Microgrid Forum

Achieving The Business Case, Power Quality And Reliability Of Microgrids In Multiple Applications

18 - 19 September 2013
Movenpick Hotel AMSTERDAM City Centre

Presentations From
Over 20 Industry Experts
From 18 Countries Covering:

- Reducing Total Cost Of Ownership By Choosing The Most Cost Effective Technology Mix
- Developing An Optimum Regulatory Framework For Microgrids Worldwide
- Achieving Power Control In Island Grids In Order To Meet Accurate Energy Demand And Reliability
- Establishing Codes And Standards For DC Applications In Residential, Commercial And Industrial Applications
- Evaluating Case Studies From 5 Regions Including Africa, India, Middle East, China

www.microgridforum.com
call: +44 208 432 0886 (London) +65 6243 0050 (Singapore)
email: emily@energystorageforum.com
Sponsorship Packages At A Glance

The Platinum option has premier positioning and priority in each of the features described below. This is not an exhaustive list, please contact one of our marketing consultants to help you define your objectives.

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<th>Features</th>
<th>Platinum</th>
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These three main sponsorship options are available amongst other options so do please contact one of our marketing consultants to enquire further. Examples of packages include: • Lunch • Drinks reception • Conference bursary • Cultural entertainment sponsorship

Tailored Packages We believe in tailoring your needs by understanding your strategic objectives. This understanding is then transferred to our database, blog and media partners which will allow you to reach thousands of individuals for a good period stretching over 6 - 12 months.

Exhibition Showcase

Who Will You Meet

- Utilities, DSOs
- Generation
- Distribution Providers
- Renewable Energy Integrators
- Government/Regulators/Public Agencies
- Energy Storage Solutions Providers
- Battery Manufacturers
- Research Institutes
- Investors
- Wind Energy Operators
- PV Manufacturers
- Power Electronics/Inverters
- Commercial & Industrial End Users
- Oil/Gas
- Property Developer
- Hospitals, Universities, Refineries
- Pharmaceutical Manufacturing
- Data Centers
- Telecoms
- EPCs

From Which Functions

- CEO / Board Members
- CTO
- Head of Public Affairs
- Director of Product Management
- Director of Grid Integration
- Transmission Networks Manager
- Head of R&D
- Energy Storage Business Development
- Technical Development Manager
- Head of Renewable Technologies
- Head of Engineering
- Director of Innovation
- Distributed Energy Resources Manager
- Storage Research Leader
- Load Levelling Manager
- Business Development Manager
- Property Management Director
- Head of Operations / Network Head
- Head of R&D
- Energy Systems Manager

Regions

- USA
- Middle East
- Rest of the World
- Japan
- India
- South East Asia
- China

Sponsorship & Exhibition Enquiries:

Europe: call Desmond at +44 (0) 208 638 0920  email: emily@energystorageforum.com  or +44 7799 1611 62

Asia: call Kenny at +65 6243 0050  email: emily@energystorageforum.com

call: +44 208 432 0886 (London)  www.microgridforum.com  email: emily@energystorageforum.com
Forum Day 1  
Wednesday 18 September

8.30  Registration And Coffee

9.00  Welcome Address
Davide Bonomi, Content Strategy Director
DUFRESNE – MICROGRID FORUM

9.20  Chairman Introduction
Balthasar Klimbie
Chairman
ALLIANCE FOR RURAL ELECTRIFICATION (BELGIUM)

9.30  Examining The Business Case And Investment Opportunities For Microgrids Worldwide
- Evaluating the business case for:
  - PV and residential energy storage in Europe and the US
  - fully energy-independent communities - remote mining operations
- Evaluating the choice of technologies and underlying drivers other than financials
- Identifying market opportunities and potential business models for start-up companies worldwide
Fabio Lancelotti
Investment Manager
ASTER CAPITAL (FRANCE)

9.55  Integrating Photovoltaic, Wind And Diesel Systems To Supply The Electrical Needs Of The Graciosa Island
- Demonstrating the monthly average electric production in the island
- Examining smart meters enabling remote management
- Monitoring the use of battery and electric vehicle recharge systems
Gonzalo Piernavieja,
Director of R&D and Innovation
CANTABRIAN ISLANDS INSTITUTE OF TECHNOLOGY (SPAIN)

10.20  Africa Case Study: Managing Microgrid Risks By Maintaining The System's Stability And Control Under Equipment Failures
- Examining the African Regulatory Scenario needed for Microgrids
- Understanding the value chain of Microgrids installations in Africa
- Examining the following scenarios and technical results:
  - High load seasonal variability - High residential PV penetration - Weak electric system
Joseph Diamenti
System Planning Engineer
SWAZILAND ELECTRICITY COMPANY (SWAZILAND)

10.45  Coffee Break And Exhibition Visit

11.20  Designing Energy Storage Solutions For Microgrid Only Applications
- What type of technology is available now?
- What needs to improve in order to achieve optimum performance and ROI?
- To what extent can current grid storage technology be tailored for Microgrid applications?

