



CLEAN ENERGY MINISTERIAL

SUMMARY FACT SHEET

On July 19th and 20th in Washington, D.C., ministers from 24 governments participated in the first-ever Clean Energy Ministerial, launching 11 initiatives to accelerate the global transition to clean energy. These initiatives will avoid the need to build more than 500 mid-sized power plants in the next 20 years, promote the rapid deployment of electric vehicles, support the growing global market for renewable energy and carbon capture technologies, bring solar lanterns or other improved energy services to more than 10 million people without access to grid electricity by 2015, and help encourage women to pursue careers in clean energy.

Participating governments account for more than 80 percent of global energy consumption and a similar percentage of the market for clean energy technologies. The following governments participated in the Clean Energy Ministerial: Australia, Belgium, Brazil, Canada, China, Denmark, the European Commission, Finland, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Norway, Russia, South Africa, Spain, Sweden, the United Arab Emirates, the United Kingdom, and the United States.

The initiatives launched build on the Technology Action Plans released by the Major Economies Forum Global Partnership in December 2009 and will help to achieve global climate and energy policy goals. *Governments listed below for each initiative reflect participants as of July 20.*

Global Energy Efficiency Challenge. Governments launched five initiatives as part of a Global Energy Efficiency Challenge to help cut energy waste around the world. These programs will help bring super-efficient consumer appliances to growing global markets, target energy savings in the buildings sector, improve the energy efficiency of industrial processes, and encourage deployment of millions of electric vehicles. Once fully implemented, these programs will eliminate the need for at least 500 mid-sized power plants by 2030.

1. **Appliances:** The *Super-efficient Equipment and Appliance Deployment (SEAD) Initiative* aims to transform the global market for energy-using equipment and appliances, such as televisions and lighting. SEAD will help governments overcome market barriers to capture a significant portion of global appliance efficiency energy savings.

SEAD addresses both ends of the efficiency spectrum: helping “pull” super-efficient devices into the market through cooperation on measures like manufacturer incentives and research and development investments and helping “push” inefficient devices off the market by bolstering national policies like minimum efficiency standards. Specific efforts include the development of “toolkits” for policymakers seeking to enhance national appliance efficiency programs and launching new Global Efficiency Awards, which will recognize the very best super-efficient appliances sold (and under development) in global markets.

Governments participating in this initiative include Australia, Canada, the European Commission, France, Germany, India, Japan, Korea, Mexico, Russia, South Africa, Sweden, the United Kingdom, and the United States.

- 2. Buildings and Industry:** The *Global Superior Energy Performance (GSEP) Partnership* will help large buildings and industrial facilities – which account for almost 60 percent of global energy use – measure and reduce their energy consumption and greenhouse gas emissions over time, incentivizing positive change with an internationally-recognized certification program. GSEP participants will share tools, trainings and best practices for tracking and accelerating energy performance improvements, both within their sector and across industry sectors. As part of the program, eight companies representing over \$600 billion in annual sales and one university will pilot the program.

GSEP partners will also advance efficiency through public-private task groups targeting major energy-intensive industries, such as the power generation sector, steel industry, and hotel chains. These task groups will identify and promote the deployment of the best-available efficiency technologies and best practices, standardize protocols for measuring and monitoring energy use, and facilitate communication among stakeholders. Additionally, participants in GSEP announced a task group to promote the adoption of innovative cool roof technologies across sectors.

Governments participating in GSEP include Canada, the European Commission, France, India, Japan, Korea, Mexico, Russia, South Africa, Sweden, and the United States. Pilot participants include 3M Company, Cleveland Clinic, Dow Chemical Company, Grubb & Ellis Company, Marriott International, Inc., Massachusetts Institute of Technology, Nissan, Target Corporation, and Walmart Stores, Inc. Initial participants in the sectoral task groups include JFE Steel Corporation and Tokyo Electric Power Company.

