heating appliances.¹⁴⁸ This addresses energy efficiency.

In November, the European Commission launched court proceedings against Luxemburg due to its failure to comply with the 2002 Energy Performance of Buildings Directive. This Directive aims at "reducing energy consumption in buildings," which will "improve overall energy efficiency." ¹⁴⁹ This action represents a step towards improving accountability on energy efficiency.

¹⁴⁴ DOE Awards \$15 Million in Technical Assistance to Support Major Retailers, Financial Institutions and Real Estate Firms to Adopt Energy-Efficient Technologies, US Department of Energy, 26 September 2008. Date of Access: 11 December 2008. <u>http://www.energy.gov/news/6577.htm</u>.

¹⁴⁵ EU leaders agree on climate-change deal, CBC, 12 December 2008. Date of Access: 15 January 2009. http://www.cbc.ca/world/story/2008/12/12/eu-climate.html.

¹⁴⁶ EU leaders agree on climate-change deal, CBC, 12 December 2008. Date of Access: 15 January 2009. http://www.cbc.ca/world/story/2008/12/12/eu-climate.html.

¹⁴⁷ Russia and Ukraine's gas dispute should be a chance to tackle fossil fuel consumption. What happened? The Guardian, 14 January 2009. Date of Access: 15 January 2009. http://www.guardian.co.uk/commentisfree/2009/jan/14/eu-energy.

¹⁴⁸ Member States approve the phasing-out of incandescent bulbs by 2012, Rapid EUROPA (Brussels), 8 December 2008. Date of Access: 10 December 2008.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1909&format=HTML&aged=0&language= EN&guiLanguage=en.

¹⁴⁹ Energy Performance of Buildings: Commission launches Court proceedings against Luxemburg, Rapid EUROPA (Brussels), 27 November 2008. Date of Access: 9 December 2008.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1824&format=HTML&aged=0&language= EN&guiLanguage=en.

The European Commission recently announced plans to expand its Energy Labelling Directive to: (1) "energy-using products used in the industrial and commercial sectors" and (2) "other energy-related products which have an impact on energy consumption during use, such as insulated windows." ¹⁵⁰ The new labels will inform customers on the energy consumption of a product before purchase. This initiative should provide incentives for firms to produce more energy-efficient products.¹⁵¹

Thus, the European Union has been awarded a score of +1 for its initiatives and policy changes to encourage both energy efficiency and diversification.

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¹⁵⁰Towards more energy-efficient products: extending the scope of energy labelling, Rapid EUROPA (Brussels), 13 November 2008. Date of Access: 10 December 2008. http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/700&format=HTML&aged=0&langu age=EN&guiLanguage=en.

¹⁵¹Towards more energy-efficient products: extending the scope of energy labelling, Rapid EUROPA (Brussels), 13 November 2008. Date of Access: 10 December 2008. <u>http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/700&format=HTML&aged=0&langu age=EN&guiLanguage=en</u>.