POVERS
&ELECTRICITY
WORLD AFRICA 2015

24 - 25 March 2015 | Sandton Convention Centre, Johannesburg, South Africa

Africa's largest < power & energy > show

FEATURING



















6000 attendees 500 delegates 80 speakers 26 African countries 18 years of business success

Host Ministry



Diamond Partner



CPD Accredited by



Created by



Thousands are part of our African electricity story

The year 1997 will always be memorable – it's when we hosted the first annual Power and Electricity World Africa conference. Terrapinn (the organisers of the show) wanted to play a central role in influencing the growth of the energy sector. This first event acted as the building block for channelling attention and investment as well as a guide to honing in on what is relevant and critical for all in the African energy sector.

This is Africa's longest running and largest power and energy show - an exhibition with 6000 attendees and a mecca of solution providers spanning 3 halls and thousands of square meters.

GE, Barloworld Power, Siemens, MTU, Alstom, Voith, IBM, ABB, Mott Macdonald, Solar World Africa, Yingley Solar, Vestas, SMA, Arup... just to name a few, have all leveraged Power and Electricity World Africa as their once-a-year opportunity to meet and do business with new and existing customers.

Billions of dollars of business have either been initiated, concluded or influenced at this show.

What originally started as a conference, has since expanded exponentially into a world class exhibition and conference. Year on year, the event provides our partners with access to over 500 African energy utility and IPP decision makers, who traditionally are difficult to reach. And most importantly, the show allows them to meet real buyers.

We are proud to have hosted utilities such as STEG, Eskom, Nampower, Zesco, KenGen, Tanesco, EDM, ENE Ethiopian Electric Power, CEET, SNEL, Senelec, Sonabel, Nigelec, GRIDco and many others over the years. And this year we will welcome back in excess of 26 African countries for the 2015 edition of the event. It is for good reason that Power and Electricity World Africa is endorsed by the Ministry of Energy in South Africa and has Eskom, Africa's largest utility as a Diamond Partner.

It's been 18 exciting business-filled years!

Power and Electricity World Africa continues to provide the meeting place for buyers, sellers and their partners to do the deals that drive Africa's energy sector. This is THE place where buyers find solutions to their challenges.

Let's not forget that our expo presents the largest gathering of solution providers to the African continent.

"A truly world class show" - "WOW" - "The best energy show" - "Mind blowing" are a few of the words our customers have used to describe the show.

TENS OF THOUSANDS of executives and business leaders from across Africa have attended the show over the last 18 years.

You should join us too! Come find out why they keep coming back!



Thinking differently... learn, innovate, share and collaborate

Power & Electricity World Africa will bring together thousands of industry professionals to share ideas on the latest innovations in electricity generation and the entire energy value chain. The show maximises learning through; keynote speakers, regional project case studies, roundtable discussions and seminars.

Abundant networking opportunities

We understand that networking and finding partners is key. To maximise your experience we have lined up numerous exciting opportunities for you to network:

- A themed cocktail party sponsored by Shoals Technologies
- Africa Energy Awards Gala Dinner
- A networking application with the entire list of attendees
- Coffee and lunch breaks
- Networking options

Superior content

What are the top trends in the energy sector? What are the biggest opportunities? Superior content on smart electricity, solar, nuclear, maintenance and asset management. Coal, power distribution, energy storage, gas power, finance, investment and billing, are also top of the agenda.

Solution provider exhibition

Explore exciting technologies by networking and participating in live demos taking place on all the exhibition floors.



Disruptive. Innovative. Forward thinking. Innovators for a brighter energy future

The keynote speakers are energy experts and entrepreneurs who are passionate about the power & electricity sector. It's rare to find true visionaries who are able to articulate the power & electricity opportunities and challenges that lie ahead. What's even more rare is having four of them together under one roof.

On 24 - 25 March 2015, we're bringing together the 'headline act' of speakers, unrivalled by any event you've been to before. These speakers will help you bridge the gap between the challenges facing the energy sector and help you take advantage of opportunities offered by the sector. Step into tomorrow's energy world.

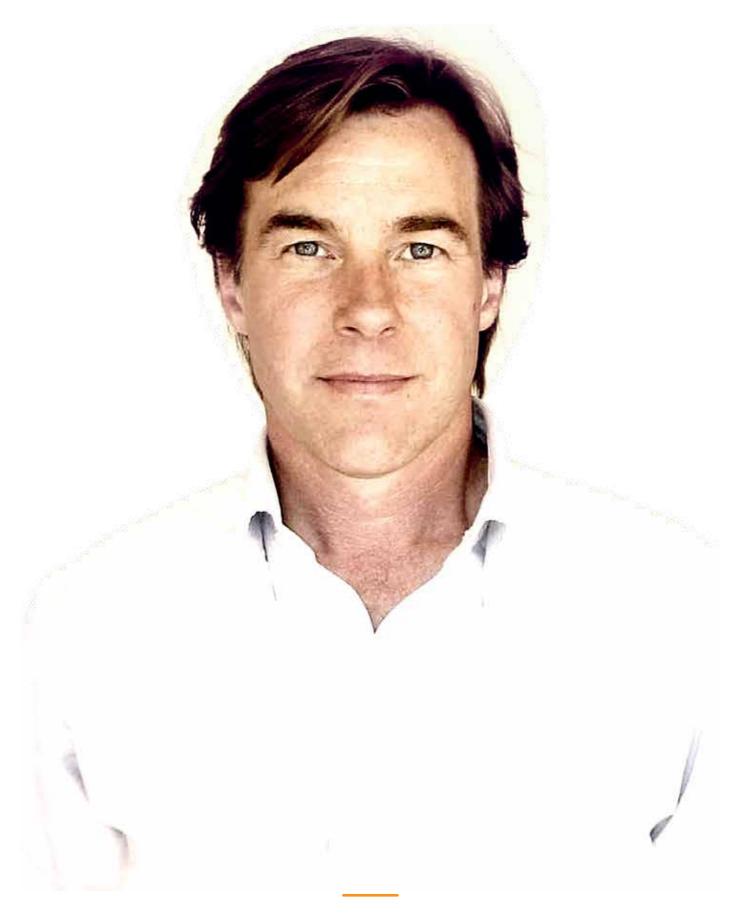


Dr Robert Stoner
Deputy Director for Science and Technology
MIT Energy Initiative, United States

Priyanka Bakaya
Chief Executive Officer
PK Clean Energy, United States

Dr. Matthew L. Scullin
Founder & Chief Executive Officer
Alphabet Energy, United States

Jothi Periasamy
Chief Data Scientist, Harvard Innovation Lab,
Harvard University, United States



Dr Robert Stoner

Deputy Director for Science and Technology

MIT Energy Initiative, United States

The mind shaping our energy future

Writing the blueprint for the future of energy.

