



# Africa Australia

## TECHNOLOGY + INFRASTRUCTURE CONFERENCE

CONNECTING STAKEHOLDERS | ENABLING OPPORTUNITIES

Monday 4 + Tuesday 5 September 2017 | Perth, Western Australia

### CONFERENCE DAY ONE

Monday 4<sup>th</sup> September 2017

Venue: Mantra on Hay, East Perth, Western Australia

Address: 120 Hay Street, East Perth, Western Australia.

**08:30** Arrival, registration and coffee

**09:00** Opening briefs from AATIC Founder:

**Frank Aneke**, Principal, OctoberFirst Consulting, Sydney.

**09:05** Welcome remarks:

**John Shute**, Manager Overseas Markets, South Asia, Middle East and Africa,  
Department of State Development, Western Australia.

**Session One: Chair: Prof Chem Nayar**, Director, Regen Power, Western Australia

#### AFRICA MICRO-GRIDS & OFF-GRID RENEWABLE ENERGY OVERVIEW: OPPORTUNITIES & TECHNOLOGIES

**9:15** Keynote Address: Powering Africa: The Micro-grids & Off-grid Renewable Energy Option.

- ✚ Evaluating current global trend in micro-grid & off-grid renewable technologies
- ✚ Analysis of micro-grids growth in African regions
- ✚ Evaluating micro-grids as alternate pathway to attain predictable supply in Africa
- ✚ Security options for micro-grids investment in African regions
- ✚ Reviewing the impact of African investors in micro-grids sector in Africa
- ✚ Examining risks factors and regulatory considerations for new investors in Africa micro-grids sector

**Charlie Grover.**

Partner, PricewaterhouseCoopers (PwC)

**09:45** Ghana Micro-Grids Investment & Business Opportunities.

- ✚ On-going micro-grid & off-grid renewable energy projects
- ✚ Investment opportunities in Ghana
- ✚ Funded micro-grid projects, BOT and PPP business opportunities
- ✚ Entry licensing and regulatory criteria for investors
- ✚ Next steps for investors

**R.Yofi Grant.**

Chief Executive Officer, Ghana Investment Promotion Centre(GIPC)

**10:15** UON Micro-Grid Technology :Design, Supply and Management of Turnkey Power Solutions

- ✚ Present key features of technology
- ✚ Brief analysis of costs and benefits to consumers
- ✚ Address technology transfer methodology for African countries
- ✚ Highlight key business interest in African countries
- ✚ Corporate contacts.

**Mark Keogh.**

Executive Chair, UON, Perth.

**10:30** Networking and refreshment break.



# Africa Australia

## TECHNOLOGY + INFRASTRUCTURE CONFERENCE

CONNECTING STAKEHOLDERS | ENABLING OPPORTUNITIES

Monday 4 + Tuesday 5 September 2017 | Perth, Western Australia

### 11:15 PANEL DISCUSSION | Africa Micro-grids & Off-grid Renewable Overview.

- ✦ Could micro-grid & off-grid renewable technologies become source of stable power in Africa?
- ✦ Is African micro-grid power purchasing agreements bankable for international capital?
- ✦ Review of Africa Governments support for foreign investors in micro-grid sector?
- ✦ Compare the ease of starting micro-grid project in Australia with African countries?
- ✦ What are the key constraints for Australians entrance into African micro-grids markets?

#### Panelists:

**Professor Chem Nayar**, Director, Regen Power, Western Australia.

**Mark Keogh**, Executive Chair, UON, Western Australia.

**R.Yofi Grant**, Chief Executive Officer, Ghana Investment Promotion Centre(GIPC)

**Jemal Beker Abdula**, BA, MA, Minister Counsellor for Economic Diplomacy at Ethiopian Embassy in Canberra

**Hon. Dr. Mohammed Amin Adam**, Ghana Deputy Minister of Energy.

Session Two: Chair: **Paul Rodden**, Senior Renewables Engineer, Ekistica, Alice Springs

### AUSTRALIA MICRO GRID TECHNOLOGIES & BUSINESS OPPORTUNITIES OVERVIEW:

#### 12:00 Keynote address: Overcoming the Barriers to Bioenergy Utilisation in Australia and Africa with New Technologies:

- ✦ Bioenergy potential for off-grid, fringe-of-grid and utility scale applications.
- ✦ What are the main impediments?
- ✦ How can they be overcome?
- ✦ Renergi's solutions.

