

SUMMARY OF CEM ACCOMPLISHMENTS

Since the first Clean Energy Ministerial (CEM) two years ago in Washington, D.C., the 23 participating governments have launched wide-ranging initiatives to accelerate the transition to clean energy technologies. The CEM aims to avoid the need to build 650 mid-sized power plants, accelerate clean energy deployment and provide energy access to over ten million consumers. The CEM is pioneering a “distributed leadership” approach to international action on clean energy, with different groups of governments leading each initiative and governments participating in those efforts that interest them. These collective efforts are already producing results.

Sixteen CEM governments are cooperating to transform the efficiency of appliances on a global basis through the Super-efficient Equipment and Appliance Deployment (SEAD) initiative. Progress thus far includes:

- India became the first country in the world to adopt comprehensive standards for performance, safety, and quality of light-emitting diodes (LEDs) in February 2012, thanks to technical exchanges facilitated through SEAD. These standards will help ensure that poorly performing products do not spoil this critical market for highly efficient lighting.
- The first Global Efficiency Medal competition to promote the most efficient products, starting with a voluntary flat-panel televisions competition launched earlier this year. Televisions account for 6 to 8 percent of global residential electricity consumption—and manufacturers representing a significant portion of the global market have expressed interest in competing, with winners to be announced this fall. Today, SEAD participating countries also announced that motors and computer monitors and other displays will be the next two award categories.
- A new effort to accelerate adoption of efficient lighting, led by India, and in partnership with the \$20 million UN Environment Program’s en.lighten initiative. Shifting to more efficient lighting technologies has the potential to reduce global electricity consumption by approximately 2.5 percent.
- The launch today of a new Efficient Product Promotion Collaborative that will better utilize the billions of dollars spent globally on appliance efficiency programs each year.
- The development by the Indian Bureau of Energy Efficiency of a Super Efficient Equipment Programme (SEEP) that will provide an incentive to manufacturers that produce ceiling fans that are twice as efficient as the best fans currently on the market. Technical analysis supported by SEAD helped to inform the design of the program.
- The creation of a Street Lighting Tool to help purchasers compare the energy use and lifecycle costs of street lighting fixtures, available on superefficient.org.

Denmark, Germany and Spain have led efforts to scale up wind and solar technologies globally, including:

- The launch today of a new Renewable Resource Atlas that provides a data library of solar and wind resource assessments from all sources for countries around the world. It will offer a one stop portal for renewable energy resource data and related mapping tools.

- Developing the IRENA Renewable Energy Learning Partnership (IRELP), an online education and training platform for the wind and solar sectors that has been implemented by the International Renewable Energy Agency (IRENA) together with various partners.

CEM governments are partnering to reach at least ten million people with modern energy access solutions by 2015. The U.S. and Italy, together with the World Bank, the International Finance Corporation, the UN Foundation, the Energy and Resources Institute (TERI), the African Development Bank, the Global Environment Facility, the UN Development Program, and Japan's Ministry of Economy, Trade & Industry announced the Global Lighting and Energy Access Partnership (Global LEAP) to promote market-based delivery of low-cost, quality-assured solutions to consumers who currently lack modern energy options. More than 100 private sector and civil society organizations have also expressed support for its principles. Global LEAP will leverage and expand the Solar and LED Energy Access Initiative launched previously by Italy and the United States. Related accomplishments to date include:

- The launch of Lighting India, which will bring modern lighting services to 2 million people by the end of 2015. This builds on the success of the Lighting Africa program, which has already accelerated market-driven delivery of quality off-grid lighting devices to 2.5 million people in Africa.
- Support for the sale of 500,000 affordable, quality-assured off-grid lighting systems in Africa. Through support for Lighting Africa (a joint program of the IFC and World Bank), SLED helped the program reach 2.5 million individuals by 2012.
- Expansion of an Outstanding Product Awards competition for off-grid lighting systems. The first awards were given in eight categories at a 2010 conference in Kenya. The next awards competition is underway, and award winners will be announced at the 3rd International Off-Grid Lighting Business Conference and Trade Fair in Dakar, Senegal, in November 2012.
- Support for the development of the Lighting Africa Quality Test Method (LA-QTM). LA-QTM has been adopted by UNFCCC as the method for evaluating eligibility for use of off-grid lighting products in carbon offset projects under a newly established Clean Development Mechanism method. It has also been adopted by the government of Ethiopia.

