

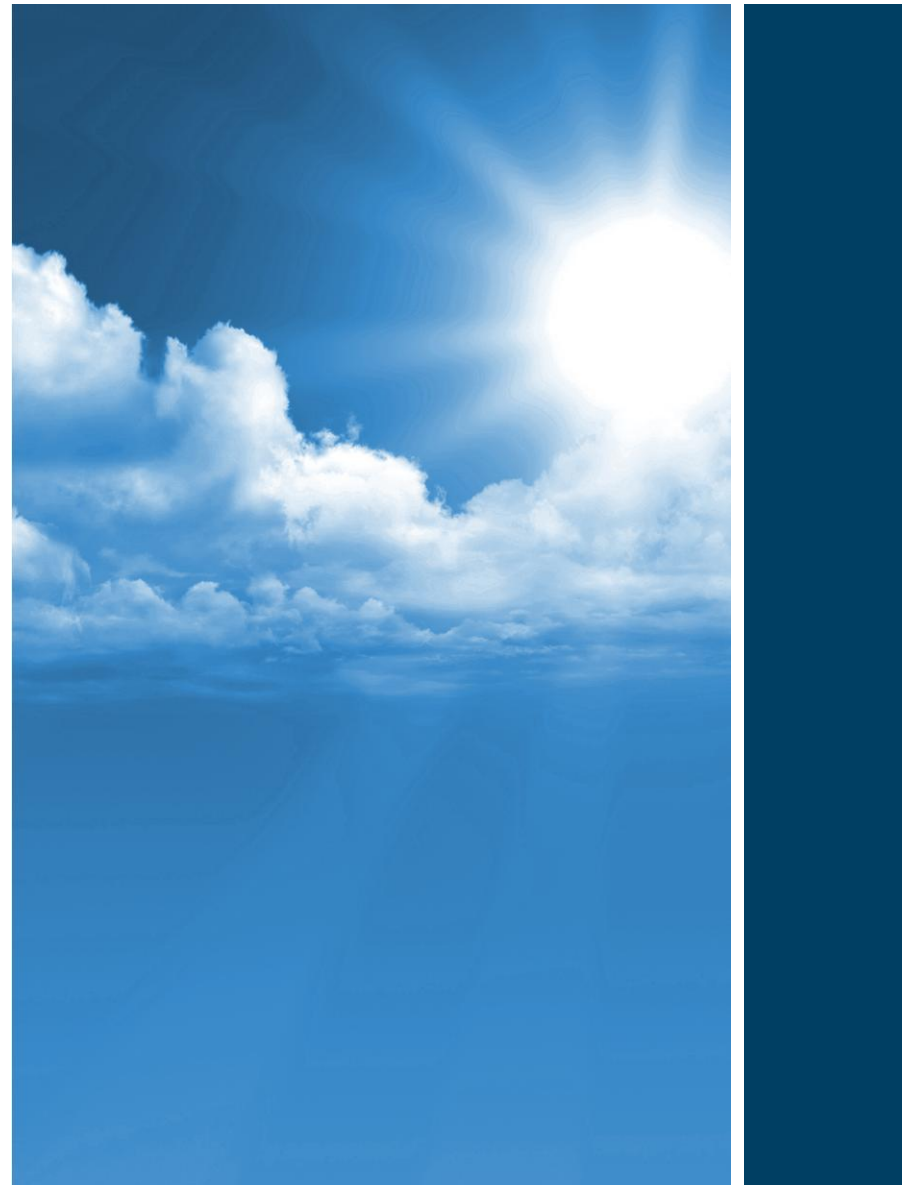
# The Clean Energy Solutions Center

Financing Clean Energy Solutions in Developing Countries

June 11, 2012

Michael Mendelsohn– Moderator

Ellen Morris, Phillip LaRocco, and  
Harish Hande– Presenters



## Two Options for Audio (select audio mode):

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**3. *Please mute your audio device***

# Some housekeeping Items (continued)

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## To ask a question

1. **Select the ‘questions’ pane on your screen and type in your question**
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- <http://cleanenergysolutions.org/training>

