2007 EU-U.S. SUMMIT STATEMENT ENERGY SECURITY, EFFICIENCY, AND CLIMATE CHANGE

Ensuring secure, affordable supplies of energy and tackling climate change are central, interlinked global challenges facing the international community. Addressing these issues requires urgent, sustained global action and an integrated policy approach, using a wide range of regionally, nationally or internationally defined policy tools and measures. We are determined to ensure access to affordable, clean, and secure sources of energy to underpin sustainable global economic growth and to protect our environment. Tackling the challenge of energy security will also require unprecedented international cooperation in several areas, including increasing energy efficiency, market transparency, diversifying energy supplies — including the share of renewable energies — and protecting and maintaining the world's energy supply system.

We are committed to the ultimate objective of stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, and we acknowledge the recent work of the IPCC. The respective responsibilities of industrialized and major emerging economies require strengthened action according to our national circumstances. Developing and commercializing advanced technologies will allow us to slow, stabilize and then significantly cut net global emissions of greenhouse gases. This requires strong economies and a wide range of policy instruments, including market based instruments, to generate technology investment and commercialization and achieve emission reductions. To achieve these objectives, we will work together and with other nations to deliver results in our global efforts to confront climate change through the upcoming G8 summit in Heiligendamm, our numerous multilateral partnerships, and by promoting a constructive agenda for the UNFCCC Conference in Indonesia in December 2007.

We especially note the importance of advancing energy efficiency, near-zero emissions coal and renewables, including biofuels, in improving our energy security and reducing anthropogenic emissions of greenhouse gases. Nuclear energy can also contribute to reach these goals in countries that decide to use this option. We therefore affirm our commitment to accelerate the transformation of our energy infrastructure so that we can effectively tackle the interlinked challenges of climate change, energy security, and clean and sustainable development. As we usher in this Age of Energy Transformation, we will act together in true partnership to advance our shared climate, sustainable development, and energy security goals, using a mix of nationally, regionally or internationally defined policy tools to research, develop, deploy and commercialize clean energy technologies that will change the way we power our homes, businesses, and automobiles.

Complementary Goals:

Our common goals for clean energy development and commercialization in the near and medium-term include, but are not limited to, the following sectors:

Promoting Advanced Coal Technologies, including Near Zero Emissions:

- The European Union considers carbon dioxide capture and storage an important option in a broad portfolio of measures to reduce CO2-emissions. Given the early stage of some elements of the CCS-technology concept, the EU will establish a mechanism to stimulate the construction by 2015 of a network of up to 12 demonstration plants of sustainable fossil fuel technologies in commercial power generation. As well as examining financial support mechanisms, this work will develop a regulatory framework to ensure that CCS is developed and managed in a safe and environmentally sound manner. This work includes in particular the examination of the availability and suitability of appropriate CO2-storage reservoirs in geological formations. The EU's regulatory framework, in particular the emissions trading scheme, provides strong incentives for investment in clean power technologies, including clean coal. The EU is currently looking at options for extending its emissions trading scheme, to include carbon dioxide capture and storage from 2012, and possibly before. The EU will also strengthen its research and development funding and efforts; under the EU's 7th Framework Programme up to € 400 million will be directed towards projects in the fields of sustainable fossil fuels, in particular clean coal and CCS, with funds for the EU's scientific and research community to collaborate with their counterparts in non-EU countries.
- The United States, in partnership with its government steering group member countries and the private sector, will build FutureGen, the United States first near-zero emissions fossil fuel plant, by 2012; President Bush's policies provide strong incentives for investment in clean power technologies, including advanced coal; \$1 billion in tax credits has already been allocated to spur billions of dollar in private investment in nine advanced clean coal facilities and another \$650 million will be awarded this year, culminating in additional builds; the United States has established a federal loan guarantee program to drive investment in advanced technologies, including advanced coal. In addition, the United States will support roughly \$200 million for carbon capture and storage, including field tests demonstrating different techniques for capturing and storing carbon dioxide emissions underground; any risks to human health and the environment resulting from underground injection of CO2 will be evaluated, and a regulatory framework will be developed.

Developing, Deploying and Commercializing Renewable and Alternative Energies:

- The European Union has set a binding target of a 20 percent share of renewable energies in overall EU energy consumption and a minimum binding 10 percent share of biofuels in overall EU transport fuel consumption to be achieved by 2020. These targets are part of the Energy Action Plan adopted by the European Council in March 2007 ensuring a reduction of greenhouse gas emissions of at least 20 percent by 2020 compared to 1990.
- The United States has advanced plans to achieve a 20 percent reduction in gasoline consumption by 2017; this can be achieved by requiring the use of 35 billion gallons of renewable and alternative fuels (replacing 15 percent of projected gasoline consumption in 2017) and by increasing fuel economy standards for passenger vehicles (replacing 5 percent of projected gasoline consumption by 2017); President Bush's plan will help stop the growth of carbon dioxide emissions from passenger and light duty vehicles in the United States.

