

CONFERENCE BROCHURE 2016

The largest global meeting place for African utilities



17 – 19 May 2016

Industry Awards: 18 May 2016 | Site visits: 20 May 2016

Cape Town, South Africa

www.african-utility-week.com

Host utility





Host ministry



AFRICAN UTILITY WEEK 2016 OUTLINE Who will you meet at African Utility Week? • Utilities, IPPs and municipalities • Government and regulators • Developers, EPCs and engineering consultants • Electrical and construction contrators • Lawyers and management consultants Authorised CEO Forum • Solution and technology providers Side Events • Large power / water users Conference More on page 23 Financiers and investors Co-located Generation events • Transmission & Distribution Metering & Revenue Cycle Management Efficiency, Embedded Generation & Energy Storage African Clean Power • Matchmaking: 17-19 May 2016 Africa 😚 🔿 🝪 Utility Week • Cocktail Function: 17 May 2016 • Coffee Breaks: 17 – 19 May 2016 • CEO Forum Dinner: 17 May 2016 Clean Power Site Visits Networking **AO** Africa **Events** 230 stands 18 May 2016, CTICC • Live demonstrations • Lifetime Achievement Award • Free Technical Workshops • Power Utility Executive of the Year INDUSTRY AWARDS • Innovation Hub (NEW) • Water Utility Executive of the Year Media Competitions • Water Utility of the Year • Accenture VIP Lounge • Clean Energy Project of the Year • Free, CPD Accredited Skills • Pioneer in Project Finance – NEW CATEGORY Hubs **EXPO** • Community Development Project of the Year • Future Leader Award – NEW CATEGORY • Power/Water Woman of the Year

The Generation track will provide the industry with

an important platform to debate the latest strategies

and technologies supporting African utilities to meet

power generation demands and pinpoint lucrative

opportunities in Clean Power. Attend a debate on

the ideal African baseload and actively listen to lively

presentations on hydropower, geothermal and wind

and solar in depth, to expand your knowledge and

take away tools for increasing generation capacity.

Water, once an abundant natural resource, is

becoming a more valuable commodity due to

droughts and overuse. This track will show how

effective and innovative water management is

fundamental in ensuring the optimum use of water

resources and how technical innovation can improve

water service delivery. African utilities, governments

and municipalities will learn about alternative water

resources innovative water metering and discuss

the importance of taking an integrated approach

to energy and water planning. Delegates will gain

insights into the business opportunities of sanitation

as well as how to attract and sustain investments, to

ensure the future sustainability of water utilities.

- For more information about the side events, dates and times, see page 26

GENERATION



TRANSMISSION & DISTRIBUTION

The Transmission and Distribution track will

provide a platform for utilities, government and

this sector. Which model will ensure affordable

key stakeholders to debate key issues challenging

and reliable electricity - the single-buyer model or

wholesale competition? What has been hindering

African countries from achieving cost reflective

tariffs, and what are the potential solutions that

balance the commercial aspect along with the

we define energy access and how will this

technologies and projects.

unique African electrification issues? How should

definition impact on solutions? Can microgrids

solve the challenge of rural electrification? This

track is your one-stop-shop on the latest solutions,



METERING & REVENUE CYCLE
MANAGEMENT

OO
kV



African utilities, governments and municipalities will candidly share and address the challenges faced in their metering and revenue cycle management strategies and indicate what their expectations are vs. the needs of solution providers. Attend this track to problem solve and find an African solution to meter rollout pilot projects, interpreting and making sense of big data and increasing revenue collection by preventing electricity theft and energy losses.

EFFICIENCY, EMBEDDED GENERATION & ENERGY STORAGE

This track will look at how large power users, large

commercial users and even utilities can save money,

energy and water by embarking on an energy-water

savings journey. Learn about the opportunities in

water-energy efficiency and synergies and how to

develop a sustainable energy and water efficiency

management systems. Understand how the utility

business model must adapt in order to create an

enabling environment for customers wishing to

install embedded generation. Discover the potential

of energy storage technologies and learn how no

region in the world offers a better fit and stands to

gain more value from energy storage than Africa.



WATER



AFRICA POWER FINANCE & INVESTMENT FORUM



Co-located event

Financiers and project owners will hear from expert speakers who will identify the key trends impacting project finance in regional energy markets with updates and insights on market opportunities, sources of capital, financing instruments and access to project finance. A featured session on regional power integration will explore new methods of developing cross-border power projects on a PPP basis, explore the opportunities for investors, and show how regional power integration can substantially save capital investment costs.

AGENDA AT A GLANCE

DAY 1 - 17 MAY 2016

OPENING KEYNOTE SESSIONI		

Identifying the ideal base-load mix for Africa

Accelerating the turnaround time for Africa's 15-20 GW geothermal potential

The next 36 months of hydropower: Challenges,

DAY 2 - 18 MAY 2016

RANSMISSION & DISTRIBUTION

Reforming Africa's electricity markets: Singlebuyer model vs. wholesale competition

Cost reflective tariffs: Solution to utilities' funding gap?

METERING & REVENUE CYCLE MANAGEMENT

How to plan a successful pilot and commercial meter roll out

Ensuring your smart meters connect and communicate

EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES

Water and energy synergies: Save money, water and energy

Implementation of a long term energy and water efficiency management system

WATER

Water resource management: Alternative water supply options to meet rapid growth in urban demand

Water loss management: Innovative water metering and flow control technologies to improve service delivery

AFRICA POWER FINANCE & INVESTMENT

Major projects and financing trends in 2016

Increasing investment and deal flow in emerging markets

KEYNOTE SESSION: OPERATIONALISING THE ENERGY-WATER NEXUS: MANAGING RISK AND RESILIENCE TO CLIMATE CHANGE

RENEWABLES

NEWARLES TRAINSMISSION & DISTRIB

The economics of regional transmission corridors

Technical toolkits to enhance smaller scale Accelerating renewable grid connections and hydropower improving network resilience

METERING & REVENUE CYCLE MANAGEMENT

Interpreting and making sense of big data in the African context

Increase revenue collection: Preventing electricity theft and energy losses

EMBEDDED GENERATION

Distributed defectors: When customers leave the grid

The A - Z of embedded generation: Solution to loadshedding and Africa's energy security

WATER

Improving efficiencies by integrating water and energy planning

eration: Solution to The business of sanitation: Seeing wastewater as a resource rather than a burden

AFRICA POWER FINANCE & INVESTMENT

Bankable or not: Creating capital opportunities

The success of the the Renewable Energy IPP Programme in South Africa and current developments in Sub-Saharan Africa

DAY 3 - 19 MAY 2016

trends and upcoming projects

RENEWABLES

Shining a light on utility scale solar PV

The clean power vision for Africa

Redefining energy access: Illuminating creative and context-appropriate solutions

Could microgrids and new technologies make rural electrification a reality?

METERING & REVENUE CYCLE MANAGEMENT

Enhancing customer satisfaction in a digital world

Standardisation as a key enabler of smert metering and smart grids

ENERGY STORAGE

Discovering the potential of energy storage technologies

Why energy storage is a game changer for energy independence

WATER

Water infrastructure management: Overcoming backlogs in maintenance

Planning for future water scarcity: How to attract and sustain investments

AFRICA POWER FINANCE & INVESTMENT

An integrated approach to power development – reaping the benefits of regional power

Understanding emerging project financing options

Closing Keynote Session: An Energy Model Fit For Africa

OPENING KEYNOTE DAY 1

FEATURED KEYNOTE SPEAKERS



H.E Elham Mahmoud
Ahmed Ibrahim
Commissioner for
Infrastructure and Energy,
African Union, Ethiopia
(African Utility Week Woman
in Power Award winner 2015)



Michael Liebreich Chairman of the Advisory Board and Founder, Bloomberg New Energy Finance, UK



James E. RogersFormer CEO and Chairman of the Board, Duke Energy, USA



Anton Eberhard
Professor: Management
Programme in Infrastructure
Reform and Regulation,
Graduate School of Business,
University of Cape Town, SA

TUESDAY, 17 MAY 2016

GLOBAL TRENDS, AN AFRICAN HOPE OR DREAM

Chairperson: Anton Eberhard, Professor: Management Programme in Infrastructure Reform and Regulation, Graduate School of Business, University of Cape Town, South Africa

09:30 Chairperson welcome address

Anton Eberhard, Professor: Management Programme in Infrastructure Reform and Regulation, Graduate School of Business, University of Cape Town, SA

19:40 The enhancement of regional and continental efforts for accelerated integrated infrastructure development

H.E Elham Mahmoud Ahmed Ibrahim, Commissioner for Infrastructure and Energy, African Union, Ethiopia

10:00 Africa today and beyond

Michael Liebreich, Chairman of the Advisory Board and Founder, Bloomberg New Energy Finance, UK

10:20 A "blank sheet of paper" for utilities the next 50 years – Here is how to power the world and the possibility of a major transformation for utilities

James E. Rogers, Former CEO and Chairman of the Board, Duke Energy, USA

11:00 Refreshment break in exhibition hall

Be inspired by some of our leading industry heads at the opening keynote

"Kindly allow me to express my sincere appreciation for the cordial hostship that you demonstrated during our time in Cape Town. I am sure you went to all lengths to make our stay very comfortable and indeed I enjoyed every moment of our trip."