# Agenda

- Welcome and Introductory Remarks
  - Michael Mendelsohn ❖ National Renewable Energy Laboratory
- Overview of the Clean Energy Solutions Center
  - Vickie Healey ❖ National Renewable Energy Laboratory
- Financing Clean Energy Solutions in Developing Nations
  - Ellen Morris ❖ President & Founder, Sustainable Energy Solutions, LLC
  - Philip LaRocco ❖ Founder, E+Co
  - Harish Hande ❖ Managing Director, SELCO-India
- Question & Answer
- Discussion and Closing Remarks

# Clean Energy Ministerial & UN Partnership Supporting the Solutions Center

- Clean Energy Ministerial (CEM) launched the Clean Energy Solutions Center in April, 2011 for major economy countries
  - One of eleven CEM Initiatives
  - Led by Australia and U.S. with other CEM partners
- Partnership with UN-Energy is extending scope to support all developing countries
  - Enhance resources on policies relating to energy access, small to medium enterprises (SMEs), and financing programs
  - Offer expert policy assistance to all countries
  - Expand peer to peer learning and training



# Clean Energy Solutions Center

<http://www.CleanEnergySolutions.org>

## Goals

- Serve as a first-stop clearinghouse of clean energy policy resources.
- Share policy best practices, data, and analysis tools across countries.
- Deliver dynamic services that will enable expert assistance, learning, and peer to peer sharing of experiences
- Foster dialogue on emerging policy issues and innovation across the globe.

## Target Audiences

- Primary:
  - Energy policy makers and advisors
  - Analysts
- Secondary:
  - Private sector companies,
  - Energy entrepreneurs and investors
  - Non Governmental Organizations
  - Civil society
  - Others engaged in clean energy



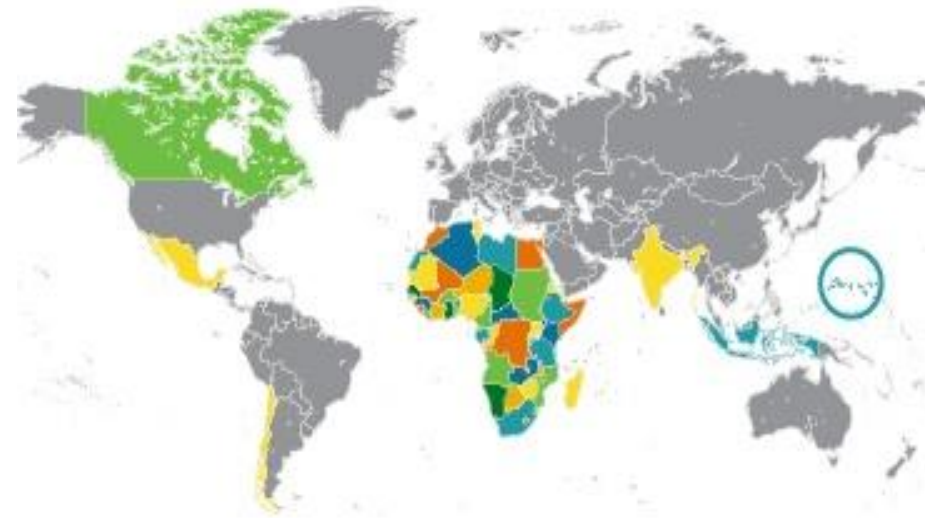
# Ask an Expert: Our Experts in Action

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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 deployment programs** for a broad range of clean energy sectors and technologies including:

- Energy Access
- Energy Efficiency
- Renewable Energy
- Smart Grid
- Transportation
- Utilities



