The Africa-EU Energy Partnership

Call for action to African Rural Electrification Agencies from the AEEP's Young Leaders in Energy Access

Zambia-Lusaka, 5th September, 2017

Energy Access

Energy is the root of development and is linked to job creation for the youth through catalyzing small businesses. Promoting sustainable energy can also provide a foundation for future growth and job creation. Aligning energy access challenges with other development challenges is critical in achieving sustainable development goals. It has the potential to create many new jobs as well as new business models and opportunities.

The youth can be enabled/inspired in several ways to become energy leaders in the energy access space. Recognising their crucial role in achieving clean energy access, we as Young Leaders in Energy Access hereby call on the African Rural Electrification Agencies to take action on the following areas:

a. **Accelerating energy access:** this will lead to more job opportunities for youth in rural areas through the productive use.
b. **Hands-on training** in working with renewable energy technologies e.g. solar assembly, improved cooking technologies focused on empowering young entrepreneurs to start income generating enterprises in the renewable energy sector.
c. **Promoting Education in Sustainability:** Current curricula shall be modified by introducing and/or promoting renewable energy to the students, which in return, better prepares them for easier adaptability to transition to working life.
d. **Energy Business competitions:** Competition always encourages innovation for new ideas and concepts e.g. Solar Pay-As-You-Go as a financial innovation, eliciting greater interests and kick-starting new business models.
e. **Energy entrepreneurship grants:** Enabling the youth to participate or access grants will pave way for innovative ideas in energy thus offering job opportunities. This will also encourage pilot projects with alternative solutions.
f. **Policy for energy enterprises**: There should be favorable policies which foster energy entrepreneurship among the youth.
g. **Local communities' involvement:** this will result in job creation especially if there is a longer-term engagement, increased sense of ownership of the projects which enhances its management of the project.
h. **Gathering of information and scouting of projects**: easier access to information and project opportunities will reduce transaction costs and facilitate more projects, thus creating jobs.
i. **Raising awareness:** create awareness about energy issues for people living in rural areas, this will lead to better understanding and better use. It will also lead to better selection of projects.

Endorsed by Young Leaders in Energy Access:

Sayouba Guira, *General Director, Nafa Naana*

Simon Kiragu, *Strategic Partnerships Manager, wPOWERHUB*

Astria Fataki, *Founder & President, Energy Generation*

Dr. Abdirahman M. Abdilahi, *Chief Executive Officer, SOMPOWER CO.*

Dina Ramaromandray, *Ministry of Energy & Hydrocarbons, Madagascar*

Marta Pascual Santodomingo, *Community Development Coordinator, TTA*

ENERGY GENERATION

The challenge of an entire generation!

At Energy Generation, we are convinced that African youth have the potential to solve the problem of access to electricity within the span of a generation.

SOLEKTRA SOLAR ACADEMY
#1 SOLAR TECH INSTITUTE

AKON LIGHTING AFRICA

fondation Schneider Electric

GreenWish PARTNERS

Délégation de l'Union Européenne au Togo

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AMBASSADE DE FRANCE AU TOGO

ASKY AIRLINES

CEET

SABER - ABREC
SOCIETE AFRICAINE DES BIOCARBURANTS ET DES ENERGIES RENOUVELABLES
AFRICAN BIOFUEL & RENEWABLE ENERGY COMPAGNY
SOCIEDADE AFRICANA DOS BIOCARBURANTES E DAS ENERGIAS RENOVÁVEIS

2iE Institut International d'Ingénierie

Centre régional de collaboration – Lomé
Promotion de l'action contre le changement climatique

BOAD

Archery

Bond'innov
Incubateur de projets innovants et entrepreneuriat Nord/Sud

MISSION AND VISION

OUR MISSION

Foster the emergence of innovative entrepreneurial projects among Africa's youth in order to develop reliable, effective and affordable electrification solutions.

OUR VISION

Provide basic electrification to every African household, while empowering Africa's youth through entrepreneurship.

To meet this challenge, Energy Generation carries out two main actions:

1. Creating the Energy Generation Academy: a training program to entrepreneurship which mission is to coach young social entrepreneurs specialized in the field of access to energy solutions.

