

# PACE UPDATE

A Newsletter on the U.S.-India Partnership to Advance Clean Energy (PACE)

## Modi, Obama Agree to Strengthen “Highly Successful” PACE

Indian Prime Minister Narendra Modi and U.S. President Barack Obama met for their first bilateral summit on September 30, 2014 in the White House. In a Joint Statement, the two leaders agreed to a “new and enhanced strategic partnership on energy security, clean energy and climate change.” As part of this new partnership, they “agreed to strengthen and expand the highly successful U.S.-India Partnership to Advance Clean Energy (PACE) through a series of priority initiatives.” New priority initiatives for PACE include:

- A new Energy Smart Cities Partnership to promote efficient urban energy infrastructure;
- A new program, “Greening the Grid,” to scale-up renewable energy integration into India’s power grid;
- Cooperation to support India’s efforts to upgrade its alternative energy institutes and to develop new innovation centers;
- An expansion of the Promoting Energy Access through Clean Energy (PEACE) program to unlock additional private sector investment and accelerate the deployment of cost-effective, super-efficient appliances; and
- Intensified efforts on clean energy finance, including the formation of a new Clean Energy Finance Forum to promote investment and trade in clean energy projects.



*Indian Prime Minister Narendra Modi and the U.S. President Barack Obama in the White House*

Source: U.S. Embassy

Implementation of the Modi-Obama commitment has already begun. On November 5, USAID Administrator Rajiv Shah announced the first step in the expansion of PEACE, the U.S.-India off-grid clean energy initiative, by launching a new effort to mobilize USD 41 million in equity and debt, coupled with a social enterprise accelerator program. Administrator Shah also announced the formation of a transactions team that will partner with the public and private sectors to unlock financing for clean energy opportunities in South Asia. At the November 18-19 India-U.S. Technology Summit, the U.S. Ex-Im Bank and Indian Renewable Energy Development Agency (IREDA) intend to sign a Memorandum of Understanding that will make available up to USD 1 billion in Ex-Im financing to support renewable energy goods and services.

Modi and Obama also launched a new U.S.-India Partnership for Climate Resilience, a new program of work on air quality, and a new U.S.-India Climate Fellowship Program to build long-term capacity to address climate change-related issues in both countries.



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## Clean Energy Finance

- **Loan Commitment for Solar Rooftop Project:** OPIC committed a USD 20 million loan to Azure Sunlight Private Limited for the development, construction and operation of an approximately 19 MW portfolio of rooftop solar projects located in various cities throughout India. OPIC expects to make the first disbursement under this loan commitment by the end of 2014.
- **Capacity Building Workshops for Energy Efficiency (EE) Finance:** USAID, via its PACE-D TA Program, organized two capacity building workshops on energy efficiency for banks and financial institutions. The workshops, held on September 9 and September 11, 2014 at New Delhi and Mumbai, focused on technical and economic characteristics of energy efficiency projects, their implementation business models and risk management approaches. The trainings will help loan officers and risk managers understand the concepts of performance contracting and energy service companies, and the associated benefits, risks and financing issues.