Promoting Energy Efficiency

- The European Union will increase energy efficiency so as to achieve the objective of saving 20 percent of energy consumption compared to projections for 2020. For newly sold passenger cars the EU intends to take measures to ensure average emissions of 120 g CO2/km by 2012.
- The United States will improve energy efficiency and reduce greenhouse gas emissions of each Federal agency, through reduction of energy intensity, by 30 percent by 2015, using 2003 as a baseline.

Key Priorities:

To advance our common goals, we have identified the following priorities for a transatlantic partnership on clean energy and climate change, bearing in mind our commitments under the UNFCCC, G8, International Energy Agency and other frameworks and processes:

- (1) Advance commercial deployment of clean coal and carbon capture and storage technologies, including through the CSLF; advanced, clean, and near zero emissions coal technologies are critical in tackling global CO2 emissions, given coal's importance in meeting current and future energy needs for developed and developing countries; development of a regulatory framework for CCS;
- (2) Improve energy efficiency, especially in the transportation sector and buildings and appliances;
- (3) Research, develop, deploy and commercialize second-generation biofuels; overcome barriers to the use of renewable energy sources including through the development of international standards;
- (4) Identify opportunities to jointly advance as many methane recovery-and-use projects as possible.

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Work Action Plan:

To implement these transatlantic priorities, we commit to the following actions:

- (1) Provide policy incentives to reduce the cost and other barriers to full commercialization of advanced coal technologies; on carbon capture and storage, develop bilateral cooperation in particular on regulating risks of capture, transport and storage, and allocation of responsibility for any leakage; assess availability of geological formations suitable for long term CO2-storage, discuss international minimum-safety requirements and site-selection criteria for the protection of the climate and surrounding environment; cooperate to develop adequate monitoring and remediation techniques; begin discussion of how to define "carbon-capture-ready" coal fired plants to facilitate eventual market adoption of carbon sequestering plants; work together to gain firm commitments from advanced developing countries to deploy clean coal technology units.
- (2) Implement the Energy Efficiency Work Plan; ensure proper implementation of the EU-U.S. ENERGY STAR Agreement; discuss potential to extend the EU-U.S. ENERGY STAR Agreement to other product categories; discuss possible cooperation on the use of minimum efficiency requirements; cooperate on energy efficiency in buildings, and discuss potential for joint efforts to promote energy efficiency in third countries to enhance our mutual energy security;
- (3) Develop a set of compatible specifications for pure biofuels (both for bioethanol and biodiesel) by the end of 2007 that will facilitate international trade and increase use of alternative fuels, taking into account existing standards; work to promote strategies for sustainable biomass cultivation, including standards as appropriate; establish a roadmap before summer for developing compatible standards for biofuels, engaging the private sector, standards organizations, and the government and taking full account of existing and planned biofuels standards; continue analysis of biofuel resource assessment, as was discussed at the EU-U.S. Second Biofuels Workshop; present the results on economic factors and environmental impacts of biofuels development; and exchange information on our respective research agendas on second generation biofuel sources with the goal of accelerating further commercialization of biofuels;
- (4) Hold an international renewable energy conference at the ministerial level in Washington in March 2008 with the goal of advancing the development and commercialization of renewable energy systems, including second generation biofuels and solar energy;
- (5) Seek to develop a joint Methane-to-Markets work plan before the next Summit to provide inventory opportunities, identify collaborative activities, specific goals and emission reduction targets, and time lines to advance methane recovery and use project development.
- (6) Explore the most effective means to promote energy efficiency internationally, taking into account the work of the International Energy Agency and the G8 Gleneagles Dialogue, including the development of new international strategies on energy efficiency.

To better understand the effectiveness of the wide range of policy instruments, the EU will host with the United States this year a climate and clean energy policy and measures forum, composed of senior policy officials, to discuss the policy and technical aspects of different market mechanisms, including but not limited to emissions trading, taxation, and incentives, and other regulatory programs, public-private partnerships, and technology initiatives.

We also commit under the Montreal Protocol to seek to speed up the recovery of the ozone layer by accelerating the phase-out of HCFCs. We will weigh the impact of our proposals on climate change and energy efficiency. In working together toward our shared goal of speeding ozone recovery, we recognize that the Clean Development Mechanism impacts emissions of ozone-depleting substances.

We note that our domestic efforts, while important, will not by themselves be sufficient to reverse the significant growth trend in global greenhouse gases. We, therefore, will work together to unleash markets that will speed up the transfer of clean energy technology to developing countries. We reaffirm the goal that our Leaders set at the G8 Summit at Sea Island in 2004 to reduce barriers to the international flow of goods and materials for recycling and remanufacturing, recycled and remanufactured products, and cleaner, more efficient technologies, consistent with existing environmental and trade obligations and frameworks.

We will strengthen cooperation on the global phase-out of leaded gasoline and promotion of low-sulfur diesel through the Partnership for Clean Fuels and Vehicles. We also will reinforce our cooperation on hydrogen notably through IPHE (the International Partnership for the Hydrogen Economy). We will also continue our ongoing collaboration on nuclear power through the Generation-IV International Forum and International Nuclear Energy Research Initiative.

We reaffirm our commitment to international cooperation on global observation and will continue to exercise leadership in the development of the Global Earth Observation System of Systems (GEOSS), including working to strengthen weather observing, climate and air quality monitoring, and forecasting for human health, global disaster preparedness and monitoring, and drought monitoring and forecasting. We encourage participation in the November 30, 2007 Fourth Earth Observation Ministerial in Capetown, South Africa.

Transatlantic Research:

We will reach agreement on transatlantic research cooperation under the bilateral EU-U.S. Science and Technology Agreement, including: (1) enhance existing research programs in energy and environment collaboration in areas of mutual interest, and if appropriate, revision of relevant implementing arrangements, as needed; (2) examine international grant funding mechanisms with the aim of eliminating obstacles and develop practical proposals to broadly publicize research solicitations and better coordinate, where appropriate, research activities through mechanisms, such as coordinated calls for transatlantic clean energy research; (3) work to more closely coordinate research agendas on both sides of the Atlantic in line with the priorities identified at the 9th February 2007 meeting of the EU-U.S. High Level Joint Consultative Group on S&T.

Cooperation should focus on:

- (1) Second generation biofuels;
- (2) Hydrogen/fuel cells (e.g. research on novel materials for H2 production and storage and for advanced fuel cell components; pre-normative research in hydrogen technologies);
- (3) CO2 capture and storage;
- (4) Energy efficiency;
- (5) Renewable energy technologies of mutual interest;
- (6) Coordination and collaboration on global carbon cycle research and carbon observation and monitoring systems.

Increasing Energy Security:

We committed in Vienna in 2006 to a set of agreed principles to increase transparency in global energy markets, enhance energy efficiency, diversify the energy mix and ensure the security of critical energy infrastructure. Today, we reaffirm those principles and commit to conducting a periodic stocktaking of our performance in abiding by and implementing them.

Key to maintaining affordable and secure supplies of energy to power our economic growth and facilitate the development of new technologies is sound management of our existing energy mix. The security of the energy supplies of the European Union and the United States are directly impacted by actors and events beyond our borders as well as by our own regulatory and technology mixes. We must, therefore, intensify our cooperation to:

- carry out our commitment to the G8 Global Energy Security Principles developed at St. Petersburg in 2006, including: effective market access, and investment in all stages of the energy supply chain; open, transparent, efficient and competitive markets for energy production, supply, use, transmission and transit services; transparent, equitable, stable and effective legal and regulatory frameworks, including the obligation to uphold contracts, to generate sufficient, sustainable international investments upstream and downstream; energy saving and energy efficiency measures;
- achieve greater diversification of energy types, sources, and routes of European energy supplies, in particular encourage new infrastructure for utilizing the oil and gas reserves of the Caspian region and Central Asia. We encourage the International Energy Agency to continue to take an active role in advancing this objective;
- ensure there is an open and transparent international marketplace for trade and investment in energy resources;
- facilitate, through bilateral efforts or multilateral venues such as the International Energy Agency, the integration of the new major consuming countries (e.g. China and India) into the global energy marketplace;
- strengthen cooperation through partnerships and networks in particular with emerging economies, focusing on energy efficiency, renewable energies, low-emission energy technologies, notably CCS, and
- improve the security and resiliency of global energy networks and the physical security of critical energy infrastructure.

Tapping the Expertise of the Private Sector

We will convene a public-private meeting, composed of our senior government officials, business leaders, and scientific and technical experts, focusing on the priority areas identified in this statement. Options available to us include, but are not limited to, inviting CEOs to participate in our ongoing high-level dialogues, holding a public-private sector event associated with the proposed international renewables conference, and/or convening a stand-alone meeting. We will also use the EU-U.S. Energy Technology CEO forum that was launched by the U.S. Department of State and the German Foreign Ministry in March as a foundation for this effort.