11.45  Case Study Results: Evaluating Costs And Benefits Of A Smart Polygeneration Microgrid Project In A University Campus
- Integrating renewables and storage systems for a programmable power generation
- Evaluating the cost and benefit of having Microgrids in the campus
- Defining optimal control strategies for Microgrids operation
Federico Dellino,
Professor, Power Systems Engineering, Pro-Rektor Management Of Savona Campus Research & Teaching Facilities
UNIVERSITY OF GENOA (GENOVA)

12.10  Examining The Business Case Of Financing Residential Energy Storage Development In Europe
- Discussing how residential storage may be integrated in the grid for a positive ROI
- Understanding the drivers for a successful roll-out
- Analysing which stakeholder can collaborate to share the benefits and how could they influence the ROI?
Johan Reynaert
Partner
CAPRICORN VENTURE PARTNERS (BELGIUM)

12.35  Evaluating The Results Of A Reliable And Economic Energy Production In Island Grids And Assessing Its Business Case
- Learning the economic conditions of energy production using diesel and PV on islands
- Demonstrating the system design for energy production as main application
- What are the challenges for the system control of a Microgrid?
- Determining the results from prototype system operation at KIT Karlsruhe
  - frequency control
  - voltage control
  - reactive power control
  - SOC control
  - PV production forecast
Glaf Wollersheim
Systems Management Competence E
KARLSRUHE INSTITUTE OF TECHNOLOGY, KIT (GERMANY)

13.00  Lunch And Exhibition Visit

14.35  Achieving Low Cost Metering That Can Accurately Analyse The Grid And Provide Quality Of Service
- Overcoming open source vs. close source and interface related issues
- Completion of low cost smart metering on designated loads
- Choosing the best technology in different scenarios
Pascal Rioual
Director, Island Energy Systems
CAPENERGIES / EDF (FRANCE)

15.00  Overcoming the Challenges Of Balancing Intermittent Renewables Within A Microgrid
- Managing the delicate balance of supply and demand while providing the necessary electrical safety functions
- Forecasting the supply of wind and solar
- How to use storage in rural vs. urban scenarios with intermittent renewable?
Jos Blom
Director of Energy Storage Program
ALLIANDER (THE NETHERLANDS)

15.25  Comparing Different Energy Storage Technologies For Microgrids In Different Geographical Scenarios
- Evaluating the following technologies:
  - Li-ion
  - Flow battery
  - Lead-acid
  - Supercapacitors
  - Hydrogen
  - Flywheel
  - Zebra
- Examining the following scenarios and applications:
  - Rural vs Urban
  - Island vs Grid Connected
  - Commercial UPS
Jos Van Der Burgt
Consultant Electricity Storage And Smart Grids
DNV KEMA ENERGY & SUSTAINABILITY (THE NETHERLANDS)

15.50  Coffee Break And Exhibition Visit

16.30  Could Grid Connected Microgrids Evolve To Become Isolated Ones?
- Demonstrating the difference between power quality in a Microgrid and the larger grid
- Can the energy generated by power from Microgrids be cheaper than the unit cost of grid energy?
- Working with local authorities to enter the market
Panelists:
Pascal Rioual
Director, Island Energy Systems
CAPENERGIES / EDF (FRANCE)
Jos Blom
Director of Energy Storage Program
ALLIANDER (THE NETHERLANDS)

To apply as a panelist please email: glady@energystorageforum.com

17.55  Closing Remarks From The Chair

Join our group
Energy Storage World Forum
3500+ members
on
Linked in
http://goo.gl/ILRjJ
Discuss with professionals from the value chain. Put forward your questions and get to know your peers before and after the conference so you can gain more learning and networking value.

