CONFERENCE PROGRAMME

4th International Conference on Solar Technologies & Hybrid Mini Grids to improve energy access

Palma de Mallorca, Spain
April 26 - 28, 2023
www.energy-access-conferences.com

Wednesday, April 26, 2023

CONFERENCE SIDE EVENT "A" (open to all registered participants): Innovation Lab – Energy Access in A Crucible
April 26, 2023, 09:00 - 12:30 hrs
Hosted by Affordable Energy for Humanity (AE4H), Prof. Jatin Nathwani, WISE, Canada

The goal of the 'Innovation Lab' is *to kick-off the S-@ccess conference with an engaging set of in-depth discussions on 'what you want to do next' in the field of energy access. This is in contrast to the primary mode of traditional conferences, which asks 'what you have done before'. The goal is to provide open space for new collaborations and project ideas to emerge, which can then be discussed informally throughout the rest of the conference and pursued thereafter.*

The 'energy access innovation lab' format features small group discussions on topics that participants identify ahead of time, as well as open group discussion in plenary. This format has been utilized by AE4H to run similar innovation labs in the past.

13:00	**REGISTRATION OPEN**
14:00-14:30	**OPENING SESSION** **Opening Address** **Werner Weiss**, AEE-INTEC - Institute for Sustainable Technologies, Austria **Xavier Vallvé,** TTA – Trama TecnoAmbiental, Spain **Andreu Moià,** Universitat de les Illes Balears, Spain **Josep Malagrava Rigo,** General Director of Energy and Climate Change from the Balearic Islands Government, Spain **Jaume Carod,** Vice Chancellor (Rector) of the University of the Balearic Islands, Spain

SESSION 1: Progress and Challenges in Achieving SDG 7 **Chairs: Daniel Zimmerle,** Colorado State University, USA **Xavier Vallvé,** Trama TecnoAmbiental, Spain	
14:30-14:45	**State of the Mini Grid Market Globally and 10 Building Blocks for Scaling Up Deployment** James Knuckles, ESMAP, World Bank Group, USA
14:45-15:00	**Strengthening the utilization of mini-grids for eCooking – global insights from the Modern Energy Cooking Services programme.** Richard Sieff, MECS, UK

15:00-15:15	**State of solar thermal development and use worldwide** Werner Weiss. AEE INTEC, Austria
15:15-15:30	**Discussion**
15:30-15:45	**The Role of Renewable Energy Off-Grid Systems in Global Electrification Scenarios and for Climate** Clara Neyrand, Reiner Lemoine Institut, Germany
15:45-16:00	**Monitoring Results, Energy Savings and Environmental Impacts of Installed Solar Thermal Systems in the Southern African Region** Rudolf Moschik. AEE INTEC, Austria
16:00-16:15	**A Historical Perspective on the Role of Mini-grids in Energy Access** Peter Lilienthal. UL Solutions Global Microgrid Lead and Creator of HOMER Software, USA
16:15-16:30	**Discussion**
16:30 17:00	**Coffee Break** 

17:00 17:15	**INDUSTRY SESSION – Company presentations** **Session organizer: Ingo Vosseler,** S-@ccess Conference Manager, Spain • **CEGASA, Spain** • **STUDER INNOTEC, Switzerland** • **ARCA, Spain**

