10. Energy: Clean Technology Transfer [91]

Commitment

"We will improve policy and regulatory frameworks in order to boost investments in renewable energies, and promote their deployment and diffusion also in emerging and developing countries"

G8 Leaders' Declaration on Energy Efficiency, Diversification of the Energy Mix and Technology

rissessment			
Country	Lack of Compliance	Work in Progress	Full Compliance
Canada		0	
France	-1		
Germany			+1
Italy		0	
Japan			+1
Russia		0	
United Kingdom			+1
United States			+1
European Union			+1
Average Score			+0.44

Assessment

Background

According to the International Energy Association, renewable energies "could make important contributions to sustainable development", as they help both reduce global greenhouse gas emissions, and "meet specific user and infrastructure needs, particularly in rural areas and in newly industrializing and developing countries".⁶⁴⁰ Presently, non OECD countries consume more renewable energy than their OECD counterparts.⁶⁴¹ Types of renewable energy include geothermal power, solar power, wind power, hydropower, and energy from biomass.⁶⁴²

The G8 has not previously undertaken commitments regarding clean technology transfer specifically, but they have made commitments regarding renewable energy. At the 2005 Summit, the G8 created the Gleneagles Plan of Action, in which members pledged to take action towards "financing the transition to clean energy".⁶⁴³ The group reaffirmed its support for the Gleneagles Plan of Action at the 2006 St. Petersburg Summit.⁶⁴⁴

⁶⁴⁰ Renewable Energy, International Energy Agency (Paris) 23 August 2004. Date of Access: 30 October 2009. <u>www.iea.org/papers/2002/renewable.pdf</u>.

⁶⁴¹ Renewable Energy, International Energy Agency (Paris) 23 August 2004. Date of Access: 30 October 2009. <u>www.iea.org/papers/2002/renewable.pdf</u>.

⁶⁴²Renewable Energy, International Energy Agency (Paris) 23 August 2004. Date of Access: 30 October 2009. <u>www.iea.org/papers/2002/renewable.pdf</u>.

⁶⁴³ Gleneagles Plan of Action - Climate Change, Clean Energy and Sustainable Development (Gleneagles) 2005. Date of Access: 29 October 2009. ww.g8.utoronto.ca/summit/2005gleneagles/climatechangeplan.pdf.

⁶⁴⁴ St. Petersburg Summit Documents – Global Energy Security (St. Petersburg) 16 July 2006. Date of Access: 29 October 2009. <u>www.g8.utoronto.ca/summit/2006stpetersburg/energy.html</u>.

During the 2006 St. Petersburg Summit, the G8 also pledged to "promote wider use of renewable and alternative energy sources".⁶⁴⁵ Members also acknowledged the role of renewable energy in combating climate change, during the Hokkaido-Toyako Summit.⁶⁴⁶

The G8 has expressed support for the "work of interested parties in international mechanisms and programs dealing with renewable energy".⁶⁴⁷ Such bodies include the Renewable Energy and Energy Efficiency Program, which strives to disseminate renewable energy to developing countries.⁶⁴⁸

Essentially, the G8 has previously committed to increase the use of renewable energy, but has not yet undertaken a commitment related to improving policy and regulatory frameworks surrounding investments in green energy; or a commitment related to clean technology transfer.

Commitment Features

This commitment features two aspects. The first is improving policy and regulatory frameworks in order to boost investment in renewable energy. Compliance with this aspect of the commitment would therefore not include creating specific renewable energy projects. It may, however, include policy and regulatory frameworks designed to boost investment in renewable energy both within the member state, and in developing countries. The word 'improve' means that old policies and regulatory frameworks will be updated and strengthened, and not that new policies and regulatory frameworks will be created.

The second aspect of this commitment is the promotion of deployment and diffusion of renewable energies in emerging and developing countries. Promoting deployment and diffusion could be accomplished via policies, monetary instruments, technology grants or other specific programs.

Full compliance would encompass taking action towards both aspects of the commitment.

⁶⁴⁵ St. Petersburg Summit Documents – Global Energy Security (St. Petersburg) 16 July 2006. Date of Access: 29 October 2009. <u>www.g8.utoronto.ca/summit/2006stpetersburg/energy.html</u>.

⁶⁴⁶ Hokkaido Official Documents -- Environment and Climate Change (Hokkaido) 8 July 2008. Date of Access: 29 October 2009. <u>www.g8.utoronto.ca/summit/2008hokkaido/2008-climate.html</u>.