#### **Antony Piccinini.**

Chief Executive Officer, Renergi, Perth.

#### 12:30 Case Study: Providing Sustainable Power, Water and Communication for Remote Communities

- ✦ Hybrid energy systems integrating renewable energy technologies with diesel or biodiesel generators, inverters and batteries to provide grid quality power in remote areas not connected to a utility grid
- ✦ Remote Micro-Grid – electrification technology for the 21st century
- ✦ HYBRID GEN – new technology maintaining constant voltage and frequency while adjusting the engine speed to power demand
- ✦ Components of micro grid
- ✦ Case studies on some of the projects implemented in different parts of the world

#### **Professor Chem Nayar,**

Director, Regen Power, Perth.

#### 1:00 Ekistica Micro-Grid Power Solutions

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

**Paul Rodden**, Senior Renewables Engineer, Ekistica, Alice Springs

#### 1:15 Networking Lunch and One-to-One Meetings



# Africa Australia

## TECHNOLOGY + INFRASTRUCTURE CONFERENCE

CONNECTING STAKEHOLDERS | ENABLING OPPORTUNITIES

Monday 4 + Tuesday 5 September 2017 | Perth, Western Australia

### 2:30 PANEL DISCUSSION | Africa as New Export Frontier for Australia Micro-Grid Technologies.

- ✦ What are the key strengths of Australian micro-grids technologies?
- ✦ How best could Australian micro-technologies be transferred to Africa countries?
- ✦ How competitiveness is Africa's power markets in comparison to other regions of the globe?
- ✦ Is African Government policies and regulations encouraging new investors in micro-grid sector?
- ✦ What lessons could be drawn from over \$2 billion dollars Australian mining investments in African countries?

#### Panelists:

**Paul Rodden**, Senior Renewables Engineer, Ekistica, Alice Springs

**Antony Piccinini**, Chief Executive Officer, Renegi, Perth

**R. Yofi Grant**, Chief Executive Officer, Ghana Investment Promotion Centre(GIPC)

**Jemal Beker Abdula**, BA, MA, Minister Counsellor for Economic Diplomacy at Ethiopian Embassy in Canberra

**Professor Chem Nayar**, Director, Regen Power, Perth.

### 3:15 Case Study: Energy Farmers Bioenergy Power Solutions.

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

#### **Eaun Beamont.**

Co-founder and Director of Energy Farmers, Perth.

### 3:30 Afternoon Refreshment and networking

Session Three: Chair: **Prof Chem Nayar**. Director, Regen Power, Perth

---

## AUSTRALIA POWER STORAGE TECHNOLOGIES & BUSINESS OPPORTUNITIES OVERVIEW

---

### 3:35 Case Study: Evosol Solar Solutions & Energy Storage Solution.

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

#### **Chiron Aesir,**

Chief Executive Officer, Evosol Solar Solutions, Perth.

### 3:50 Case study: Unpacking Electricity Cost Structure.

- ✦ Energy tracking
- ✦ Billing mechanisms (blockchain technology enabled solutions)
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries

#### **Vinod Tiwari**

Chief Operating Officer, Regen Power, Perth.

---



# Africa Australia

## TECHNOLOGY + INFRASTRUCTURE CONFERENCE

CONNECTING STAKEHOLDERS | ENABLING OPPORTUNITIES

Monday 4 + Tuesday 5 September 2017 | Perth, Western Australia

**4:20 PANEL DISCUSSION | Introducing Australia Power Storage Technologies to Africa.**

- What are the key strengths of Australian power storage technologies?
- Could Australian power storage technologies compete in African markets?
- Is Africa's power storage capacity primed for Australian technologies?
- Explore means for possible partnership between Australian power storage stakeholders and local micro-grid stakeholders in African countries?
- Evaluate the possibility of joint-venture partnership between Australian micro-grid operators and power storage providers in African countries?

**Panellists:**

**Chiron Aesir**, Chief Executive Officer, Evosol Solar Solutions, Perth.

**Professor Chem Nayar**, Director, Regen Power, Perth.

**Will Rayward-Smith, PhD**, General Manager, SunSHIFT, Sydney.

**Mark Keogh**, Executive Chair, UON, Western Australia

**Oscar Kojo Amonoo- Neizer**, Public Utilities Regulatory Commission, Ghana.

**5:00 Africa Australia Technology + Infrastructure Conference 2017 Day One Close.**

**5:17 Welcome drinks & Networking.**

---



# Africa Australia

## TECHNOLOGY + INFRASTRUCTURE CONFERENCE

CONNECTING STAKEHOLDERS | ENABLING OPPORTUNITIES

Monday 4 + Tuesday 5 September 2017 | Perth, Western Australia

CONFERENCE DAY TWO

Tuesday 5<sup>th</sup> September 2017

Venue: Mantra on Hay, East Perth, Western Australia.

Address: 201 Hay Street, East Perth, Western Australia.

Session Four: Chair: **R. Yofi Grant**, Chief Executive Officer, Ghana Investment Promotion Centre(GIPC)

### FUNDING MICRO-GRID PROJECTS OVERVIEW

#### 9:15 Keynote Address: Australia's Remote Micro-grid projects: Lessons Learnt

- ✦ ARENA financing options for Australian micro-grid projects
- ✦ Review of Australia funding options for remote micro-grids projects
- ✦ Application of ARENA learnt lessons in developing nations.

**Chris Twomey.**

Transaction Consultant | Business Development & Transactions  
Australian Renewable Energy Agency (ARENA).

#### 09:45 Ethiopia Micro-Grids Investment & Business Opportunities.

- ✦ On-going micro-grid & off-grid renewable energy projects
- ✦ Investment opportunities in Ethiopia
- ✦ Funded micro-grid projects, BOT and PPP business opportunities
- ✦ Entry licensing and regulatory criteria for investors
- ✦ Next steps for investors

**Jemal Beker Abdula, BA, MA**

Minister Counsellor for Economic Diplomacy at Ethiopian Embassy in Canberra,

#### 10:15 Carnegie Clean Energy Micro-Grid Technology :Design, Supply and Management of Turnkey Power Solutions

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

**John Davidson,**

Director of Carnegie Clean Energy.

#### 10:30 Networking and refreshment break.

#### 11:15 PANEL DISCUSSION: Australia Micro-Grids Funding Options:

- ✦ Evaluate micro-grid investment funding options available in Australia?
- ✦ Is there any Australian investment fund that support micro-grid projects in developing countries?
- ✦ What are the unique difference in sourcing capital for mining in comparison to micro-grid projects?
- ✦ Brief remarks on return on investment on Government funded micro-grids power project(s)?
- ✦ What are the key risk factors to consider in funding micro-grid power projects?
- ✦ Evaluate Australian example as a key investor in micro-grids projects?

**Panelists:**

**Chris Twomey**, Investment Manager, Australian Renewable Energy Agency (ARENA).

**John Davidson**, Director, Carnegie Clean Energy, Perth.

**R. Yofi Grant**, Chief Executive Officer, Ghana Investment Promotion Centre(GIPC)

**Jemal Beker Abdula, BA, MA**, Minister Counsellor for Economic Diplomacy at Ethiopian Embassy in Canberra

**Alan Furey**, Partner at Global Australian Managed Enterprises Official Network, Perth



# Africa Australia

## TECHNOLOGY + INFRASTRUCTURE CONFERENCE

CONNECTING STAKEHOLDERS | ENABLING OPPORTUNITIES

Monday 4 + Tuesday 5 September 2017 | Perth, Western Australia

**Session Five: Chair: Will Rayward-Smith, PhD General Manager, SunSHIFT, Sydney**

### SOLAR TECHNOLOGIES & BUSINESS OPPORTUNITIES OVERVIEW

#### 12:00 SunSHIFT Solar Power Solutions

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

**Will Rayward-Smith PhD**

General Manager, SunSHIFT, Sydney.

#### 12:20 Wattwatchers Power Solutions

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

**Jon Keeble.**

Electronic System Developer, WattWatchers, Sydney

#### 12:40 Case study: Economic rationalisation of energy storage via low load diesel application.

- ✦ Reconfiguring the diesel assets for improved operational range
- ✦ Affording all hybrid diesel systems some level of improved engine performance without asset
- ✦ Presenting a review of low load application
- ✦ Discussing a number of operational case studies

**Dr. James Hamilton,**

NEW.ABLE.READY, University of Tasmania.

#### 1:00 Ghana Micro-Grid Regulation Insights.

- ✦ Presenting licencing types for micro-grids investors
- ✦ Brief overview of power purchase agreement terms and conditions
- ✦ Address business registration and partnership obligations in Ghana

**Hon. Dr. Mohammed Amin Adam.**

Ghana Deputy Minister of Energy

#### 1:15 Networking Lunch and One-to-One Meetings

#### 2:30 PANEL DISCUSSION | Introducing Australia Solar Technology to Africa.

- ✦ What are the key strengths of Australian solar technologies?
- ✦ Could Australian standard solar technologies compete in African markets?
- ✦ How to convert solar technology to dependable energy source in African countries?
- ✦ How to engage Australian solar stakeholders with opportunities in African markets?
- ✦ Review power purchase agreement procedure for solar project(s) in African countries?

**Panellists:**

**Will Rayward-Smith PhD,** General Manager, SunSHIFT

**Chiron Aesir,** Chief Executive Officer, Evosol Solar Solutions, Perth.

**Oscar Kojo Amonoo- Neizer,** Public Utilities Regulatory Commission, Ghana.

**Dr. James Hamilton,** NEW.ABLE.READY, University of Tasmania.

**Jon Keeble,** Electronic System Developer, WattWatchers, Sydney





# Africa Australia

## TECHNOLOGY + INFRASTRUCTURE CONFERENCE

CONNECTING STAKEHOLDERS | ENABLING OPPORTUNITIES

Monday 4 + Tuesday 5 September 2017 | Perth, Western Australia

**Session Six: Chair:** [Mark Keogh](#), Executive Chair, UON, Western Australia

### MODULAR / HYBRID TECHNOLOGIES & BUSINESS OPPORTUNITIES OVERVIEW

---

#### 3:15 Uniflow Power: Small-scale Biomass Fuelled Steam Engine.

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

**Michael McCann.**

Managing Director, Uniflow Power, Perth.

#### 3:30 Afternoon Refreshment and networking

#### 4:05 New Energy Corporation: Waste to Energy Solutions

- ✦ Present key features of technology
- ✦ Brief analysis of costs and benefits to consumers
- ✦ Address technology transfer methodology for African countries
- ✦ Highlight key business interest in African countries
- ✦ Corporate contacts.

**Jason Pugh,**

Chief Executive Officer, New Energy Corporation, Perth.

#### 4:20 PANEL DISCUSSION | Prospects of Africa-Australia Micro-Grids Power Partnerships

- ✦ What are the key issues militating against Australian-African partnerships in power sector?
- ✦ How to address perception of Africa power markets?
- ✦ Lessons learnt from African countries as hosts to Australian mining companies?
- ✦ What are the major hurdles for new entrants in African power markets?
- ✦ What is the average return of investment in African power markets?
- ✦ What are the next steps for here?

#### Panellists:

**Michael McCann**, Managing Director, Uniflow Power, Perth.

**R. Yofi Grant**, Chief Executive Officer, Ghana Investment Promotion Centre(GIPC)

**Jemal Beker Abdula, BA, MA**, Minister Counsellor for Economic Diplomacy at Ethiopian Embassy in Canberra

**Will Rayward-Smith PhD**, General Manager, SunSHIFT

**Professor Chem Nayar**, Director, Regen Power, Perth.

**Mark Keogh**, Executive Chair, UON, Western Australia

#### 5:00: AATIC 2017 summary and closure.

#### 5:05: Networking.

NB: This program is subject to changes by Conference Management Team.

---