It is business unusual for the energy sector. The sector is set for a big shake up. Smart grids, decentralised power, automation, smart metres and storage are a few of the many trends that are starting to emerge in the sector. To help the sector prepare for major disruptions, Dr Stoner will speak about the future of energy, generation, demand and supply. He will help you position your company to meet future energy needs.

Dr Robert Stoner is an inventor, technology entrepreneur and the Deputy Director for Science and Technology at the MIT Energy Initiative as well as the founding Co-Director of the MIT Tata Centre for Technology and Design.

Call now on +27 11 516 4038 now to book your seat

www.terrapinn.com/powerafrica



Priyanka Bakaya

Chief Executive Officer

PK Clean Energy United States

Meet one of the most innovative energy entrepreneurs in the world!

Recognised by Forbes & Fortune Magazine as one of the finest Innovators & entrepreneurs of her generation.

Priyanka Bakaya is the CEO of PK Clean Energy. She is a graduate of Stanford and MIT. She has been listed in Forbes Magazine's 30 Under 30: Energy; Fortune Magazine's 40 Under 40: Ones to Watch; Inc. Magazine's The 25 Most Audacious Companies and is a 2013 Laureate of the Cartier Women's Initiative Awards.

Join Priyanka as she speaks about clean energy opportunities in renewables & waste energy. Priyanka will show you how you can make the clean energy transition. She will also discuss game changing technologies and how these will disrupt the future of energy.

Call us on +27 11 516 4038 to secure your one-on-one meeting with Priyanka

www.terrapinn.com/powerafrica

Dr. Matthew L. Scullin Founder & Chief Executive Officer

Alphabet Energy, United States

A true technology pioneer

Matt is widely considered as a visionary, and one of the world's leading experts in the fields of waste-heat recovery and thermoelectric product development. Matt's background includes positions at General Motors and IBM, as well as in venture capital. Matt and his company have won numerous awards including being named a Technology Pioneer by the World Economic Forum as well as being featured in Forbes 30 under 30.

Join Matt as he speaks on wasteheat recovery as a valuable source of energy savings. He will demonstrate advancements in waste-heat recovery technology and applications that will bring efficiency into your industrial processes.

Call now on +27 11 516 4038 now to book your seat



Jothi Periasamy

Chief Data Scientist & Chief Innovator

Harvard Innovation Lab, Harvard University, United States

Meet the grandmaster of Big Data...

.... as he shows utilities how they can profit from Big Data.

Jothi has been recognised as a leader in his field by Forbes, TechCrunch, CIO Review, Mashable and many others. He is a teacher, author, speaker, thought leader, and mentor with hands-on deep expertise on big data and analytics. He was also accountable for leading and growing a multimillion dollar SAP data & analytics practice for three "Big 4" advisory firms: Deloitte, E&Y, KPMG.

Join Jothi as he speaks about how Big Data & the Internet of Things will change consumer and utility behaviour. Jothi will share his thoughts on how Big Data will revolutionise demand side management.

Book now to hear from Jothi!

Call us on +27 11 516 4038 to secure your seat

Our ministers Leaders. Influencers. Visionaries.

Energy has become central to economic growth across the African continent. Energy ministries are at the centre of this growth strategy. Engage with African energy Ministers as they take part in the ministerial panel talking about energy investment as a driver for economic growth. Want to hear about upcoming projects in their countries?

Join us for the panel! They will share their vision for the electricity & power sector. They will also talk about how you can work with their ministries to take advantage of the opportunities within their countries.



H.E. Tina Joemat-Pettersson

Minister

Ministry of Energy

South Africa

H.E. Djerassem Le Bemadjiel

Minister

Ministry of Petroleum, Mines and Energy

Republic of Chad

H.E. Ibrahim Matola

Minister

Ministry of Natural Resources,
Energy and Environment

Malawi

H.E. Come Manirakiza

Minister

Ministry of Energy and Mines

Burundi

H.E. Minister Henri Ossebi

Minister

Ministry of Energy and Water

Republic of Congo

Workshop

08:00	Registration & welcome refreshments	
08:50	Chairpersons opening address	Nozipho Mbanjwa, Anchor, CNBC Africa, South Africa

Ministerial welcome and address

H.E. Tina Joemat-Pettersson, Minister, Ministry of **Energy, South Africa**

Bia Picture

How Big Data & the Internet of Things will change consumer and utility behaviour

- Matching supply with predictive demand
- Predictive data analytics to improve revenue collection
- Smart meters at the forefront of Internet of Things
- Smart thermostats bringing big data to the people
- The next big technology boom will be in the energy space



Jothi Periasamy

Chief Data Scientist

Harvard Innovation Lab, Harvard University, United States

The future of energy, generation, demand and supply

- Keeping up with a rapidly growing world
- Disruptive technologies and what to expect
- Totally new business paradigms
- Infrastructure and modernisation
- Where are we, where are we going and how will we get there



Dr. Robert Stoner

Deputy Director for Science and Technology MIT Energy Initiative, United States

Exhibition opening

Morning refreshments, exhibition viewing & networking

Streams > Workshops > Roundtables

Coal & Gas

Finance & Investment

East Africa Country Spotlights

Workshop

The future of African utilities – a focus on gas

Market outlook Trends

Tom Harris, Research Analyst, Frost & Sullivan, South Africa

New finance and ownership structures for renewables and distributed generation

- New types of ownership models
- Innovative business models, partnerships and new sources of finance
- The buy-in: transitioning
- from employee to partner Intermediaries

Neside Tas Anvaripour, Chief Executive Officer. Africa50. Morocco

Uganda country spotlight New projects and what is being

done to open the door for investment

James Baanabe Isingoma, Assistant Commissioner for Energy, Ministry of Energy and Mineral Development, Uganda