⁶⁴⁷ St. Petersburg Summit Documents – Global Energy Security (St. Petersburg) 16 July 2006. Date of Access: 29 October 2009. <u>www.g8.utoronto.ca/summit/2006stpetersburg/energy.html</u>.

⁶⁴⁸ St. Petersburg Summit Documents – Global Energy Security (St. Petersburg) 16 July 2006. Date of Access: 29 October 2009. <u>www.g8.utoronto.ca/summit/2006stpetersburg/energy.html</u>.

Scoring	
-1	Member does not improve existing policy and regulatory frameworks in order to
	boost investment in renewable energy AND does not promote the deployment and
	diffusion of renewable energies in emerging and developing countries.
0	Member improves existing policy and regulatory frameworks in order to boost
	investment in renewable energy OR promotes the deployment and diffusion of
	renewable energies in emerging and developing countries.
+1	Member improves existing policy and regulatory frameworks in order to boost
	investment in renewable energy AND promotes the deployment and diffusion of
	renewable energies in emerging and developing countries.
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Lead Analyst: Natalie Antonowicz

Canada: 0

Canada has partially complied with its commitment to boost investment in renewable energy through improved policy and regularly frameworks, and to promote the diffusion and deployment of renewable energies emerging and developing countries.

In a meeting on 10 November 2009, Canada's Minister of International Trade and Minister for the Asia-Pacific Gateway, Stockwell Day, and Wannarat Channukul, Thailand's Minister of Energy agreed to develop a Canada-Thailand strategic energy partnership.⁶⁴⁹ According to Minister Day, "this agreement will help Canadian companies take advantage of opportunities in the Thai market, particularly in oil and gas exploration and production, natural gas vehicles, biomass energy, and wind, solar and nuclear energy."⁶⁵⁰ In addition to promoting technology transfer in non-renewable forms of energy, the agreement also promotes diffusion of renewable energy. Thus, the agreement complies with the commitment to diffuse renewable energy in emerging and developing countries.

On 16 September 2009, the Minister of Natural Resources pledged an investment of CAD8 million to support the St. Lawrence Wind Project.⁶⁵¹ Similar announcements in two other provinces were made. On 23 July 2009, the government invested CAD24.3 million in the West Cape Wind Farm project in Prince Edward Island.⁶⁵² On 10 September 2009, the Minister of Natural Resources pledged CAD59 million to support the Wolfe Island EcoPower Centre wind project in Ontario⁶⁵³ This boost in investment

www.international.gc.ca/media_commerce/comm/news-communiques/2009/337.aspx?lang=eng. ⁶⁵⁰ Canada-Thailand Strategic Energy Partnership, Department of Foreign Affairs and International Trade (Ottawa) 10 November 2009. Date Accessed: 3 December 2009.

www.international.gc.ca/media_commerce/comm/news-communiques/2009/337.aspx?lang=eng. ⁶⁵¹ Government of Canada Invests in Clean Energy for Newfoundland and Labrador, Natural Resources Canada (Ottawa) 16 September 2009. Date of Access: 3 December 2009.

www.nrcan.gc.ca/media/newcom/2009/200988-eng.php.

⁶⁵² Government of Canada Invests in Renewable Power for Prince Edward Island, Natural Resources Canada (Ottawa) 23 July 2009. Date Accessed: 3 December 2009. www.nrcan.gc.ca/media/newcom/2009/200970-eng.php.

⁶⁵³ Government of Canada Invests in Clean Energy for Ontario, Natural Resources Canada (Ottawa) 10 September 2009. Date Accessed: 3 December 2009. www.nrcan.gc.ca/media/newcom/2009/200985-eng.php.

⁶⁴⁹ Canada-Thailand Strategic Energy Partnership, Department of Foreign Affairs and International Trade (Ottawa) 10 November 2009. Date Accessed: 3 December 2009.

was part of the ecoEnergy for Renewable Power plan to invest CAD1.5 billion over nine years starting in 2008.⁶⁵⁴ While these actions demonstrate that Canada is taking action to implement its renewable energy legislation, they do not indicate that the country is improving existing policy or regulatory frameworks to boost investment. It is merely acting on existing policy.

On 10 November 2009, Ray Boughen, Member of Parliament for Palliser, on behalf of the Lisa Raitt, Canada's Minister of Natural Resources announced an investment of CAD77.75 million over seven years to support the production of ethanol (biofuels) in Saskatchewan.⁶⁵⁵ Similar announcements in two other provinces were made. On 2 December 2009, the government invested CAD109.97 million to support the production of ethanol in Ontario.⁶⁵⁶ On 25 September 2009, the government invested CAD5.4 million to support the Methes Energies' biodiesel plant in Mississauga, Ontario.⁶⁵⁷ These investments are part of the ecoEnergy for Biofuels programs, which will invest a total of CAD1.5 billion to support biofuels production in Canada from 1 April 2008 to 31 March 2017.⁶⁵⁸ Therefore, because these actions are in accordance with a previous policy, and not an improvement to an existing policy, they do not constitute improvement in existing policy and regulatory frameworks in order to boost investment in renewable energy.

