

GOVERNMENT OF RWANDA LAUNCHES ECONOMIC RECOVERY FUND

In June 2020, The Government of Rwanda established the Economic Recovery Fund to support the recovery of businesses hardest hit by COVID19 so they can survive, resume operations and safeguard employment, thereby cushioning the economic effects of the pandemic.

Energy Private Developers will continue to leverage its capacity to provide massive coordination to support and see companies benefit from the recovery fund.

How do I access the Economic Recovery Fund?

To access the fund, talk with your financial institution. Any SMEs or other businesses wishing to access the Fund will submit their loan application directly to their bank or Micro-Finance Institution, who will review your paperwork, request any additional documents needed, and assess your eligibility for the Fund. You can find the list of Banks with contact numbers of dedicated staff in the SME clinic website.

For full information on the Economic Recovery Fund, please see the website of the Ministry of Finance and Economic Planning (MINECOFIN): Economic Recovery Fund Operational Guidelines.

Reference:

Announcement 3000/2020 - 04931/0010BNR [902.4]. National Bank of Rwanda.

Economic Recovery Fund Operational Guidelines. MINECOFIN. May 2020.

BIOMASS OPPORTUNITIES ON THE LOCAL MARKET.

Extensive use of Biomass energy has potentially serious environmental implications and it may be non-renewable if not managed properly. Currently around 80% of Rwandans still use firewood for cooking but, by 2024, Rwanda is targeting to reduce the figure to

42%. EPD together with Government officials, stakeholders and developers from the Biomass subsector had close discussions on how the subsector can partner with the government to improve and find solutions that lead to more opportunites, contribute to the government target and create a conducive environment for Biomass business in Rwanda.

"We need to stop the use of traditional charcoal for its efficiency is low and harmful

to the environment but promote the use of Green charcoal that has a high efficiency" Said Mr. Manyifika Dir. General LWF-Ministry Of Environment.

He continued to ephazise that government is relaying on the success of the Biomass subsector.



Public-private dialogue

FIRST TV ASSEMBLING FACTORY IN RWANDA



Solar TVs being assembled and packed

Off-grid Electric (ZOLA Rwanda) is the first company to have a TV assembling Show-room located in the Economic zone. It is the first company in Rwanda to assemble solar TVs and avail them on the local market as well as in the region.

Off-grid Electric is looking into expanding its business in Rwanda through EPD being a channel to connect it to more customers, Through partnering with its competitors and as well as Opening to other business entities (private businesses).

Off-grid Electric together with EPD will continue to join Efforts to contribute to having Access to modern electricity in Rwanda.



Virtual Presentation

DE-RISKING RENEWABLE ENERGY INVESTMENT (DREI)

De-risking Renewable Energy Investment (DREI) introduces an innovative framework to assist policy makers in developing countries to cost-effectively promote investment in renewable energy. EPD members in Solar Home Systems & Mini-grid developers were optimistic that DREI workshop would provide an in-depth analysis of investment risks and opportunities in the sector as well as instruments to de-risk investments in the respective energy sub-sectors in Rwanda.

"POST COVID-19 IMPACT ASSESSMENT REPORT"

ENERGY 4 IMPACT CONTRIBUTION IN RWANDA ENERGY SECTOR



Energy 4impact in partnership with Practical action are working in Kigeme, Nyabiheke, and Gihembe refugee camp in Rwanda to improve access for both refugees and host community. Energy4impact is leading on development of livelihood opportunities arising from increased access in refugee camps in host community. Currently supporting 150 entrepreneurs through productive use of energy applications such as saloons, carpentry, welding, tailoring, milk cooling, cyber café, and refrigeration services. Energy4impact supports businesses to identify appropriate appliances, access to equipment, business finance to acquire management skills such as marketing, customer care, record keeping, and training on appliance usage, health and safety standards.

Through the MInigrid Market Development programme, Energy4impact is supporting minigrid developers on issue ranging from business planning, market development, project financing, grid operation and mentainace. The objective is to accelerate the development of a project cycle of minigrids and

improve the bankability, create link between market actors in order to address the gap and developers' capacities, technology, financing, and contribute to evidence base of commercially viable projects. Under Solar irrigation Rwanda Program, E4I is also focusing on supporting farmers to have access to appropriate solar powered irrigation system.