2. Organizing the Africa Energy Generation Prize: a pan-African inventions contest of non- conventional energy generating solutions.

A UNIQUE MODEL DEVELOPPED BY ENERGY GENERATION

INVENTOR → ENTREPRENEUR → START-UP

The ACADEMY
1 year

The INCUBATOR
2 years

The SEED FUND
5 years





ENERGY GENERATION DEVELOPMENT STRATEGY

A GROWING MARKET

2013: estimated 41 million students market

2030: 340 million more young Africans

→ Growing demand for private education, lack of offer in entrepreneurship education

A UNIQUE MODEL

COMPETITORS:
Universities + Incubators

ENERGY GENERATION:
Complete and integrated training and support over a 8 years period

A 3 YEARS DEVELOPMENT STRATEGY

2017-2018

New ACADEMY in Accra

•

INCUBATOR in Lomé

•

Creation of weekly/yearly PAYING training programs

2018-2019

New ACADEMY in Lagos

•

INCUBATOR in Accra

•

Creation of the Open Innovative Platform website

2019-2020

INCUBATOR in Lagos

•

Creation of the IMPACT FUND

•

FINANCIAL EQUILIBRIUM OF ENERGY GENERATION

AFRICA ENERGY GENERATION PRIZE 2016 - WINNERS

Entrepreneur:
Lalle NADJAGOU, 22
Technology:
Transform water into hydrogen to power motors.

Togo

Entrepreneur:
Abel Kidane, 19
Technology:
Hand-crank portable battery for USB charging devices

Ethiopia

Entrepreneur:
Prince Essel, 24
Technology:
Low sulphur diesel oil produced from plastic waste

Ghana

AFRICA ENERGY GENERATION PRIZE 2017

Energy Generation is launching the Second Edition of its Pan-African contest!

You have an innovative technical or entrepreuneurial project to electrify Africa?

Want to learn more about entrepreneurship and alternative access to energy solutions?

APPLY NOW

ENERGY GENERATION

Thank you for your attention!

www.energy-generation.org

Twitter: @EnergyGenAfrica

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Partnership on Women's Entrepreneurship in Renewables

Promoting the central role of women in clean energy entrepreneurship

www.wpowerhub.org

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Our Engagement: Where are the Women?

Our partners work across the clean cooking, lighting and heating energy value chains.

Policy, Regulatory Framework
Creating a conducive business environment.

Product Design & Development
Researching, designing, engineering, and testing products.

Manufacturing
Manufacturing and packaging clean cooking, lighting, and heating products.

Distribution
Transporting and selling products to communities that need them.

Financing
Providing access to consumer financing and working capital.

Outreach & Awareness
Creating awareness and communicating benefits of products & services.

End User
Increasing adoption of cooking, lighting, and heating products.

"Prioritizing women's leadership in clean energy entrepreneurship is investing in our future." *Wanjira Mathai*

Our Approach

wPOWER
PARTNERSHIP ON WOMEN'S ENTREPRENEURSHIP IN RENEWABLES

We work with partners from around the world to undertake activities that are mutually reinforcing.

- **We Build Evidence**
- **We Share Best Practices**
- **We Advocate**

Copyright: wPOWER

We Build Evidence: The 8 A's

The essential measures required to accelerate clean energy uptake and increase women's involvement.

Awareness

of entrepreneurship opportunities and energy alternatives.

Accessible

entrepreneurship opportunities and clean energy products.

Affordable

capital for entrepreneurs and products for consumers.

Aspirational

opportunities in entrepreneurship and quality products.

Agency

to address cultural barriers for women entrepreneurs.

Advocacy

around the issue and supportive clean energy policies.

Association

across women's networks at all income levels.

Acceptable

products that take into consideration cultural preferences.

We Share Best Practices

The best practice principles that determine implementers' success in the sector encompass 8 key points.

Focus on women

Strong bias towards engaging women across the value chain.

Community Presence

Accessible points for product inventory and coaching and mentorship.

Product Availability

Well established distribution chains that prevent stock outs.

