







# Africa Investment Exchange Power & Renewables

13-14 November 2019, RSA House, London

Over the last five years AIX: Power & Renewables has become one of the meeting places of choice for Africa's power sector stakeholders, including leading private and public sector investors, African officials and project developers.

The meeting is co-organised by Cross-border Information (CbI), and CbI's African Energy, a consultancy that has been involved at the heart of the debate surrounding the development of the energy sector in Africa for more than 20 years.

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# Timetable for 13 November

08h30 to 09h00 Registration & coffee

oghoo to 10h30

#### Africa Heat Map

Overview of major political and energy industry developments in Africa.

#### Africa power & renewables five years ahead

Moderated debate discussing some of the big issues confronting the industry and its financiers.

10h30 Coffee



The Great Room

**Power Generation** 

#### Stream two

The Tavern Room

Transmission & Distribution

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#### 12h30 Lunch





#### 11h00 to 12h30

#### Utility and regulator perspectives

What is the future for African utilities? What is needed to attract investment in the electricity supply industry.

#### 11h00 to 12h30

#### Financing the grid

Public-private partnerships, independent power transmission model (IPT) and other efforts to strengthen the grid.



#### 13h45 to 15h15

The Great Room

#### Outlook for power developers and utilityscale development

As big utilities enter Africa and more local SMEs emerge, a range of developers discuss the changing markets.

#### 13h45 to 15h15

#### Disrupting T&D in the age of storage

Changing the African energy landscape.

#### 15h45 to 17h15

#### Attracting new investors

Perspectives from private equity, IOCs, institutional investors, domestic capital markets and other sources of funding.

#### 13h45 to 17h15

#### **Distribution options**

Management contracts, concessions and other models – what are the challenges and pitfalls?

#### 15h15 Coffee



#### 17h15 Reception



#### Our unique perspective

AIX: Power & Renewables is held under the Chatham House Rule and structured around panel-led sessions with an audience limited to around 200 participants to preserve the networking environment.

Participants will benefit from exclusive analysis based on African Energy Live Data - our unique platform that combines a range of analytics tools with project level detail of more than 6,000 power plants across the continent.

Cbl Meetings pairs the extensive regional expertise and source network of Cbl's African Energy with a seasoned events team experienced in producing high-level investment forums and dialogues across the African continent.

As a consultant, CbI has a unique perspective when it comes to understanding the themes and topics that provide the foundations for a vibrant conference agenda and the mix of project stakeholders required to create a lively and engaging panel-led discussion.

We are focused on producing meetings that create

enduring dialogues between development finance institutions, public sector stakeholders and private sector investors including, private equity firms, venture capitalists, family offices, foundations, institutional investors and impact investors.

#### Contact Lauren Andrews for more details

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#### Why RSA House?

RSA House was chosen to host the AIX meetings because of its excellent conference facilities, break out spaces and private meeting rooms, packaged together in a venue that provides a unique slice of London's history.

A hidden gem in the heart of London, and within a few minutes walk of major transport hubs, hotels, theatres

and some of London's most famous landmarks, RSA House was designed by Robert Adam in the early 1770s, and is the historic home of the Royal Society of Arts.

A famous centre for Enlightenment thinking, the building has been the intellectual and social home of some of the greatest thinkers and social activists of the past 200 years.

### Timetable for 14 November

#### 08h30 to 09h00 Registration & coffee

The Great Room

#### Regional focus

Bringing together stakeholders to discuss in greater detail the demands and opportunities facing the electricity supply industry at a regional and country level.

Tavern Room and The Great Room

#### Off-grid Investment Exchange

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#### oghoo to 10h30

# Emerging markets in Southern and East Africa

Countries whose generation and T&D have been attracting investors

#### 11h00 to 12h30

#### West and Central Africa

Electricity supply industry trends and challenges across the region.

#### 11h00 to 12h30

### Understanding off-grid data

Exclusive analysis of the data being generated in the PAYG and minigrid sector. (Tavern Room)

#### 13h30 to 16h30

AIX: Gas Update, the Tavern Room

### State of the market; The off-grid toolkit; Financing off-grid for scale

The main focus of the Off-grid Investment Exchange, the afternoon will cover three sessions, each with its own dedicated panel (The Great Room)

#### Special sessions, the Tavern Room

#### 09h00 to 10h30

# Smaller markets and post-conflict economies

Projects and countries attracting investment, and those facing challenges.



