

# **Quality Standards for Energy Access:** How International Standards can Support Off- Grid Electrification in Developing Countries

27 April 2016

# Disclaimer

---

- *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 practices resources reviewed and selected by technical experts*

# Some Housekeeping Items

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

### **1. *Listen through your computer.***

- Please select the “mic and speakers” radio button on the right hand audio pane display

### **2. *Listen by telephone.***

- Please select the “telephone” option in the right-hand display, and a phone number and PIN will display.

### **3. *Panelists - Please mute your audio device when not presenting***

### **4. *Technical Difficulties:***

- ***Contact the GoToWebinars Help Desk: 888.259.3826***

# Some Housekeeping Items (continued)

- **To ask a question**
  - Select the 'Questions' pane on your screen and type in your question
- **Having trouble viewing the webinar?**
  - PDFs of the presentations can be accessed at <https://cleanenergysolutions.org/training>
- **Share with others or watch it again**
  - A video/audio recording of this Webinar and the slide decks will be made available at: <https://cleanenergysolutions.org/training>
- **Recordings are also available on our YouTube channel**
  - <http://www.youtube.com/user/cleanenergypolicy>

# Agenda

1

**Welcome & Introductory Remarks**

2

**Overview of the Clean Energy Solutions Center**

- **Sean Esterly**,  
National Renewable Energy Laboratory

**Overview of the Energy Access Practitioner Network**

- **Yasemin Erboy Ruff**,  
United Nations Foundation

3

**Presentations**

- **Pierre Sebellin**, Systems Technical Officer and Secretary of the System Evaluation Group, IEC
- **Vimal Mahendru**,  
President, Legrand – India
- **Paul Johnson**, Executive Secretary, African Electrotechnical Standardization Commission
- **Dr. Arne Jacobson**,  
Director of the Schatz Energy Research Center at Humboldt State University

4

**Question and Answer Session**

5

**Attendee Survey**

# Solutions Center Background and Vision

CleanEnergySolutions.org

**The Clean Energy Ministerial (CEM) launched the Clean Energy Solutions Center in April 2011. The Solutions Center:**

- Is one of 13 CEM Initiatives, which include:
  - Global Superior Energy Performance Partnership
  - Super-Efficient Equipment and Appliance Deployment initiative
  - Global Lighting and Energy Access Partnership
- Helps governments design and adopt policies and programs that support the deployment of clean energy technologies
- Has more than 35 partners, including IRENA, IEA, IPEEC, Sustainable Energy for All, Bloomberg New Energy Finance and Leonardo Energy
- Is co-chaired by the U.S. Department of Energy and the Australian Department of Industry.



# Clean Energy Solutions Center

CleanEnergySolutions.org

## Goals

- **Serve** as the primary resource for clean energy policy information, assistance and peer learning for governments and government-affiliated practitioners.
- **Share** policy best practices, data, and analysis tools across countries.
- **Deliver** dynamic services that enable expert assistance, learning, and peer-to-peer sharing of experiences.
- **Foster** dialogue on emerging policy issues and innovation across the globe.

## Primary

- Government Policy Makers
- Advisors

## Secondary

- Private Sector Companies
- Energy Entrepreneurs and Investors
- Non-Governmental Organizations
- Civil Society
- Others Engaged in Clean Energy

## Target Audiences

# Ask-an-Expert: Our Experts in Action

CleanEnergySolutions.org



Connects policymakers to a global network of more than 30 energy experts for quick-response technical assistance on policies and programs relating to:



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

Delivered no-cost assistance for more than 160 requests from over 75 countries.



Please submit your question directly at [cleanenergysolutions.org/expert](https://cleanenergysolutions.org/expert)



# Yasemin Erboy Ruff, Officer, Energy and Climate, UN Foundation



Yasemin Erboy Ruff is an Officer with the UN Foundation's Energy and Climate team, primarily assisting in coordinating efforts to scale up energy access in developing countries. She manages the day-to-day operational coordination and strategic planning of the UN Foundation's Energy Access Practitioner Network, and she serves as the Energy and Climate team's focal point for research and writing support on materials related to the energy access issue area. Prior to joining the UN Foundation, Yasemin majored in environmental science at Columbia University and gained her master's degree in environmental management at the Yale School of Forestry and Environmental Studies, with a focus on climate change and resource management.