Thus, Canada is awarded a score of 0 for promoting the deployment and diffusion of renewable energies in emerging and developing countries, without improving existing policy and regulatory frameworks in order to boost investment in renewable energy. Analyst: Mina Akrami

France: -1

France has not complied with its commitment to improve policy and regulatory frameworks to boost investment in renewable energies and promote their deployment and diffusion in emerging and developing countries.

As the world's second largest producer of nuclear energy, eighty per cent of France's energy is derived from nuclear power.⁶⁵⁹ France has been less successful in adopting other sources of renewable energy. France's current goals have focused more on the

⁶⁵⁴ Government of Canada Invests in Clean Energy for Newfoundland and Labrador, Natural Resources Canada (Ottawa) 16 September 2009. Date of Access: 3 December 2009.

www.nrcan.gc.ca/media/newcom/2009/200988-eng.php. ⁶⁵⁵ Government of Canada Invests in Saskatchewan Biofuels, Natural Resources Canada (Ottawa) 10 November 2009. Date of Access: 3 December 2009. www.nrcan.gc.ca/media/newcom/2009/2009112-eng.php.

⁶⁵⁶ Government of Canada Invests in Ontario Biofuels, Natural Resources Canada (Ottawa) 2 October 2009. Date of Access: 3 December 2009. www.nrcan.gc.ca/media/newcom/2009/200996-eng.php.

⁶⁵⁷ Government of Canada Invests in Mississauga Biofuels, Natural Resources Canada (Ottawa) 25 September 2009. Date Accessed: 3 December 2009.

www.nrcan-rncan.gc.ca/media/newcom/2009/200995-eng.php. 658 ecoEnergy for Biofuels, Government of Canada (Ottawa) 2009. Date of Access: 3 December 2009. www.ecoaction.gc.ca/ECOENERGY-ECOENERGIE/biofuelsincentive-incitatifsbiocarburants-eng.cfm.

www.nytimes.com/2009/11/09/business/energy-environment/ 09iht-green09.html?scp=1&sq=france%20renewable%20energy%20goals&st=cse

reduction of carbon emissions and less on investment in renewable sources of energy.⁶⁶⁰ The country has not taken any additional action on renewable energy since the 2009 L'Aquila Summit.

Thus, France has been assigned a score of -1 for its lack of improvements to policy and regulatory frameworks for the boosting of investment in renewable energy, and its lack of action for the deployment and diffusion of renewable energy in developing countries. *Analyst: Poorva Misra*

Germany: +1

Germany has fully complied with its commitment to improve existing policy and regulatory frameworks in order to boost investment in renewable energy and promote its deployment and diffusion in developing and emerging countries.

On 3 December 2009, Germany and Brazil launched "nine joint projects"⁶⁶¹, costing EUR295 million. These projects aim to safeguard rainforests and encourage renewable energy development in the Brazil. As part of these projects, the German government will provide Brazil with investment loans for renewable energy. For the 2014 FIFA World Cup, Germany will also provide Brazil with solar roofs for two soccer stadiums, in order to introduce solar energy use in public spaces, and to make the world cup less environmentally damaging.⁶⁶²

On 30 September 2009, the German government articulated its partnership with Senegal, which will focus on "renewable energies and energy efficiency."⁶⁶³ Germany will aid Senegal in developing a rural electrification scheme, along with an initiative to "provide electricity from renewable energy sources" to the country.⁶⁶⁴

On 26 August 2009, The Act to Accelerate the Expansion of Extra High Voltage Transmission Network went into effect. According the Federal Ministry of Economics and Technology, "The act speeds up the realization of 24 high-priority grid construction projects involving extra-high voltage transmission networks (380 kV). These projects are necessary both for EU-wide electricity trading and for the integration of power generated from wind energy and from new, highly efficient conventional power plants."

www.bmz.de/en/press/pm/2009/september/pm 20090930 88.html

⁶⁶⁴ Renewable energy for Senegal, Federal Ministry for Economic Cooperation and Development 30 September 2009. Date of Access: 25 November 2009. www.bmz.de/en/press/pm/2009/september/pm 20090930 88.html