17:15 18:30	**SESSION 2: POSTER SESSION** **Chairs: Helvi Ileka** NEI, Namibia **Jatin Nathwani,** WISE, Canada
Block A	**African and European roadmaps towards hydrogen transition: how to mutually support and benefit** Stefano Barberis. University of Genova, Italy
	Captive solar energy for the agri-food sector Daniel Neyer. TWIGA Sun Fruits / Neyer Brainworks, Austria
	Photovoltaic Pilot Project of Sto. Amaro, Sto. Amaro, Agua-Grande, São Tomé and Príncipe Gabriel Lima Maquengo, Ministry of Infrasestructure and Natural Resources, Sao Tomé and Principe
	Pumped hydro storage in stand-alone PV systems Rodolfo Dufo López. Universidad de Zaragoza, Spain
	Techno-economic comparative analysis of different storage technologies for off-grid PV based microgrid in Africa Francesco Roncallo, EnGreen Solutions, Italy
	Access to Energy for e-Cooking in Public Institutions of Displacement Settings through a Solar Mini-Grid: Alianza Shire´s Dolo Ado project approach review Sonia Ramos Galdo, Universidad Politécnica de Madrid, Spain)
	Evaluation of a hybrid application of PV and wind system using thermoelectric based cooling to fulfilling rural agricultural cooling needs Cátia Joaquina Siueia, Universidade Eduardo Mondlane, Mozambique

Block B	**Increase of flexibility for Off-grids by using AC-coupling** Isabel Ballesteros. SMA Solar Technology AG, Germany
	ARCA, an IoT robust solar generator for isolated locations Pablo Sánchez, IED Company, Spain
	Reconversion of traditional water extraction windmills in Mallorca to produce electrical energy José Pascual Tortella. ENGINYERIA PASCUAL ESTEVA S.L., Spain
	Mini Grids to Generate Income for Rural Areas (business case for a dairy) Abrar Ali, Energy Consultant, Pakistan
	Comparative analysis of the LCOE evolution for PV plants in South America and Europe: the Paraguay case Massimo Rivarolo. Università di Genova, Italy
	Experimental Analysis of a Decentralized Solar PV System complementing an existing Mini-Grid in a growing Rural Settlement Bertha Lwakatare, Technische Hochschule Ingolstadt, Germany
	Optimization of an isolated smart grid by real time management of user's needs and available resources. Tovondahiniriko Fanjirindratovo, University of Toliara, Madagascar
Block C	**Experimental characterization of foldable solar cooker with trapezium-shaped cooking chamber** Giovanni Di Nicola, Marche Polytechnic University, Italy
	Innovative solar Cooker Design with equatorial tracking Pere-Antoni Bibiloni-Mulet, University of the Balearic Islands, Spain
	Steering towards a circular economy with multiuse and second life batteries Benjamin Seckinger. BOS Balance of Storage Systems AG, Germany
	Methods to host Randomly distributed Large Stochastic Active Loads in Weak Low Voltage Distribution Grid with Localized Voltage Control System Daniel Boateng. Colorado State University, USA
Block D	**Claiming sustainable development outcomes in renewable electricity infrastructures: results from a systematic review** Luiz Eduardo Rielli. The University of Lisbon, Portugal
	Why clean cooking did not work…yet! Nadia Mrabit, Energy Consultant, Spain
	Climate protection and poverty reduction. Proposals for household energy and horticulture in developing countries José Manuel Vilchez, IPCENA, Spain
Block E	**The Potential Role of Concessional Consumer Financing in Energy Access** Jakub Vrba. Energy Saving Trust, UK
	Soltrain: Building Markets and Capacity for Solar Thermal in Lesotho Ivan Yaholnitsky. BBCDC, Lesotho
	Resilient Appliances – Delivering Rural Economic Growth & Emissions Reductions Sumedha Awasty, CLASP, India
	A Cluster of Solar Thermal Technology in Mozambique Geraldo Nhumaio.Universidade Eduardo Mondlane, Mozambique
18:30-20:00	**Visit to Trade and Poster Exhibition** 
	Welcome Reception 
20:00	**End of the First Conference Day**