The project targets 3000 farmers, organized in farmers groups, cooperatives, through the introduction of financing facilities and other market development activities. The projects also works with private sector to establish a supply chain for successful introduction of the technology to the market. It's currently operating over ten districts, Bugesera, Kirehe, Ngoma, Nyagatare, Gastibo, Rwamagana, Kamonyi, Gisagara, Kamonyi, Muhanga, and Ruhango. The project will result into improved productivity and increased income that will benefit famers and their family members.

OFFGRIDBOX RWANDA LIMITED

OffGridBox is among EPD's new members that has been added to its wide network. OffGridBox offers a mobile and modular 2x2x2m container with solar panels on the top and a water purification system inside. Their unit is one solution to two problems: lack of access to energy and lack of access to clean water. The box is manufactured in Italy, can be transported to anywhere in the world, and then deployed on the spot within 4 hours.

Since 2016, OffGridBox, Inc., a US Company has installed its OffGridBox in 12 different countries around the world (Rwanda, Tanzania, DRC, Madagascar, South Africa, Colombia, Puerto Rico, Italy, US, Philippines, Nigeria, and the British Virgin Islands).

Their journey in Rwanda began as a partnership with Innotech Rwanda Ltd three years ago, which was all about impact energy, water, and women's empowerment, but today, they are oriented to taking their business to the next level, launching the AYACU water brand on the market alongside power bank recharging services.



Bringing new services:

OffGridBox currently provides households with a solar powered battery pack, 3 led lights, a phone charger and a clean branded jerry can. Customers can recharge their 40Wh power bank to light 3 lights for 4 hours, charge their phone or power small electronic equipment, plus collect up to 10 liters of purified water each time.



The OffGridBox can also be used to power institutional buildings, like schools or rural clinics, and to provide energy for productive uses like a dryer, a welding machine, an ice machine, a water pump or an irrigation system, to name but a few.

It's all about Women's Empowerment

In February, they welcomed their first woman into their Rwandan leadership, Jodie Wu, an MIT Engineer who has been working in East Africa for the past 11 years, first as CEO of her own last-mile distribution company of solar lanterns and clean cookstoves and then as VP of New Products of Greenlight Planet.

OffGridBox employs women from the community as operators, 2 per box, who are trained in technical, bookkeeping and sales & marketing skills. In June, the company hosted its Company Wide Training in sales, technical, and water production skills.

As the rate of unemployment in females is still high, OffGridBox seeks to create jobs that are often thought only for men. They aim to create a favorable work place where women gain skills to help them become independent in all aspects of life, preparing them for future challenges.

Facts About OffGridBox

- Technology is 100% ran by women, with each OffGridBox serving more than 400 families with energy and water services.
- Mobile and modular 2x2x2m meaning it can be moved to anywhere in the world, and relocated if needed. Also, the OffGridBox can include additional services, such as a desalination unit, a WiFi hotspot and/or a timer for irrigation.
- Environmentally friendly: The electricity created by an OffGridBox in one year would require burning 1.4 tons of diesel fuel. The OffGridBox replaces kerosene, candles and disposable batteries with rechargeable power banks, and it provides purified water, so families do not need to use charcoal or wood for boiling. All this added up means that one unit will help to prevent up to 15 tons of CO2 from polluting the atmosphere.
- OffGridBox's AYACU water is the only water brand on the market producing water without any carbon footprint, from production to delivery to shop. It's 100% eco-friendly, produced at a biker's distance to the markets where it is being sold.

Waste Power Plant Ltd (WPP)



Waste Power Plant Ltd (WPP) a processing factory of municipal solid waste by direct incineration with heat recovery facilities to generate electrical energy is a coming quick fix to municipal solid waste and environmental protection, solution to unemployment, and tool to energy recovery. The 15MW plant is expected to be in operation in two years at a cost of \$63.2 million.

The expansion of cities in Rwanda and the increase of settling of people in town lead to the increase of municipal solid waste that reaches 0.5kg per capita and 800tons per day in only Kigali city (jerry-can Ltd- 2019) which is harmful to environment and source of diseases and leachate. Without practical gas capture and recovery facilities of the landfills constructed, the greenhouse gases would emit to atmosphere totally during the anaerobic and aerobic biodegrading procedure of the carbon origin material including methane, carbon dioxide, hydrogen Sulphur and nitrogen components.

