CLEAN ENERGY SOLUTIONS CENTER
ASSISTING COUNTRIES WITH CLEAN ENERGY POLICY

USAID
FROM THE AMERICAN PEOPLE

Greening the Grid: Best Practices for Grid Codes for Renewable Energy Generators

04 October 2018

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- *The Clean Energy Solutions Center does not endorse or recommend specific products or services. Information provided in this webinar is featured in the Solutions Center's resource library as one of many best practice resources reviewed and selected by technical experts*

Agenda

1

Welcome & Introductory Remarks

2

Overview of the Clean Energy Solutions Center

- **Katie Contos,** Clean Energy Solutions Center

USAID Moderator

- **Jennifer Leisch,** USAID-NREL Partnership Manager, USAID Office Of Global Climate Change

3

Presentation

- **Adarsh Nagarajan,** Research Engineer, National Renewable Energy Laboratory

4

Question and Answer Session

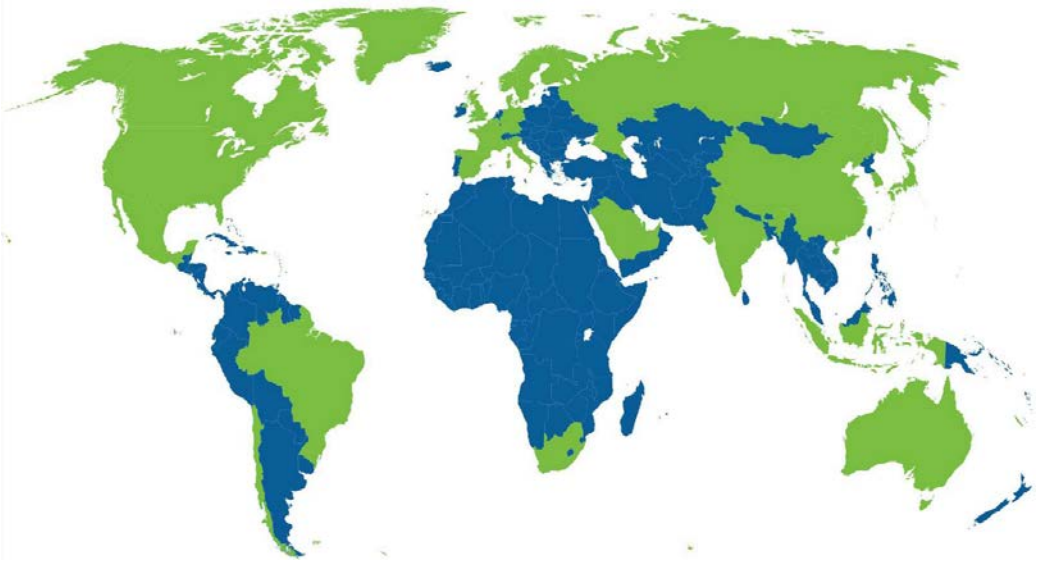
Clean Energy Ministerial

The Solutions Center:

- Launched under the Clean Energy Ministerial (CEM) in 2011

Clean Energy Ministerial:

- A high-level global forum to promote policies and programs that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy.



90% of Clean energy investment

&

75% of Global CO_2 emissions

Solutions Center: Background & Vision

- Multilateral initiative, of the Clean Energy Ministerial, is co-led by the Australian Department of the Environment and Energy, Sweden's Ministry of the Environment and Energy, and the U.S. Department of Energy.
- Additional funding support from Power Africa
- In-kind support from Chile
- The Solutions Center is a unique CEM initiative assisting countries in all regions of the world in strengthening clean energy policies and finance measures
- Supporting transition of clean energy markets and technologies

*US participation & leadership are under review.