Thursday, April 27, 2023

SESSION 3: LESSONS LEARNED: Failure and Success Factors **Chairs: Jatin Nathwani,** WISE, Canada **Saurabh Biswas,** PNNL, USA	
9:00-9:15	**Risk assessment of an agrivoltaic community project for The Gambia** Jessica Berneiser. Fraunhofer Institute for Solar Energy Systems ISE, Germany
9:15-9:30	**Operational Challenges in Functioning of Photovoltaic-based Mini-Grid Power Plants in India and policy implications** Dwipen Boruah, GSES India Pvt. Ltd., India
9 :30-9 :45	**Perceptions of success in rural electrification projects in Tanzania** Hannah Mottram, University of Sheffield, UK
9:45-10:00	**Debt Financing for Mini-Grids – Structuring Considerations and Lessons Learned** Meghana Duggirala, Facility for Energy Inclusion (FEI), UK
10:00-10:15	**Discussion**
10:15 11:00	**Coffee Break and visit to Trade and Poster Exhibition: Posters Block A, B** 

SESSION 4A - PARALLEL SESSION: Policy, Regulatory Framework, and Institutional Support **Chairs: Miguel Fernández**, Energy Consultant, Bolivia **James Knuckles,** Word Bank, USA	
11:00-11:10	**Of monopolies and mini grids: case studies from Kenya, Tanzania, Nigeria and Senegal** Lucy Baker. University of Sussex, UK
11:10-11:20	**Papua New Guinea Off-Grid Regulation for Small Power Systems** Roger Sallent, TTA - Trama TecnoAmbiental, Spain
11:20-11:30	**An Industry Roadmap for Scaling Solar Mini grids in Asia & Africa** William Brent, Husk Power Systems, India
11:30-11:40	**Harnessing the Mini-Grids Potential for Sustainable Development: Uncovering the UNIDO experience within the context of the Global Network of Regional Sustainable Energy Centers (GN-SEC)** Gentjan Sema, UNIDO, Austria
11:40-12:00	**Discussion**
12:00-12:10	**Impact of Awareness and Training on Solar Thermal Technology Uptake: Case Study Zimbabwe** Samson Mhlanga. National University of Science and Technology, Zimbabwe
12:10-12:20	**Improving knowledge and awareness on differentiated energy access in Mozambique: hands-on training of government officials in the MTF methodology** Carlos Guerrero Lucendo, VITO/Energyville, Belgium
12:20-12:30	**Cooperating with Energy: Spanish Agency for International Development Cooperation's role in access to energy** Maite Martin-Crespo. AECID, Spain

12:30-12:40	**Private Public Partnership for the electrification of the rural community of Mahavelona in Madagascar** Rakotomahevitra Andrianelison, Université d'Antananarivo, Madagascar
12:40-13:00	**Discussion**
13:00	**LUNCH and Visit to Trade and Poster Exhibition** 

SESSION 4B - PARALLEL SESSION: Innovative Storage and Design **Chairs: Helvi Ileka**, NEI, Namibia **Georg Bopp,** Fraunhofer ISE, Germany	
11:00-11:10	**Assessing the cost competitiveness of Sodium-Nickel batteries compared to Lead-acid and Lithium-ion technology for stationary applications.** Michele Velenderic. Green Power Brains, Germany
11:10-11:20	**Optimization of stand-alone PV-battery-diesel systems considering accurate battery ageing models** Rodolfo Dufo López. Universidad de Zaragoza, Spain
11:20-11:30	**Assessing the use of second-life Li-ion batteries and solar photovoltaics in isolated mini grids in the Brazilian Amazon** Prof. Ricardo Rüther, Universidade Federal de Santa Catarina, Brazil
11:30-11:40	**Safety of Batteries** Hugo Horno. CEGASA ENERGÍA, Spain
11:40-12:00	**Discussion**
12:00-12:10	**Energy-Hubs in Informal Settlements – An interdisciplinary approach** Rebekka Besner, THI - Technische Hochschule Ingolstadt, Germany
12:10-12:20	**Design of hybrid wind-PV power plants with battery energy storage and back-up diesel generators for UNDP-Lebanon** Luis Arribas. CIEMAT, Spain
12:20-12:30	**Decentralized Independent Mini-Grid for maximum system performance. Case study of Don Bosco Mini-Grid** Christof Baum. Don Bosco Technical Institute, Ghana
12:30-12:40	**Inovasi Modular Smart Swarm Minigrid** Andre Susanto. PT Inovasi Dinamika Pratama, Indonesia
12:40-13:00	**Discussion**
13:00	**LUNCH and** **Visit to Trade and Poster Exhibition** 

