Clean Energy Solutions Center and the Energy Access Practitioner Network

Off-Grid Energy Storage

July 18, 2013

Sean Esterly – Moderator Richenda Van Leeuwen – UN Foundation Xavier Vallvé – Trama TecnoAmbiental, S.L. Thomas Samuel– Sunna Design José Gabriel Martín Fernández – Fundación Acciona Microenergía Romina Arcamone – Trojan Battery Company



SOLUTIONS CENTER UNITED NATIONS

SUSTAINABLE ENERGY ACCESS ENERGY FOR ALL PRACTITIONER NETWORK

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/off-grid-energy-storage

A video/audio recording of this Webinar and the slide decks will be made available at:

<u>https://cleanenergysolutions.org/training/off-grid-energy-storage</u>





Agenda

- Welcome and Introductory Remarks
- Overview of the <u>Clean Energy Solutions Center</u>
 - Sean Esterly: National Renewable Energy Laboratory
- ✓ Introduction
 - Richenda Van Leeuwen: Executive Director, Energy and Climate, Energy Access Initiative, UN Foundation
- ✓ Presentations Panelists:
 - Xavier Vallvé: Trama TecnoAmbiental, S.L
 - Thomas Samuel: Sunna Design
 - José Gabriel Martín Fernández: Fundación Acciona Microenergía
 - Romina Arcamone: Trojan Battery Company
- ✓ Question & Answer
- ✓ Discussion and Closing Remarks
- ✓ Survey





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

.EAN ENERGY

SOLUTIONS CENTER

- 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



SOLUTIONS CENTER





ENERGY ACCESS PRACTITIONER NETWORK

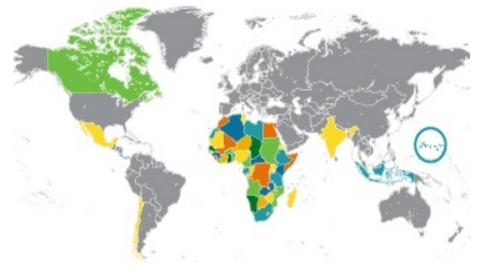
Ask an Expert: Our Experts in Action



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 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







ENERGY ACCESS PRACTITIONER NETWORK

How You Can Get Involved

- 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
- Register for our newsletter







Richenda Van Leeuwen: Executive Director, Energy and Climate, Energy Access Initiative Team UN Foundation



Richenda Van Leeuwen is Executive Director, Energy Access Initiative overseeing the UN Foundation's work on energy access and its engagement with the UN's Sustainable Energy for All Initiative. She founded and leads UNF's Energy Access Practitioner Network, a 900-strong global network catalyzing market-led solutions for energy access in developing countries. A renowned expert on energy access, gender equity and poverty issues, she has over 20 years of executive management experience with the UN, private sector and non-profits on several continents, in particular focusing on impact investing for micro- and small and medium sized enterprises as well as post-conflict reconstruction, refugee issues and economic empowerment. She currently serves on the board of SELCO India, a leading renewable energy social enterprise focusing on energy solutions for poor families in India. She gained both her BS and MBA degrees from Durham University, UK.





Xavier Vallvé: Board Member International Consultant and Partner, Eng, M. A. Sc, Trama Tecnoambiental, Spain



Xavier Vallvé is a Member of the Board of ARE (Alliance for Rural Electrification) and a Member of the Board of Secartys. He has also been project director or lead consultant for private and government clients, and for projects with UNDP, UNOPS, UNIDO, UNEP, AECID, IDB, WB, EC and other agencies. Mr. Vallvé has more than 25 years of experience in renewable energy rural electrification projects for distributed generation both grid-tied to the national grids and autonomous RE hybrid technology for islands and isolated villages. This involves complementary interdisciplinary skills in economic, social and management aspects as well as engineering experience in RE generation and storage. In RE distributed generation and micro grids, he has been involved in feasibility studies, engineering, project management and commissioning of many PV rural micro grids in isolated villages in Africa, Asia and South America. He has also been an active member in international codes and standards committees on this subject. Mr. Vallvé studied Engineering at the University of Waterloo in Canada and received a M.Sc. degree in 1979. In 1986 he co-founded in Barcelona, Spain the engineering and consultancy firm Trama TecnoAmbiental, S.L. where he currently is an associated partner. He is also the director of and a lecturer in the Master's degree program ("Master en Ingeniería y Gestión de las Energías Renovables") at IL3 (University of Barcelona).





Thomas Samuel: Founder, Sunna Design



Thomas Samuel is the Founder of Sunna Design. He is a French mechanical engineer and since 2012 has been based in France where he has initiated an R&D program with CEA / INES regarding energy management and energy storage. Prior to this, he worked for Aurore, a rural electrification foundation based in south India for developing an efficient solar street light. Mr. Samuel has also traveled extensively in Africa, South America and Asia and has volunteered for various energy related NGOs.







José Gabriel Martín Fernández: Project Manager, ACCIONA Microenergy Foundation



José Gabriel Martín Fernández has been a project manager at ACCIONA Microenergy Foundation since February 2012. He joined ACCIONA in 2007 as project staff in the Strategic Department and in 2009 became a manager in the R&D Department. Prior to joining ACCIONA, Mr. Fernández was a senior consultant in PricewaterhouseCoopers' Energy and Environmental Department.

Mr. Fernández is a chemical engineer and holds both an Executive MBA and a Master's degree in "Renewable Energies and Energetic Market" from the Escuela de Organización industrial (EOI) in Madrid, Spain.







Romina Arcamone Garcia : International Business Development Manager for Renewable Energy



Romina Arcamone Garcia is the international business development manager for renewable energy at Trojan Battery Company. Garcia is responsible identifying business opportunities with potential renewable energy customers in Trojan's key international markets including Europe, Middle East, Asia and Latin America. She also focuses on broadening existing relationships with key players in the renewable energy market to form strategic partnerships expanding Trojan Battery's presence in renewable energy projects around the world. In addition, Garcia exams and analyzes trends in the renewable energy market and advises Trojan's executive management team on strategies for developing, planning and monitoring renewable energy project opportunities.





ENERGY ACCESS PRACTITIONER NETWORK

Time for Q&A

Questions



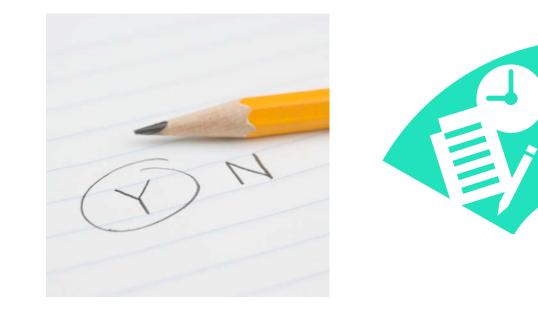




ENERGY ACCESS PRACTITIONER NETWORK

Survey

- How did we do?
- Your feedback is important!









Your participation is appreciated!

Thank you!

An audio recording of this Webinar and the PowerPoint presentations will be available following the webinar Please visit:

https://cleanenergysolutions.org/training/off-grid-energystorage