Boniface Njombe, General Manager & CEO Tanzania Geothermal Development Co, TANESCO, Tanzania Generation

KEYNOTE DAY 2

FEATURED KEYNOTE SPEAKERS



Rachel Kyte
Special Representative of the
UN Secretary-General and
CEO, SE4All, Austria



Lawrence Musaba Co-ordination Centre Manager, SAPP - Southern African Power Pool, Zimbabwe (African Utility Week Lifetime Achievement Award winner 2015)



Henk Ovink Special Envoy for International Water Affairs, Kingdom of the Netherlands

WEDNESDAY, 18 MAY 2016

OPERATIONALISING THE ENERGY-WATER NEXUS: MANAGING RISK AND RESILIENCE TO CLIMATE CHANGE

- 09:30 The centrality of the Energy Goal for the 2030 Development Agenda and the Paris Agreement Rachel Kyte, Special Representative of the UN Secretary-General and Chief Executive Officer, SE4All, Austria
- 10:00 How the Southern African Power Pool is integrating their energy and water planning Lawrence Musaba, Co-ordination Centre Manager, SAPP Southern African Power Pool, Zimbabwe
- 10:30 The Nexus approach, key to resilience or default complexity Henk Ovink, Special Envoy for International Water Affairs, Netherlands
- 11:00 Refreshment break in exhibition hall

Get first hand insights about the hottest topics in Africa right now!

"I was impressed by the African Utility Week event. You were able to attract so many practitioners from utility managers, planners, private and public financiers, legal advisors, regulators, project managers (particularly for alternative energy projects) etc. I really learned a lot and made good contacts."

Greg Binkert, Country Director: Central Africa, World Bank, Cameroon



TUESDAY, 17 MAY 2016

Opening Keynote: Global trends, an African hope or dream 09:30

Refreshment break in exhibition hall

SESSION 1.1 IDENTIFYING THE IDEAL BASE-LOAD MIX FOR AFRICA

Moderator: Vanessa Snyman, Associate Director – Infrastructure, Deal Advisory, KPMG, SA

Chairperson Introduction 11:45

Debate: What are the key considerations when developing a base-11:55

- What is the future outlook of large scale hydro power in Africa?
- · Have African utilities considered the use of small nuclear reactors as a source of power?
- Will renewable energy always remain a niche market rather than become a set of mainstream energy supply technologies?

Panellists:

- Zimiti Chodeva, Manager, Accenture, SA
- Noah Gwariro, Managing Director, Zimbabwe Power Company,
- David Muthike, Director, Strategy & Business Performance, Kengen, Kenya*

13:15 Lunch break in exhibition hall

SESSION 1.2

ACCELERATING THE TURNAROUND TIME FOR AFRICA'S 15-20 GW GEOTHERMAL POTENTIAL

Clean Power

Africa



The role of capacity building in the development of the geothermal sector in East Africa

Izael Pereira Da Silva, Director Strathmore Energy Research Centre, Strathmore University, Kenya

15:20 Panel discussion: What are the critical factors for geothermal acceleration?

- Assessing the potential of the Africa Geothermal Centre of Excellence (AGCE)
- What are the latest technology solutions for your geothermal project?
- Asset management: Ensure plants are running at optimal performance
- The role of capacity building in the development of the renewable energy sector in East Africa

Panellists:

- Boniface Njombe, General Manager, Tanzania Geothermal Development Company, Tanzania
- Izael Pereira Da Silva, Director Strathmore Energy Research Centre, Strathmore University, Kenya

18:00 - 19:30 Networking function in exhibition hall

WEDNESDAY, 18 MAY 2016

Keynote: Operationalising the energy-water nexus: Managing risk and resilience to climate change

11:00 Refreshment break in exhibition hall

SESSION 2.1

THE NEXT 36 MONTHS OF HYDROPOWER: CHALLENGES, TRENDS & **UPCOMING PROJECTS**

Moderator: Anton-Louis Olivier, CEO, Renewable Energy Holdings, SA

Clean Power



Pre-development technical assistance for small hydro development in East Africa

> Andrew Njoba, Team Leader, DFID, Renewable Energy Program, Kenya Association of Manufactures, Kenya

Case study: From vision to reality: Singrobo-Ahouaty hydro power plant. Cote d'Ivoire

Ekolan Alain Etty, CEO, Ivoire Hydro Energy, Cote d'Ivoire

12:15 Panel Discussion: What are the plans to incorporate small hydro into existing infrastructure?

- · How can smaller scale hydro be a game changer for industry and community access?
- What are investment opportunities for hydropower plants with a capacity of more /less than 5MW?

Panellists:

- · Wim Jonker Klunne, Programme Director, Energy and Environment Partnership Southern and East Africa, South Africa
- Ekolan Alain Etty, CEO, Ivoire Hydro Energy, Cote d'Ivoire
- Andrew Njoba, Team Leader, DFID, Renewable Energy Program, Kenya Association of Manufactures, Kenya

13:15 Lunch break in exhibition hall

SESSION 2.2

TECHNICAL TOOLKITS TO ENHANCE SMALLER SCALE HYDROPOWER

Moderator: Bertrand Rochecouste Collet, Technical Director, Aurecon, SA*

Clean Power



15:00 Panel discussion: Strategies to optimise hydropower plants by overcoming the barriers of imported substandard technologies

- Assessing the application for low head hydropower vis-à-vis the traditional high head hydro
- What are the opportunities for re-engineering and or retrofitting the existing power plan / hydro turbines?

Panellists:

- · Harrison Mutikanga, CEO, UEGCL, Uganda*
- John Kandulu, CEO, ESCOM Malawi, Malawi*

Industry Awards Gala Dinner (by RSVP only) **Entrance with ticket only**



DID YOU KNOW?

YOU CAN MEET OVER 6000 ATTENDEES FROM OVER 70 COUNTRIES UNDER ONE ROOF

* invited speakers

THURSDAY, 19 MAY 2016

SESSION 3.1 SHINING A LIGHT ON UTILITY SCALE SOLAR PV

Clean Power

Africa



09:30 Panel discussion: Where are the opportunities for utility scale solar PV projects?

- · Where are the opportunities for utility scale solar PV projects?
- · Latest innovation in the solar PV field
- From conception to grave: What is best practice for solar maintenance plans?

Panellists:

- Marc Malan, New Business, Solar Capital, SA*
- Senzosenkosi M. Myeni, Renewable Technologies Manager, Eskom,

 SA*

11:00 Refreshment break in exhibition hall

SESSION 3.2 THE CLEAN POWER VISION FOR AFRICA

Moderator: Michael Goth, General Manager, STEAG Energy Services, SA

Clean Power

- 11:45 The value of biomass: How to have renewable energy 24/7

 Jasper Cloete, Director (CEO), Viking Energy Development Africa & SA

 Wood Pellets, SA
- 12:00 Smarter operations of renewable energy projects
 Caroline Faasen, Senior Engineer Renewable Energy, DNV GL, SA
- 12:15 Panel discussion: Where are the next investment opportunities in clean power?
 - What is the future for rooftop solar PV?
 - Solutions to galvanise wind power take-up
 - · Where are the next investment opportunities in clean power?
 - What are the critical market factors needed to drive the growth and success of the waste-to-energy market in Africa?

Panellists:

- Caroline Faasen, Senior Engineer Renewable Energy, DNV GL, SA
- Jasper Cloete, Director (CEO), Viking Energy Development Africa & SA Wood Pellets, SA
- Eugene Obiero, Senior Manager, Africa Projects, Renewable Energy Project Finance, CAMCO Clean Energy, Kenya
- 13:10 Chairperson conclusion

13:15 Lunch break in exhibition hall

14:30 Closing Keynote: An Energy Model Fit for Africa



* invited speakers



AFRICA NEEDS ADDITIONAL 250GW BY 2030 TO MEET DEMAND GROWTH

SOURCE: IEA REPORTS

FEATURED SPEAKERS



Izael Pereira Da SilvaDirector Strathmore Energy
Research Centre, Strathmore
University, Kenya



Boniface NjombeGeneral Manager, Tanzania
Geothermal Development
Company, Tanzania



Andrew Njoba
Team Leader, DFID, Renewable
Energy Program, Kenya
Association of Manufactures,
Kenya



Vanessa Snyman Associate Director – Infrastructure, Deal Advisory, KPMG, SA

"Energy security is the most challenging task of a nation. Most countries depend on particular and limited resources."

Vinod Kumar Khare, CEO, Ethiopian Electric Utility, Ethiopia



TRANSMISSION & DISTRIBUTION

TUESDAY, 17 MAY 2016

09:30 Opening Keynote: Global trends, an African hope or dream

11:00 Refreshment break in exhibition hall

SESSION 1.1

REFORMING AFRICA'S ELECTRICITY MARKETS: SINGLE-BUYER MODEL VS. WHOLESALE COMPETITION

Moderator: Robert Mubiru, Projects Manager, UMEME Limited, Uganda

11:45 Chairperson Introduction

Robert Mubiru, Projects Manager, UMEME Limited, Uganda

11:50 Perspective from Ghana: Competitive wholesale electricity market transactions, pricing and LMP decomposition

- Bernard T. Modey, Director of Systems Operation, Ghana Grid Company Limited (GRIDCo), Ghana
- Chris Mensah-Bonsu, Principal Technical Consulting Advisor, Ghana Grid Company Limited (GRIDCo), Ghana

12:10 Panel Discussion: Is a wholesale competitive electricity market the answer to Africa's electrification challenges?