### 13h30 to 15h00

#### Africa gas overview

Highlighting key trends in Africa's gas market with expert analysis of big-ticket upstream projects as well as domestic gas to power strategies.

#### 15h15 to 16h30

#### Scaling small-scale LNG and options for domestic supply

A look at the prospects of small-scale LNG being anchored by industry, small power plants, or transport.

#### 10h30 Coffee



12h30 Lunch



16h30 End of AIX



#### Tuesday 12 November

17h00 to 18h30 AIX: Power & Renewables speakers' welcome reception at RSA House

Informal welcome for panellists and chairs ahead of the next two days of discussion.

Wednesday 13 November

08h30 to 09h00 Registration & coffee

#### oghoo to ogh30

#### Africa heat map

Led by **Jon Marks**, Chairman, Cross-border Information, with the African Energy team, the meeting kicks off with a strategic assessment of potential major political and energy industry developments in Africa over the next year.

Unveiling the 'Heat Map' to illustrate the political

events and industry developments to expect across the continent in 2020.

 African Energy scorecard: Analysis of exclusive power sector data from the African Energy Live Data platform, including performance of the sector over the last 12 months, continental electricity supply industry trends, project pipelines and demand growth projections.

#### 09h30 to 10h30

#### Africa power & renewables five years ahead

Chair: Jon Marks, Chairman, Cross-border Information, African Energy

A moderated debate between the audience and a high-level panel including government officials and senior industry players – held, like the rest of the conference under the Chatham House Rule – to discuss some of the big issues confronting the industry and its financiers.

Live polling will capture the mood of the room.

- · Transmission and distribution: the next big thing?
- Integrating public and private sector thinking.
- Are traditional state utilities a thing of the past?
   And are distributed technologies the future?
- Delivering 100% access to energy: who is going to take the lead?
- What 'transformative' and 'disruptive' change do participants envisage in the next five years?
- How to integrate power with national industrialisation programmes

**Wisdom Ahiataku-Togobo**, Director of Renewable and Alternative Energy, **Ministry of Power, Ghana** 

**Eric Mwangi**, Economic Advisor to the Cabinet Secretary, **Ministry of Energy, Kenya** 

Scott Mackin, Managing Partner and Co-President, Denham Capital

Hizkyas Dufera, Senior Advisor to the Minister, Ministry of Water Irrigation and Energy, Ethiopia Cliff Nhandara, Executive Director, Planning and

Technology, Rural Electrification Agency, Zimbabwe





#### 10h30 Coffee

# Wednesday 13 November

The Great Room

Stream 1 - Power Generation

#### 11h00 to 12h30

#### Utility and regulator perspectives

Chair: **Dafe Akpeneye**, Commissioner, **Nigerian Electricity Regulatory Commission** 

What is the future for African utilities? What is needed to attract investment to the electricity supply industry?

- Shifting trends in fuel types. Is diesel with the advent of energy storage?
- Is accelerating micro, mini and off-grid solutions forcing utilities and regulators to reassess centralised generation, transmission and distribution networks?
- Tariffs versus reliability/solvency: the future power utility business model.
- What do administrations and regulators want from DFI initiatives and support schemes?
- Affordability verses sustainability the future of the Africa Electricity Supply Industry at balance.
- Risk perception; an unseen enemy to affordability of electricity on the Africa continent.

**Ziria Tibalwa Waako**, Chief Executive Officer, **Electricity Regulatory Authority, Uganda** 

**Erick Rugabera**, Principal Engineer for Electricity Generation, **Ewura**, **Tanzania** 

Nii Darko Asante, Director, Technical Regulation, Ghana Energy Commission

Pinehas Mutota, Manager, Economic Regulation, Electricity Control Board, Namibia

The Tavern Room

Stream 2 – Transmission & Distribution Sponsored by



#### 11h00 to 12h30

#### Financing the grid

Chair: Romain Py, Head of Investments, African Infrastructure Investment Managers

Public-private partnerships, concessions, independent power transmission model (IPT) and other efforts to strengthen the grid.