 ⁶⁶⁰France Renewable Energy Fact Sheet. Date Accessed. 4 December 2009
<u>ec.europa.eu/energy/energy_policy/doc/factsheets/renewables/renewables_fr_en.pdf</u>
⁶⁶¹Germany supports Brezil's processes in the second secon

⁶⁶¹ Germany supports Brazil's program on climate change, Federal Ministry for Economic Cooperation and Development 3 December 2009. Date of Access: 4 December 2009.

www.bmz.de/en/press/pm/2009/december/pm_20091203_106.html

⁶⁶²Germany supports Brazil's program on climate change, Federal Ministry for Economic Cooperation and Development, 3 December 2009. Date of Access: 4 December 2009.

www.bmz.de/en/press/pm/2009/december/pm_20091203_106.html ⁶⁶³Renewable energy for Senegal, Federal Ministry for Economic Cooperation and Development 30 September 2009. Date of Access: 2 December 2009.

On 19 August 2009, Germany enacted its National Development Plan for Electric Mobility, which aims to boost research and development funding, "as well as implementing market preparation strategies to facilitate the implementation of electric vehicles".⁶⁶⁵ In total, the government has allotted EUR500 million to research for electric vehicles.⁶⁶⁶ This research is related to renewable energy, as Germany aims to "foster the close connection between electric mobility and renewable energies".⁶⁶⁷

Thus, Germany has been awarded a score of +1, as it has undertaken action to both improve existing policy and regulatory frameworks in order to boost investment in renewable energy, and to promote the deployment and diffusion of renewable energy in developing and emerging countries.

Analyst: Edil Kassim

Italy: 0

Italy has partially complied with its commitment to improve policy and regulatory frameworks to boost investments in renewable energies, or to promote their deployment and diffusion in developing and emerging countries.

On 3 December 2009, Italy has said that it aims to boost the capacity of solar photovoltaic installations to 16,000 megawatts in 2020, from about 280 MW.⁶⁶⁸

In 2010, Italy will be the European Union Focus Country in the establishment of partnerships for technology transfers and investment energy efficiency and renewable energy sources, particularly in Eastern Europe.⁶⁶⁹ However there has not yet been any concrete investment action taken in such plans.

Thus, Italy has been assigned a score of 0 working towards the improvement of existing policy and regulatory frameworks to boost investments and renewable energy; but for failing to promote the deployment and diffusion of renewable energies in emerging and developing countries.

Analyst: Joelle Westlund

Japan: +1

⁶⁶⁷ Germany Boosts its Global Market Position for Electric Vehicles. 19 August 2009. (Berlin) Date of Access: 3 December 2009. <u>www.gtai.com/homepage/info-service/press-releases/jul-aug-09/</u> germany-boosts-its-global-market-position-for-electric-vehicles/?backlink=0.

www.energy.eu/news/Italy_aims_to_boost_capacity_of_photovoltaic_(PV)_installations.pdf 669 6th International Congress on Energy Efficiency and Renewable Energy Sources for South-East Europe,

⁶⁶⁵ Germany Boosts its Global Market Position for Electric Vehicles. 19 August 2009. (Berlin) Date of Access: 3 December 2009. <u>www.gtai.com/homepage/info-service/press-releases/jul-aug-09/</u> germany-boosts-its-global-market-position-for-electric-vehicles/?backlink=0

germany-boosts-its-global-market-position-for-electric-vehicles/?backlink=0. 666 Germany Boosts its Global Market Position for Electric Vehicles. 19 August 2009. (Berlin) Date of Access: 3 December 2009. www.gtai.com/homepage/info-service/press-releases/jul-aug-09/ germany-boosts-its-global-market-position-for-electric-vehicles/?backlink=0.

⁶⁶⁸ Italy aims to fifty-fold the capacity of photovoltaic installations by 2020, Europe's Energy Portal, 3 December 2009. Date of Access: 3 December 2009.

Cordis [Bulgaria] 27 November 2009. Date of Access: 3 December 2009. <u>cordis.europa.eu/wire/index.cfm?fuseaction=article.Detail&rcn=20289</u>

Japan has fully complied with its commitment to improve existing policy and regulatory frameworks in order to boost investment in renewable energy and promote renewable energy deployment and diffusion in developing countries.