The plant treatment operations will reduce the greenhouse gases emissions by transforming methane into carbon dioxide, thus lowering the global worming potential of the landfills. From bubbling and circulating fluidized bed gasifiers, the cooled flue gases would be treated by gas cleaning equipment such as scrubbers, activated carbon powder injection and fabric filter systems.

The 30% of the plant is unemployment reduction by employment of 319 permanent workers and 207 during plant installation and different international and national companies with associated local warehouses for implementation.

For energy recovery which is 20% of the plant the hot flue gases from the furnace would flow through the boiler, releasing thermal energy which turns water into steam. The steam produced would be used to drive the turbo alternators for electricity generation. The factory is a multipurpose on municipal solid waste and environmental protection, to reduce greenhouse gases effect, to reduce the problem of unemployment, to energy recovery and generate continuously 15 MW in the national electricity grid.

THE RESILIENCE OF "MADE IN RWANDA" COOK STOVES DURING THE COVID 19 CRISIS: CHALLENGES AND OPPORTUNITIES BY GENI GREEN SOLUTION (GGS) LTD.

The second quarter of 2020 was marketed by the COVID 19 pandemic that affected all the activities around the globe. Most of the countries including Rwanda decided to close borders and lockdown the whole or part of the population to limit the new infections. The movements were only allowed for the basic services and whole economies shutdown. This reduced to zero the production and sales during the total lockdown and affect the purchasing power of the clients as they have mainly spent their economies on food and could not plan to invest in acquiring assets. Geni Green Solution Ltd, the leading producer, and distributor of improved cook stoves in Rwanda, shares its experience of doing business during the lockdown, lessons learned, and plans for 2020.

During the first month of the lockdown, March-April 2020, Geni Green Solution Ltd closed all activities including production, marketing, distribution, and recovery of loans. However, during this period, the demands (calls) of improved Cook stoves significantly increased. This was because households were uncertain about the supply of LPG and Charcoal as the borders were closed and movement among provinces and Districts were prohibited or limited. They wanted to get improved Cook stoves to save as much as possible the charcoal and money as they did not know when the lockdown was about to end.

Furthermore, the lockdown served as an opportunity for raising awareness on the use

of Improved Cook stoves as all the members of the family especially heads of households and spouses were at home watching TV and/or listening Radio.

Lessons from COVID 19 crisis

- 1. Marketing and raising awareness should continue and be reinforced because even if users could not buy today but they get information that could be useful for them in the future.
- 2. Distribution systems of GGS Ltd. and other stove manufacturers and distributors should be reinforced through acquiring more motorbikes, van, and set-up of outlets and storage facilities across the country. More have to be done to make sure that improved cook stoves are available in a limited radius of sector and District.

Post-COVID 19 roadmap

Long term impact of Marketing, cooking demonstration and easy access

The penetration of Improved Cook stove is still at an early stage in Rwanda and awareness on their benefits is also still low. To raise awareness on the use of Improved Cook stove in general and market its products in particular, GGS Ltd. will continue to combine different channels/approaches including but

not limited to media and social media, and more importantly cooking demonstrations.

The pictures below show the public awareness campaign, cooking demonstration, and homedelivery conducted before COVID 19 crisis.



Awareness campaign in Kamonyi, South Province

Cooking Demonstration in Rulindo, Ngufu delivered to Client in Kigali North Province

GGS Ltd will continue to do home-delivery and reinforce its distribution system by acquiring more motorbikes and van and setting up more storage and outlet across the country.

Coming soon: Green Cooking fuels: Briquettes, Pellets, and Green Charcoal





GGS Ltd. intends to launch the production of briquettes, green charcoal in the third quarter of 2020, and pellets by the end of 2020. The green charcoal will be produced using updated technologies that increase the productivities of wood by 4 times; from the current conversion rate of wood to charcoal of 10% to 37%.

Coming soon: Tier 4 stove, "Geni Fan Stove"



GGS Ltd. is collaborating with its partners to bring to the Rwandan market a tier 4 stove designed for burning wood pellets and charcoal. The stove will be branded "GENI Fan Stove.