Energy Efficiency

- Identify operating efficiencies within your company
- Finding efficiencies in operations to reduce and optimize energy use
- Tax incentives
- Policy and regulation
- Choice of technology Financing instruments

Barry Bredenkamp, Senior Manager, Energy Efficiency, SANEDI

Streams > Workshops > Roundtables

coal fired power stations Economics and funding

Coal & Gas

Efficiency technologies for

- Procurement and quality Maintenance and key drivers
- Integrating new solutions Boiler and combustion technologies
- Predicting future needs and usage patterns

Mahama Kappiah, Director General, Ecowas Centre For Renewable Energy And **Energy Efficiency, Cape** Verde Islands

Opportunities for private equity investors

Finance & Investment

- Strategy and acquisitions
- Getting in on green field activity early
- Overcoming the challenges
- How to identify operational excellence

Jens Thomassen, Director, Denham Capital, United States

East Africa Country Spotlights

Tanzania country spotlight

New projects and what is being done to open the door for investment

Engr. Felchesmi Mramba MD, Tanesco, Tanzania

Evolving power generation technologies for Africa

- Technologies for efficiency
- For the environment
- Your bottom line

Sascha Benkenstein. Area Sales Manager, Voith,

Germany

forward?

Trading Plc

Funding

Africa

How to structure funding solutions and win energy projects, even if you're not a bank

- Innovative debt
- Post-ITC Financing
- Tax equity 2.0
- Filling the vacuum left by banks
- Securitisation

transactions redefined Antonio Barbalho, Sector Manager - Energy and Extractive Industries, World Bank, United States

Ethiopia country spotlight

New projects and what is being done to open the door for investment

Mekuria Lemma, Strategy and Investment Director, **Ethiopian Electric Power**

Roundtable 2

Roundtable 4

Energy Efficiency (continued)

9 Roundtables > Choose one of the 9 tables

Is the standardised PPA agreement the way

Dr Nnaemeka Ewelukwa, General Counsel and

Company Secretary, Nigerian Bulk Electricity

Skilling the next generation of engineers

Prioritising upskilling your current workforce

Jacob Maroga, Former CEO, Eskom, South

Creating a functional skills policy

Reducing red tape & legal review time

Streamlining the process

Opening new markets

Roundtable 1

Smart Grids in Nigeria

- Opportunities for technology leapfrogging in distribution networks
- Distribution automation and control
- Smart metering and sensing
- Loss reduction

Dawie Pieterse, Vice President - Technical Services, Eko Electricity Distribution Company, Nigeria

Roundtable 3

shut-downs

Comprehensive maintenance with minimal

- A proactive approach to shut-downs
- Type, quality of work and timing
- Reducing long term costs
- Managing shut-downs to reduce future down-time

Samkelo Simelane, CTO, Swaziland Electricity Company

Jasper Oduor, Former Executive Secretary, East

African Power Pool, Kenya

Streams > Workshops > Roundtables 9 Roundtables (continued) Workshop Roundtable 5 Roundtable 6 New participants entering markets with new How technology is enhancing competitive advantage for energy utilities ideas and new business models What to expect Mobile and location aware technology What are the drivers for innovation Sensors, smart grids and big data Creating a Google like culture Costs down, efficiency up What's next? Social media and consumer expectation Vincent Gueneau, Chairman, Kappafrik Group, Predictive analytics - avoiding future failure patterns UAE Jean Jacques Ntab, Director of Information Systems, Senelec, Senegal Roundtable 7 Roundtable 8 **Energy Efficiency** Making a profit on low tariffs How to manage project costs effectively (continued) Fundamentals Budget determination & cost-reduction Optimising operational efficiency Monitoring and control Cost competitive generation Kao ABI, Director, Compagnie Energie Electrique du Tog Covering costs Clive Ferreira, Director, Fieldstone Africa, South Africa Roundtable 9 **Rural electrification in Benin** Overview Opportunities for investment Charles Yaovi Koumaple, Managing Director, ABERME, Benin Speed networking Lunch, exhibition viewing & networking Streams > Workshops > Roundtables **West Africa Country** Solar & Embedded Nuclear Workshop **Spotlights Power Plant automation** Nuclear energy in Africa Nigeria country spotlight Investment and payback New projects and what is being Commissioning East Africa's Asset health analytics largest solar project in done to open the door for Network security and Fundamentals and economics investment record time automation: Why this Kalu Ukoha Overcoming safety Negotiations should be a priority for Senior Specialist Assistant Finance, taxes and the concerns utilities Federal Ministry Of Power, Partnerships and How substation Partnerships & working automation will shift to Nigeria opportunity Dr Kelvin Kemm, Chief with the government IP based systems that Executive Officer. Nuclear Other learnings rely on Ethernet switches Africa, South Africa Chaim Motzen, MD, and Intelligent Electronic Gigawatt Global, UAE Device (IED) Expect more M2M as technology prices continue to drop Introducing automation into an aging fleet Seats are limited. Call Kelly NOW on +27 11 516 4038 to book Autonomous self-healing infrastructure or visit www.terrapinn.com/powerafrica

Nuclear	West Afric Spotl		Solar & Embedded Generation	Workshop
Mini nuclear reactors A solution to improving the uptake of nuclear Cheap and safe – easy to deploy Remote site electrification Generating away from the grid David Martin, Chief Executive, The Weinberg Foundation, United Kingdom	Equatorial Guinea country spotlight New projects and what is being done to open the door for investment Alfred Olo Lima, Director General, Ministry Of Mines, Industry And Energy, Equatorial Guinea		How solar energy micro grids are meeting the demand for rural electrification Funding Fast implementation Challenges and success factors Market development The role of the utility, if any Meeting Africa's electrification challenges Houcine Azouz, CDM Project Management Officer, STEG, Tunisia	
Session reserved for sponsor	Senegal count New projects an done to open th investment Fatou Thiam, U Coordinator of S Planning, Minis Senegal	d what is being e door for Jnit tudies and	Embedded generation and net metering International trends Cost considerations New and profitable business models Guidelines and tariff Brian Jones, Head: Green Energy, City of Cape Town, South Africa	
	8 Roundtable	s (continued)		Power Plant automation (continued)
Ro	undtable 1		Roundtable 2	
Should state owned energy assets be privatised? Privatising electricity assets and liberalise the market Profits versus universal access Is the Nigerian privatisation model working? Global ownership trends and: Where is the industry headed Rumundaka Wonodi, Chief Executive Officer, Nigerian Bulk Electricity Trading Plc Roundtable The impact of the licencing process What is best for your market? Challenges and lesson learnt Moustaph Baïdy Bâ, Senior Engineer, Dept. of Studies, Senelec, Senegal		Gas generation outlook Global market outlook The role of gas in Africa's future energy mix New discoveries Floating liquefied natural gas plants as enablers Thomas Krimmel, Partner, Southern Biopower, Mauritius Roundtable 4 Opportunities in geothermal energy Investment and profit Exploration Leasing & unitization Water use Chris McCormick, Director – Strategy and Project Finance, Reykjavik Geothermal, United States		

www.terrapinn.com/powerafrica

Spotlight on speakers

Streams > Workshops > Roundtables

8 Roundtables (continued) Workshop

Feed-in tariffs vs. competitive bidding

- Price considerations & economics
- Cost-containment Mechanisms Designing the procurement process
- **Souleymane Ouedraogo,** Economist and Statistical Engineer, Sonabel, Burkina Faso Emile Opangault, Director General, Arsel, Republic of Congo

Planning a grid for both large, and smallscale power producers

Roundtable 6

- Cost considerations
- Stakeholder management
- Stability and operations Reserved for ZESCO

Roundtable 7

Roundtable 5

Roundtable 8

Big data and the benefits of utility analytics

- Improving grid operations
- Customer analytics
- Real time decision making

Tristan Bergh, Co-Founder, Ixion, South Africa

New financing models and partnerships for African infrastructure projects

- Mapping the new infrastructure financing landscape
- Localised financing models
- Time for PPP 2.0?

Folabi Esan, Partner, Adlevo Capital, Nigeria Lolu Adubifa, MD, Lavayo Energy, Nigeria

Energy Efficiency

(continued)

Energy Investment

Keynote Panel: Energy investment as a driver for economic growth

- Building an ecosystem for energy entrepreneurship
- Electricity exports as drivers for growth
- Localisation & manufacturing
- Government and multilateral tools for encouraging energy financing
- Policy, regulation & capacity mechanisms



H.E. Tina Joemat-Pettersson

Ministry of Energy, South Africa



H.E. Djerassem Le Bemadjiel

Minister

Ministry of Petroleum, Mines, and Energy, Republic of Chad



H.E. Ibrahim Matola

Ministry of Natural Resources, Energy and Environment, Malawi



H.E. Come Manirakiza

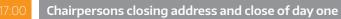
Minister of Energy and Mining Republic of Burundi

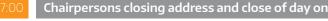


H.E. Minister Henri Ossebi

Minister

Ministry of Energy and Water, Republic of Congo







To encourage diverse ownership of electricity resources, Neside will help you develop new ownership models.

Neside Tas Anvaripour Chief Executive Officer Africa50, Morocco



Learn from Chaim as he shows you how he commissioned East Africa's largest solar project in record time

Chaim Motzen Gigawatt Global, Israel



Rumundaka will lead a debate on the privatisation of state assets.

Rumundaka Wonodi Chief Executive Officer Nigerian Bulk Electricity Trading



Join Dawie as he shares his thoughts on the smart grid opportunity in Nigeria

Dawie Pieterse Vice President - Technical Services **Eko Electricity Distribution** Company, Nigeria



Join Mahama as he speaks on energy efficiency opportunities in Africa.

Mahama Kappiah Director General **Ecowas Centre For Renewable Energy And Energy Efficiency,** Cape Verde Islands



Attend Alfred Olo Lima's presentation to learn about new projects in Equatorial Guinea

Alfred Olo Lima Director General Ministry Of Mines, Industry and **Energy, Equatorial Guinea**



Denham Capital is a Private Equity firm with \$7.9 billion in assets under management they are looking to grow their investment portfolio.

lens Thomassen Director **Denham Capital, United States**



Project costs running out of control? Join Kao as he shows you how to manage project costs effectively





Join Charles as they speaks about rural electrification in Benin

Charles Yaovi Koumaple Managing Director ABERME, Benin



How can utilities use technology to enhance their competitive advantage? Jean Jacques has the answer

Jean Jacques Ntab Director of Information Systems Senelec, Senegal

Welcome refreshments

Chairpersons opening address

Nozipho Mbanjwa, Anchor, CNBC Africa, South Africa

Leadership

Fireside chat with Jacob Maroga, Former CEO, Eskom, South Africa

- What was it like leading Africa's largest electricity utility?
- Lessons learned
- What advice would you give Eskom's new CEO



acob Maroga Former CEO Eskom, South Africa

Executives Panel The view from the top

- Leadership development & building capacity
- Disrupting every rule: The evolving utility
- Innovations



Engr. Felchesmi Mramba

Tanesco, Tanzania







Engr. Oladele Amoda Chief Executive Officer **Eko Electricity Distribution Company,** Nigeria



Rachid Ben Dali CEO STEG, Tunisia

Paulinus Ilonga Shilamba

Nampower, Namibia

Chief Executive Officer

William Amuna

GRIDco, Ghana

Morning refreshments, exhibition viewing & networking





Streams > Workshops > Roundtables

Smart Electricity

Smart grids for South Africa

Future shifts in power-flow

Strategic grid plan

Reserved for sponsor

Financing

patterns

Deployment

Distributed Power & Waste Energy

Distributed power and how

it's disrupting the electricity

North And Central Africa Country Spotlights

Tunisia country spotlight

market Redefining business models Why more money is going

into distributed solar Collaboration and

- partnership opportunities The ultimate solution for efficiency
- An opportunity or challenge for utilities?

Thomas P. Doyle, CEO, NRG Renew, United States

New projects and what is being done to open the door for investment

Jamil Korked, Deputy General Manager, STEG, Tunisia

households and intensive energy users

Efficiency

customers

The use of operational analytics to improve asset performance, reduce operations costs, and improve network reliability

Workshop

Big Data's impact on Energy

Tailored electricity supply

and demand services for

Better management of

energy demand of

Using data analytics to improve operations and the customer experience

Jothi Periasamy, Chief Data Scientist, Harvard Innovation

Lab, Harvard University,

United States



Meeting the challenges within central Europe high voltage grid

- Managing a heavily meshed network
- Incorporating a big amount of renewables
- Operational planning, maintenance and real time operation
- SCADA systems, operational planning systems and EDI
- Network Codes

Rudolf Baumann, Senior Adviser: Operations, Swissgrid, Switzerland

Waste-heat recovery as a valuable source of energy savings

- Waste-heat recovery & and thermoelectric products Delivering simple, reliable
- fuel savings Managing & controlling the

Dr. Matthew L. Scullin, Founder & Chief Executive Officer, Alphabet Energy, United States

Chad country spotlight:

New projects and what is being done to open the door for

H.E. Djerassem Le Bemadjiel, Minister, Ministry of Petroleum, Mines, and Energy, Republic of Chad

Using electricity meters as smart grid sensors

- Separating billing data from
- the grid power quality data Detailed load profile and power quality data
- Power quality monitoring & lower network costs

Poul Berthelsen, Project Manager, NRGi , Denmark

Clean energy opportunities in waste energy

Priyanka Bakaya, CEO, PK Clean, United States

projects and what is being done to open the door for investment

> **Bernard Diayele, CGI3** Coordinator, Ministry Of Resources Hydraliques And Electricity, DRC

DRC country spotlight: New





Big Data's impact on

Energy Efficiency

(continued)

Streams > Workshops > Roundtables

9 Roundtables > Choose one of the 9 tables Workshop Roundtable 1 Roundtable 2

Markets & finance opportunities

- Green bonds on the rise
- Securing project finance
- Capital raising strategies
- Tapping into energy funds
- Finding a financial match for your project

Alastair Campbell, MD, Vantage Greenx, South Africa

Integrating renewables in electricity markets

- Overcoming operational problems
- Strengthening the grid backbone
- The modelling and forecasting of stochastic
- renewable power production
- Counteracting the variability and unpredictability of renewable units
- Trading renewable energy

Karim El-assefry, State Engineer: Renewable Energy, The Ministry Of Energy, Mines, Water and Environment, Morocco

Roundtable 3 Roundtable 4

A future proof architecture for smart grid

- Data that improves visibility
- Operational efficiency Incentives
- An intelligent grid
- Next gen DSM technologies

Mark Ossel, Vice President, OSGP, Netherlands

Privatisation & regulation

- License agreements
- An efficient energy trader
- Lessons from Nigeria

Dr. Haliru Dikko, Deputy General Manager, Nigerian Electricity Regulatory Commission

Roundtable 6

Building privately owned mining IPPs

- Finding a mine to work with Reaching financial closure
- Issues & challenges

Richard Doyle, COO, Avelar Energy, South

South Africa's nuclear ambitions

- Can SA afford to go nuclear?
- Vendor financing as an option
- What are the alternatives?

Dr Kelvin Kemm. Chief Executive Officer. Nuclear Africa, South Africa

Roundtable 7

Roundtable 5

Roundtable 8

Next gen microgrids

- Realising the economic potential of microgrids
- Benefits for utilities
- New markets & monetization strategies
- Integration with macro grids

Dr. Lawrence Musaba, Coordinator Centre Manager, Southern African Power Pool, Zimbabwe

Karen Surridge-Talbot, Centre Manager:

Energy storage - the sector's most important innovation

Renewable Energy, Centre of Research & Development Clean Energy, South Africa

Spotlights

Mozambique country spotlight New projects and what is being done to open the door for investment

Southern Africa Country

Benedito Diogo Lopes Chembeze, Deputy National Director of Electrical Energy, Ministry Of Energy Mozambique

Topic to be confirmed

Streams > Workshops > Roundtables

Mongezi Ntsokolo, Division Executive for Generation, Eskom, South Africa

Maintenance And Asset Management

Billing & The Customer

How utilities can build a healthy bottom line

- Asset management strategies as an
- enabler for boosting plant performance Predictive demand: knowing when to cater to customer habits
- New revenue models
- A focus on cost recovery of electricity services
- Using asset analytics to profit from ·
- Distributed Energy Resources

Anish Garg, Director (Finance & Law), Joint **Electricity Regulatory Commission,** India

Angola country spotlight

New projects and what is being done to open the door for investment

Kiala Pierre, Director for International Cooperation, Ministry of Energy, Angola

Increasing your generation performance & energy availability

- Increasing performance
- Minimising downtime
- Optimising maintenance Keeping costs down
- Developing a recovery plan for underperforming assets

Philip Emeka Ugwu, Managing Director and Chief Executive Officer, Olorunsogo Power PLC, Nigeria

Mobile payments for utilities Unimagined new opportunity

- Developing a strategy
- Rolling out the strategy
- Ease of use, convenience & security
- In-App payment prospects

James Baanabe Isingoma, Assistant

Commissioner for Energy, Ministry of Energy and Mineral Development, Uganda



Namibia country spotlight

New projects and what is being done to open the door for investment

Paulinus Ilonga Shilamba, MD, Nampower, Namibia

Creating the best O&M and CIP investment strategy for your business

- Fundamental elements
- Strategy
- Long term funding Future growth prospects
- Reserved for EDM

Customer analytics goes big time! Optimising resource utilization

- Understanding the customer better Harnessing the power of big data
 - Developing demand-response program analytics

Tristan Bergh, Co-Founder, Ixion, South Africa







Lunch, exhibition viewing & networking

Seats are limited. Call Kelly NOW on +27 11 516 4038 to book or visit www.terrapinn.com/powerafrica

Roundtable

Roundtable

Spotlight on speakers



Streams > Workshops > Roundtables

9 Roundtables > Choose one of the 9 tables

Price and reliability

on tariffs

Energy independence & security Dealing with potential shortages

Securing long term fuel supplies

Factoring systemic issues

Market price sensitivity

Implications of classifying coal as a strategic mineral Hybrid diesel plants as a secure generation investment?

Knox Msebenzi, Executive Director, Power Institute for East and Southern Africa, South Africa

How regulators can strike the right balance when deciding

Dr Sam Amadi, Chairman and Chief Executive Officer, Nigerian

Regulatory barriers and infrastructure bottlenecks

Achieving interoperability on a smart grid Standards for interoperability

Testing & certification requirements

Paul Johnson, Executive Secretary, AFSEC, South Africa

Roundtable 3

Roundtable

How shale gas will shake the energy market

- Sustainability and environmental challenges
- The potential impact of shale gas on other energy sources
- Prices and costs of generating from shale gas New technologies and policies

John Marks, Chairman, C.B.I., United Kingdom

Roundtable 5

Roundtable

The Energy Efficiency opportunity

Electricity Regulatory Commission

- How governments can collaborate to make EE a priority
- Creating mechanisms to attract EE investment
- Encouraging behavioural change

Mahama Kappiah, Director General, Ecowas Centre For Renewable Energy And Energy Efficiency, Cape Verde Islands Trans-regional power trading

- Designing the electric power market operating model
- Geopolitics in evolving regional energy frontiers
- Overcoming institutional, technical, technological, environmental and financial issues

Changullah Lebbi, Secretary General, East Africa Power Pool,

Roundtable

Roundtable

Opportunities in Africa for energy start-ups

- Future prospects and disruption
- How innovation is changing the energy sector
- Understanding and predicting demand

Mamadou Diarra, Head of Research, Nigelec, Niger

The Internet of Things & the smart grid: Unimagined new possibilities

- Electricity 2.0: Intelligent homes & networks
- More M2M sensors, storage buffers & switches Energy delivery and peak demand
- IoT security standards & PKI
- Weak links, privacy & black swans

Reserved for sponsor

Roundtable 9

Investing in existing & new assets

- Managing complexity and change in a new landscape Avoiding debt overhang
- Opportunities for investment

Zubair Suliman, Senior Investment Manager, **KfW DEG, South** Africa

Seats are limited.Call Kelly NOW on +27 11 516 4038 to book

or visit www.terrapinn.com/powerafrica

Chairpersons closing address and close of conference

Afternoon refreshments, exhibition viewing & networking



Keen to know about Eskom's smart grid plans? Mongezi will share Eskom's plans on just that.

Mongezi Ntsokolo Division Executive for Generation Eskom, South Africa



NRG Renew is the biggest retailer of green power in America. Come learn how they accomplished that feat.

Thomas P. Doyle NRG Renew, United States



Struggling to strike the right balance when deciding on tariffs? Dr Amadi can help.

Dr Sam Amadi Chairman and Chief Executive Nigerian Electricity Regulatory Commission



to get the EAPP working and trading power.

Discover how Changullah plans

Changullah Lebbi Secretary General East Africa Power Pool, Ethiopia



Join Rudolf as he speaks about managing a heavily meshed network

Rudolf Baumann Senior Adviser: Operations Swissgrid, Switzerland



Join Dr. Kemm as he speaks about South Africa's nuclear ambitions

Dr Kelvin Kemm Chief Executive Officer Nuclear Africa, South Africa



Join Poul as he speaks about using electricity meters as smart arid sensors

Poul Berthelsen Project Manager NRGi, Denmark



Join Richard as he speaks about building privately owned mining

Richard Doyle COOAvelar Energy, South Africa



Mamadou will uncover opportunities in Africa for energy start-ups

Mamadou Diarra Head of Research Nigelec, Niger

Seats are limited. Call Kelly NOW on +27 11 516 4038 to book or visit www.terrapinn.com/powerafrica

Peer-to-peer roundtables

Want to shape the future of the power and electricity sector? Join our interactive roundtable sessions, designed to facilitate debates and discussions on how to move the sector forward.

Sit across the table and deliberate with executives from Africa's top utilities, large energy users, IPPs, municipalities, government ministries, investors and regulators.

Exchange business cards, share ideas and discuss the lates challenges facing the industry.

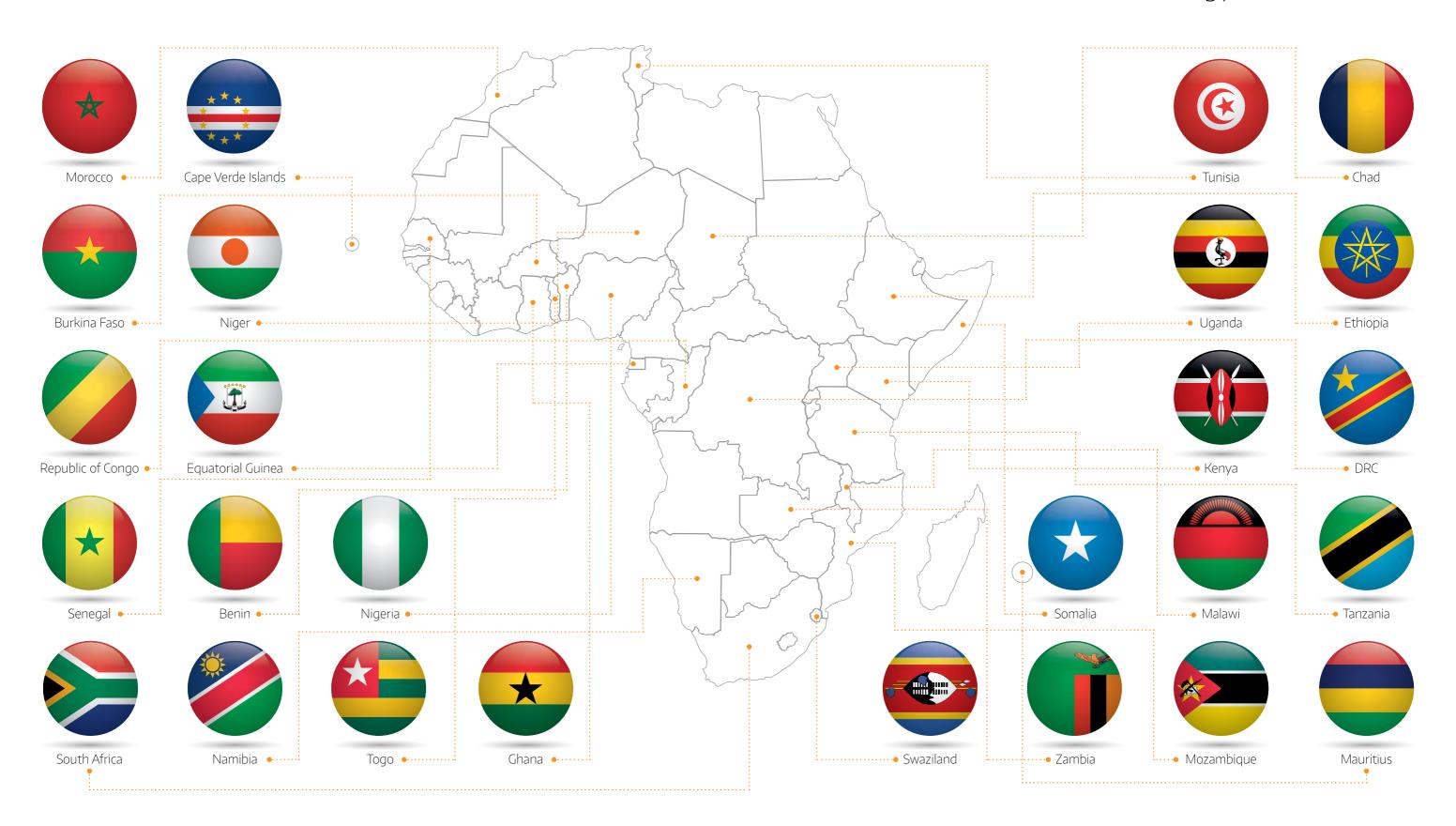
Take a look at the topics being discussed...