Panellists:

- Chris Mensah-Bonsu, Principal Technical Consulting Advisor, Ghana Grid Company Limited (GRIDCo), Ghana
- Bernard T. Modey, Director of Systems Operation, Ghana Grid Company Limited (GRIDCo), Ghana
- Bassey F. Nkamado, President/CEO, Nsquared Integrated Electric Co. Ltd, Nigeria
- Thava Govender, Group Executive: Transmission, Eskom, SA
- Silas Mzingeli Zimu, Special Advisor to the President, The Presidency: Republic of South Africa, SA
- Jenny Fletcher, CEO, Ariya Capital, Kenya

13:15 Lunch break in exhibition hall

SESSION 1.2

COST REFLECTIVE TARIFFS: SOLUTION TO UTILITIES' FUNDING GAP?

Moderator: Robert Mubiru, Projects Manager, UMEME Limited, Uganda

15:00 Introduction to cost reflective tariffs in Africa

Ted Blom, Advisor Mining & Energy Advisory, SA

15:10 How cost-reflective tariffs can influence investments in the utility industries

Brian Sechotlho, Head of Department for Electricity Pricing and Tariffs, National Energy Regulator of South Africa (NERSA), SA

15:20 Panel Discussion: Are cost reflective tariffs the solution to utilities' funding gap?

- · How do you achieve cost reflective tariffs?
- What are the barriers and challenges?
- What are the potential solutions that can balance the commercial requirements of the utilities with the socio-economic needs of the customers?

Panellists:

- Ted Blom, Advisor Mining & Energy Advisory, SA
- Chimaobi Daniel Nna, Research Officer, Energy Commission of Nigeria, Nigeria
- Sicelo Xulu, MD, City Power, SA
- Brian Sechotlho, Head of Department for Electricity Pricing and Tariffs, National Energy Regulator of South Africa (NERSA), SA
- Johan Delport, Consultant, EON Consulting (Pty) Ltd, SA
- Dolapo Kukoyi, Partner, Detail Commercial Solicitors, Nigeria

18:00 – 19:30 Networking function in exhibition hall

* invited speakers

WEDNESDAY, 18 MAY 2016

09:30 Keynote: Operationalising the energy-water nexus: Managing risk and resilience to climate change

11:00 Refreshment break in exhibition hall

SESSION 2.1

THE ECONOMICS OF REGIONAL TRANSMISSION CORRIDORS

Moderator: Ana Hajduka, Founder & Chief Executive Officer, Africa GreenCo, UK

11:45 Is regional power sector integration viable? Feasibility study from GreenCo (Africa Green Regional Energy: Efficient, new and creditworthy offtaker)

Ana Hajduka, Founder & Chief Executive Officer, Africa GreenCo, UK

12:00 Panel Discussion: Are regional transmission corridors the solution to achieving energy security in Africa?

- Why regional transmission networks will save generation capital investment costs
- Opportunities for investors: what regional T&D projects and infrastructure gaps are there?
- Building regional collaboration between African nations via transmission interconnectors
- Issue of regionalisation why should some countries give up their sovereignty over their electricity supply?

Panellists:

- · Mikhail Nikomarov, Director and Co-founder, Bushveld Energy, SA
- Lawrence Musaba, Centre Manager, Southern African Power Pool (SAPP), Zimbabwe
- Lebbi Mwendavanu Kisitu Changullah, Secretary General, East African Power Pool (EAPP), Ethiopia

13:15 Lunch break in exhibition hall

SESSION 2.2

ACCELERATING RENEWABLE GRID CONNECTIONS AND IMPROVING NETWORK RESILIENCE

Moderator: Mbulelo Kibido, General Manager – Transmission Grid Planning, Eskom, SA*

15:00 Renewable generation access to the Ghana national interconnected transmission system

- William Amuna, CEO, Ghana Grid Company Limited (GRIDCo), Ghana
- Chris Mensah-Bonsu, Principal Technical Consulting Advisor, Ghana Grid Company Limited (GRIDCo), Ghana
- Bernard T. Modey, Director of Systems Operation, Ghana Grid Company Limited (GRIDCo), Ghana

15:30 Enabling transmission grid access - current and future initiatives Ronald Marais, Strategic Grid Planning Manager, Eskom, SA

19:00 Industry Awards Gala Dinner (by RSVP only) (INDUSTRY AWARDS Entrance with ticket only



Join the debates on Africa's electricity market and regional power trading

THURSDAY, 19 MAY 2016

SESSION 3.1

REDEFINING ENERGY ACCESS: ILLUMINATING CREATIVE AND CONTEXT-APPROPRIATE SOLUTIONS

Moderator: Refilwe Mokgosi, Deputy Director: Logistic and Technical Services, City of Tshwane Municipality, SA

09:30 Tanzania case study: Overview of electrification in Tanzania, challenges and the way forward

Robert M. Semsella, Manager Electrification, Tanzania Electric Supply Company Ltd (Tanesco), Tanzania

Hybrid eco-friendly energy systems for small businesses and households in rural West Africa

Chimaobi Daniel Nna, Research Officer, Energy Commission of Nigeria, Nigeria

Effective strategies for reducing both biomass fuel consumption and smoke exposure

Kevin Mortimer, Senior Clinical Lecturer in Respiratory Medicine, Liverpool School of Tropical Medicine, UK

Innovative financing mechanisms driving energy access

Faith Chege, Chief Financial Officer, Barefoot Power Africa, Kenya

10:20 Panel Discussion: Beyond connections: What do we mean by energy access?

Panellists:

- Robert M. Semsella, Manager Electrification, Tanzania Electric Supply Company Ltd (Tanesco), Tanzania
- Kevin Mortimer, Senior Clinical Lecturer in Respiratory Medicine, Liverpool School of Tropical Medicine, United Kingdom
- Chimaobi Daniel Nna, Research Officer, Energy Commission of Nigeria, Nigeria
- Wim Jonker-Klunne, Programme Director, Energy & Environment Partnership (EEP) Programme, South Africa
- Faith Chege, Chief Financial Officer, Barefoot Power Africa, Kenya

11:00 Refreshment break in exhibition hall

SESSION 3.2 COULD MICROGRIDS AND NEW TECHNOLOGIES MAKE RURAL

ELECTRIFICATION A REALITY?

Moderator: Refilwe Mokgosi, Deputy Director: Logistic and Technical Services,
City of Tshwane Municipality, SA

- 11:45 Technology Shoot-Out Session: Case studies on the latest microgrid technologies that can make an impact on rural electrification
- 12:15 Panel discussion: How is African tracking in reaching its rural electrification goals?

Panellists:

- Gordon Molefe, Director, Customer Services and Supply, Botswana Power Corporation, Botswana
- Dolapo Kukoyi, Partner, Detail Commercial Solicitors, Nigeria
- Faith Chege, Chief Financial Officer, Barefoot Power Africa, Kenya
- Arno Zengerle, Mayor, Wildpoldsried, Germany

13:10 Chairperson conclusion

Robert Mubiru, Projects Manager, UMEME Limited, Uganda

- 13:15 Lunch break in exhibition hall
- 14:30 Closing Keynote: An Energy Model Fit for Africa





CAPITAL SPENDING
ON DISTRIBUTION AND
TRANSMISSION WILL EXCEED
\$300 BILLION BY 2040

FEATURED SPEAKERS



CHAIRPERSON
Robert Mubiru
Projects Manager, UMEME



William Amuna Chief Executive Officer, Ghana Grid Company Limited (GRIDCo), Ghana



Silas Mzingeli Zimu
Special Advisor to the President,
The Presidency: Republic of South
Africa, SA



Dolapo KukoyiPartner, Detail Commercia
Solicitors, Nigeria

"The greatest challenges facing
Africa's energy sector are
inadequate measures to combat
energy theft and under-developed
cross-border transmission networks
to stimulate Africa's economy."

Mdu Nzimande, Director: Engineering Services City Power, SA



METERING & REVENUE CYCLE MANAGEMENT

TUESDAY, 17 MAY 2016

09:30 Opening Keynote: Global trends, an African hope or dream

11:00 Refreshment break in exhibition hall

SESSION 1.1

HOW TO PLAN A SUCCESSFUL PILOT AND COMMERCIAL METER ROLL OUT

11:45 Chairperson Introduction

Franco Pucci, Technical Consultant, STSA, SA

11:55 Roberto Gomez, Business Development, Iberdrola, SA

12:15 Lawrence Juku, Business Development, Landis+Gyr, SA

12:30 Panel discussion: What are the recommended steps and considerations for a successful pilot project?

Panellists

- · Roberto Gomez, Business Development, Iberdrola, SA
- · Lawrence Juku, Business Development, Landis+Gyr, SA

13:15 Lunch break in exhibition hall

SESSION 1.2

ENSURING YOUR SMART METERS CONNECT AND COMMUNICATE

15:00 Enabling Seamless Smart Meter Connectivity Through Rigorous Laboratory Testing

Shawn Papi, Senior Technician: Demand Management, Eskom, SA

- 15:20 Panel discussion: How can utilities optimise their existing cellular infrastructure for increased reliability?
 - Radio frequency, wireless or 3G? Assess the pros and cons of each communication technology to understand the most effective solution for your country
 - What are the key considerations for smart meters and information and communication technology (ICT)
 - How can utilities optimise their existing cellular infrastructure for increased reliability?