Australia and the United States, with many other partners, are working to provide low-cost high-impact support to governments implementing clean energy and efficiency policies. Launched a year ago at the second CEM, the Clean Energy Solutions Center is a \$15 million Internet-based technical assistance project jointly led by Australia and the United States in partnership with UN-Energy. Related accomplishments include:

- Launch of www.cleanenergysolutions.org in April 2011. The site has now had more than 10,000 users from over 150 countries.
- Creation of a no-cost ask-an-expert policy assistance service. The team consists of 20 international policy experts that provide no-cost assistance to government policy makers and analysts. Assistance is available in English, French, Spanish, Mandarin, Russian, Portuguese, Thai, and other languages and covers a wide range of policy topics. Since its formation three months ago, the team has already fielded more than 20 requests for policy assistance consultations, which have received strongly positive reviews.
- The ClimateWorks Foundation announced today a new commitment to provide up to \$1 million over three years of in-kind support for no-cost technical advice through the Clean Energy Solutions Center.
- Building of an expert-rated library of over 1,300 clean energy best practice policy resources. Resources include policy and deployment data and tools, and a series of online trainings and webinars conducted in partnership with other organizations and governments.
- Completion of a comparative analysis of policies for high renewable energy penetration. The analysis

focuses on case studies compiled from Australia, Denmark, Germany, Ireland, Spain, and the United States, and was refined through a series of stakeholder roundtables.

- Commitment by the United States to develop a Global Solar PV opportunity map in cooperation with the Clean Energy Solutions Center. The map will highlight the increasing commercial market potential for solar in distributed grid-connected applications.
- Launch of a quarterly clean energy investment update in partnership with Bloomberg New Energy Finance.
- The announcement by India of its plan to create a detailed national and sub-national level clean energy policy database, with support from the United States during the design phase.

CEM governments are working together to encourage leadership by women in clean energy through the Clean Energy Education & Empowerment Initiative (C3E). Accomplishments thus far include:

- Launch of a South African Chapter during Women's Month in August 2011 with committees on education, empowerment, research, and communication. Minister Dipuo Peters also convened a workshop at the South African Department of Energy to support businesswomen getting involved in the clean energy space.
- Launch today of a U.S. C3E program. The program includes C3E Ambassadors – a group of more than 20 distinguished senior professionals who share an interest in broadening the recruitment, retention and advancement of highly qualified women in the field. The C3E Ambassadors will also act as a selection panel for a C3E awards program, which will recognize with \$10,000 cash prizes those individuals who advance women's leadership and accomplishments in clean energy across multiple nomination categories. The ambassadors, awardees, and other women working in the field will gather at a new Women in Clean Energy Symposium, hosted by MIT, on September 28, 2012.

Fourteen governments are accelerating efficiency in the buildings and industrial sector through the Global Superior Energy Performance Partnership (GSEP). Accomplishments include:

- Initiation of energy management pilot projects with major institutions including 3M, Grubb & Ellis, MIT, Cleveland, Wal-Mart, Target, and the General Services Administration (GSA).
- Launching of a cool roofs pilot project in India. The project is focused on measuring the impact of cool roofs on indoor comfort levels.
- Creation of an online cool surfaces and urban heat island knowledge base. Through support for the Global Cool Cities Alliances and in partnership with the Clean Energy Solutions Center, <http://coolrooftoolkit.org> provides information and resources for policymakers, researchers, and program managers.
- Development of a review of combined heat and power and district heating and cooling, including case studies, research and development data, financing mechanisms, and country-by-country estimates of potential.

Twenty CEM governments are working together to leverage smart grid technologies to scale up efficiency and clean energy through the International Smart Grid Action Network (ISGAN) and a new cross-cutting partnership announced today. Accomplishments thus far include:

- The launch today of the 21st Century Power Partnership with the goal of unlocking large-scale demand-side management and renewable energy electricity generation, through policies and programs that leverage smart grid technologies. The Partnership will develop and share knowledge on smart policies, strengthen and disseminate technical tools that support both regulators and the private sector and bolster the human capacity needed to lead this transformation. The Partnership will leverage this work to support national and sub-national efforts to deploy central station renewables, clean distributed

generation, and energy efficiency at scale.

- Creation of the Smart Grid International Research Facility Network (SIRFN). SIRFN will bring together interested research and test bed facilities to evaluate and prove out Smart Grid technologies and concepts in the important niche between technology research and development and product commercialization and conformance testing. SIRFN will enhance knowledge exchange on facilities' evaluation capabilities and facilitate the coordinated development of evaluation protocols and round robin testing in six Smart Grid technology domains identified by ISGAN Participants, among them, microgrids, distribution automation, and distributed energy resource integration.
- Development of a smart grid information package and related tools and methods. The package includes white papers on smart grid contributions to renewables integration, management of consumer benefits and costs, and cyber security considerations, to inform international project development. It also includes an online Smart Grid glossary to help bridge the significant differences internationally in understanding and applying the diverse range of Smart Grid concepts.

The Electric Vehicles Initiative (EVI) released the EV City Casebook, a compilation of illustrative case studies focused on city and regional EV deployment efforts around the world. The Casebook seeks to enhance understanding of the best practices for creating thriving EV ecosystems in urban areas.

The Carbon, Capture, Use & Storage Initiative developed a set of key recommendations for closing the gap between the current status of CCS and where it needs to be in order to effectively contribute to climate change mitigation. Ministers from a number of CEM governments endorsed the recommendations and stated their intent to carry out activities in support of them, appropriate to their country context.