SESSION 4C - PARALLEL SESSIONS: Capacity Building and Inclusion **Chairs: Andreu Moià-Pol,** UIB, Spain **Boaventura Cuamba,** EMU, Mozambique	
11:00-11:10	**Knowledge sharing to accelerate the energy transition – lessons from Nigeria** Maria Yetano Roche. Wuppertal Institute for Climate, Environment and Energy, Germany

11:10-11:20	**The Opportunities and Challenges for Women in the emerging Solar Thermal Market in Botswana** Karen Gibson. So Solar (Pty) Ltd and Solar Industries Association Botswana, Botswana
11:20-11:30	**Solar Training in the Scope of PERER, Madagascar** Léonie Ranarison, GIZ Perer, Madagascar
11:30-11:40	**ONEPlanET - OpeN source nExus modelling tools for Planning sustainable Energy Transition in Africa** Stefano Barberis, University of Genova, Italy
11:40-12:00	**Discussion**
12:00-12:10	**Global online knowledge management on energy access via Energypedia** Robert Heine, Energypedia, Germany
12:10-12:20	**New Model for Delivery of Online Solar Training** Geoff Stapleton, GSES - Global Sustainable Energy Solutions Pty Ltd., Australia
12:20-12:30	**Opensource for Energy Access: a new phase for the sector** Vivien Barnier. EnAcces Foundation, Netherlands
12:30-12:40	**Electricity supply and satisfaction of energy service needs among rural and peri-urban households and small firms in Nigeria** Philipp Blechinger. Reiner Lemoine Institut, Germany
12:40-13:00	**Discussion**
13:00	**LUNCH** **Visit to Trade and Poster Exhibition** 

	SESSION 5: Practitioners Round Tables (different rooms) **Session organizer: Daniel Zimmerle,** Colorado State University, USA **Saurabh Biswas,** PNNL, USA 14:00 – 14:45
1.	**The future of Solar thermal in competition with PV** **Moderator:** Werner Weiss, AEE - INTEC, Austria **Rapporteur:** Boaventura Cuamba, Eduardo Mondlane University, Moçambique
2.	**Topic: Strength and Weaknesses of Different Storage Technologies** **Moderator:** Georg Bopp, Fraunhofer ISE (Germany) **Rapporteur:** Ricardo Rüther, Universidade Federal de Santa Catarina, Brazil
3.	**Topic: Solar Energy to Enhance Community Development and Livelihood** **Moderator:** Kilian Reiche, iiDevelopment, Germany **Rapporteur:** Frank Bergh, NRECA, USA
4.	**Topic: Revenue, tariffs, and ability to pay in off grid energy services and Mini-Grids** **Moderator:** Cristina Ruiz Martínez, Acciona Org, Spain **Rapporteur**: William Brent, Husk Power, India
5.	**Topic: Is Solar Cooking reaching the market?** **Moderator:** Celestino Ruivo, University of Algarve, Portugal **Rapporteur:** Nadia Mrabit, Energy Consultant, Spain
6.	**Optional requested by participants during registration on the 26th April**

SESSION 6: LESSONS LEARNED: Business Models **Chairs: Richard Sieff,** MECS, UK **Xavier Vallvé,** TTA – Trama Tecnoambniental, Spain	
15:00- 15:15	**Rural Electric Cooperatives: The 90-year Movement to Power Global Communities** Frank Bergh, NRECA International, USA
15:15- 15:30	**Inovasi Rural Economic Development Delivery Model** Andre Susanto. PT Inovasi Dinamika Pratama, Indonesia
15:30- 15:45	**Lessons learned: Solar Powered Cold Rooms in the Field** Florian Martini, Phaesun GmbH, Germany
15:45- 16:00	**Strengthening commercial viability through greater inclusion in rural mini grids: Insights from Nigeria** Temilade Sesan, International Centre for Energy, Environment and Development. Nigeria
16:00- 16:15	**Discussion**
16:15 17:00	**Coffee Break and visit to Trade and Poster Exhibition: Poster Blocks C, D, E** 

SESSION 7A: PARALLEL SESSION: Technology Innovations **Chairs: Helvi Ileka,** NEI, Namibia **Celestino Ruivo,** UA, Portugal	
17:00- 17:10	**Correction of the ASAE S580.1 procedure for deriving the standardised power of solar cookers** Ruivo Celestino, University of Algarve, Portugal
17:10- 17:20	**Hydrogen with photovoltaic energy for Solar Cooking** Andreu Moia Pol. UIB, Spain
17:20- 17:30	**Airborne Wind Energy - making wind resources accessible in remote areas and islands** Kristian Petrick. Airborne Wind Europe, Belgium
17:30- 17:40	**Thermal Performance Assessment of a Hybrid Space and water Heating System** Lavhelesani Maluleke. Stellenbosch University, South Africa
17:40- 17:55	**Discussion**
18:00- 18:10	**Modular Walk-in Storage Rooms with thermal ice storage powered by solar** Victor Torres Toledo. Solar Cooling Engineering GmbH, Germany
18:10- 18:20	**Scaling up mini-grids business case in Africa:** **Can remote monitoring help?** Marco Pittalis, European Commission, JRC, Italy
18:20- 18:30	**Battolysers – part of the solution?** Dani Strickland, Loughborough University, UK
18:30- 18:45	**Discussion**
18:45	**End of the Conference Day** *Buses to the dinner restaurant are leaving in front of the University at 19:15.*
20:00 	**Conference Dinner with *Best Poster* Award** **Ceremony Award Committee:** **Kilian Reiche,** iiDev, Gemany **Helvi Ileka**, NEI, Namibia **Jatin Nathwani,** WISE, Canada

SESSION 7B: PARALLEL SESSIONS: Design and Optimization **Chairs: Ricardo Rüther**, FUSC, Brazil **Peter Lilienthal,** UL Solutions Global Microgrid Lead and Creator of HOMER Software, USA	
17:00-17:10	**Evaluation of Standalone Microgrid Design Software Tools Based on the Defined Criteria** Gautam Rituraj, Task 18 IEA - PVPS
17:10-17:20	**Autarky: Optimal sizing and dispatch of mini-grids considering uncertainties.** Tatiana González. Europa University Flensburg, Germany
17:20-17:30	**CLOVER: Modelling Technologies to Support Energy and Clean-Water Access** Benedict Winchester, Imperial College London, UK
17:30-17:40	**Repowering the hybrid power system of Baltra – Santa Cruz** Andrea Eras-Almeida, UNIDO, Austria
17:40-17:50	**Discussion**
17:50-18:00	**Planning considerations for electrical connection of power-based energy storage into existing mini-grids** Antonio Notholt. Reutlingen University, Germany
18:00-18:10	**A Techno-economic Feasibility study of Electrifying Rural Communities in Sub-Saharan Africa harnessing Renewable Energy-based Mini-grids: A case of Uutsathima village, Namibia** Joseph Shigwedha. Energy Researcher - Namibia Energy Institute, Namibia
18:10-18:20	**Evaluating the cost competitiveness between Mini-grids and Standalone Systems: The influence of load profile aggregation on electrification model analysis outcomes** Churchill Agutu. ETH Zurich, Switzerland
18:20-18:30	**Energy Supply for Health Facilities in Ghana: A forecast-based battery control of a PV-battery-diesel-system.** Stefanie Meilinger. University of Applied Sciences Bonn-Rhein-Sieg, Germany
18:30-18:45	**Discussion**
18:45	**End of the Conference Day** *Buses to the dinner restaurant are leaving in front of the University at 19:15*
20:00 	**Conference Dinner with *Best Poster* Award** **Ceremony Award Committee:** **Kilian Reiche,** iiDev, Gemany **Helvi Ileka**, NEI, Namibia **Jatin Nathwani,** WISE, Canada

SESSION 7C: PARALLEL SESSIONS: Market Outlook and Planning **Chair: Werner Weiss,** AEE-INTEC, Austria **James Knuckles,** World Bank, USA	
17:00-17:10	**SURINAME - Support to the assessment of three mini grids to improve access to water and energy needs in South Suriname** Shamir Bakridi, EBS, Suriname
17:10-17:20	**Assessment of Electricity Access for Host Communities and Forcibly Displaced People in Sahel and Lake Chad Basin regions** Ana Sancho. TTA - Trama TecnoAmbiental, Spain
17:20-17:30	**Mini-grids for integrated electrification of unserved villages in Belize** José Luis Larrégola. Lait UP Belize! T.A., Belize

17:30-17:40	**Coupling Water Energy Food Nexus and multi-year microgrid planning** Davide Fioriti. DESTEC, University of Pisa, Italy
17:40-17:50	**Discussion**
17:50-18:00	**SOLTRAIN+ and IEA SHC Task 69 – New International Initiatives to Promote Solar Energy in SADC Countries and Globally** Monika Spörk-Dür. AEE – Institute for Sustainable Technologies, Austria
18:00-18:10	**Towards a Universal Energy Access Interamerican Hub** Andres Gonzalez Garcia, MIT-Comillas-WE UEA Lab, Spain
18:10-18:20	**Solar Cooling for the Sunbelt regions - first results of IEA Task 65 Activity A1 Climatic conditions and applications** Daniel Neyer, TWIGA Sun Fruits / Neyer Brainworks, Austria
18:20-18:30	**Household innovation and agency in mini-grid energy use: a case study of households in Kenya** Abigael Okoko, Nuvoni Centre for Innovation Research, Kenya
18:30-18:45	**Discussion**
18:45	**End of the Conference Day** *Buses to the dinner restaurant are leaving in front of the University at 19:15*
20:00 	**Conference Dinner with *Best Poster* Award** **Ceremony Award Committee:** **Kilian Reiche,** iiDev, Gemany **Helvi Ileka**, NEI, Namibia **Jatin Nathwani,** WISE, Canada

Friday, April 28, 2023

SESSION 8: Energy for Local Development and Livelihood **Chairs: Samson Mhlanga,** National University of Science and Technology (NUST), Zimbabwe **Miguel Fernández,** Energy Consultant, Bolivia	
9:00-9:15	***'Luz en Casa'*: providing access to an affordable and sustainable electricity basic service** Cristina Ruiz Martínez, Acciona.org Foundation, Spain
9:15-9:30	**Gender gap on productive uses of energy in refugee camps and its impacts in livelihood opportunities** Sonia Ramos. Universidad Politécnica de Madrid, Spain
9:30-9:45	**Socio-economic determinants of electricity access in refugee settlements. Evidence from Sub-Saharan Africa** Paola Casati. University of Bari, Italy
9:45-10:00	**Lessons from Deploying Solar Microgrids in Malawi** Aran Eales, University of Strathclyde, UK
10:00-10:15	**Discussion**
10:15-10:30	**Round Tables´ Conclusions** Daniel Zimmerle, Colorado State University, USA