Quality Certified Products

Products that will not break easily and that can be followed up with a warranty.

Access to Finance

Offer a variety of pay options to address affordability.

Coaching & Mentorship

Continuous development of entrepreneurs beyond training.

Women's Networks

Tap into existing community networks.

Technology Innovation

Exploit technology to create connectedness among entrepreneurs.

We Advocate

The partnership increases the understanding, visibility, prioritization, and support of women's economic empowerment through clean energy entrepreneurship.

Engage Strategically:
Key audiences including policy makers, business leaders, thought leaders, media, and other influencers must be engaged.

Develop Policy:
Legislative and regulatory changes are needed in many geographies.

Consolidate Voice:
A global platform in support of women's engagement in clean energy entrepreneurship is critical.

Increase Funding:
Increased capital flow is needed urgently to accelerate access.

A Global Partnership

Australia (1)
- New South Wales – Barefoot Power

France (2)
- Gardanne- Gaia Impact Fund
- Meyreuil - Synergie Solaire

Germany (1)
- Berlin – SOLARKIOSK

India (3)
- Pune – Swayam Shikshan Prayog (SSP)
- Rajasthan – Barefoot College, Frontier Markets

Ivory Coast (1)
- Abidjan – African Development Bank

Kenya (6)
- Nairobi – LivelyHoods, Pamoja Life, Green Belt Movement, BURN, Pawame, World Agroforestry Centre

The Netherlands (1)
- The Hague- ENERGIA

Uganda (1)
- Kampala - Solar Sister

United Kingdom (5)
- London - Energy 4 Impact, World Energy Council
- Warwickshire - Practical Action
- Kent – Value for Women
- Berkshire – Sollatek

USA (6)
- Washington DC – Department of State, Global Alliance for Clean Cookstoves, Women for Women Intl, Global Development Incubator
- Baltimore, MD – John Hopkins University
- Gettysburg, PA – Project Gaia

Other Activities

Training of Trainers
(Jul 2014)

Africa-India Exchange Visit
(Apr 2015)

Kenya Community Training
(Aug 2015 - Mar 2016)

"Empowering women through increasing access to clean and affordable energy is in itself a driver for change."
Wanjira Mathai

Opportunities to Partner

We are always seeking additional partners to help us accelerate the adoption of improved cooking, lighting, and heating technologies. Partner with us to become a powerful force for progress in the sector.

Contact Us

Simon.kiragu@wpowerhub.org

http://wpowerhub.org/

wPOWER

PARTNERSHIP ON WOMEN'S ENTREPRENEURSHIP IN RENEWABLES

Strathmore Energy Research Centre, Kenya

Presenter:

Geoffrey Ronoh

Strathmore UNIVERSITY

Introduction

- Founded in 2012 as a Research Centre within Strathmore University
- **Mission**: To be a catalyst towards greater adoption of renewable energy technologies (RETs) and best practices in energy efficiency
- Service to society & positive influence to our students
- **Focal areas : Solar PV & Thermal, Bioenergy, Energy Efficiency**