- 3. Smart Grid:** The *International Smart Grid Action Network (ISGAN)* will help accelerate the development and deployment of smart electricity grids around the world through high-level government dialogue, sharing best-practices, technical assistance, peer review and project coordination, where appropriate. Smart grid technologies will promote the growth of renewable energy, help consumers and businesses to better measure and manage their energy use, improve the reliability of the electrical system, and speed the introduction of fuel-saving electric vehicles. ISGAN complements the Global Smart Grid Federation, an ‘association of associations’ composed of leading smart grid stakeholder organizations from around the world, which was also announced at the Ministerial.

ISGAN will facilitate cooperation in five key areas: smart grid policy, regulation and finance; standards policy; pre-competitive technology research, development and demonstration; workforce skills and knowledge; and engagement of smart grid users and consumers at all levels.

Governments participating in ISGAN include Australia, Belgium, Canada, China, the European Commission, France, India, Italy, Japan, Korea, Mexico, Norway, Russia, Sweden, the United Kingdom, and the United States.

4. **Electric Vehicles:** The *Electric Vehicles Initiative (EVI)* will help countries deliver on their respective electric vehicle deployment targets through sister-city partnerships, cooperation to develop key technologies, and dialogue to identify and encourage best-practice deployment strategies. The International Energy Administration estimates that delivering on these targets will put participating countries on the path to deploy at least 20 million electric vehicles by 2020, thereby reducing global oil consumption by approximately one billion barrels over the next decade. Participants agreed to launch pilot programs in coordination with industry, academia and other stakeholders, and share best practices, data and lessons learned to dramatically scale up electric vehicle sales.

Governments participating in the EVI include China, France, Germany, Japan, South Africa, Spain, Sweden, and the United States. Other initial partners include the International Energy Agency (IEA).

5. **Capacity Building for Developing Country Policymakers:** The *Clean Energy Solutions Centers* will help governments of developing countries drive transformational low-carbon technologies by creating a virtual network to identify and share best-practice policies, provide the market with information on emerging policy trends, and identify opportunities for policy coordination across countries. The Solutions Centers will serve as a clearinghouse for policy information, supporting a network of at least 100 policy and technology experts with an initial focus on energy efficiency.

Governments participating in developing Clean Energy Solutions Centers include Australia, France, India, Italy, Japan, Mexico, South Africa, the United Arab Emirates, and the United States. Other initial partners include the ClimateWorks Foundation and the International Energy Agency (IEA).

Clean Energy Supply. Governments launched four initiatives designed to accelerate the deployment of low-carbon energy sources around the world:

1. **Carbon Capture, Use and Storage:** The *Carbon Capture, Use, and Storage (CCUS) Action Group*, a collaboration between governments and businesses, will develop a Global Strategic Implementation Plan to make recommendations at the next Clean Energy Ministerial on how global CCUS deployment can be accelerated between now and 2020. The CCUS Action Group will work to overcome barriers to CCUS deployment in five key areas: strategic direction, use and storage, financing, regulation, and knowledge sharing, with the goal of accelerating and building on existing global initiatives. It will leverage the broad body of work on CCUS by international CCUS institutions.

Governments participating in the CCUS Action Group include Australia, Canada, China, France, Germany, Japan, Korea, Mexico, Norway, South Africa, the United Arab Emirates, the United Kingdom, and the United States. Initial business and institutional partners include Aker Clean Carbon, the Carbon Capture and Storage Association, the Center for American Progress, Global

Carbon Capture and Storage Institute, the International Energy Agency, Sasol, ScottishPower, Shell, the World Coal Institute, and the World Resources Institute.

2. **Solar and Wind:** The *Multilateral Solar and Wind Working Group* will support the growing global market for solar and wind technologies through two initial projects – the Global Solar and Wind Atlas and a Long-Term Strategy on Joint Capacity Building – that will further lower the incremental costs of providing wind and solar energy to all regions of the world, thereby reducing emissions, creating jobs and promoting energy security. The Global Solar and Wind Atlas will ensure that analysts and policymakers have comprehensive and accurate data when making investment decisions. The project will combine and expand existing databases on wind and solar potential and social and economic conditions into one open web portal that will allow access to user-tailored data.

A Long-Term Strategy on Joint Capacity Building will help train the global clean energy workforce of the future by providing a range of international training opportunities along the whole value chain of solar and wind technologies, from basic working skills to academic education.

Governments participating in the Multilateral Solar and Wind Working Group include Brazil, Denmark, France, Germany, Japan, and Spain. Other countries that have shown interest in joining the initiative include Australia, the European Commission, Korea, Mexico, Norway, South Africa, the United Kingdom, and the United States. The main activities and outputs of this working group were identified during a workshop held in Bonn, Germany in June 2010.

3. **Hydropower:** The *Sustainable Development of Hydropower Initiative* will seek to promote the sustainable development of cost-effective hydropower in developing countries. The group's first action will be to inventory a river basin in an African country for potential hydropower resources. Partners in the initiative will also work to identify potential financial resources from multilateral organizations for future sustainable hydropower development.

Governments participating in the Sustainable Development of Hydropower Initiative include Brazil, France, Mexico, and Norway.

4. **Bioenergy:** The *Multilateral Bioenergy Working Group* will accelerate the deployment of bioenergy technologies through two initial projects: a Global Bioenergy Atlas and a Long-Term Strategy on Joint Capacity Building. Partners will create a Bioenergy Atlas by expanding an existing database on bioenergy potentials, considering both the potentials for biofuels production and the use of biomass for electricity generation. The Atlas will identify initiatives that can promote the development of new uses of biomass in sustainable and efficient ways in poor communities, exploring the potential of local production with low-cost technologies.

The creation of a Long-Term Strategy on Joint Capacity Building will enhance global cooperation between the bioenergy industry and relevant research institutions with the goal of identifying international regional centers of excellence in bioenergy research and development.

Governments participating in the Bioenergy Working Group include Brazil, Italy, and Sweden.

Clean Energy Access. Governments launched two new initiatives to expand access to the clean energy revolution.

1. **Off-grid Appliances:** The *Solar and LED Energy Access Program (SLED)* focuses on the approximately 1.6 billion people who lack access to grid electricity. It aims to transform the global market for affordable, clean, and quality-assured off-grid appliances by addressing fundamental barriers to market development. The program will initially focus on replacing dirty, fossil fuel-based light sources like kerosene lanterns with solar LED lights. The program is expected to improve lighting services for 10 million people within five years.

Key activities under the program will include leveraging private sector financing to develop and demonstrate business models to commercialize clean, off-grid energy services; ensuring quality; educating customers; advising companies; engaging policymakers; and addressing sustainability issues.

Governments participating in SLED include Italy and the United States. The program will be managed by the International Finance Corporation (IFC) in consultation with donor partners.

The program was first announced in December 2009 by U.S. Energy Secretary Steven Chu, accompanied by Italian Environment Minister Stefania Prestigiacomo and Indian Environment Minister Jairam Ramesh. It became active at the Clean Energy Ministerial with the transfer of the first contribution of US\$10 million from Italy to the International Finance Corporation (IFC). Italy has pledged to contribute an additional US\$20 million to the initiative.

2. **Women in Energy:** Led by U.S. Under Secretary of Energy Dr. Kristina Johnson, the *Clean Energy Education and Empowerment (C-3E) Women's Initiative* will encourage women to pursue careers in clean energy and lend their innovative power to creating future clean energy technologies. It will offer university talks around the world by women leading in the fields of science, technology, engineering and mathematics.

Governments participating in the C-3E Women's Initiative include Australia, Denmark, Mexico, Norway, South Africa, the United Arab Emirates, the United Kingdom, and the United States.

At the conclusion of the meeting, the United Arab Emirates offered to host the second Clean Energy Ministerial in spring 2011. The United Kingdom offered to host the third Ministerial at a date to be determined. These offers were welcomed by other ministers.

The Clean Energy Ministerial is a high-level forum hosted by different nations to promote policies and programs that advance clean energy technology based on common interests of participating governments and other stakeholders. The meetings are an opportunity to assess progress and to communicate this progress globally.