Renewable Energy in East-Africa: New Frontiers

AGENDA

JANUARY 24th 2018
2:30 pm
Enel X Innovation Event
in collaboration with SEEDSTARS
RES4AFRICA RENEWABLE ENERGY EXPO


Strathmore University – Nairobi, Kenya

January 23rd - 24th, 2018

Sponsored by:

Supported by:
Context

Sub-Saharan African countries are rapidly attracting attention as new markets for renewable energy technologies. Thanks to the continent’s dynamic economic and population growth, its wealth in renewable energy resources, and falling technology costs, renewable energy investments are considered a key solution to introduce widespread affordable, reliable and sustainable energy access to the region.

This vast market potential is based on an important growing African energy demand. **Over 600 million people still live without access to energy in the region**, representing significant residential and productive demand for affordable, reliable and clean energy. Reducing energy poverty in Africa is widely recognized as fundamental to accelerating economic transformation and sustainable development and can be achieved through the deployment of large scale and decentralized (off-grid) renewable energy solutions.

This potential was also captured by the **RES4Africa Program launch in Nairobi** on the 26th and 27th of October 2016, where multi-stakeholder interest and market development efforts were identified first-hand. **RES4Africa**, in partnership with **AEEP**, identified the Eastern-African countries as an important region of focus where renewable energy can reap significant benefits in terms of market development and improving people’s lives and livelihoods. These countries are increasingly attracting attention from renewable energy investors and market developers. Based on these estimations and first-hand results, **RES4Africa** aims to build on its successful program launch and be among the first movers in the region.

About the event

**RES4Africa**, with the support of Africa-EU Energy Partnership and other partners, organizes a regional conference to enable dialogue on the latest insights for the deployment of RE solutions in Eastern-African countries. The event aims to build on the ongoing policy dialogue and scale existing networks for companies to connect and form renewable energy partnerships. The conference will convene partners from key African markets, and will gather relevant international and African stakeholders such as IFIs, manufacturers, institutional actors, international organizations, academia, and civil society to enable a comprehensive discussion.

The regional event is intended to build on and scale the results of the **RES4Africa Program Launch conference, “A step change in the deployment of Renewable Energy in Eastern Africa”**, which took place on the 26th and 27th of October 2016 in Nairobi, Kenya. The conference attracted 72 speakers and over 340 attendees from the private and public sector, including over 200 participating regional companies, resulting in more than 60 B2B meetings. The event gained significant media attention by over 20 Kenyan journalists and was featured in over 40 media outlets.

**RES-EXPO 2018** is designed as a regional conference and showcasing exhibition, including B2B matchmaking sessions. The conference will touch upon the key topics for renewable energy deployment such as enabling policies and regulatory frameworks, financing solutions and innovative business models, technological and technical issues, capacity building and socio-economic benefits to local economies. The exhibition allows for local, national and international RE solutions providers to present their business and products. The B2B sessions will be a platform for these companies to connect and create new business opportunities in Eastern-African renewable energy markets. **RES4Africa** supports the development of African start-ups with innovative solutions that contribute to the growth of local entrepreneurship and provide innovative answers to the region’s energy needs. The development of African start-ups and entrepreneurial innovation scene plays a key role in driving the region’s sustainable energy transition. To that end, Enel X, Enel’s new advanced energy services division, in partnership with Seedstars World, are awarding a particularly innovative start-up with the African Energy Prize, following a competition launched in April 2017. **RES-EXPO** hosts a **side-event on innovation**, including the awarding ceremony of the competition’s winning African start-up.
TUSSDAY JANUARY 23\textsuperscript{RD}

Morning session

\textbf{7:00}  \quad Registration and welcome coffee

\textbf{8:00}  \quad Welcome Speech

\begin{center}
\begin{tabular}{ll}
Prof. Izael Da Silva & Deputy Vice Chancellor, Research & Innovation, Strathmore University \\
Amb. Mauro Massoni & Italian Ambassador in Kenya \\
\end{tabular}
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\textbf{8:30}  \quad RES4Africa: achievements and future perspective in the Region