- Overview of transmission lines under development and proposed.
- Overview of business models for private investment in transmission, including case studies applicable to Africa.
- Legal and regulatory frameworks for new approaches to T&D investment.
- · The role of DFIs and multilaterals.
- · Issues around interconnections.

Simon Hodson, Chief Executive Officer, Gridworks

Jonathan Amoako-Baah, CEO, Ghana Grid Company (GridCo)

Kimberly Heimert, General Counsel, Africa50

Andrew M Herscowitz, Coordinator, Power Africa





**12h30 Lunch** sponsored by



Stream 1 - Power Generation

#### 13h45 to 15h15

#### Outlook for private power developers and utilityscale development

As more big investors enter Africa and local SMEs emerge, this session sounds out opinion from: Traditional' developers; New entrants to the market; Financiers with experience in financing greenfield developments across the continent.

The session will also look:

- at the impact of DFI-led initiatives and early stage development.
- Examining the progress for FIT and auction mechanisms in different countries.
- What is changing in the world of financing for developers and utility scale projects.

Ragnar Gerig, Director, Energy & Infrastructure, Africa & Latin America, DEG

Joe Tato, Partner, DLA Piper

**Mike Peo**, Head, Infrastructure, Energy & Telecoms Finance, **Nedbank** 

Wikus Kruger, Researcher, University of Cape Town

**Charles Eberly**, Clean Power Advisory, Head of Global Coverage, **CrossBoundary** 

**Vuyo Ntoi**, Investment Director, Southern and Central Africa. **AIIM** 

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Stream 2 - Transmission & Distribution

#### 13h45 to 15h15

Chair: **Giuseppe Artizzu**, Executive Director, Global Strategy, **Engie EPS** 

#### Disrupting T&D in the age of storage

Changing the African energy landscape.

- · Investment in storage systems.
- From utility-scale projects to C&I and residential consumers –technologies and costs.
- How storage can help integrate renewables, meet peak demand and strengthen grids.
- Structuring PPAs for solar-plus-storage projects.
- · Other technologies.

Charlie Blair, Managing Director, Gravitricity

**Zukui Hu**, Head of Sales for Commercial and Utility Energy Storage Solutions, EMEA, **Tesla** 

Shahbano Soomro. Economist, Vivid Economics

Lars Stephan, Market Development Manager, Aggreko Microgrid and Storage Solutions

**Pekka Tolonen**, Director, Growth & Development, Wärtsilä

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15h15 Coffee

# Wednesday 13 November

#### Stream 1 - Power Generation

#### 15h45 to 17h15

#### Attracting new investors

Chair: Orli Arav, Managing Director, EMFin Advisory

Perspectives from private equity, IOCs, institutional investors, domestic capital markets, family offices and other sources of funding on opportunities – and the perennial challenges to private investors.

- IOC investment strategies along the electricity supply chain.
- Attracting international institutional and strategic investment into Africa.
- Evaluating market opportunities in Africa compared to the rest of the world
- · What is the right IPP tariff?
- · Renegotiated PPAs and other risks.

**Scott Mackin**, Managing Partner and Co-President, **Denham Capital** 

Susie Scannelli Cook, Co-Founder/Chief Investment and Legal Officer, Empower New Energy

Gabriel de Lastours, Associate Director, Energy EMEA, European Bank for Reconstruction and Development

James Mittell, Principal, Actis

Damien Ricordeau, Founder & CEO, Finergreen

#### Stream 2 - Transmission & Distribution

#### 15h45 to 17h15

#### **Distribution options**

Chair: Helen Tarnoy, Chairman, Gridworks

- Concessions, management contracts and other models – options, challenges and pitfalls.
- Developing distribution networks as a consumer service, with case studies.
- Electrification programmes that incorporate stronger grids and encourage commercially viable off-grid.
- Financing the 'last mile' and reducing network losses.

Nii Darko Asante, Director, Technical Regulation, Ghana Energy Commission

Thomas Amram, Senior Consultant, Ricardo

Cassandra Siemens, Senior Project Manager, Manitoba Hydro International Ltd

Ademola Adesina, Founder, CEO, Rensource

**Eric Mwangi**, Economic Advisor to the Cabinet Secretary, **Ministry of Energy, Kenya** 

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#### 17h15 Evening reception in the Benjamin Franklin Room













#### 09h00 to 10h30

#### **Emerging markets in Southern and East Africa**

A focus on countries whose generation and T&D have been attracting investors over the last year.