Panellists:

- · Shawn Papi, Senior Technician: Demand Management, Eskom, SA
- Thandiwe S.Sithole, Chief Risk Officer, ZESA Holdings, Zimbabwe*

18:00 – 19:30 Networking function in exhibition hall

DISCOVER THE LATEST
SOLUTIONS AND
TECHNOLOGIES IN THE
MARKET BY ENGAGING
WITH OVER 230
EXHIBITORS

WEDNESDAY, 18 MAY 2016

09:30 Keynote: Operationalising the energy-water nexus: Managing risk and resilience to climate change

11:00 Refreshment break in exhibition hall

SESSION 2.1

INTERPRETING AND MAKING SENSE OF BIG DATA IN THE AFRICAN CONTEXT

11:45 Case study: Process re-engineering and data integrity improvements to aid in the revenue recovery realisation efforts for City Power

Mdu Nzimande, Director of Engineering Services, City Power, SA

- 12:00 Panel Discussion: What are the top 3 actions that every utility should implement to enhance their operations through big data?
 - Back to smart meter basics: how can you best spot irregularities that indicate meter tampering?
 - · What frequency does a meter require a read out?
 - How can customer behaviour analytics enhance your reporting & business decisions?
 - · Considerations for ensuring data security is high priority

Panellists:

- · Mdu Nzimande, Director of Engineering Services, City Power, SA
- Jaco du Toit, Data Scientist, Eskom, SA

13:15 Lunch break in exhibition hall

SESSION 2.2

INCREASE REVENUE COLLECTION: PREVENTING ELECTICITY THEFT & ENERGY LOSSES

15:00 Energy Losses Management – A Collaborative Approach to Securing Utility Revenue Streams

Jayesh Pillai, Senior Consultant, EON Consulting, SA

15:15 **Electronic Payments for the Unbanked** Lorien Gamaroff, CEO, Bankymoon, SA

- 15:35 People will make or break the utility: Considering the 'people' factor as the first point of call in the energy and metering space Jodie Sherwin Hill, Executive Director, Jomat Investments, SA
- 15:35 Panel discussion: How do you balance technology, law and society triad to support commercial losses?
 - Balancing the technology, law and society triad to support commercial losses
 - Tactics and strategies for eradicating the roll of utility staff in electricity theft and tampering
 - What ae the latest technologies and tools for protecting the meter and gun cabinet
 - What is the future for mobile revenue collection?

Panellists:

- Jayesh Pillai, Senior Consultant, EON Consulting, SA
- Lorien Gamaroff, CEO, Bankymoon, SA
- Jodie Sherwin Hill, Executive Director, Jomat Investments, SA
- Ishmael Oku, Ag. Manager/Technical Investigations, Electricity Company of Ghana (ECG), Ghana

19:00 Industry Awards Gala Dinner (by RSVP only)

Entrance with ticket only

^{*} invited speakers

Join Utilities, governments and municipalities candidly sharing their smart metering needs

THURSDAY, 19 MAY 2016

SESSION 3.1

ENHANCING CUSTOMER SATISFACTION IN A DIGITAL WORLD

Moderator: Simon Dart, Managing Director, Elster Solutions, SA*

09:30 Delivering an enhanced utilities customer experience through social listening and digital engagement, whilst driving down costs for the utilities service provider

Anoka Balram, Senior Manager, Accenture Interactive, SA

09:45 City Power: Embedding Smart Metering Technology

Aubrey Mochela, General Manager ICT and Load Limiting Project Manager, City Power, SA

10:00 Panel discussion: The ultimate exercise in electricity demand management: What are the benefits of the latest load-shedding and load-limiting technology for your utility?

- How can programmes communicate to the customer that the infrastructure is under pressure and commercially reward reduction of usage?
- What are African utilities' experiences with Time of Use billing models?

Panellists:

- Aubrey Mochela, General Manager ICT and Load Limiting Project Manager, City Power, SA
- Reuben Sekwele, President/Chairman, RUBBYTAD, SA*

11:00 Refreshment break in exhibition hall

SESSION 3.2

STANDARDISATION AS A KEY ENABLER OF SMART METERING & SMART GRID

11:45 Future-proofing the STS: A leap forwards

Franco Pucci, Technical Consultant, STSA, SA

12:00 A future proven global reality, beyond metering

Angel Hernandez, Chairman of the PRIME Promotion Working Group, Prime Alliance, Belgium

- 12:15 Panel Discussion: What is the impact of standardisation and the role for utilities in the process?
 - What are the power producers and the power distributors' real requirements in a meter?
 - What new services can standardisation bring to the energy sector?

Panellists:

- Angel Hernandez, Chairman of the PRIME Promotion Working Group, Prime Alliance, Belgium
- Franco Pucci, Technical Consultant, STSA, SA

13:05 **Chairperson conclusion**

Franco Pucci, Technical Consultant, STSA, SA

13:15 Lunch break in exhibition hall

14:30 Closing Keynote: An Energy Model Fit for Africa



SOURCE: WORLD BANK REPORT

FEATURED SPEAKERS



CHAIRPERSON
Franco Pucci
Technical Consultant, STSA,



Jodie Sherwin Hill Executive Director, Jomat Investments, SA



Ishmael Oku

Ag. Manager/Technical
Investigations, Electricity Company
of Ghana (ECG), Ghana



Mdu NzimandeDirector of Engineering Services,
City Power, SA

"The need for huge capital investments to diversify and deploy appropriate technology cannot be overemphasised; this is a necessary sacrifice."

Isaac Adu-Botchway, Commercial Manager, Electricity Company of Ghana, Ghana

^{*} invited speakers



EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES

TUESDAY, 17 MAY 2016

09:30 Opening Keynote: Global trends, an African hope or dream

11:00 Refreshment break in exhibition hall

SESSION 1.1

WATER AND ENERGY SYNERGIES: SAVE MONEY, WATER AND ENERGY

Moderator: Barry Bredenkamp, Senior Manager: Energy Efficiency & Corporate Communications, SANEDI, SA

11:45 Chairperson Introduction

Lisa Reynolds, President Elect, Southern African Association for Energy Efficiency, SA

11:50 Thirsty energy: Securing energy in a water-constrained africa Diego J. Rodriguez, Senior Economist, PhD, World Bank, USA

12:10 Innovation for Africa: India's bold plan to cover 1,000 miles of canals with solar power

Jagat Shah, Founder & Chief Mentor, Cluster Pulse: Economic Development, India

12:30 Case study: The development of conduit hydropower in a city's water distribution system

Adriaan Kurtz, Design and Planning Engineer, City of Tshwane, SA

13:15 Lunch break in exhibition hall

SESSION 1.2

IMPLEMENTATION OF A LONG TERM ENERGY & WATER EFFICIENCY MANAGEMENT SYSTEM

Moderator: Barry Bredenkamp, Senior Manager: Energy Efficiency & Corporate Communications, SANEDI, SA

15:00 Energy Management Systems-ISO 50001: Providing a sharper focus on energy eficiency

Faith Mkhacwa, Project Manager: Industrial Energy Efficiency Project, National Cleaner Production Centre (NCPC-SA), SA

15:20 How to develop a sustainable energy management system Wendy da Cruz, Management System Consultant, Wendy da Cruz Consultancy Services, SA

15:40 Case Studies followed by Q&A sessions:

10-minute PowerPoint presentation case studies with pictures, graphs and illustrations

Driving behaviour change to achieve energy efficiency: A case study of Karob Plastics

Andrew McIlwaine, HR/ISO Manager, Karob Plastics, SA

Optimisation of energy efficiency in water utilities

Pauline Macharia, Assistant Lecturer, Egerton University, Kenya

Saint Gobain Case Study

Lisa Reynolds, President Elect, Southern African Association for Energy Efficiency, SA

18:00 – 19:30 Networking function in exhibition hall

WEDNESDAY, 18 MAY 2016

09:30 Keynote: Operationalising the energy-water nexus: Managing risk and resilience to climate change

11:00 Refreshment break in exhibition hall

SESSION 2.1

DISTRIBUTED DEFECTORS: WHEN CUSTOMERS LEAVE THE GRID

Moderator: Andrew Njoba, Team Leader, DFID Clean Energy Promotion Program, Kenya Association of Manufacturers, Kenya

11:45 Is it time for distributed power? How can utilities make this new technology work for them

Jenny Fletcher, CEO, Ariya Capital, Kenya

12:00 Case study: Parkhurst off-grid power plans

Ryan Beech, Project Manager: Off-grid Power Plan, Parkhurst Residents and Business Owners Association, SA

12:15 Panel discussion: Is the rise of customer-owned solar systems, gaspowered generators, micro-hydro and pump storage installations a threat or opportunity for utilities?

Panellists:

- Silas Mzingeli Zimu, Special Advisor to the President, The Presidency: Republic of South Africa, SA
- · Sicelo Xulu, Managing Director, City Power, SA
- Jenny Fletcher, CEO, Ariya Capital, Kenya
- Moefi Moroeng, Specialist: Wholesale Electricity Trading, National Energy Regulator of South Africa (NERSA), SA
- Bertha Dlamini, Managing Director, EON Consulting (Pty) Ltd, SA
- Ryan Beech, Project Manager: Off-grid Power Plan, Parkhurst Residents and Business Owners Association, SA

13:15 Lunch break in exhibition hall

SESSION 2.2

THE A-Z OF EMBEDDED GENERATION: SOLUTION TO LOAD SHEDDING AND AFRICA'S ENERGY SECURITY?