*EE Finance Capacity Building Workshop*

## Renewable Energy

- **Advanced Wind Resource Assessment in Gujarat:** The U.S. Department of Energy (USDOE) and The National Renewable Energy Laboratory (NREL), in collaboration with India's National Institute of Wind Energy (NIWE), published a study using the Weather Research and Forecasting model to simulate wind resources in Gujarat for one year. Accurate assessment of wind resources helps developers and investors make decisions about siting and operation of wind farms, and helps system operators reliably integrate large quantities of wind energy into the grid.
- **Solar Energy Training Capacity:** The USAID PACE-D TA Program supported the National Institute of Solar Energy (NISE) to establish Solar Energy Training Network (SETNET). The advertisement for EOI for partner institutions to SETNET received overwhelming response from 100 public and private sector organisations. SETNET is set to be formally launched in early 2015. The program also helped NISE in organizing five technical training programs and one training-of-trainers program. These focused trainings will assist in building the capacity of solar energy professionals in India to achieve solar deployment targets for 2022.
- **State Policy for Off-grid Renewable Energy:** USAID, via its PACE-D TA Program, assisted Urja Vikas Nigam Limited, Madhya Pradesh to develop an off-grid policy for the state. The proposed policy will help identify different market segments, technological options, renewable energy (RE) applications and approaches to accelerate the deployment and financing of off-grid RE in Madhya Pradesh.
- **Net Metering Implementation:** The USAID PACE-D TA Program provided technical assistance to Bangalore Electricity supply Company Ltd. (BESCOM) on solar rooftop PV framework. As part of this, the program finalized formats for implementation of the solar rooftop PV systems for consumers and utility; developed an information manual for eligible consumer and finalized guidelines/process mapping for the utility and consumer.
- **Energy Storage Advisory Committee:** The USAID PACE-D TA Program provided support to MNRE to identify and develop a pilot program for energy storage to enhance understanding of technologies, applications and business models in the country. An advisory committee has been set up to advise MNRE on this initiative and its first meeting was held on September 15, 2014. MNRE expects to complete evaluation and announce the award of grant by early 2015.
- **Participation in Renewable Energy India 2014 Expo (REI 2014):** U.S. Commercial Service India certified REI 2014 under its Trade Certification Program. The show, scheduled from September 3-5, 2014, at Greater Noida saw participation from thirteen U.S. companies representing the wind, solar, and biomass sectors. Counselor for Commercial Affairs Dillon Banerjee was a keynote speaker and also inaugurated the U.S. pavilion.



*Counselor for Commercial Affairs  
Dillon Banerjee at REI Expo 2014*



## Off-grid Energy Access



USAID Administrator Rajiv Shah at the CLEAN MOU Signing Ceremony

- **New Investment Facilitation Initiative:** In the recent visit to India, USAID Administrator Rajiv Shah announced a new initiative between USAID and a consortium led by New Ventures India to provide energy access to one million Indians through a business facilitation and social investment strategy. The Global Social Benefit Institute (GSBI) of the University of Santa Clara, and Insitor Management, a social impact investment fund manager are part of the consortium. This three-year initiative will mobilize USD 41 million in equity and debt, coupled with a social enterprise accelerator program that helps entrepreneurs understand and fill gaps that prevent their organizations from achieving scale and helps them find capital to increase their impact. It will target early-stage entrepreneurs providing off-grid clean energy solutions.

- **MOU between Clean Energy Access Network (CLEAN) Resource Partners:** Dr. Shah also signed a MOU to formalize a partnership between USAID and CLEAN resource partners including Germany's GIZ, the Shakti Sustainable Energy Foundation, and the Netherlands' ICCO. The partnership helps to bring together leadership within the Government of India with international and national actors.
- **Workshop on Quality Assurance Framework for Mini-grids and PACEsetter Fund:** A stakeholder consultation workshop was organized in New Delhi, in collaboration with MRNE and NISE, to discuss the Quality Assurance Framework for mini-grids and the design of USD 8 million PACEsetter Fund. A quality assurance framework, including control standards and performance benchmarks, will better serve consumers in terms of safety, reliability, performance and cost comparison, and facilitate the delivery of high quality products to the market.

## Smart Grids

- **Smart Grid Capacity Building Workshop:** The USAID PACE-D TA Program, in collaboration with the India Smart Grid Task Force, organized a two-day capacity building workshop for smart grid pilot projects in Udaipur. The workshop provided technical and commercial knowledge to utility participants that will help them effectively progress towards implementing smart grid projects. The workshop also involved a site visit to the manufacturing facility of the Secure Meters to provide live demonstration of smart grid solutions.