- Angola and Ethiopia: from socialist models to IPP ambitions.
- · Kenya: looking beyond generation.
- · Mozambique: getting projects away.
- · Uganda: power updates.
- · South Africa: life after Eskom?
- · Political risk issues.

Hizkyas Dufera, Senior Advisor to the Minister, Ministry of Water Irrigation and Energy, Ethiopia Ricardo Leitão Machado, CEO, Aenergy

Isabel Abreu, Executive Director, Associação Lusófona de Energias Renováveis (ALER)

Birgit Edlefsen, Senior Investment Officer, FMO

Kate Muir-Jones, Partner, Marsh JL Specialty



09h00 to 10h30

#### Smaller markets attracting investment

Chair: Jon Marks, Chairman, Cross-border Information, African Energy

- Markets awake: Benin, Burkina Faso, Chad, Guinea, Mali, Niger, Togo and Indian Ocean islands. DRC: can it really happen.
- Post-conflict projects that could revolutionise ignored markets.
- · DFI and commercial models.
- · Solar opportunities in extreme frontiers.

**Marcus Williams**, Global Head, Energy and Extractive Industries, **MIGA** 

**Reason Abajuo,** Legal Counsel - Power Sector, **African Legal Support Facility** 

Julian Horn, Independent Consultant

Michael Mills, Private Finance Adviser, International Climate Finance, Department for Business, Energy & Industrial Strategy, UK

Jonathan Shaw, CEO and Co-Founder, Nuru

Johannes Gunnell, Commercial Director, Maris



10h30 Coffee

# Thursday 14 November

#### 11h00 to 12h30, Great Room

#### West and Central Africa

Chair: Aziz Fall, Director International Cooperation and Promotion, Ministry of Energy, Senegal

- Transition towards renewables a reflection of major changes in the market and its participants.
- · Big ticket thermal projects across the region.
- News from the 'water towers': hydropower in Guinea, Sierra Leone, DRC etc.
- National and regional strategies to integrate utility-scale projects with mini-grids and other distributed solutions.

**Wisdom Ahiataku-Togobo**, Director of Renewable and Alternative Energy, **Ministry of Power, Ghana** 

**Olumuyiwa Abiodun**, Head of Advisory Power Team, Office of the Vice President, **Federal Republic of Nigeria** 

Chris Antonopoulos, CEO, Lekela





**12h30 Lunch** sponsored by





#### Stream 1 - Off-grid Investment Exchange, The Great Room

#### 11h00 to 12h30, Tavern Room

#### Understanding off-grid data

Chair: Cliff Aron, Principal, GreenMax Capital Group

Exclusive analysis of the data being generated in the PAYG and mini-grid sector.

- What data is available? Who is generating and mapping trends?
- What data is relevant to investors and can it be generated?
- How can analytics improve portfolio risk assessments?

Mariana Daykova, Manager, GOGLA

Madeleine Gleave, Chief Data Scientist, Nithio

**Eitan Hochster,** Vice President of Business Development, **Odyssey Energy Solutions** 

Susann Stritzke, Senior Researcher, University of Oxford

#### 13h30 to 14h30

#### State of the market

Chair: **Nico Tyabji**, Director of Strategic Partnerships, **SunFunder** 

Off-grid investment trends and outlook.

Anita Otubu, Head of Special Projects, Rural Electrification Agency, Nigeria

Yoven Moorooven, CEO, ENGIE Africa

Meera Shah, Business Manager, Shell Foundation

Nicholas Wrigley, CEO, Winch Energy

The Off-grid Investment Exchange is included in the AIX: Power & Renewables ticket or may be bought separately for £540 excl VAT (including morning coffee and lunch).

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#### 14h30 to 15h30

#### The off-grid toolkit

Chair: **Andrew Reicher**, Independent Advisor and Investor

Residential, mini-grid and commercial-scale options, and how they fit together

Bolade Soremekun, CEO, Rubitec Africa

Pradeep Pursnani, Konexa

Tom Cairnes, Chairman, ManoCap

Anshul Patel, Chief Commercial Officer, BBOXX

Coffee will be served in the room

#### 15h30 to 16h30

#### Financing off-grid for scale

Chair: **Andrew Reicher**, Independent Advisor and Investor

What are the returns, who is going to pay and what do regulators need to do?