The 7th Energy Storage World Forum
London 4 - 6 March 2014
www.energystorageforum.com
Over 1000 delegates and a total of 270 speakers from 28 countries attended our past 6 Energy Storage World Forums
9.30 Faroe Island Case Study: Using Warm Water Storage To Stabilise The Fluctuating Microgrid In Rural Areas
• Matching the reactive power in self excited induction generation
• Evaluating fast control of heaters
• Stabilising A Stand-Alone 220 KW Wind Turbine
BJARTI THOMSEN
Engineer and Project Developer
FAROE EARTH AND ENERGY DIRECTORATE (FAROE ISLAND)

9.55 Understanding Microgrid Operational Model Challenges In Execution and Operation To Achieve Sustainable Growth
• Understanding community and geographical constraints in Microgrids
• Analysing Microgrid revenue management and collection
• Identifying the operational and maintenance Microgrid problems
MANIK JOLLY
Consultant
WORLD BANK (INDIA)

10.20 Examining The New Challenges In Coordinated Control And Communications For Microgrid Technologies
• Analysing AC and DC Microgrids control and management
• What are the advanced control architectures for intelligent Microgrid?
• Evaluating the multi agent systems of the Microgrid projects in real sites at Faroe Islands, China and Taiwan
TOMISLAV DRAGICEVIC
Professor, Institute of Energy Technology
AALBORG UNIVERSITY (DENMARK)

10.45 Coffee Break And Exhibition Visit

11.30 Examining How Microgrid Technology Can Support The Energy Transition Of An Optimised Financial And Organisation Framework
• Overcoming current and future hurdles of Microgrids:
  - Legal & Financial boundaries : real costs and revenues
  - Organisational steps : skills & change management requirements
  - Microgrids relieving the Grid in the energy transition
• Understanding forecasting and matching: e-production, e-demand and e-storage
HUGO NIESING
Founder and Director
RESOURCEFULLY (THE NETHERLANDS)

11.55 Examining The Market Potential And Developing A Regulatory Framework For Microgrids
To apply as a speaker please email: gladys@energystorageforum.com

12.20 Understanding The Geographic Analysis Of Isolated Diesel Microgrids
• Examining GIS-based identification of off-grid energy demand using geo-referenced information of population density, nightlights, and power transmission grids.
• Analysing the energy demand profiles in the identified areas depending on population, human development, and climate
• Analysing the cost of the hybridization of diesel-grids with renewable energies
ROBERT SEGUGIN
Team Leader Off-grid
REINER LEMOINE INSTITUT (GERMANY)

12.45 Case Study: Demonstrating The Hybrid Microgrids In Rural Areas In Sub-Sahara Africa
• Understanding the hybrid Microgrid business model
• Analysing the service and system of Microgrids
• Learning the delivery costs and tariffs of the Microgrid Operation
CAROLINE NIJLAND
Business Development Director
FOUNDATION RURAL ENERGY SERVICES (FRES) (NEDERLANDS)

13.00 Networking Lunch And Exhibition Visit

14.35 Evaluating Power Energy Management Of A Microgrid In An Industrial Area
• Measuring the impact of power demand and battery capacity in the Microgrid system
• Designing inverters that rely on local information and decide whether it is under on-grid or off-grid mode
• Maintaining good system dynamics and ensuring the optimum current output
MONICA AGUADO
Director of the Renewable Energy Grid Integration Department
CENER (SPAIN)

15.00 Examining The Current Market and Future Potential of Microgrid Applications In China
• What is driving Microgrid developments in China?
  - policy goals
  - rural grid upgrades
  - power shortage and quality issues
  - cost savings vs. incumbent technologies
• Where is the development focused?
  - urban vs. rural
  - island vs. inland
  - small vs. large
• Who is most active in this space?
EMIEL VAN SAMBEEK
Director of Consulting and Advisory
AZURE (CHINA)

15.25 To What Extent Will Microgrid Become Part Of Mainstream Energy Economics?
• Comparing energy prices of:
  - central power grids vs microgrids
  - diesel vs battery power
• What needs to improve in order to achieve economics of scale and ROI?
• How and when could Microgrid and central power grids compliment each other cost effectively?
MICHAEL SALOMON
CEO
CLEAN HORIZON (FRANCE)

15.50 Coffee Break And Exhibition Visit

16.30 Determining The Impacts And Solutions Of Integrating Renewable Energy Resources into Microgrid
• What are the KPIs?
• To what extent are they applicable in different world scenarios?
• How can the community achieve a standard?
TUAN QUOC TRAN
Research Engineer Manager
CEA LITEN, INES (FRANCE)

16.45 Our Forums culminate with a session where conference delegates are asked to “Build An Action Plan” (BAP), with a step by step guide for a specific number of issues. The “BAP” is moderated by experts from the Microgrid industry who will guide the audience and help with new ideas and past experience.