Group photograph during smart grid capacity building workshop

## Building Energy Efficiency



Launch of HVAC Report

- **Heating, Ventilation and Air-conditioning (HVAC) Market Transformation Report:** The USAID PACE-D TA Program developed and launched "HVAC Market Assessment" report which characterizes the Indian HVAC market. The report outlines the established practices in the HVAC industry as well as market response to energy efficiency. It also lays out a broad framework for achieving market transformation in India via generating consumer awareness, labeling of HVAC equipment, demonstration projects, and test labs.






## Cleaner Fossil Technologies

- **Benchmarking Report:** USAID, via its PACE-D TA Program, has developed a benchmarking report for NTPC's supercritical power plant in Sipat. The report will help the Sipat power plant to effectively compare aspects of the plant to internal design parameters, world-class quantitative values and other stations in the business of generating electricity through the use of supercritical technology.
- **Indian Heat to Power Alliance:** The USAID PACE-D TA Program facilitated the establishment of the Indian Heat to Power Alliance (IH2PA). The IH2PA aims to serve as a platform to enable utilities to achieve better operational and thermal efficiencies through solution development and improved market for technology suppliers and service providers.



*Launch of Indian Heat to Power Alliance*

## Upcoming Events

-  **Solar Resource Assessment and Project Development Workshops:** The workshops aim to provide solar developers throughout India information on the new solar resource data and training on how to leverage the data in financial analyses to improve assessments of potential solar projects. These include:
  - November 12, 2014 at the National Institute of Wind Energy (NIWE) in Chennai
  - November 14, 2014 at the National Center for Photovoltaic Research and Education (NCPRE), IIT Bombay in Mumbai
  - November 20 – 21, 2014 at the National Institute of Solar Energy (NISE) in GurgaonOrganizer: USDOE. For more information please contact [Elena.Berger@ee.doe.gov](mailto:Elena.Berger@ee.doe.gov)
-  **Stakeholder Consultation on Solar Irrigation:** This workshop aims to share the approach and progress of the USAID PACE-D TA Program on developing solar irrigation-based micro/mini grids and the Karnataka solar pumping program.
  - December 2014 (TBD), New DelhiOrganizer: USAID's PACE-D TA Program. For more information please contact [rkhanha@pace-d.com](mailto:rkhanha@pace-d.com)
-  **Webinar of Energy Conservation Building Codes (ECBC):** The webinar will review the progress with ECBC implementation in India, analyse the economic impacts of ECBC-compliant buildings, and explore opportunities for the private sector.
  - December 2, 2014, VirtualOrganizer: USDOE. For more information please contact [Elena.Berger@ee.doe.gov](mailto:Elena.Berger@ee.doe.gov)
-  **India Smart Grid Reverse Trade Mission:** The trade mission will familiarize twelve Indian private and public sector delegates with a broad range of U.S. smart grid transmission and distribution technologies.
  - December 6 - 17, 2014, U.S.Organizer: USTDA. For more information please contact [aj@webstergroupinc.com](mailto:aj@webstergroupinc.com)
-  **DistribuTech 2015:** U.S. Commercial Services is recruiting a buyers delegation of Indian businessmen to DistribuTECH 2015, the leading annual transmission – distribution and smart grid technology event.
  - February 3 - 5, 2015, U.S.Organizer: PennWell. For more information please contact [Renie.Subin@trade.gov](mailto:Renie.Subin@trade.gov)

**About PACE:** Launched in 2009, the U.S.-India Partnership to Advance Clean Energy (PACE) seeks to accelerate inclusive, low-carbon growth by supporting research and deployment of clean energy technologies and policies. PACE combines the efforts of several government, non-governmental, and private sector organizations on both the U.S. and Indian sides and contains three key components: Research (PACE-R), Deployment (PACE-D), and Off-Grid Energy Access (PEACE). In September 2014, Prime Minister Modi and President Obama agreed to strengthen and expand PACE through a series of priority initiatives that build on PACE's ongoing work.