

7th OFF-GRID Expo + Conference

Lecture Program Overview

Status: 07.10.2020 | Note: Single presentations of the lecture program and the times may change before the start of the event.

Conference Day 1 – 03.12.2020

Session I	11.00 am - 01.00 pm	Off-Grid electrification in post Covid-19 era
Session II	02.00 pm - 04.00 pm	Productive use and sector coupling – Driver of economic development

Conference Day 2 – 04.12.2020

Session III	09.00 am - 12.00 am	Bundesverband Kleinwindanlagen – Small wind for demanding locations – News from research and practice
Session IV	02.00 pm - 04.00 pm	Energy Storage for rural electrification – providing uninterrupted energy supply



Session I: Conference Day 1 – 03.12.2020

In 2019/20, the world witnessed just how fragile our key systems are. The outbreak of COVID-19 showed us how a virus has the power to pose a grave threat to all development efforts currently being pursued around the world. The energy sector was immediately recognised as an 'essential service' – powering up other interlinked sectors, especially the decentralised renewable energy providing power to the healthcare facilities in remote rural areas. The World Health Organisation (WHO) also vouched for the urgent intensification of an expansion of sustainable energy solutions worldwide. The panel discussion will discuss both the status quo of Off-Grid electrification and the way forward.

08:30 – 10:00 am

Opening und Kick-off | Exhibitors' presentations

11:00 – 12:00 am

Session I

Off-Grid electrification in post Covid-19 era

Welcome Note – Deepak Mohapatra:

Need for off-grid electrification with decentralised energy solutions to catalyse the energy access efforts to power up the rest 860 million in post-Covid times

Panel Discussion

Alessandro Medici / Benjamin Müller	<i>Power-Blox</i>
Deepak Mohapatra	<i>ARE</i>
Géraldine Quelle	<i>Phaesun</i>
Irene Calvé Saborit	<i>Sunkofa</i>
Michael Schmidt	<i>UNIDO</i>

'The OFF-GRID Expo + Conference in Augsburg is a good platform to network and exchange views with project developers, technology suppliers, industry associations and service providers that promote projects in developing and emerging countries as we do. The projects initiated in Augsburg therefore contribute directly to achieving the UN Sustainable Development Goals (SDGs). In most parts of the world, affordable and sustainable energy (SDG7) is only possible through an expansion of OFF-GRID energies. The topics at the OFF-GRID Expo + Conference are set to become increasingly more important in the future.'

Michael Schmidt (UNIDO)

12:00 am

Questions & Answers

01:00 pm

Lunch Break & Networking | Exhibition

Subject to changes.

Session II: Conference Day 1 – 03.12.2020

The productive use of renewable energy potentially means to provide energy services to small business units in low-income communities to improve their overall performance. Such services can be expanded and integrate many end-users and supply sectors with one another to improve efficiency and reliability of energy systems and to enable increased economic activities in the area of operation. This session will highlight such innovative practices happening around the world stimulating cross-sectoral productivity.

02:00 – 04:00 pm

Session II

**Productive use and sector coupling –
 Driver of economic development**
powered by Alliance for Rural Electrification



Speakers

02:00 pm	Luca Traini <i>RES4Africa</i>	RE-thinking access to energy business models. Ways to walk the Water-Energy-Food Nexus Talk in Sub-Saharan Africa
02:20 pm	Christoph Peters <i>TTA</i>	PV for uninterrupted electricity supply of health facilities - case studies
02:40 pm	Bert Bernolet <i>Solergie</i>	The Solergie Nano-Grid, in between SHS and mini-grids, with the advantages of both
03:00 pm	Jasper Verreydt <i>Turbulent NV</i>	Low head micro hydro enabling rural electrification and agricultural development
03:20 pm	Farah Mrabet <i>University of Hohenheim</i>	Improving economic activities in local level through local manufacturing
03:40 pm	Rana Adib <i>REN21</i>	Overarching challenges, bottlenecks and recommendations on sector coupling towards achieving SDG 7 goals
04:00 pm	Closing Day 1 Exhibition	

Subject to changes.

Session III: Conference Day 2 – 04.12.2020

Small wind turbines are the perfect complement to photovoltaics. But the planning and use of small wind turbines follows its own rules, especially in complex terrain with nearby obstacles such as buildings and vegetation. Professional planning and independent system tests are the basis for successful projects.

08:30 am

Opening Day 2

09:00 – 10:00 am

Session III a

**Small wind for demanding locations –
 News from research and practice**
powered by Bundesverband Kleinwindanlagen



Speakers

Jean-Daniel Pitteloud
 WWEA

Small Wind Global Market Status

Gerhard Gruhler
 HS Heilbronn

Off-Grid Electricity Generation and Consumption:
 Quo Vadis?

Luis Arribas / Ignacio Cruz
 CIEMAT

SWTOMP Project What goes next?

10:00 am

Break | Exhibition

11:00 – 12:00 am

Session III b

**Small wind for demanding locations –
 News from research and practice**
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Speakers

Alexander Hirschl
 FH Technikum Wien

Evaluation of the influences of different roof shapes on the flow properties and performance of small wind turbines

Erik Schütz (Keynote Speaker)
 Jürgen Weinreich / Ashutosh Das
 RoSEC

Practice-oriented planning of small-wind-systems with augmented reality

Tonny Brink
 Folkecenter

Small Wind & Batteries:
 How to go Off Grid ... safely!

12:00 am

Pitches of the OFF-GRID Challenge

Subject to changes.

Session IV: Conference Day 2 – 04.12.2020

The increased penetration of renewable energy sources is a good sign for global power sector. However, the variable generation potential from solar and wind makes it challenging to provide power 24x7. Energy storage comes as a key to such challenges. Energy storage, if suitably deployed, gives system operators a flexible and fast response resource to effectively manage variability in generation and load and hence provide uninterrupted power supply. This session outlines the nuances of “Energy storage” and the vital role it plays in decentralised rural electrification.

12:30 am

Lunch Break | Exhibition

01:30 pm

Special Guest

02:00 – 04:00 pm

Session IV

Energy Storage for rural electrification – providing uninterrupted energy supply
powered by Alliance for Rural Electrification



Speakers

02:00 pm

Prof. Ed Brown
University Loughborough

Energy storage trends for off-grid services in emerging markets

02:20 pm

Antonia Orsoni
Bluestorage

Integrated solar energy production, storage & management approach to energy access

02:40 pm

Hendrik Broering
AMMP

Energy system and storage optimisation with state-of-the-art monitoring systems

03:00 pm

Francesco Gattiglio
EUROBAT

Battery technologies for off-grid and rural applications

03:20 pm

Daniel Rosas
BAE Batterien GmbH

Premium lead batteries as a storage solution for off grid rural electrification

03:40 pm

Markus Münch
sunfire GmbH

Fuel cells as energy converter in off-grid systems and their impact on operational safety and energy storage

04:00 pm

Award ceremony OFF-GRID Challenge, closing and group photo

Subject to changes.