**Requesting Assistance:**

Register on <http://cleanenergysolutions.org/expert>

# Solutions Center Broad Portfolio of Peer Learning Webinars and Training Resources

- Conducting monthly webinars on policy topics of interest. Upcoming webinars:
  - IEA: “Tracking Clean Energy Progress” report
  - Global Cool Cities Alliance: Urban Heat and Cool Surfaces Knowledge Base
  - Institute for Industrial Productivity: Industrial Efficiency Policy Database
  - Bloomberg New Energy Finance: Clean Energy Policy and Market Quarterly Reports
  - Course on Regulation and Sustainable Energy in Developing Countries (in collaboration with Leonardo Energy)
  - REN21: Renewables 2012 Global Status Report - Series devoted to regional focus
- Providing training materials (videos, presentations, curriculum, etc.) in partnership with Leonardo Energy, UN, IPEEC, IRENA, other CEM initiatives, others
- Policy Forum: Feed-In-Tariff cost containment, Energy Access programs, RE in Africa, etc.

## Training Videos by Leonardo Energy

### Renewable Energy Tools

#### Solar Energy Assessment for Community Energy Planning

Learn to evaluate the potential energy production of solar technologies and how to make an educated decision about installing solar power.

#### Introduction to Small-Scale Wind Energy Systems

Learn about small-scale wind turbines, including as vertical- and horizontal-axis turbines. The video includes a tutorial for RETscreen's wind tool, which presents how to effectively navigate the wind module of RETscreen.





# Solutions Center Providing Unique Resources for Policy Makers

We also conduct original analysis of policy topics of common interest, and develop unique tools:

## Quarterly Policy and Market Briefing

- Bloomberg New Energy Finance
- Clean energy investment data with webinars to present quarterly highlights

## Integrating Variable Renewable Energy in Electric Power Markets

- Case studies of policies for enabling high penetration of renewable energy into electricity grids
- Upcoming Webinar

## Analysis Reports on additional emerging policy topics

## Multi-country DSIRE- like Database

## PV Opportunity Interactive Map

**Bloomberg**  
NEW ENERGY FINANCE

18 April 2012

**Q1 2012 CLEAN ENERGY POLICY & MARKET BRIEFING**

**Contents**

1. INVESTMENT
2. POLICY
3. TECHNOLOGY

**Policy pullbacks, weak economies, market oversupply slow Q1 investment**

New investment in clean energy projects, companies and technologies fell in the first quarter of 2012 amid weak economic conditions in Europe, narrowing profit margins for manufacturers, scaled back subsidy support from policy-makers and fierce competition from low-priced natural gas. Total new funds into the sector slipped to \$26.7bn from Q1 2011. In this inaugural issue of the Clean Energy Solutions Center's quarterly briefing, we outline clean energy trends and opportunities.

Several factors contributed to a historically frayed pipeline of investment in clean energy. Excess capacity and equipment glutting has prompted policy makers to scale back subsidies. And opportunities for large-scale power generation in Q4 2011 and from \$27.8bn in auctions, with more in the EU, US and elsewhere, have slowed. However, clean energy companies continue to raise capital. The clean energy stocks rose 7.1% in Q1 2012. Major policies backing clean energy in Europe, the US and elsewhere, such as India, China and others, continue to be implemented. Prices for solar PV modules at \$1 type (monocrystalline vs. multicrystalline) have fallen from roughly \$1.00/Watt in Q1 2011 to \$0.70/Watt in Q1 2012. The average price for utility-scale solar PV has fallen 4% from six months earlier. The average price for an electric vehicle has fallen from approximately \$500/kWh to \$400/kWh. Falling wind and PV equipment costs continue to decline, and economies of scale are being realized. The industry's short-term excess capacity is being eliminated.

Prepared by Bloomberg New Energy Finance for the Clean Energy Solutions Center, an initiative of the Clean Energy Ministerial

**Clean Energy Policy Q1, 2012**

NREL JISEA

NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy, LLC.

# How You Can Get Involved

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- Request expert assistance or tailored technical resources for your country
- Participate in webinars, training activities, and policy networks
- Offer advice and suggest resources to share
- Sign up for the newsletter
- Join conversations on the Policy Forum



Time for Q&A

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## Questions



Your participation is appreciated!

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Thank you!

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Please visit:

<http://cleanenergysolutions.org/training>