# Pierre Sebellin, Systems Technical Officer, IEC



Pierre Sebellin works for the IEC Central Office in Geneva. He is responsible for setting up and promoting the development of the systems approach for the standardization work of the IEC. He also acts as secretary for the systems groups currently operating in the IEC: SEG 4 on Low Voltage DC, SEG 6 on Microgrids, SyC AAL on Active Assisted Living, SyC Smart Cities. He is also Secretary of the Systems Resource Group developing Systems methodologies. He has an engineering background in automation, and prior to joining the IEC, he worked over 25 years for industry, holding management positions in marketing and R&D.

# Vimal Mahendru, President, Legrand-India



Mr. Mahendru is the President of Legrand-India, a subsidiary of the French multinational Legrand. An engineer with 27 years of experience in manufacturing, supply chain, finance and international business, he assumed this role in 2010. Mr. Mahendru is a prominent member of the Indian electrical equipment industry and was President of the industry association, IEEMA, in 2010 and 2011. He is on several committees of the Government of India, including of the Bureau of Indian Standards, where he chairs the committee for standards development and maintenance for LT and HT fuses. Since January 2015, Mr. Mahendru has been an elected member of the IEC Standardization Management Board (SMB) for a period of three years. Simultaneously, he is the Convenor of the IEC SEG 4 for LVDC (Low Voltage Direct Current). Mr. Mahendru has been appointed IEC Ambassador for a two-year term (2016-2017) to represent the interests of the IEC in the sector of LVDC and rural electrification.

# Paul Johnson, Executive Secretary, African Electrotechnical Standardization Commission



Engineer Paul Johnson holds the position of Executive Secretary of the African Electrotechnical Standardization Commission (AFSEC) and also currently supports the South African National Committee of the IEC as National Committee Secretary, employed by the South African Bureau of Standards. His past experience includes some 32 years with the South African National Electricity Company, Eskom in various roles, in particular in the field of technology standardization.

# Dr. Arne Jacobson, Director, Schatz Energy Research Center



Dr. Arne Jacobson is Director of the Schatz Energy Research Center and a Professor in the Environmental Resources Engineering department at Humboldt State University. Dr. Jacobson serves as the technical lead for product quality assurance for Lighting Global, which is associated with the Lighting Africa and Lighting Asia programs. He is also an active member of Technical Committee 82 (Photovoltaics) of the International Electrotechnical Commission (IEC). Dr. Jacobson has a Ph.D. from the Energy and Resources Group at the University of California, Berkeley, a master's degree focused on Environmental Resources Engineering (Humboldt State University), and a bachelor's degree in physics (Earlham College). His areas of research and work interest include renewable energy technologies, energy access in off-grid areas, and clean energy deployment policy. He has extensive international work experience in Africa, South Asia and Latin America.

# Question and Answer Session

Please submit any questions through the “Question Pane” of the GoToWebinar panel

## Questions



The slides and an audio recording of this Webinar will be made available following the webinar.

- Webinar recording, presentations, and information on upcoming and previously held webinars:
  - <https://cleanenergysolutions.org/training>
- Webinar recordings at the Clean Energy Solutions Center YouTube page:
  - <https://www.youtube.com/user/cleanenergypolicy>
- Viewing the recording? Please submit any questions to the Solutions Center:
  - <https://cleanenergysolutions.org/contact>

# Attendee Survey

How did we do?

Your feedback is important! Please complete the poll on your screen



# Your Participation is Appreciated!

---

## THANK YOU!

An audio recording of this Webinar will be made available following the webinar.

- Webinar recording, presentations, and information on upcoming and previously held webinars:
  - <https://cleanenergysolutions.org/training>
- Webinar recordings at the Clean Energy Solutions Center YouTube page:
  - <https://www.youtube.com/user/cleanenergypolicy>
- For more information on the “Ask-an-Expert” program:
  - <https://cleanenergysolutions.org/expert>