10:30 **11:00**	**Coffee Break and visit to Trade and Poster Exhibition** 

	SESSION 9A: Project Showcases **Chairs: Kilian Reiche,** iiDev, Germany **Daniel Zimmerle -** Colorado State University, USA
11:00-11:15	**Large scale solar hot water heating systems for hospitals in Namibia** Fenni M.T. Shidhika. NEI, Namibia University of Science and Technology, Namibia
11:15-11:30	**Integral Approach to the solar electrification of 73 health centres in Niger** Rabo Oubandawatchi Maman Tassiou. ANPER, Niger
11:30-11:45	**SURINAME - Engineering, Procurement and Construction of 10 PV-Diesel Hybrid mini grids in the Upper Suriname River** Richard Paal. EBS – Energie Bedrijven Suriname, Suriname
11:45-12:00	**Discussion**
12:00-12:15	**Experiences from a large rollout of 120 mini grids in Senegal** Stefan Trittler. Asantys Systems GmbH, Germany
12:15-12:30	**Integrated Food, Energy and Water Systems for economic development – learnings from an Agrivoltaics project in Mali and The Gambia** Jessica Berneiser. Fraunhofer Institute for Solar Energy Systems ISE, Germany
12:30-12:45	**Application of Solar Thermal Technologies to Compliment Grid Energy Requirements in Namibia** Helvi Ileka, Namibia Energy Institute-Namibia University of Science and Technology, Namibia
12:45-13:00	**Discussion**
13:00 **13:15**	**CLOSING REMARKS** **Xavier Vallvé,** TTA - Trama TecnoAmbiental ,Spain **Werner Weiss,** AEE-INTEC - Institute for Sustainable Technologies, Austria **END OF THE CONFERENCE**

	SESSION 9B: Solar Cooking event **Chefs: Manuel Vilches**, IPCENA, Spain **Celestino Ruivo Celestino Ruivo,** UA, Portugal **Richard Sieff,** MECS, UK
11:00-13:00	**Cooking with the experts** Parabolic solar cookers Box oven solar cookers Electric Pressure Cookers with off-grid PV-generation
13:00 **13:15**	**CLOSING REMARKS** **Xavier Vallvé,** Trama TecnoAmbiental, Spain **Werner Weiss,** AEE-INTEC - Institute for Sustainable Technologies, Austria **END OF THE CONFERENCE**

13:15 hrs **<u>"Solar Lunch", sponsored by the ESMAP - World Bank Group</u>**

<u>CONFERENCE SIDE EVENT "B" (open to all registered participants): Scaling up Mini Grid deployment by a factor of 10</u>

April 28, 2023, 14:30 - 16:00 hrs

Hosted by The World Bank's Energy Sector Management Assistance Program (ESMAP)

The World Bank's Energy Sector Management Assistance Program (ESMAP) has just published its most authoritative book on mini grids to date, Mini Grids for Half a Billion People: Market Outlook and Handbook for Decision-Makers, and will soon publish another report on interconnected mini grids. These two books take stock of the mini grid market today and provide "how to" guides to scaling up mini grids in energy access deficit countries. Approximately 21,500 mini grids are installed today, but achieving universal access to reliable, affordable electricity by 2030 will require more than an additional 200,000 mini grids serving more than half a billion people, through both stand-alone and interconnected mini grids. Achieving this 10x increase is possible only if significant progress is made in technologies, business models, and enabling environments.

In this session, participants will be broken into three groups, and will be tasked with identifying game-changing technologies, strategies, or innovations currently available or in use today that can help achieve unprecedented acceleration in mini grid deployments in energy access deficit countries.

S-@ccess conference - Parallel Events:

Tuesday, April 25, 2023

PARALLEL EVENT 1: IEA PVPS task 18 meeting (by invitation only)
April 25, 2023, 09:00 – 16:00 hrs
Day 1 – Room – Sala de Graus B, Jovellanos building, UIB

PARALLEL EVENT 2: CARIBBEAN Minigrid workshop (by invitation only)
April 25, 2023, 09:00 – 16:00 hrs
Day 1 – Room – sala de Graus A, Jovellanos building, UIB

PARALLEL EVENT 3: ONEPlanET workshop – Horizon Europe Project (open to all registered participants)
April 25, 2023, 15:00 – 18:00 hrs
Day 1 – Room – Sala01b, Antoni Maria Alcover I Sureda building, UIB

Wednesday, April 26, 2023

PARALLEL EVENT 4: IEA SHC task 69 meeting (by invitation only)
April 26, 2023, 08:00 – 13:00 hrs
Day 2 - Room – Sala de Graus B, Jovellanos building, UIB