Moderator: Andrew Njoba, Team Leader, DFID Clean Energy Promotion Program, Kenya Association of Manufacturers, Kenya

15:00 The Western Cape Energy Game Changer

- · Hildegarde Fast, Head of Department, Western Cape Government, SA
- Jack Radmore, Green Finance Business Analyst, GreenCape, SA

15:30 How to budget for embedded generation

Jasper Cloete, Director (CEO), Viking Energy Development Africa (Pty) Ltd, SA

2:00 Industry Awards Gala Dinner (by RSVP only)

Entrance with ticket only



^{*} invited speakers

THURSDAY, 19 MAY 2016

SESSION 3.1

DISCOVERING THE POTENTIAL OF ENERGY STORAGE TECHNOLOGIES

Moderator: Mkhulu Mathe, Manager: Energy Materials, Council for Scientific and Industrial Research (CSIR), SA

09:30 Advanced batteries as enablers of renewable energy

Prof Kenneth I. Ozoemena, Chief Research Scientist, Council for Scientific and Industrial Research (CSIR), SA

09:50 Financial viability of battery storage to defer capital expenditure related to the upgrade of substations

Wynand Goosen, CEO, Africa Focus Consulting (Pty) Ltd, SA

11:00 Refreshment break in exhibition hall

SESSION 3.2

WHY ENERGY STORAGE IS A GAME CHANGER FOR ENERGY INDEPENDENCE

Moderator: Mkhulu Mathe, Manager: Energy Materials, Council for Scientific and Industrial Research (CSIR), SA

11:45 Why Africa stands to benefit the most from energy storage

Mikhail Nikomarov, Director and Co-founder, Bushveld Energy, SA

13:00 Panel discussion: How can utilities ensure that they take full advantage of the energy storage technology?

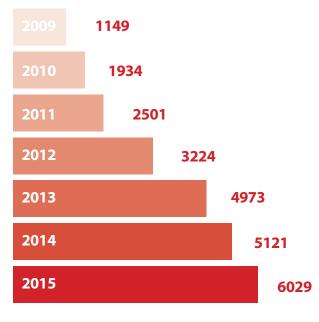
- Mikhail Nikomarov, Director and Co-founder, Bushveld Energy, SA
- Prof Kenneth I. Ozoemena, Chief Research Scientist, Council for Scientific and Industrial Research (CSIR), SA
- Bruce Raw, Energy Programme Manager, Green-Cape, SA
- Evan Rice, Business Development Manager, Tesla Energy, SA

13:10 Chairperson conclusion

13:15 Lunch break in exhibition hall

14:30 Closing Keynote: An Energy Model Fit for Africa

ATTENDEES SINCE 2009: 424% GROWTH IN 7 YEARS



* invited speakers



THE SHARE OF RENEWABLES IN POWER GENERATION COULD INCREASE TO 50% IN 2030

SOURCE: IEA REPORTS

FEATURED SPEAKERS



CHAIRPERSON
Lisa Reynolds
President Elect, Southern African
Association for Energy Efficiency,



Sicelo XuluManaging Director,
City Power, SA



Jagat Shah
Founder & Chief Mentor, Cluster
Pulse: Economic Development,
India



Moefi Moroeng Specialist: Wholesale Electricity Trading, National Energy Regulator of South Africa (NERSA), SA

"Africa needs integrated initiatives to leverage the water and energy sectors"

Arlete Matola Sando, Board Directors Advisor, EDM- Electricidade de Moçambique, Mozambique



TUESDAY, 17 MAY 2016

09:30 Opening Keynote: Global trends, an African hope or dream

Refreshment break in exhibition hall

SESSION 1.1

WATER RESOURCE MANAGEMENT: ALTERNATIVE WATER SUPPLY OPTIONS TO MEET RAPID GROWTH IN URBAN DEMAND

Moderator: Paul Yillia, Program Manager (Water-Energy Nexus), UN Sustainable Energy for All (SE4All), Austria

Chairperson Introduction

Paul Yillia, Program Manager (Water-Energy Nexus), UN Sustainable Energy for All (SE4All), Austria

11:50 Assessing large scale seawater desalination as a regional water supply option

> Steve Gillham, General Manager: Engineering & Scientific Services, Umgeni Water, SA

Development of water sensitive urban design - new thinking today for a different world tomorrow

Jason Mingo, Berg River Task Manager, Western Cape Government, SA

How African utilities use technological innovation to strengthen water delivery in lower and middle-income urban communities David Schaub-Jones, Director, SeeSaw, SA

13:15 Lunch break in exhibition hall

SESSION 1.2

WATER LOSS MANAGEMENT: INNOVATIVE WATER METERING AND FLOW CONTROL TECHNOLOGIES TO IMPROVE SERVICE DELIVERY

Moderator: Rudo Angela, Sanyanga, Africa Program Director, International Rivers,



15:00 Use IT or lose it!

Gerardt Viljoen, System Executive, Sensus, SA

Water Metering: Basics to Smart Solutions

Mark Shamley, Managing Director, Elster Kent Metering, SA

Case study on reduction of non-revenue water: Partnership between Lilongwe Water Board and eThekwini Municipality Verson Julian Kafodya, Zone Manager, Lilongwe Water Board, Malawi

The triple bottom line of water loss reduction: economic, environmental and social gains

> Nicole Kranz, Country Coordinator South Africa: International Water Stewardship Programme, GIZ, SA

18:00 - 19:30 Networking function in exhibition hall



* invited speakers

WEDNESDAY, 18 MAY 2016

Keynote: Operationalising the energy-water nexus: Managing risk and resilience to climate change

Refreshment break in exhibition hall

SESSION 2.1

IMPROVING EFFICIENCIES BY INTEGRATING WATER AND ENERGY PLANNING

Moderator: Diego J. Rodriguez, Senior Economist, PhD, World Bank, USA

Water-Energy-Food Nexus: A conceptual framework for strengthening cross-sector interactions

> Paul Yillia, Program Manager (Water-Energy Nexus), UN Sustainable Energy for All (SE4All), Austria

Whose Water? Integrated water resource management revisited Aurelia van Eeden, Business Unit Leader: Energy & Environment, Africa, Frost & Sullivan, SA

12:15 Optimisation of energy efficiency in water utilities Pauline Macharia, Assistant Lecturer, Egerton University, Kenya

Case study: The development of conduit hydropower in a city's water distribution system Adriaan Kurtz, Design and Planning Engineer, City of Tshwane, SA

Panel discussion: How should utilities co-ordinate and integrate their energy and water planning?

Panellists:

- Paul Yillia, Program Manager (Water-Energy Nexus), UN Sustainable Energy for All (SE4All), Austria
- Aurelia van Eeden, Business Unit Leader: Energy & Environment, Africa, Frost & Sullivan, SA
- Pauline Macharia, Assistant Lecturer, Egerton University, Kenya
- Adriaan Kurtz, Design and Planning Engineer, City of Tshwane, SA

13:15 Lunch break in exhibition hall

SESSION 2.2

THE BUSINESS OF SANITATION: SEEING WASTEWATER AS A RESOURCE RATHER THAN A BURDEN

Energy potential in waste water treatment plants: measuring the technical and financial potential of such projects Sofja Giljova, Renewable Energy Advisor, GIZ, SA

How can African utilities successfully share and exchange knowledge for faster learning

Simela Dube, Director Engineering Services, City of Bulawayo, Zimbabwe

New solutions to old problems: Thermophilic sludge digestion, phosphate recovery and UV disinfection case studies

Titus Cohen Kasie, Mechanical Engineer, eThekwini Municipality, SA

Polluting Water with a Veritable Source of Energy: the Situation in the Urban City of Lagos-Nigeria

> Ajayi Timothy Oluwagbenga, Laboratory Technologist, Ogun State Institute of Technology, Nigeria

Industry Awards Gala Dinner (by RSVP only) Entrance with ticket only



Ensure your utility stays competitive with the latest water technologies and practices

THURSDAY, 19 MAY 2016

SESSION 3.1

WATER INFRASTRUCTURE MANAGEMENT: OVERCOMING THE BACKLOGS IN MAINTENANCE

Moderator: Charles Hemba, Monitoring and Evaluation Expert, Ramboll Denmark in the Niger Delta Support Programme (EU), Nigeria

09:30 Stress-testing of water infrastructure

Diego J. Rodriguez, Senior Economist, PhD, World Bank, USA

09:50 Panel discussion: Are the backlogs in maintenance of Africa's water infrastructure a serious threat to the future of our water supply?

- How should water utilities approach their asset management strategies?
- · Why is there underspending on water infrastructure maintenance?
- · Are maintenance skills shortages a contributing factor?