What we do

Strathmore UNIVERSITY

- Consultancy

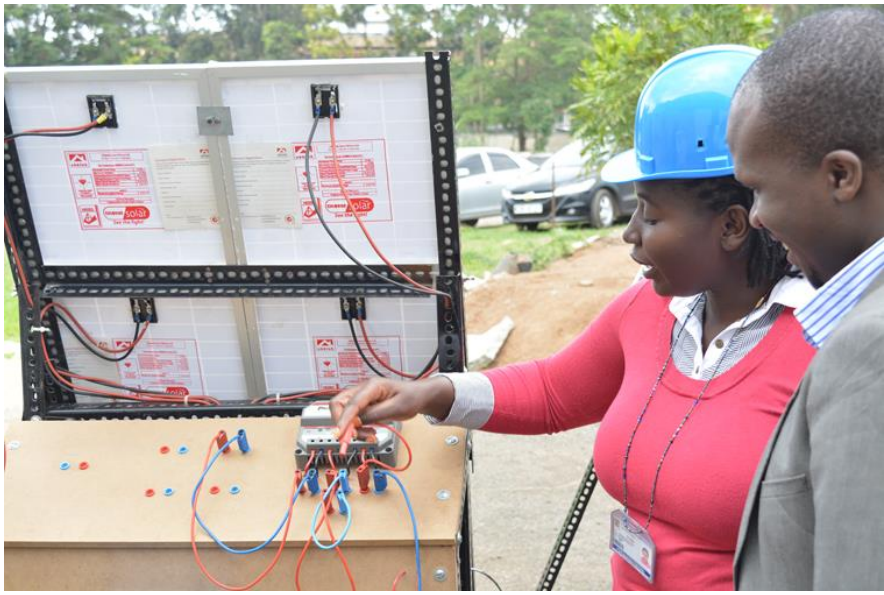
- Training

- Testing

Training courses

Monthly training programs

- Solar PV Courses - T1/T2 – Upto 300Wp Standalone, T3 (Grid –Tie and Hybrid)
- Bio-energy
- Energy Management
- Practical top-of-the range training equipment

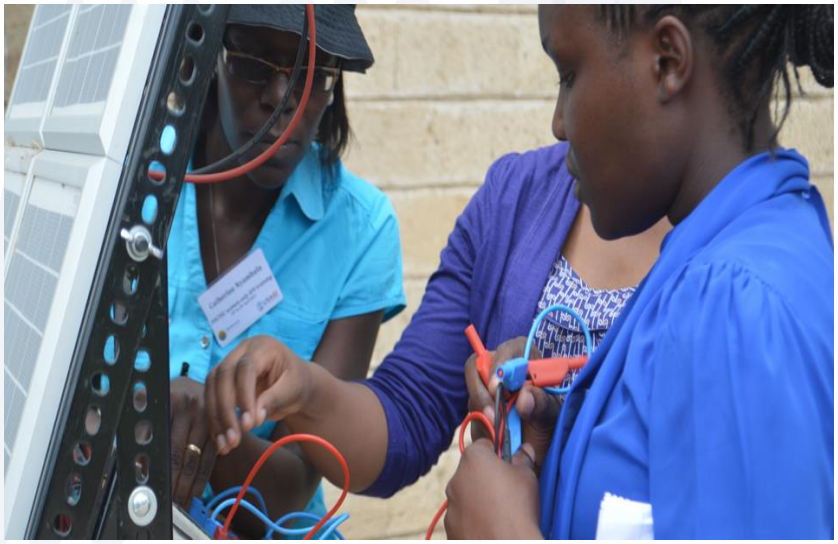


Solar PV Training

- SERC has trained over 1500 solar technicians – Approx 60% are Youth
- Tier 1 – Stand alone DC Systems
- Tier 2 – Stand alone AC Systems
- Tier 3 - Grid connected and Standalone Hybrid PV systems
- In the pipeline - Training course on design of mini grids, solar water pumping and heating

Women's Only Training

- SERC saw the need to offer women only PV training due to the few number of female Solar PV technicians
- The effort was successful and has led to the training of upto 200 Female technicians so far



"The opportunity overall was unique, highly educative and transformational. I am so equipped for the solar industry now!" Mary Mindo of the Jomo Kenyatta University of Agriculture and Technology about the solar photovoltaic (PV) training she took in Nairobi, Kenya.

SMA Solar Academy

Strathmore UNIVERSITY

25 KWp Solar PV – Grid Tie with Battery and Genset Backup

The 600 KW Grid Tie PV System

Strathmore UNIVERSITY

SERC Solar Testing Lab

Started in 2014

- We test Solar Panels, Charge Controllers, Batteries of different chemistries and Lighting appliances
- Our aim is to Improve adoption of solar through access to good quality products

https://www.youtube.com/watch?v=eY-LzHjh9nY

Wasini Pilot Project

- 1.6 kW solar battery power plant was designed for installation in Wasini Island in 2014
- The aim of the project was to provide the community access to electricity and media (cell phone charging, solar lights and internet) and special needs (deep freezer)

Strathmore UNIVERSITY

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