For more information contact GGS LTD on Website:

http://genigreensolutions.com/

https://www.youtube.com/watch?v=CSPJ-UXC68w

SONARWA GENERAL STRENGTHENS PARTNERSHIP WITH ENERGY PRIVATE DEVELOPERS

June,2020: In a bid to help accelerate efforts in extending affordable, reliable power to all Rwandan's, SONARWA *General* entered into a partnership with Energy Private Developers (EPD) from October 2019.

Under the partnership, SONARWA *General* provides bespoke insurance products for EPD products and services, provides advisory services to EPD on important topics such as Risk Management in the Energy Sector.

Some of the main products offered to EPD by SONARWA *General* include Motor Vehicle

Insurance, Fire Insurance, Marine Cargo Insurance, Goods in Transit, Natural Disaster, Pubic and Product Liability Insurance, Individual and Group Personal Accident cover as well as Professional Indemnity Insurance.

The partnership with SONARWA *General* complements the Government of Rwanda transition from a developing country to a middle-income country and its vision to achieve a 100% electrification by 2024 as stated in the National Strategy for Transformation 2017-2024.

SONARWA General, your Insurance of first choice!!!



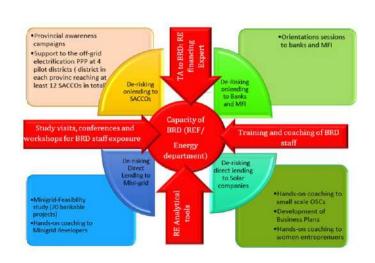
PRIVATE SECTOR PARTICIPATION IN THE GENERATION AND DISTRIBUTION OF ELECTRICITY FROM RENEWABLE SOURCES (PSPE) PROJECT

PSPE's Profile

I. Introduction of PSPE project

PSPE project is the project funded by the Belgian Development Agency (Enabel), and its acronym stands for "Private Sector Participation in the Generation and Distribution of electricity from renewable sources

The €2M aims to support the implementation of the Renewable Energy Projects at BRD including the Renewable Energy Fund (REF) through capacity building and technical assistance of REF's windows (SACCOs, Banks and MFIs, Mini-grid and its Solar companies) as summarized in the below PSPE approach.



2. Partnership with EPD

EPD is one the primary stakeholders of PSPE project because it is the umbrella of private companies responsible of dispatching electrification services in Rwanda (solar and mini-grids). EPD is partnering with PSPE project in the implementation of different activities such as Detailed Feasibility Study by

consulting mini-grid developers from scratch up to the moment. PSPE is also providing a technical assistance to EPD to support small scale solar companies in the development of business plans and other requirements for their creditworthiness.

3. Activities of PSPE Supporting Energy Private members of EPD (OSCs and Mini-grid)

As the membership association that groups all companies operating in Energy sector in Rwanda, PSPE has hired the consultant firm which will support the mini-grid developers to come up with 20 bankable proposals which will be financed by REF at the end of the day. Besides, PSPE has recruited the individual consultant who will coach the OSCs so that they can come up with bankable business plans, and they will be financed by REF after meeting REF's eligibility criteria as well.

PSPE has supported EPD members to exploring renewable energy technology and opportunities in India, Bangladesh, and Nepal. The exposure visits resulted coming up with an idea of amalgamating Mini-grids companies into one company known as SARURA. Besides, the exposure visit permitted the energy actors to come up with the idea of subsidy which will handle the challenge of low purchasing power of end users.

Last but not least, PSPE supported the company called "Power Women" which was

derived from two off-grid solar companies (Munyax Eco ltd and Mother Light Africa) in the development of the Business Plan. This business plan was submitted to REPP (Renewable Energy Performance Platform) for being financed. This was the big achievement to the project because it was selected within among 12 best Business plans.

4. Expectation of PSPE Project at its Closure

- After the training of mini-grid developers in Detailed Feasibility Study of mini-grids, there will be 20 bankable project proposals which will be financed by BRD after meeting REF's eligibility criteria. Then, the developers will run their businesses to increase the rate of electricity in Rwanda with the aim of meeting the target of Universal Energy Access by 2024.
- For off-grid hands on coach of solar companies, 14 companies have started the coaching session. Our expectation is to get 14 bankable business plans meeting REF's eligibility criteria so that they can be sponsored by REF to boost the rate of electricity in off-grid areas.

UPDATES





ARC POWER LTD

GREEN TECH AFRICA LTD

OFFGRIDBOX RWANDA

LTD

WASTE POWER PLANT

LTD

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