Panellists:

- Diego J. Rodriguez, Senior Economist, PhD, World Bank, USA
- Simela Dube, Director Engineering Services, City of Bulawayo, 7 imhahwe
- Farouk Khan, Maintenance Planning Manager, Rand Water, SA
- Grant MacDonald, District Maintenance Manager (Plant & Equipment: Wastewater Works), City of Cape Town, SA
- · Adri Venter, Principal Consultant, EON Consulting (Pty) Ltd, SA

11:00 Refreshment break in exhibition hall

SESSION 3.2

PLANNING FOR FUTURE WATER SCARCITY: HOW TO ATTRACT AND SUSTAIN INVESTMENTS?

Moderator: Charles Hemba, Monitoring and Evaluation Expert, Ramboll Denmark in the Niger Delta Support Programme (EU), Nigeria

11:45 Partnering for water stewardship – new solutions through collective action

Nicole Kranz, Country Coordinator South Africa: International Water Stewardship Programme, GIZ, SA

12:00 Panel discussion: How to attract and sustain investments in the post-2015 era?

- · How much investment is needed?
- · Where are the opportunities?
- What are the current challenges?
- · How can the water sector develop it private-public partnerships?

Panellists:

- Edward Mungai, CEO, Kenya Climate Innovation Centre, Kenya
- Philip Gichuki, Nairobi City Water and Sewerage Company, Managing Director, Kenya
- Andre Kruger, Programme Manager, Africa Investment and Integration Desk, SA
- Jonathan Berman, Managing Director, Fieldstone, SA
- Hamanth Kasan, General Manager Scientific Services Division, Rand Water, SA
- Nicole Kranz, Country Coordinator South Africa: International Water Stewardship Programme, GIZ, SA

13:10 Chairperson conclusion

Paul Yillia, Program Manager (Water-Energy Nexus), Sustainable Energy for All (SE4All), Austria

13:15 Lunch break in exhibition hall

14:30 Closing Keynote: An Energy Model Fit for Africa



42% of Healthcare Facilities in Africa do Not have access to safe Water

SOURCE: WHO/UNICEF 2015

FEATURED SPEAKERS



CHAIRPERSON
Paul Yillia
Program Manager (Water-Energy
Nexus), UN Sustainable Energy for
All (SE4All), Austria



Verson Julian Kafodya Zone Manager, Lilongwe Water Board, Malawi



Philip Gichuki
Nairobi City Water and Sewerage
Company, Managing Director,
Kenya



Edward Mungai CEO, Kenya Climate Innovation Centre, Kenya

"It is crucial that as Africans we start managing our water and energy resources responsibly and to ensure that all members of our society have access to these crucial resources."

Rudo Angela. Sanyanga, Africa Program Director, International Rivers, SA

^{*} invited speakers





TUESDAY, 17 MAY 2016

09:30 Opening Keynote: Global trends, an African hope or dream

11:00 Refreshment break in exhibition hall

SESSION 1.1 MAJOR PROJECTS AND FINANCING TRENDS IN 2016

11:45 **Upcoming power projects in African economic hotspots** (DTI/ Whitehouse/SAEEC Report)

Paul Runge, Managing Director, Africa Project Access (APA), SA

Hear expert perspectives on key trends impacting project finance in regional energy markets

- Professor Anton Eberhard, Director: Management Programme in Infrastructure Reform and Regulation, Graduate School of Business, UCT, SA
- Michael Liebreich, Founder and Chairman of the Advisory Board, BNEF, LIK
- Solomon Asamoah, Vice President & Head, Energy & Natural Resources, AfDB, Cote d'Ivoire*
- Jeannot Boussougouth, Executive Vice President, Power and Infrastructure, Investment Banking, Standard Bank, SA

13:15 Lunch break in exhibition hall

SESSION 1.2 INCREASING INVESTMENT AND DEAL FLOW IN EMERGING MARKETS

15:00 Scaling up finance for sustainable energy investments

Rachel Kyte, Special Representative of the UN Secretary-General and CEO, Sustainable Energy for All (SE4All), Austria

Panel Discussion:

- Market opportunities
- Access to finance
- · Increasing the deal-flow
- Sources of capital and financing instruments

Moderator: Rachel Kyte, CEO & Special Representative of the UN Secretary-General, Sustainable Energy for All (SE4All)

Panellists:

- Michael Liebreich, Founder and Chairman of the Advisory Board, BNEF, UK
- Ana Hajduka, Founder & CEO, Africa GreenCo, UK
- Robert Ashdown, Senior Originator Energy, Vice President, Products & Global Markets, Swiss Re Corporate Solutions Advisors, SA
- Mohan Vivekanandan, DBSA Strategy Division Group Executive, DBSA, SA
- Benjamin Mugisha, Senior Underwriter, ATI, Kenya
- Carl Kachale Chirwa, Director: Trade Finance Head (Sub Sahara Africa), Citibank, Kenya

18:00 – 19:30 Networking function in exhibition hall

WEDNESDAY, 18 MAY 2016

09:30 Keynote: Operationalising the energy-water nexus: Managing risk and resilience to climate change

11:00 Refreshment break in exhibition hall

SESSION 2.1 BANKABLE OR NOT – CREATING CAPITAL OPPORTUNITIES

11:45 The challenges of shortening the time to bankability Moderator Introduction: Chiboni Evans, CEO, SAEEC, SA

1:55 The cycle between idea to feasibility - navigating the complexity and driving projects towards bankability

Lauri Elliott, CEO, Afribiz Foundation, USA

12:15 Best practices to enhance project preparation and project finance

- The use of dedicated project preparation funds and the systematic use of project structuring to better allocate risks
- The use of diverse contractual instruments, to de-risk project finance

Panellists

- Donald Mabusela, Director: Export Marketing and Investment Assistance Scheme (EMIA), IDAD DTI, SA
- Ashley Peterson, Senior Business Development Manager Africa Unit, IDC, SA
- Mohale Rakgate, GM: Project Preparation, DBSA, SA
- Jan Martin Witte, Head of Division, Infrastructure Southern Africa, KfW, Germany
- Lloyd Jameson, Acting Director Energy and Power, Corporate Council on Africa (CCA), USA
- Marcel Bruhwiler, Principal Investment Officer Infrastructure & Natural Resources, IFC, SA

13:15 Lunch break in exhibition hall

SESSION 2.2

THE SUCCESS OF THE RENEWABLE ENERGY IPP PROGRAMME IN SOUTH
AFRICA AND CURRENT DEVELOPMENTS
IN SUB-SAHARAN AFRICA

Chairperson: De Buys Scott, Head of Infrastructure Deal Advisory, KPMG

Session Sponsor:



15:00 Panel discussion: The success of the Renewable Energy IPP Programme in SA and current developments in Sub-Saharan Africa

- What made these programs successful and what is needed to effectively replicate them in other African countries?
- · Can this model be extended to more complex projects?
- Does this model work for other technologies, for example coal and gas?
 Moderator Introduction: De Buys Scott, Partner Infrastructure, Deal Advisory, KPMG, SA

Panelllists:

- Karen Breytenbach, IPP Office DoE, SA
- Silvia Kreibiehl, Head FS-UNEP Collaborating Centre for Climate & Sustainable Energy Finance, Frankfurt School of Finance & Management, Germany
- Jasandra Nyker, CEO, BioTherm Division Energy, SA
- Jan Martin Witte, Head of Infrastructure Southern Africa, KfW, Germany
- Jonathan Berman, Managing Director, Fieldstone, SA

19:00 Industry Awards Gala Dinner (by RSVP only)

Entrance with ticket only

* invited speakers

Unlock financial opportunities - understand project funding partners and sources of capital

Patron Bank:



THURSDAY, 19 MAY 2016

SESSION 3.1

AN INTEGRATED APPROACH TO POWER DEVELOPMENT - REAPING THE BENEFITS OF REGIONAL POWER INTEGRATION

09:30 Regional power integration - funding power generation and large scale regional projects

Ana Hajduka, Founder & CEO, Africa GreenCo, UK

09:55 Panel discussion: Raising private sector finance for cross border generation and transmission projects

- Lack of creditworthy regional off takers how can Africa GreenCo assist as a regional intermediary offtaker?
- Difficulties in entering into bilateral PPAs
- · Multiple sovereign guarantees
- The role of the power pools for development of regional generation and transmission projects
- The requirements of DFIs for funding cross border projects
 Moderator: Kannan Lakmeeharan, Partner, McKinsey & Company, SA

Project Overview:

- Kevin Kariuki, Head of Infrastructure, Industrial Promotion Services, Kenya* - Ruzizi III project overview
- Lawrence Musaba, Co-ordination Centre Manager, SAPP, Zimbabwe -ZiZaBoNa - project overview

10:05 Panellists:

- Lebbi Changullah, Secretary General, EAPP, Ethiopia
- Carmelo Cocuzza, Head of Regional Representation for Southern Africa & Indian Ocean, EIB, SA
- Karen Breytenbach, IPP Office DoE, SA
- Duncan Bonnett, Partner & Director, Whitehouse & Associates, SA

11:00 Refreshment break in exhibition hall

SESSION 3.2 UNDERSTANDING EMERGING PROJECT FINANCING OPTIONS

11:45 Funding partners during project development - increasing options for developers

James Doree, Director, Lion's Head Global Partners, UK

12:20 Panel discussion

- Emerging/ innovative players in the sector and where they enter the project cycle
- · What strategic and technical value can these investors bring?
- What risks will/ won't these new players take?
- How do we create infrastructure-related products for institutional investors?
- Tapping local investors what is being done in local markets?
 Moderator: James Doree, Director, Lion's Head Global Partners, UK