Eng. Roberto Vigotti \quad Secretary General, RES4Africa

\textbf{9:00}  \quad Opening session – New frontiers of renewable energy sector in East Africa

\begin{center}
\begin{tabular}{ll}
Hon. Judy Wakhungu & Cabinet Secretary, Ministry of Environment, Water and Natural Resources \\
Hon. Ledama Olekina & Member of the Energy Commission of the Kenyan Government \\
Dr. Jian Liu & Chief Scientist and Ag. Director of Science Division, UN Environment \\
Mr. Emmanuel Kalenzi & UNIDO Representative to Kenya, Eretria, Comoros, Seychelles and South Sudan \\
Amb. Stefano Dejak & Head of Delegation of the European Union to the Republic of Kenya \\
Dr. Francesco La Camera & Director General for Sustainable Development, Environmental Damage, European Union and International Affairs, Italian Ministry of Environment, Land & Sea \\
Dr. Teresa Savanella & Head of Regional Office Eastern Africa, AICS \\
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\textbf{10:15}  \quad Coffee break

\textbf{10:45}  \quad Session 1 - Integration of non-programmable renewable energy in the National Electric System of Kenya

\textit{The session will present the results of the study conducted by RES4Africa and CESI, in partnership with Ministry of Energy and Petroleum, KPLC, KenGen, KETRACO, ERC, REA and Strathmore University, that provided an assessment of the maximum amount of non-programmable renewable generation that is possible to integrate in the Kenyan grid based on targets for 2025 and 2030, while ensuring reliability, integrity and efficiency of the power system.}

\textit{Keynote speaker:}
Francesco Rizzo \quad Africa Area Manager, CESI

\textit{Round table moderator:}
Luca Marena \quad Project Manager, RES4Africa
Discussants:
Isaac Kiva  Secretary Renewable Energy, Ministry of Energy and Petroleum, Kenya
Pavel R. Oimeke  CEO, ERC, Kenya
Phyllis Wakiaga  CEO, KAM
Lebbi Changullah  Secretary General, Eastern African Power Pool
John Mativo  Senior Technical Advisor, KETRACO
K.P. Mungai  General Manager Business Strategy, KPLC
Moses Wekesa  Business Development Director, KenGen
George Muia  Head of Strategies, Research and Innovation, GDC
Bernard Osawa  Vice Chair, Energy Sector Board, KEPSA
Izael Da Silva  Deputy Vice Chancellor, Research & Innovation, Strathmore University

12:30  Role of regional interconnection in fostering RE integration in Eastern Africa Power Pool

Keynote speaker:
Riccardo Siliprandi  Principal, Pöyry Management Consulting

12:45  RES and energy storage: new opportunities for emerging markets

Keynote speaker:
Matteo Neri  International Business Development, TERNA

13:00  Business lunch
Afternoon session – B2B meetings running in parallel

14:30  Session 2 – Capacity building to accelerate economic development
The session will present the Micro Grid Academy (MGA), a regional training project, ideated by RES4Africa, with the purpose of providing high level skills to 300 students per year coming from East African countries. Thanks to the cooperation with KPLC, Strathmore University and other partners, the MGA will play a key role in fostering skills and creating new business opportunities in East Africa.

**Keynote speaker:**
Carlo Papa  
Director, Enel Foundation

**Round table moderator:**
Izael Da Silva  
Deputy Vice Chancellor, Research & Innovation, Strathmore University

**Presentation of Micro Grid Academy:**
Marco Aresti  
Program Manager, RES4Africa

**Discussants:**
Jeremiah Kiplagat  
Director, Kenya Power International, KPLC
Murugi Ndirangu  
Director, Nairobi Global Center, Columbia University of New York
Matt Sisul  
Engineering for Developing Community, Columbia University of New York
Timothy A. Volk  
Senior Research Associate, State University of New York
Vincent Kitto  
Chief Urban Energy Unit, UN Habitat, Nairobi
Mackay Okure  
Professor, Makerere University, Capacity Building expert, EACREEE
Alice Amayo  
Capacity Building Advisor, Promotion of Solar Hybrid Mini Grids in Kenya, GIZ
Hary Andriantavy  
Executive Secretary, African Association for Rural Electrification - Club ER
Andrea Micangeli  
Renewable Energy Systems Professor, Sapienza University of Rome
Francesca Oliva  
Focal Person for Energy and Social Entrepreneurship Initiatives, AVSI Foundation

15:45  Decentralized renewable energy solutions to foster economic development

**Keynote speaker:**
Anna Paola Minervini  
Head of Regulatory Affairs Sub Saharan Africa, Asia and Australia, EGP

16:00  Session 3 - Best practices for successful auction program: connecting public sector and investors in emerging RE markets
The session will shed light on the complex tendering process in emerging RE markets. With a holistic approach, the discussion will consider critical points from the perspective of both public and private sector. How could a tender answer the needs of these two category of stakeholders? How can public and private sector work together to maximize the total value creation?