On 3 December 2009, the Japanese government granted Sri Lanka JPY860 million to build a "400 KW grid connected solar power generation plant at Baruthandanda, Hambantota."670

On 2 December 2009, the Japanese government proposed fiscal grant aid to the Republic of Djibouti in the amount of JPY610 million. The monetary aid will be used to install solar panels at the Djibouti Centre for Research and Studies. The two countries will also begin to lay the groundwork for future deployment of solar power facilities in Djibouti.⁶⁷¹

On 26 October 2009, Prime Minister Hatoyama articulated his "Hatoyama Initiative", revealing his commitment to aiding developing countries to transition to "a low-carbon society". 672

On 8 October 2009, an agreement was signed between Ocean Power Technologies, Inc., and a conglomerate of three Japanese companies to establish a demonstration wave power station.⁶⁷³ Both parties will work in partnership with the Government of Japan to boost wave power status in the country's energy policy.⁶⁷⁴ This demonstrates a pending improvement to the country's policy regarding investment in wave power.

On 17 September 2009, Prime Minister Yukio Hatoyama pledged a 25 per cent reduction in greenhouse gas emissions from 1990 levels by 2020.⁶⁷⁵ This target will be achieved by introducing a renewable energy feed-in tariff to foster capacity expansion for "clean energy sources".⁶⁷⁶ Also, Japan's energy minister Masayuki Naoshima articulated his

www.mofa.go.jp/announce/announce/2009/12/1197722 1148.html.

⁶⁷⁰ Introduction of Clean Energy by Solar Electricity Generation System, The Official Government News Portal of Sri Lanka 3 December 2009. Date of Access: 4 December 2009. news.lk/index.php?option=com content&task=view&id=12631&Itemid=51

⁶⁷¹ Exchange of Notes for Grant Aid for the Republic of Djibouti (the Project for Introduction of Clean Energy by Solar Electricity Generation System), Ministry of Foreign Affairs of Japan (Tokyo) 2 December 2009. Date of Access: 3 December 2009.

⁶⁷² Policy Speech by Prime Minister Yukio Hatoyama at the 173rd Session of the Diet, Office of the Prime Minister of Japan (Tokyo) 26 October 2009. Date of Access: 20 November 2009.

www.kantei.go.jp/foreign/hatoyama/statement/200910/26syosin_e.html ⁶⁷³ Ocean Power Technologies Signs Agreement for Development of Wave Power Station in Japan, Business Wire (Pennington, N.J.) 8 October 2009. Date Accessed: 29 November 2009. www.businesswire.ca/portal/site/ca-en/

permalink/?ndmViewId=news_view&newsId=20091007006492&newsLang=en 674 Ocean Power Technologies Signs Agreement for Development of Wave Power Station in Japan, Business Wire (Pennington, N.J.) 8 October 2009. Date Accessed: 29 November 2009. www.businesswire.ca/portal/site/ca-en/

permalink/?ndmViewId=news_view&newsId=20091007006492&newsLang=en 675 RPT-Q+A-How will Japan's new govt tackle climate change, Reuters (Tokyo) 17 September 2009. Date Accessed: 15 November 2009. www.alertnet.org/thenews/newsdesk/T104080.htm

⁶⁷⁶ RPT-Q+A-How will Japan's new govt tackle climate change, Reuters (Tokyo) 17 September 2009. Date Accessed: 15 November 2009. www.alertnet.org/thenews/newsdesk/T104080.htm

plan to extend Japan's feed-in tariff for electricity to energy sources other than solar power, within two years.⁶⁷⁷ Finally, Japan aims to increase renewable energy sources to approximately 10 per cent "of primary energy supply by 2020."⁶⁷⁸

Thus, Japan has been awarded a score of +1 for ameliorating existing renewable energy policy for boosting of investment in renewable energy, and for its promotion and diffusion of renewable energies in developing countries.

Analyst: Edil Kassim

Russia: 0

Russia has fulfilled this commitment partially as it developed policy and regulatory frameworks in order to develop renewable energies, but has not realized projects on promotion of deployment and diffusion of renewable energies in other emerging and developing countries.

On 12 November 2009, President of Russia Dmitry Medvedev in his Presidential Address to the Federal Assembly stated that Russia has to strive for leadership not just in traditional, but also in the renewable energy.⁶⁷⁹

Previously, on 30 September 2009, at the joint meeting of the Commission for Modernisation and Technological Development of Russia's Economy and the Presidium of the Presidential Council for Science, Technology and Education President of Russia the necessity of biofuel development was emphasized.⁶⁸⁰ Following this joint meeting Presidential Aide Arkady Dvorkovich informed that the project on promotion of innovative, breakthrough technologies based on the use of biofuel, as well as the development of solar and hydrogen energy, had been approved.⁶⁸¹

On 13 November 2009, the Energy Strategy of Russia till 2030 was approved by the Russian Government. According to the Strategy Russia will implement measures on producing equipment for tidal power plants, developing other technologies of renewable energy, particularly wind and geothermal energy and biofuel. State incentives for renewable energy will include providing of the access of such energy to the electrical grids, support of industrial and scientific institutes, participation in transfer of technologies to the enterprises. As a result, the share of renewable energy (excluding

eng.kremlin.ru/speeches/2009/11/12/1321_type70029type82912_222702.shtml.

⁶⁷⁷ UPDATE 1-Japan energy min aims to expand power feed-n tariff, Reuters (Tokyo) 17 September 2009. Date of Access: 13 November 2009. <u>www.reuters.com/article/idUST4085720090917</u>

⁶⁷⁸ RPT-Q+A-How will Japan's new govt tackle climate change, Reuters (Tokyo) 17 September 2009. Date Accessed: 15 November 2009. <u>www.alertnet.org/thenews/newsdesk/T104080.htm</u>

⁶⁷⁹ Presidential Address to the Federal Assembly of the Russian Federation, President of Russia 12 November 2009. Date of Access: 3 December 2009.

 ⁶⁸⁰ Dmitry Medvedev held a joint meeting of the Commission for Modernisation and Technological Development of Russia's Economy and the Presidium of the Presidential Council for Science, Technology and Education, President of Russia 30 September 2009. Date of Access: 3 December 2009.
<u>eng.kremlin.ru/text/news/2009/09/221946.shtml</u>.
⁶⁸¹ Comments by Presidential Aide Arkady Dvorkovich to Media Representatives following a Joint

⁶⁸¹ Comments by Presidential Aide Arkady Dvorkovich to Media Representatives following a Joint Meeting of the Commission for Modernisation and Technological Development of Russia's Economy and the Presidential Council for Science, Technology and Education, President of Russia 30 September 2009. Date of Access: 3 December 2009. eng.kremlin.ru/text/docs/2009/09/221955.shtml.

hydropower plants) in the national energy balance should increase from 0.5 per cent to 4.5 per cent till 2020 and not to decrease in 2020-2030.682

According to the draft of the State Program of the Ministry of Energy of Russia on Energy Saving and Enhancing Energy Efficiency till 2020 the development of renewable energy will allow to reduce 185.7 million ton GHG emissions in 2010-2020.683

Thus the score for compliance with this commitment is 0 as Russia has acted to boost development of clean energy technologies at home and has not undertaken measures to promote their development in developing countries.

Analyst: Natalia Churkina

United Kingdom: +1

The United Kingdom has fully complied with its commitment to improve policy and regulatory frameworks to boost investment in renewable energy and to promote its diffusion and deployment in emerging and developing countries.

Released on 15 July 2009, the Renewable Energy Strategy 2009 sets up the Office for Renewable Energy Deployment (ORED), which will work with Department for Communities and Local Government "on planning and stimulating greater investment" in renewable energies.⁶⁸⁴ The strategy also introduced plans of supporting "large-scale investment in the UK renewables sector by working with the financial sector, major manufacturers, and financial sectors to communicate UK energy policy and sell the strengths of the UK as a manufacturing base, and providing direct financial support for major investment in offshore wind manufacturing".⁶⁸⁵ These plans are therefore improvements in existing renewable energy investment policy in the United Kingdom.

On 22 September 2009, wave and tidal developers were invited to bid for the Marine Renewable Proving Fund of GBP22 million.⁶⁸⁶ This investment would help boost the amount of renewable energy Britain gains from wave and tides.

From 23 November 2009 on farmers, foresters, and local authorities could apply for the GBP1.5 million to help develop the supply of biomass through round three of the Bio-

⁶⁸² Energy Strategy of Russia till 2030, Ministry of Energy of the Russian Federation 13 November 2009. Date of Access: 3 December 2009.

minenergo.gov.ru/upload/iblock/1d8/1d8da7a12da6763836d026999edab09e.doc. ⁶⁸³ On draft of the State Program on Energy Saving and Energy Efficiency Increasing till 2020, Ministry of Energy of the Russian Federation 10 November 2009. Date of Access: 3 December 2009. minenergo.gov.ru/news/min news/EMBIZ.ppt.pot.

⁶⁸⁴ The UK Renewable Energy Strategy, Department of Energy and Climate Change (London) 15 July 2009. Date Accessed: 4 December 2009.

filesdown.esecure.co.uk/Gartree/TheUKRenewableEnergyStrategy2009 1 .pdf 17072009-1624-43.pdf. ⁶⁸⁵ The UK Renewable Energy Strategy, Department of Energy and Climate Change (London) 15 July 2009. Date Accessed: 4 December 2009.

filesdown.esecure.co.uk/Gartree/TheUKRenewableEnergyStrategy2009 1 .pdf 17072009-1624-43.pdf. ⁶⁸⁶ Marine Energy Prototypes Backed with New 22m Proving Fund, Department of Energy and Climate

Change (London) 22 September 2009. Date Accessed: 3 December 2009. www.decc.gov.uk/en/content/cms/news/pn106/pn106.aspx.

energy Infrastructure Scheme.⁶⁸⁷ The Minister of Energy and Climate Change pointed out that the UK government funded 75 projects in round two of the scheme and in this round, it will "continue to ensure that the supply chain is in place to create a thriving bio-energy market in England." ⁶⁸⁸ This investment constitutes compliance with the commitment to improve policy and regulatory frameworks in order to boost investment in renewable energies because it adds an improvement to the Bio-energy Infrastructure Scheme.

On 27 November 2009, the UK government committed GBP50 million to help the poorest countries to access the latest climate research.⁶⁸⁹ The Climate and Development Knowledge Network, funded by the Department for International Development (DFID) will enable developing countries to share knowledge on clean technologies such as solar and hydropower generation.⁶⁹⁰ This constitutes as compliance with the commitment to deploy and diffuse renewable energy in developing and emerging countries.

Thus, the UK has been awarded a score of +1 for compiling both promoting renewable energy at home and abroad.

Analyst: Mina Akrami

United States: +1

The United States has fully complied with its commitment to improve policy and regulatory frameworks to boost investment in renewable energies and to promote their deployment in emerging and developing countries.

On 21 January 2010, U.S. Department of Energy Secretary Steven Chu announced funding for five local projects worth USD20.5 million that focus on biomass, wind and solar installations.⁶⁹¹.

On 8 January 2010, U.S. President Barack Obama announced the award of USD2.3 billion in tax credits to promote 180 projects on "advanced clean energy technologies including solar, wind and efficiency and energy management technologies."⁶⁹²

 ⁶⁸⁷ DECC invites applicants for £1.5 million Bio-energy infrastructure grants, Department of Energy and Climate Change (London) 23 November 2009. Date Accessed: 3 November 2009.
www.decc.gov.uk/en/content/cms/news/pn136/pn136.aspx.
⁶⁸⁸ DECC Invites Applicants for £1.5 Million Bio-energy Infrastructure Grants, Department of Energy and

 ⁶⁸⁸ DECC Invites Applicants for £1.5 Million Bio-energy Infrastructure Grants, Department of Energy and Climate Change (London) 23 November 2009. Date Accessed: 3 November 2009.
<u>www.decc.gov.uk/en/content/cms/news/pn136/pn136.aspx</u>.
⁶⁸⁹ J50 Million Climate Network To Link Over 60 Developing Countries, Department of International

 ⁶⁸⁹ J50 Million Climate Network To Link Over 60 Developing Countries, Department of International Development (London) 27 November 2009. Date Accessed: 4 December 2009. <u>www.dfid.gov.uk/Media-Room/Press-releases/2009/50-million-climate-network-to-link-over-60-developing-countries/</u>.
⁶⁹⁰ £50 Million Climate Network To Link Over 60 Developing Countries, Department of International

⁶⁹⁰ £50 Million Climate Network To Link Over 60 Developing Countries, Department of International Development (London) 27 November 2009. Date Accessed: 4 December 2009. <u>www.dfid.gov.uk/Media-Room/Press-releases/2009/50-million-climate-network-to-link-over-60-developing-countries/</u>.

⁶⁹¹ Secretary Chu Announces More Than \$20.5 million for Community Renewable Energy Deployment Projects, US Department of Energy (Washington) 21 January 2010. Date of Access: 22 January 2010. www.energy.gov/news/8536.htm.

⁶⁹² President Obama Awards \$2.3 Billion for New Clean-Tech Manufacturing Jobs, US Department of Energy (Washington) 8 January 2010. Date of Access: 10 January 2010. <u>www.energy.gov/news/8501.htm</u>.