**Cliff Nhandara**, Executive Director, Planning and Technology, **Rural Electrification Agency**, **Zimbabwe** 

Will Pearson, Policy Director, Camco Clean Energy

Yara Yazbeck, Founder, Ekta Partners

**Steven Hunt**, Senior Energy Innovation Advisor, Department for International Development,, UK

Cliff Aron, Principal, GreenMax Capital Group

Off-grid Investment Exchange is sponsored by:





# Thursday 14 November

#### Stream 2 - AIX: Gas Update, The Tavern Room

#### 13h30 to 15h00

#### Africa gas update

Chair: **Steve Husbands**, Head of Commercial - Oil & Gas Advisory, **SLR Consulting** 

Highlighting key trends across the value chain.

- · Domestic supply and export expectations.
- · Snapshot of LNG import projects.
- Innovative partnerships and structures: combining investors with upstream players.
- · Who is investing in domestic gas IPPs.

**Ignacio de Calonje**, Chief Investment Officer, Global Energy & Mining, **IFC** 

Judith Pryor, Director, Export-Import Bank of the US

Ezekiel Adesina, Executive Secretary,

Africa Energy Study Group

**Pierre Raillard**, Head of Business Development, **Orca Exploration** 

**Mark Gammons,** Head of Business Development for Tanzania, **Globeleq** 

#### 15h00 Coffee

Tickets for the AIX: Gas Update are included in the AIX: Power & Renewables ticket or may be bought separately for £450 excl VAT (including lunch).

Contact us for more details.

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#### 15h15 to 16h30

Scaling small-scale LNG and options for domestic supply

Chair: Jon Marks, Chairman, Cross-border Information, African Energy

A look at the prospects of small-scale LNG in Africa.

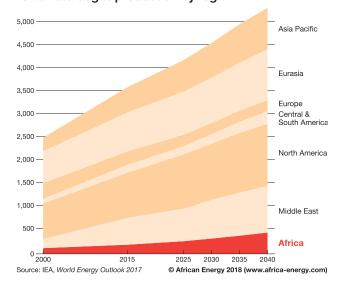
- Onsite regasification and other important milestones in the market.
- Examining how industry, small power plants and transport can anchor small schemes.
- To what extent will LNG displace diesel and HFO?

Roland Fisher, Chief Executive Officer, Gasfin Development

**Christophe Malet**, Senior Vice President Upstream and Midstream LNG, **Hanas LNG** 

Gibbs Johnson, Consultant, Clifford Chance

#### World natural gas production by region



16h30 End of AIX

# Attend our meetings

#### Please register those listed below for AIX: Power and Renewables:

Price payable: £1,800 plus VAT (discount available for three or more delegates)

#### 1st Delegate

-ull name
Position
Company/Organisation
Email
Telephone
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#### 2nd Delegate

Full name
Position
Company/Organisation
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When you have returned this form you will receive a booking confirmation and invoice to be paid by bank transfer. Full payment must be made before event. **Total to pay** ......

(see event websites for the latest offers or email lauren@cbi-meetings.com

I have read and agreed to the terms and conditions for delegate bookings and payment

#### **Terms & Conditions**

Payments: All bookings made prior to the conference must be paid in full to guarantee registration. If payment is not made at the time of booking, registration will be provisional.

Cancellation: The fee is non-refundable if cancellation is received less than two weeks before the booked meeting. For a cancellation before this date the fee will be refunded, less a handling charge of £75.

#### Indemnity

Cbl Meetings is not liable for any travel and accommodation costs incurred by delegates in connection with their registration. Cbl Meetings cannot accept liability for any loss, cost or expense suffered or incurred by any person arising from reason of war, including threat of war, riots and civil strife, terrorism or threats thereof, natural disaster, weather, fire, flood, drought, technical, mechanical or electrical breakdown within any premises visited by delegates in connection with the conference, nonprovision of services provided by hotel companies or transport operators, industrial disputes, government action, regulations, or technical problems which may affect the services provided in connection with the event.

#### Venue: RSA House

Designed in the early 1770s, RSA House is a famous centre for Enlightenment thinking, the intellectual and social home of some of the greatest thinkers and social activists of the past 200 years.

8 John Adam Street, London