Panellists:

- Cedrick Lemarie, Vice President Energy Business Development EMEA, ENGIE, Kenya
- Anthony Arnott, E Oppenheimer & Sons, UK
- Andre Botha, Infrastructure Deal Origination & Investment, Castlepines Global Equities, SA
- Jeannot Boussougouth, Executive Vice President, Power and Infrastructure, Investment Banking, Standard Bank, SA

13:15 Lunch break in exhibition hall

14:30 Closing Keynote: An Energy Model Fit for Africa



PRIVATE-SECTOR
INVOLVEMENT IS CRITICAL
AND CENTRAL TO EFFECTIVELY
DELIVERING NEW CAPACITY
SOURCE: MCKINSEY

FEATURED SPEAKERS



Karen BreytenbachIPP Office DoE, SA



Ana Hajduka
Founder and CEO, AfricaGreenCo,



Lebbi Mwendavanu Kisitu Changullah Secretary General, East African



Lloyd Jameson
Acting Director - Energy and Power,
Corporate Council on Africa (CCA),
USA

"We need to understand how best to leverage private investment to assist with funding the power needs of African countries"

Eberhard, A et al (2016). Independent Power Projects in Sub-Saharan

Africa, Washington, D.C. World Bank

CLOSING KEYNOTE



THURSDAY, 19 MAY 2016

AN ENERGY MODEL FIT FOR AFRICA

14:30 Wildpoldsried: The Inspiring Journey of a Star Energy Village

Arno Zengerle, Mayor, Wildpoldsried, Germany

Why Wildpoldsried?

- Discover how Wildpoldsried generates 400% more energy from renewable sources than its 2,500 residents need
- Be inspired, find out how the village earns EUR 4 million in annual additional revenue by selling excess energy to the national grid
- Understand how your communities can implement sustainable energy practices
- From consumers to prosumers: What is the impact on the grid?

15:00 Pioneering a Future African Village: How Can Africa Develop its Own Wildpoldsried?

Energy specialists will analyse the key findings from the Wildpoldscried model and recommend how they can be realistically adapted to succeed in the African context.

- Rik Wuts, Co-Founder & VP, Business Development, Powerhive, Kenya*
- Senior Representative, Siemens, Germany*
- 15:45 Conclusions from African Utility Week 2016

Be inspired! Discover how a village earns \$4.5 million annually by selling excess self-generated energy to the grid —

KEEP UP TO DATE WITH THE CONVERSATION

#AUW2016



@ AfricaUtilities



African Power Forum

INDUSTRY AWARDS GALA DINNER



18 May 2016, 19:00 – 23:00 CTICC, Cape Town Black tie | Traditional

Nominate a project, company or individual that is pushing boundaries, inspiring others or making an outstanding contribution to the energy and water sectors who will be acknowledged in front of 700 of Africa's most renowned power and water industry professionals.

Submit a nomination today – form available online www.african-utility-week.com/nomination (Deadline 26 February 2016)

AWARD CATEGORIES

- Lifetime Achievement Award
- Power Utility Executive of the Year
- Water Utility Executive of the Year
- Power Utility of the Year
- Water Utility of the Year
- Clean Energy Project of the Year
- Pioneer in Project Finance NEW CATEGORY
- Community Development Project of the Year
- Future Leader Award NEW CATEGORY
- Energy/Water Efficiency Project of the Year
- Power/Water Woman of the Year

Lead sponsor

Category sponsors









SITE VISITS

FRIDAY 20 MAY 2016

Book a site visit to add a third dimension to the information gathered during the conference. Led by an industry expert, site visits capture practical insights and demonstrate real world case studies of innovative technology at the heart of power and water infrastructure, combined with a unique experience of South African hospitality.

All site visits depart from and return to the CTICC. Departure 08:30 | Return 16:30

www.african-utility-week.com/sitevisits

GENERATION SITE VISIT





ANKERLIG OPEN CYCLE GAS TURBINE POWER STATION

Ankerlig Open Cycle Gas Turbine (OCTG) Power Station's site is located within the industrial area of Atlantis, near Cape Town. After consultation with local communities, the power station was named Ankerlig. The name of Ankerlig Power Station is derived from an Afrikaans expression "Om die anker te lig", which is symbolic of a community that rises above the chains of poverty to experience growth and prosperity.

Delegates will learn about the benefits of using OCTG technology:

- 1. The technology has been used extensively all over the world and is readily available
- 2. Stations can be erected in a lead time of 2-3 years as opposed to the larger coal and nuclear stations that require 8-10 years lead time
- 3. This type of technology has a proven track record
- 4. There are numerous suppliers in the world

SOLAR PV SITE VISITS





VREDE-EN-LUST WINE ESTATE

Vrede-en-Lust was the first wine estate in South Africa to install a 218 KWp solar panel which has not only furthered their aims to become a carbon neutral winery, but is also the first project to be approved under Eskom's rebate scheme for small-scale renewable energy. The entire farm is currently functioning 100% off-grid during daylight through the installation which is on the roof of the wine cellar and on the ground between the vineyards.

Delegates will learn how this installation is:

- Drastically reducing energy costs
- Less reliant on an unpredictable national power supply
- Demonstrating a corporate responsibility towards the environment



CITY ELECTRICITY DEPARTMENT PV INSTALLATION, 100KW PARKING LOT ROOFTOP IN 4 STAR RATED BUILDING

The City of Cape Town's Electricity Department has been designed to be energy efficient:

- 400 solar panels installed to help reduce the energy consumption of the building, generating approximately 156 800 kWh per year
- The lights to offices and open areas are controlled by sensors that turn the lights on by movement
- The lights in the building detect the natural light levels and adjust the lights in the building to a pre-set reading of 400 lux.
- Fresh air is supplied into the building at 12,5 litre/second/person outside air to 95% of the usable area.

ENERGY EFFICIENCY SITE VISITS





GALLOWS HILL TRAFFIC DEPARTMENT

Smart Metering / Solar PV / LED lighting

Gallows Hill Traffic Department, situated in Green Point is one of the first City-owned buildings to receive all three energy efficient interventions:

- a smart meter,
- solar photovoltaic system
- LED lighting technology with occupancy sensors.

In addition the facility managers have been trained in Fundamental Energy Management and Smart Living training has been conducted with all staff in the building. Successful commissioning of the plant was achieved in March 2014, the 10kWp rooftop solar PV system generates an estimated 107 076 kWh per annum, allowing the building to provide 3% of its energy from the rooftop PV system.



GROWTHPOINT'S BAYSIDE MALL

Waste-to-Energy / Solar Energy / Rainwater Harvesting

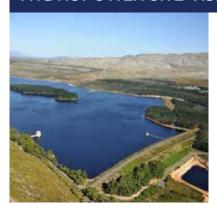
Bayside Mall in Tableview, Cape Town, spans over 45,000sqm of retail space and welcomes in excess of 7.5 million shoppers each year. This shopping centre has scooped the award for the Large Building Retrofit Category, raising the bar for energy efficiency at shopping centres across the country.

Bayside Mall's energy efficiency interventions include:

- A 500 kWp pilot rooftop solar photovoltaic (PV) plant, with 2,108 panels covering 3,300sqm
- Rainwater harvesting and reuse intervention, which involves the extraction, detaining, storage and utilisation of storm water runoff from the shopping centre's hard surfaces and rooftop
- A waste-to-energy electricity generation plant involves the anaerobic digestion of organic waste that are generated in the shopping mall each day







STEENBRAS AND PALMIET PUMPED STORAGE AND WATER SCHEMES

Steenbras Dam is an earth-fill type dam with a low sediment load and delivers water of very high quality. The Upper Dam stores water from its own catchment as well as water transferred by the Palmiet PSS – operated by Eskom and the Department of Water and Sanitation.

The 2 x 200MW Palmiet PSS generates electricity from water, released from the upper Rockview Dam to the two reversible pump turbines located 60 metres below ground level.

Water from the Upper Steenbras Dam are released to the Lower Steenbras Dam or conveyed to the City's Faure Water Treatment Works via the 180MW Steenbras PSS - the first such scheme to be built in Africa and owned by the City of Cape Town. Each of the station's four 45 000 kW generator units acts as a pump-motor in one mode and a turbine-generator in the other.

water site visit





SAB 3000M WASTE WATER TREATMENT FACILITY

The utilities plant in Newlands consists of Steam Generation, refrigeration, air generation and a CO2 plant.

The Steam generation is done by two coal boilers, one Heavy fuel oil boiler and a methane boiler. The effluent is treated via an Anaerobic digester that generates methane gas to generate steam from the methane boiler. Refrigeration in the plant is done via a plant that uses a combination of glycol and Ammonia. CO2 is produced during the fermentation process collected in the Utilities plant and is ready to use further in the packaging process.

ADVISORY BOARD

The conference is packed with information on the latest technical, strategic and financial issues drafted with the expertise of over 100 Advisory Board members who give freely of their time and expert knowledge during the meetings held in Nairobi, Abuja, Johannesburg and Cape Town to produce the conference programme.



Advisory Board Members drawn from the following companies and organisations:

- Accenture
- Transcorp Ughelli Power
- ConsultAbilities Ltd.
- Genesis Energy
- Electricity Company of Ghana
- Southern African Alternative Energy Association
- **Ecolution Consulting**
- Renewable Energy Holdings
- South African National Energy Development Institute (SANFDI)
- Nsquared Integrated Electric Co. Ltd
- African Trade Insurance Agency
- FMO (Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V.)
- **EON Consulting**
- Aurecon South Africa
- Tanzania Geothermal Company Limited (TGCL)
- Lake Turkana Wind Power Ltd.
- Gigawatt Global
- Ramboll Denmark in the EU Funded Niger Delta Support Programme
- South African Electrotechnical Export Council
- National Centre for Energy Efficiency And Conservation, Energy Commission Of Nigeria
- ACWA Power
- SonGas
- Edison Power Group
- S&C Electric Company
- **Fskom**
- Daniel John Consulting
- **Fskom**
- My Power Station Technology
- Independent Energy Consultant
- Kisumu Water & Sewerage Co. Ltd
- National Commission for Science Technology and Innovation
- SeeSaw
- Ministry of Agriculture
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- Africa Energy Services Group Ltd
- University of the Witwatersrand
- Southern African Power Pool (SAPP)
- International Rivers
- Growthpoint Properties
- EDM- Electricidade de Moçambique
- UN Sustainable Energy for All (SE4All)
- National Water and Sewerage Corporation
- South African Oil & Gas Alliance
- Kenya climate innovation Center
- Energy Regulatory Commission
- Delimara
- North South Power Company
- GreenCape
- The South African PhotoVoltaic Industrial Association (SAPVIA)
- Macfarlanes
- Botswana Power Corporation
- DNV GL
- Norton Rose Fulbright South Africa Inc
- JinkoSolar Co.
- International Renewable Energy Agency (IRENA)
- Rand Water
- NIRAS International Consulting
- ERC of Kenya

- Ministry of Electricity
- Electricity Company of Ghana
- Strathmore University
- Eskom
- Department of Energy
- Ariya Capital
- Airports Company South Africa
- Jomat Investments
- Fieldstone
- National Water and Sewerage Corporation
- Nigeria Sovereign Investment Authority
- Development Bank of Southern Africa
- WorleyParsons
- **ESKOM**
- Elster Kent Metering
- **Eskom**
- City Power

- STEAG Energy Services G South Africa mbH (incorporated in Germany)
- GreenCape
- DNV GL
- Acwa Power Solafrica Bokpoort CSP
- Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)
- Kenya Nuclear Electricity Board
- ESI Africa
- GIBB Engineering and Architecture
- Botswana Exporters and Manufacturers Association (BFMA)
- Paasol Resources
- African Infrastructure Investment Managers (AIIM)
- National Nuclear Regulator
- Africa Project Access
- Nairobi City Water and Sewerage company
- National Environment Trust Fund (NETFUND)
- Council for Scientific and Industrial Research (CSIR)
- Industrial Machinery and Processes
- Lucy Electric South Africa
- Umeme
- Monetizing Gas Africa Inc.
- KenGen
- WWF-SA
- AltGen
- Macfarlanes LLP
- Elster Solutions
- SAIPPA
- National Centre for Energy Efficiency and Conservation [Energy Commission of Nigeria]
- Umaeni Water
- Mining & Energy Advisory
- Synergetics Sustainable Solutions
- City of uMhlathuze
- Elecnor
- Ethiopian Electric Utility
- WITS University
- Energy & Environment Partnership (EEP) Programme
 - Necsa

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POWER AND WATER UTILITY CEO FORUM

The Power and Water Utility CEO Forum is the only African forum where C-level executives from Africa's leading utilities come together to discuss pressing topics within the industry and to accelerate cross-border collaboration across Africa.



The forum is held as a three-day by invitation only board meeting alongside African Utility Week 2016, where the leaders who guide Africa's power and water sectors discuss the path of transformation. Discussions centre around areas of co-operation, development plans and the advancement of regional centres of excellence throughout Africa. The meeting takes place under the Chatham House Rules.

Attending the Utility CEO Forum will provide you with the opportunity to strategise with progressive C-level executives who share your goals, concerns and aspirations in order to drive utility cooperation across Africa.

To nominate your power/water utility CEO for this prestigious event, please contact Claire O'Connell today. Tel: +27 (0) 21 700 3563 email: claire.oconnell@spintelligent.com

Attending utilities include:

















The Innovation Hub at African Utility Week is a unique platform that features new innovations and new technologies in the African energy and water sectors. It will showcase new developments in rural electrification and renewable energy distributed generation, amongst others. Young innovators will showcase their products and the programme will also connect SMME's, start-ups and engineering graduates with seasoned industry experts, heavyweights as well as industry incubators to help facilitate the growth of an African entrepreneurial ecosystem.



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KPMG - IPP CONFERENCE: 18 MAY 2016

After a successful Independent Power Producers' (IPP) conference in Cape Town and Johannesburg in 2015, KPMG would like to invite you to a knowledge sharing conference in Cape Town during the African Utility week where we will share:



- Industry highlights and outlook
- Hot topics with Investors, IPPs and EPC entities
- Financial accountancy, hedging, tax, environmental best practices including transformation and community development.

Our panel of experts will share their insights into the challenges experienced by industry players in the solar, wind and hydro sectors and provide views on how to overcome them.

Part of your 3 day event pass - Registration essential

NUCLEAR POWER AFRICA: 19 MAY 2016

The Nuclear Power Africa will examine the myths and realities of nuclear power and explore the future of nuclear in the coming energy transition. Expert speakers will look at lessons learned from nuclear build programmes around the world, and provide insights on advanced nuclear technologies available today and in the near future. A panel will examine how South Africa is at a crossroads – will nuclear build programmes be a strategic game changer? How to navigate political and legal minefields and learn from the mistakes of others to make sound decisions that can benefit the country for nearly a century. **Book separately**



OIL & GAS COUNCIL CAPE TOWN CONFERENCE: 17 - 18 MAY 2016

In conjunction with the 16th Africa Utility Week, in 2016, The Oil and Gas Council present their Cape Town conference. Assembling global gas experts, this is energy's most influential corporate development, strategy and investment event designed for CEO-level attendees to meet, identify and discuss: new corporate development opportunities in Africa and internationally, new investment opportunities across the African energy landscape, with an emphasis on gas, deal flow and capital emanating to the region, effective strategies to overcome emerging business and infrastructure challenges related to gas in SADC and how to successfully access the international capital markets and active investment community to realise the gas to power potential.



PIESA ADVISORY BOARD MEETING: 15 MAY 2016

PIESA Board resolved that the 3 PIESA Advisory Committee Meetings will take place on the Sunday preceding the AUW (ie 15 May) and proceeding to Monday morning. This is to allow the Advisory Committees to report to the Board Meeting which will take place on the Monday 16th May starting at 2 pm. **Invite only**



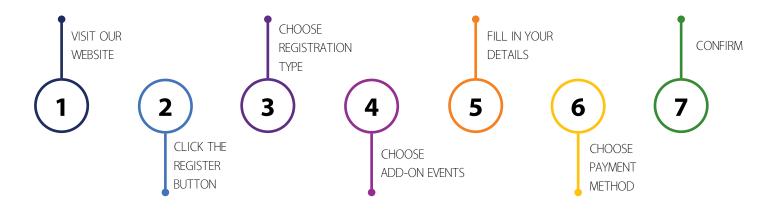
STSA ANNUAL GENERAL MEETING, 16 MAY 2016

The Standard Transfer Specification Association's (STSA) Annual General Meeting - All member representatives are welcome to attend. **Invite only**



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	Early Bird 15% Discount Valid until 5 February 2016	Final Rate
Private Company Delegate: 3-Day Pass includes "KPMG IPP" conference	R15 080	R17 750
Public Company Delegate: 3-Day Pass includes "KPMG IPP" conference	R9 630	R11 340
Oil and Gas Council Conference Cape Town includes access to African Utility Week conference		R23 000
Nuclear Power Africa (19 May 2016) Top up your conference pass		R4 000
Site Visit Delegate		R4 850
Industry Awards Gala Dinner Seat (18 May 2016)		R1 700
Industry Awards Gala Dinner Table (18 May 2016) Accommodates 10 Delegates		R15 300

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POWER & WATER UTILITIES





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With more than 18 years' experience in publishing and running conferences and exhibitions in the sub-Saharan utility sector, the power and water portfolio is the largest and longest running portfolio at Spintelligent, the African leader in business-to-business events, publications and training courses. The power and water portfolio includes our flagship event African Utility Week and Clean Power Africa, which is the largest power and water infrastructure exhibition and conference on the continent.

CONFERENCES & EXHIBITIONS

African Utility Week Clean Power

16th annual African Utility Week | Clean Power Africa 17 – 19 May 2016, Cape Town, South Africa www.african-utility-week.com



Clean Power

18th annual East African Power Industry Convention (EAPIC) | Clean Power East Africa

21 – 22 September 2016, Nairobi, Kenya www.eapicforum.com



3rd annual iPAD Rwanda Power & Infrastructure Investment Forum

1 – 2 November 2016, Kigali, Rwanda www.ipad-rwanda.com



2nd annual iPAD Cameroon Energy Infrastructure Forum 10 – 11 November 2016, Yaounde, Cameroon

www.ipad-cameroon.com



13th annual West African Power Industry Convention (WAPIC)

16 – 17 November 2016, Lagos, Nigeria www.wapicforum.com

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