On 30 December 2009, the United States Agency for International Development (USAID) announced the U.S.-China climate partnership. This initiative, which includes USD6 million of funding from USAID, seeks to increase energy efficiency and reduce Greenhouse gases among major sectors of the Chinese economies. Two notable initiatives of the partnership include peer-to-peer transfers of knowledge between municipal officials in the United States and China in order to promote best practices and an effort to identify and remove major barriers to clean technology implementation.⁶⁹³

On 24 November 2009, Energy Secretary Steven Chu announced that the Department of Energy will award USD620 million for Smart Grid technology demonstration projects.⁶⁹⁴ These projects will serve as models for future large-scale deployment of Smart Grid technology. According to Chu, these projects will "increase energy efficiency, and foster the growth of renewable energy sources like wind and solar power".⁶⁹⁵

On 29 October 2009, Secretary of State Hilary Clinton announced a USD125 million commitment to increase Pakistan's electricity output as well as to conserve wasted energy. Key projects include work on a thermal station installation, several upgrades on hydroelectric dams to make them more efficient and an overall upgrade of Pakistan's electricity grid in order to ensure that less energy is wasted.⁶⁹⁶

Thus, the United States has been awarded a score of +1 for undertaking significant action regarding its commitment to improve policy and regulatory frameworks for boosting investment in renewable energies and taking action towards the deployment and diffusion of renewable energies in developing and emerging countries.

Analyst: Poorva Misra

European Union: +1

The European Union has partially complied with its commitment to improve policy and regulatory frameworks in order to boost investments in renewable energies.

On 22 November 2009, the EU allocated EUR600,000 to further boost Malaysia-EU business cooperation, with an emphasis on environmental and green technology services.⁶⁹⁷ The European Investment Bank announced its plans to provide EUR100

⁶⁹³ USAID launches US-China Climate Partnership, United States Agency for International Development (Washington) 30 December 2009. Date of Access: 2 December 2009.

www.usaid.gov/rdma/articles/press_release_924.html. U.S. Department of Energy (Washington) 24 November 2009. Date of Access: 3 December 2009. www.energy.gov/news2009/8305.htm.

⁶⁹⁵ Secretary Chu Announces \$620 Million for Smart Grid Demonstration and Energy Storage Projects, U.S. Department of Energy (Washington) 24 November 2009. Date of Access: 3 December 2009. www.energy.gov/news2009/8305.htm.

⁶⁹⁶ The United States Announces The Pakistan Signature Energy Program, United States Agency for International Development (Islamabad) 29 October 2009. Date of Access: 3 December 2009 www.usaid.gov/pk/newsroom/news/general/091029a.html.

⁶⁹⁷ EU fund aims to boost business cooperation, The Malaysian Insider (Kuala Lumpur) 22 November 2009. Date of Access: 3 December 2009. www.themalaysianinsider.com/index.php/business/44235-eufund-aims-to-boost-business-cooperation.

million to Pakistan, to co-finance investment in the renewable energy sector.⁶⁹⁸ The EIB also agreed to provide an EUR40 million loan to South Africa "to increase electricity generation capacity and promote use of renewable energy [to] make a key contribution to sustainable growth in the country."699

In October 2009 the European Commission announced new investments of at least EUR50 billion under its Strategic Energy Technology Plan, which would target six areas: wind, solar, electricity grids, bioenergy, carbon capture and storage and sustainable nuclear fission.⁷⁰⁰

On 9 October 2009, Andris Piebalgs, the European Union Energy Commissioner announced the EU's contribution of over EUR500 million to offshore wind projects.⁷⁰¹.

Thus, the European Union has been awarded a score of +1 for its action towards the deployment and diffusion of renewable energies in emerging and developing countries, and its policy improvement domestically, in the form of further investment in clean technology.

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⁶⁹⁸ EIB to Loan €100M for Renewable Energy Projects in Pakistan, IHS Renewable Energy News (Englewood) 3 December 2009. Date of Access: 3 December 2009. energy.ihs.com/News/renewableenergy/2009/eu-pakistan-renewable-energy-projects-eib-120209.htm.

Address by Chief Executive Officer, FirstRand Bank, European Investment Bank funds for renewable energy and energy efficiency projects across South Africa, European Investment Bank (Luxembourg) 1 December 2009. Date of Access: 2 December 2009. www.eib.org/projects/press/2009/2009-239-europeaninvestment-bank-funds-for-renewable-energy-and-energy-efficiency-projects-across-south-africa.htm

⁷⁰⁰ Investing in the future: Commission calls for additional €50bn in low carbon technologies, European Union. 7 October 2009. Date of Access: 18 December 2009.

europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1431. ⁷⁰¹ Addressed by Energy Commissioner Andris Piebalgs at the EU-Mediterranean-Gulf Conference, European Union (Brussels) 9 October 2009. Date of Access: 3 December 2009. europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/09/457&format=HTML&aged=0&language= EN&guiLanguage=en.