Solutions Center: Goals and Audience

Programs and Services

- **Team of 50+ experts from around the globe responded to 350+ requests for policy support from more than 80 countries**
  - Extensive support across Africa, Asia, and LAC
  - Launched support for finance measures in 2015
- **Trained over 15,000 officials through more than 225 webinars and training events with others**
- **Strong & growing partnerships with development agencies and regional and global organizations in delivery of support**
- **Over 5500 resources in curated library for policy makers**

Target Audiences

- **Primary**
  - Government Policy Makers and Advisors
- **Secondary**
  - Private-Sector Companies
  - Energy Entrepreneurs and Investors
  - Non-Governmental Organizations
  - Civil Society
  - Others Engaged in Clean Energy

Solutions Center: Partnerships

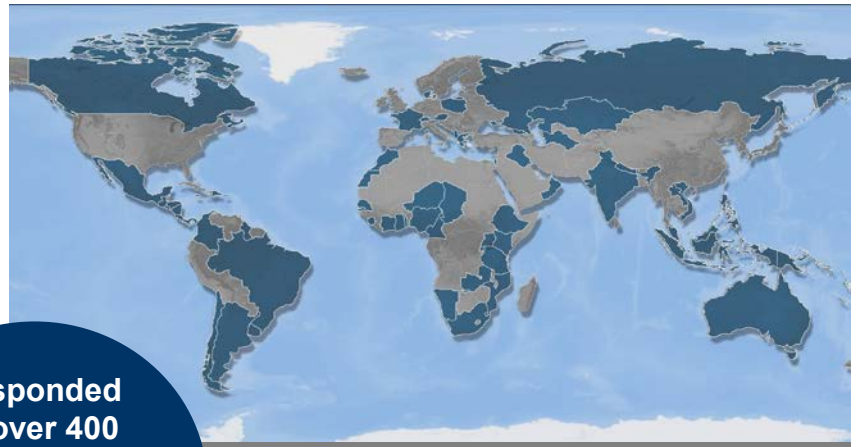
More than 35 international partners:

- Climate Technology Center and Network (CTCN)
- ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE)
- Inter-American Development Bank (IDB)
- International Energy Agency (IEA)
- International Partnership for Energy Efficiency Cooperation (IPEEC)
- International Renewable Energy Agency (IRENA)
- Low Emission Development Strategies Global Partnership (LEDS-GP)
- Renewable Energy Policy Network for the 21st Century (REN21)
- Sustainable Energy for All (SEforALL)
- United Nations Environment Programme (UN Environment)
- USAID Power Africa (USAID PA)

Ask an Expert: Our Experts in Action

We connect you to a global network of energy experts for personalized attention and quick response technical assistance on **strategies, regulations, standards, financial incentives, and energy transition programs** for a broad range of clean energy sectors and technologies including:

- Carbon Capture Utilization & Storage
- Energy Access
- Energy Efficiency
- Renewable Energy
- Smart Grid
- Transportation
- Utilities



Responded to over 400 requests for assistance from over 90 countries.

To request assistance, register on http://cleanenergysolutions.org/expert

Jennifer Leisch, USAID-NREL Partnership Manager, USAID Office of Global Climate Change

Jennifer Leisch manages the USAID-NREL Partnership, overseeing a portfolio of clean energy integration projects. Jennifer leads the USAID Greening the Grid initiative, and directs agency work to account for greenhouse gas emissions reductions as a result of USAID Clean Energy programs. She holds a Ph.D. focused on renewable energy science, and she has previously worked in the research and development of advanced solar energy and fuel cell technologies.

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Adarsh Nagarajan, Research Engineer, National Renewable Energy Laboratory

Adarsh Nagarajan is a Research Engineer in Power System Design and Studies group at the National Renewable Energy Laboratory (NREL) with a focus in distribution systems analysis relating to clean energy systems. He has especially deep expertise in: modeling advanced inverter operation modes in distribution systems, especially those associated with DERs. Dr. Nagarajan extensively supports distribution utilities in reaching their goals with adoption to solar (PV), energy storage (ESS) and electric vehicle (EV). His experience encompasses computer modeling of power systems; grid integration of distributed energy resources (DERs); modeling, control, and monitoring of energy storage systems; and the design, system integration, control and dynamics, protection, and seamless grid integration of low-inertia systems (microgrids).
He has authored over twenty technical publications. He is a Senior Member of the IEEE and is active in standards (1547-2018, 1547.9) creation. Dr. Nagarajan received Ph.D. in Electrical Engineering in 2014, from Arizona State University.

Question and Answer Session

Jennifer Leisch,
USAID

Adarsh Nagarajan,
NREL

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THANK YOU!

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