**Keynote speaker and round table moderator:**
Valentino Rossi  
Head of Business Development, EGP

**Discussants:**
Isaac Kiva  
Secretary Renewable Energy, Ministry of Energy and Petroleum, Kenya
David Kariuki  
Senior Economist, ERC, Kenya
Beatrice Meso  
Company Secretary and General Manager Corporate Affairs, KPLC, Kenya
Stanley Kamau  
Head of Public Private Partnership Unit, The National Treasury, Kenya
Lee Smith  
Project Manager, RINA Consulting
17.15  Key elements for smooth hybridization of existing mini-grid system

Keynote speaker: Giuseppe Artizzu  Executive Director Global Energy Strategy, Electro Power Systems

17:30  Closing remarks

David Otieno  Head of Secretariat, AEEP

17:45  Reception cocktail

Courtesy of ERM
WEDNESDAY JANUARY 24rd

Morning session – B2B meetings running in parallel

7:00  Registration and welcome coffee

8:00  Session 4 – Construction models for renewable plants in Africa: a flywheel for sustainable development

The session will focus on a sustainable approach to investments in RE in East Africa. Nowadays, the connection between investments and sustainable development is stronger than ever. To access capital, to achieve social legitimacy and to join new markets, sustainability is key in particular in the energy sector, which is strictly connected to the quality of livelihoods. The session will present winning case studies as well as hold a discussion with the relevant stakeholders involved in RE business.

Keynote speaker:
Antonella Santilli  Head of Sustainability, EGP

Round table moderator:
Mike Everett  Partner, Manager East Africa, ERM

Discussants:
Catherine Collin  Head of Regional Representation Eastern Africa, EIB
Alberto Castronovo  Head of Multilateral Financing, SIMEST
Zacharia Munga  National Project Coordinator GEF, UNIDO
Fred Ishugah  Sustainable Energy Expert, EACREEE
Lorenzo Facco  Business Development Renewables & Sustainability Business Manager, RINA Consulting
Lorenzo Carnelli  Commercial Director, FRIEM

9:15  Managing environmental & social risks to achieve bankability for renewable energy projects in Africa

Keynote speaker:
James Archer  Partner, ERM

9:30  Coffee break

10:00  Session 5 - Addressing financial risks in RE investments in East Africa

The session will analyze the financial risks that a RE project meets during its life. Addressing such risks is crucial in project development, even more in new countries and new contexts. With a holistic approach, the session will discuss potential risk mitigation measures.

Keynote speaker:
Patricia Pingarron  Head of Risk Control, EGP
11:00  
**Leading capacity development: a key driver for the streamlining of ODA funding for renewables in Africa**

**Keynote speaker:**  
Lorenzo Facco  
Business Development Renewables & Sustainability Business Manager, RINA Consulting

11:15  
**Session 6 – Geothermal power opportunities in the Rift Valley: how to fast track private investments**

*In a Country where the potential for geothermal resources is estimated at 10.000 MW, geothermal power should play a key role in future Kenyan energy system. The session will analyze the potential and criticalities in the Rift Valley region to this opportunity.*

**Keynote speaker and round table moderator:**  
Manuele Battisti  
Head of Business Development East Africa, EGP

**Discussants:**  
- George Muia  
  Head of Strategies, Research and Innovation, GDC  
- Peter Omenda  
  Director, International Geothermal Association  
- Gerald Ngatia  
  Manager Consumer Affairs, ERC, Kenya  
- Cyrus W. Karingithi  
  Geothermal Resource Development, KenGen  
- Meseret T. Zemedkun  
  Programme Manager, Energy, Africa office, UN Environment  
- Philip Wambua  
  Principal Consultant, ERM

12:15  
**The “Energy Efficiency Matrix” - An Africa-EU Energy Partnership (AEEP) tool to foster energy efficiency in Africa**