16.55 BUILDING AN ACTION PLAN
(CHAMPAGNE ROUNDTABLE)
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This one hour session is an integral part of the whole Forum taking it to the next level. It’s been exclusively designed by Dufresne with the aim to give you actionable information that you can work on when you are back at your office.

Champagne will be served during this session

17.55 Closing Remarks From The Chair

18.10 End Of Microgrid Forum 2013
3 EASY WAYS TO REGISTER

Online: www.microgridforum.com
Email: emily@energystorageforum.com
Call: +65 6243 0050 (Singapore +8GMT) +44 208 432 0886 (London)

Sponsorship & Exhibition: emily@energystorageforum.com
Enquiry: emily@energystorageforum.com
Speaking at Future Events: gladys@energystorageforum.com

Wednesday 18 September | Forum Day 1
Thursday 19 September | Forum Day 2

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<th>SAVE</th>
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15% Discount for Government Representatives and Academics. (Subject to approval, identification required)
Associations and Partners Discounts: Special discounts have been arranged with associations and partners. If a discount code is given to you, please enter it online or contact us at +44 208 432 0886. Discounts cannot be combined. All discounts are subject to approval. Identification stating company name will be required.

REGISTER ONLINE: www.microgridforum.com/register-now/

Delegates are responsible for the arrangement and payment of their own travel and accommodation. The Microgrid Forum has arranged a special room rate at the Hotel where the conference will take place.

FORUM VENUE

Movenpick Hotel Amsterdam City Centre
Piet Heinkade 11
1019 BR Amsterdam
Tel. +31 (0)20 519 1200
www.moevenpick-amsterdam.com

This hotel is located in the heart of Amsterdam, in the new hotspot alongside the water’s edge. It is within walking distance of Central Station (free shuttle bus is available). Adjacent to the hotel is the modern Muziekgebouw (Concert Hall) and Bimhuis (a world-famous jazz club).

Produced by Dufresne

Dufresne producers of the The Energy Storage World Forum, which is an annual conference taking place in Asia and Europe is now producing the Microgrid Forum. Our past 6 Energy Storage World Forums locations include Beijing, Tokyo, Paris, Barcelona, Rome and Berlin. Over 1,000 delegates and a total of 270 speakers from 28 countries attended our specialist events and masterclass workshops. The Forum also has a very active group called Energy Storage World Forum on LinkedIn (join here: http://goo.gl/Fpjme) with over 3500 selected members discussing key issues and solutions on a daily basis. The Microgrid Forum will benefit from the insights and research gained from the active community of delegates, speakers and online members from the Energy Storage World Forum worldwide.

TERMS & CONDITIONS

PAYMENT INFORMATION
The easiest way to pay is online at www.microgridforum.com/register-now/ and an invoice will be sent to you automatically once the payment has gone through. We may allow payments via telegraphic transfer. Please first email emily@energystorageforum.com

Payment by telegraphic transfer must be made to:
Oversea Chinese Banking Corporation Ltd
65 Chulia Street OCBC Centre, Singapore 049513
Account Name: Dufresne Private Ltd
Account No: 581807948001
Swift Code: OCBCSGSG

All transfer charges will be paid by the attendee. Attendance will only be permitted upon receipt of full payment. An invoice with the participant’s details will be issued electronically after the payment has been made. Please treat the invoice as the ticket to entry. No VAT (IVA) will be charged to the prices listed.

Dufresne Private Ltd holds the right to entry, identification required.

CANCELLATION/SUBSTITUTION
Should you be unable to attend, a substitute from the same company is always welcomed at no extra charge. Alternatively we can make a refund less a service charge of 10% of the fee for cancellation received in writing (email or fax) no later than 17 July 2013. Where notice is given between 18 July and 17 August, refunds will be of 30% of the fee. Regrettably no refunds can be made for cancellations received after 7 August 2013.

IMPORTANT NOTE
The Microgrid Forum (Dufresne Private Ltd) believes in content and conference quality. Due to unforeseen circumstances the programme may change and the Microgrid Forum reserves the right to cancel or alter the content and timing of the programme or the identity of the speakers for reasons beyond its control and will not be held accountable for any costs incurred by the participants.

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The personal information shown on this form, and/or provided by you, will be held on a database. Occasionally your details may be obtained from, or made available to, external companies who wish to communicate with you our related to your business activities. If you do not wish to receive these brochures, please email emily@energystorageforum.com or call +65 6243 0050 / +44 208 432 0886.

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call: +44 208 432 0886 (London) www.microgridforum.com email: emily@energystorageforum.com