Is the standardised PPA agreement the way forward?	Rural electrification in Benin	New financing models and partnerships for African infrastructure projects
Smart Grids in Nigeria	Should state owned energy assets be privatised?	Markets & finance opportunities
Skilling the next generation of engineers	Gas generation outlook	Integrating renewables in electricity markets
Comprehensive maintenance with minimal shut-downs	How to effectively bring an IPP onto the grid	A future proof architecture for smart grid
New participants entering markets with new ideas and new business models	Opportunities in geothermal energy	Privatisation & regulation
How technology is enhancing competitive advantage for energy utilities	Feed-in tariffs vs. competitive bidding	Building privately owned mining IPPs
Making a profit on low tariffs	Planning a grid for both large, and small-scale power producers	South Africa's nuclear ambitions
How to manage project costs effectively	Big data and the benefits of utility analytics	Next gen microgrids



We've got Africa covered

Never before have 26 African countries been under one roof to deliberate the future of energy in Africa.





Full day workshop Monday 23 March 2015

How to ensure a successful IPP license bid

Objective Registration & refreshments Introduction and background Preplanning phase Morning refreshments & networking Concept design Economic development Networking lunch Securing finance Execution & Finalisation Afternoon refreshments & networking Operations and maintenance



Lisa Tait Chairperson Transcend, South Africa

End of workshop



Lolu Adubifa Managing Director Lavayo Energy, Nigeria



3 90 Minute Focused Workshops

This is your chance to spend 90 minutes learning and interacting with some of the world's foremost energy leaders. You'll learn how to focus on big ideas in energy and how you can profit from them. You can interact, discuss and learn from your peers across Africa and brainstorm other big ideas to build the future of energy around the world.

How utilities can build a healthy bottom line

- How to mitigate municipal and national revenue loss
- Asset management strategies as an enabler for boosting plant performance
- Predictive demand: knowing when to cater to customer habits
- New revenue models
- A focus on cost recovery of electricity services
- Should municipalities pay for electricity lost in transmission?
- Using asset analytics to profit from Distributed Energy Resources

Date > Tuesday 24 March 2015

Time > 11:00

LEADER



Barry Bredenkamp Senior Manager, Energy Efficiency SANEDI

Big Data's impact on energy efficiency

- Tailored electricity supply and demand services for customers
- Better management of energy demand of households and intensive energy users
- The use of operational analytics to improve asset performance, reduce operations costs, and improve network reliability
- Using data analytics to improve operations and the customer experience

Date > Tuesday 24 March 2015

Time > **14:00**

LEADER



Jothi Periasamy Chief Data Scientist Harvard Innovation Lab, Harvard University, United States

Power plant automation

- Asset health analytics
- Network security and automation: Why this should be a priority for utilities
- How substation automation will shift to IP based systems that rely on Ethernet switches and Intelligent Electronic Device
- Expect more M2M as technology prices continue to drop
- Introducing automation into an aging fleet
- Autonomous self-healing infrastructure

Date > Wednesday 25 March 2015

Time > 11:00



Jasper Oduor Former Executive Secretary East African Power Pool, Kenya

The Executives Panel

Leadership is central to the workings of any utility. Attend the Executives Panel as CEOs from around Africa share their vision for the power & electricity sector. They will also tell you about the things that keep them awake at night.

Join us for the panel. This is your only opportunity to ask them the hard questions -don't miss it.





Carlos José Neves Chief Executive Officer Empresa Nacional De Electricidade De Angola

Rachid Ben Dali Chief Executive Officer **STEG,** Tunesia

Engr. Felchesmi Mramba Managing Director Tanesco, Tanzania







Paulinus Ilonga Shilamba Managing Director Nampower, Namibia

Country Spotlights

Attend the country spotlights and sessions at Power & Electricity World Africa to learn of upcoming projects. The country spotlights showcase new projects and what is being done to open the door for investment.

Want to learn about the latest projects in the electricity & power sector? Want to meet the people driving the projects?

East Africa Country Spotlights





James Baanabe Isingoma Assistant Commissioner: Energy Ministry of Energy and Mineral Development, Uganda





Engr. Felchesmi Mramba Tanesco, Tanzania





Strategy and Investment Director Ethiopian Electric Power

West Africa Country Spotlights





Kalu Ukoha Senior Special Assistant Federal Ministry of Power, Nigeria





Alfred Olo Lima Ministry Of Mines, Industry And Energy, Equatorial Guinea





Fatou Thiam Unit Coordinator of Studies and Planning Ministry of Energy, Senegal

North And Central Africa Country Spotlights





amil Korked Deputy General Manager STEG, Tunisia





H.E. Djerassem Le Bemadjiel Ministry of Petroleum, Mines, and Energy, Republic of Chad





Bernard Diayele CGI3 Coordinator Ministry Of Resources Hydraliques and Electricity, DRC

Southern Africa Country Spotlights





Benedito Diogo Lopes Chembeze Deputy National Director of Electrical Energy Ministry of Energy Mozambique





Director for International Cooperation Ministry of Energy, Angola







How you benefit

How you network

We know & understand that relationships matter more than ever in the power & energy space. The success of the event will be determined by the number of quality contacts you make. We guarantee you will meet buyers at this show.

With thousands of attendees, including 500+ senior buyers from African utilities and delegations from across Africa, Power & Electricity World Africa is no average event.

Networking Benefits

- Engage & meet relevant business people
- Access the entire list of relevant, professional possible future business partners
- Personalise your event experience with our updated schedule
- Select the most relevant candidates to meet to get the full benefits
- Access & download presentations post-event
- Perfect co-ordination & planning to suit your needs





STEP 3

STEP1

Total Electricity

Manage your diary, send & accept meeting invites. Easily view your meetings, agenda, maps, notes, favourites & more

Visit the App store & download our Networking App -

Finalise your pre-show & on-site schedule. Free WIFI is available

Use our Meeting Hub to meet with your pre-selected key executives. You can pre-book a secluded meeting room for maximum privacy

STEP 6

After the event you can still keep in touch with people you connected with on-site as well as anybody you might have missed





The Africa Energy Awards



The awards recognises outstanding achievements in energy research and technology from Africa and around the world. The drive for success and competitive advantage, coupled with the need to satisfy spiralling energy demands across the world is what's pushing futurists and disruptors to deliver new practical energy solutions and innovations

The awards aim to highlight vision, opportunity and innovation in the energy sector. This prestigious evening will not only recognise individuals and companies changing the future of power, but will showcase the revolution taking place in the power sector and the new opportunities its creating.













The Africa Energy Awards will be awarding excellence in the following categories...



African energy leader of the year



Premier energy project of the year



Small and medium energy company of the year



New category for 2015: The African Energy Innovation Prize





Breaking news: The Africa Energy Awards is awarding US\$30 000 to top African innovators.

In a bid to encourage innovation in the African energy sector, The Africa Energy Awards will award US\$30 000 to Africa's top energy innovator.

May the most innovative and exciting entrepreneur win!

Call Marlien NOW on +27 11 516 4048 if you want your brand to be associated with excellence & innovation.

Sponsor Now!

Networking

Take the stress out of trying to organize meetings. At the meeting hub, a dedicated Networking Manager will assist you with meeting the very best buyers. Benefit from an allocated Networking Manager who manages your diary and sets up meetings for you all via the event networking app, Total Electricity.

Seminars

Educate your customers about your solutions and products which will help them achieve their business goals in our dedicated seminar theatres.

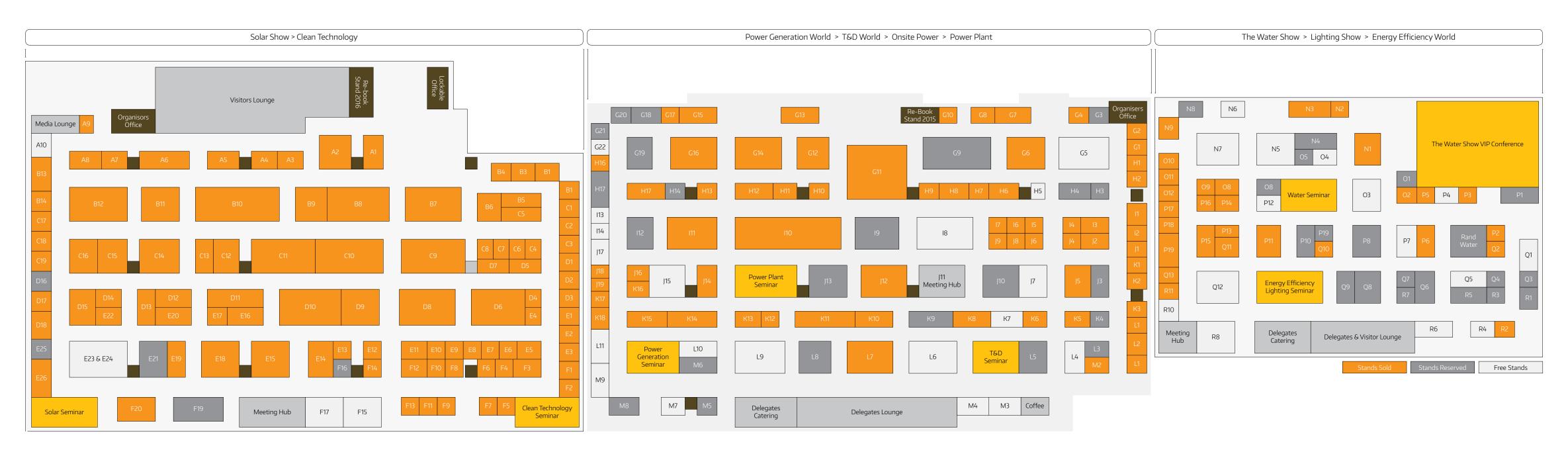
VIP Conferences

Learn about Power & Electricity innovation. The world's most groundbreaking thinkers and industry innovators will deliver their visionary presentations which will excite, provoke, inspire and engage you

Visitor and Delegate Lounge

Keep your energy levels up and enjoy lunch and refreshments or meet with prospective clients throughout the day at your local lounge or café.

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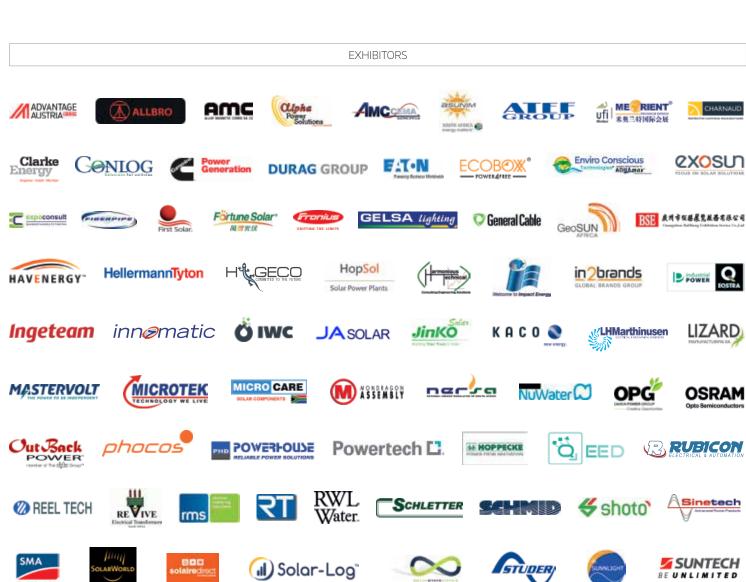


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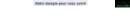




























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