**Keynote speaker:**  
Andrew Amadi  
General Secretary, Association of Energy Professionals Eastern Africa

12:30  
**Conclusions**

- Isaac Kiva  
  Secretary Renewable Energy, Ministry of Energy and Petroleum, Kenya  
- Hon. Dan Kazungu  
  Cabinet Secretary, Ministry of Mining  
- Roberto Vigotti  
  General Secretary, RES4Africa
13:00  Business lunch
Afternoon – Enel X Innovation event

*Five of the most innovative energy access startups from across the region will be showcased. This event aims to identify companies that can help to foster socio-economic development in rural villages in sub-Saharan Africa through electrification. Electricity is a fundamental factor to bring about socio-economic growth, but it must be accompanied by commercial and productive activities. The awarding of the Africa Energy Prize at RES4Africa will help identify innovative and disruptive business models focusing on electrifying remote rural regions and on the creation of related income-generating activities.*

14:00 Arrival and networking

14:30 Opening session

*Seedstars Welcome Word “Opening Remarks”:*
Claudia Makadristo  Regional Manager for Africa, SeedStars

*Keynote speech “Developing new solutions for final customers in emerging markets”:*
Riccardo Amoroso  Head of Innovation and Product Lab, Enel X

15:00 Startups’ pitches

*Speakers:*
Abraham Cambridge  Founder and CEO, TheSunExchange
Dysmus Kisilu  Founder, SolarFreeze
Radhina Kipozi  Marketing Director, Jaza-Jeff
Saheed Okuboyejo  CEO, SolarCreed
Samir Ibrahim  Founder and CEO, SunCulture

16:00 Inspiration from local innovative entrepreneurs

*Keynote speech “Focus on developing new marketing models for the farmers”:*
Su Kahumbu Stephanou  CEO and Creative Director, Green Dreams Tech.

*Interview by Joy Doreeen Biira “An example of young entrepreneur”:*
Lilian Motongori  Engineering Consultant, SOASED Turkana Basin Institute
Co-Founder, Angaza Dada Initiative

16:50 Announcement of the winner

17:00 Reception cocktail

Courtesy of Enel X
Who we are

Renewable Energy Solutions for Africa - RES4Africa - is a network of key international energy stakeholders - utilities, industries, agencies, technical service providers and academia - engaged in promoting clean tech solutions in the Sub-Saharan African continent. Its mission is to support the deployment of renewable energy, both large scale and distributed energy, energy efficiency solutions and their integration in the local and regional markets to satisfy local energy needs. RES4Africa encourages the set-up of partnership formulas to provide decision makers with the viewpoint of the private sector and to stimulate investment opportunities along the entire supply chain through networking activities for market operators, industry associations and other key stakeholders.

The Africa-EU Energy Partnership (AEEP) was launched as one of the eight strategic partnerships of the Africa-EU Joint Strategy (JAES) by the African and European Heads of State during the 2007 Second EU-Africa Summit in Lisbon, Portugal. The AEEP is an established forum for high-level political dialogue between Europe and Africa, and it has performed as an instrumental agenda-setter in African-European cooperation on energy issues as well as contribution at the international scene. The AEEP’s overall objective is to increase the effectiveness of efforts to secure reliable and sustainable energy services and extend their access on both continents, enhance access to modern energy services and expand renewable energy and energy efficiency in Africa.

Enel X is Enel’s new Global Business Line focused on electric mobility, vehicle to grid projects, recharging infrastructure, energy efficiency management, batteries and energy optimization platforms, public lighting and distributed generation systems. It is structured around four primary areas: e-Home, e-City, e-Industries, e-Mobility. Enel X will capitalize upon the power industry transformation, understanding and servicing the needs of Enel’s global customer base by exploring opportunities in areas of new technologies, developing customer-centric, innovative products using both non-commodity and digital solutions.

Seedstars is a Swiss based group of companies which has the goal of impacting people’s lives in emerging markets through technology and entrepreneurship. Seedstars connects stakeholders within these ecosystems, builds companies from scratch with public and private partners and invests in high growth startups. Through different activities of startup scouting, company building and acceleration programs, the team has now access to entrepreneurs, investors, incubators, corporations and government officials from 80+ countries. The Seedstars group includes Seedstars World, a worldwide startup competition; Seedstars Growth, a four month virtual acceleration program; Seedspace, a network of coworking and co-living spaces and Seedstars Academy, a six months program to train aspiring local entrepreneurs to build sustainable businesses.
RES4Africa RES-EXPO 2018 is organized in partnership with: