Energizing
ECONOMIES

EXECUTIVE SUMMARY

RURAL ELECTRIFICATION AGENCY
ENERGY • EMPOWERMENT • EFFICIENCY

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About the Energizing Economies Initiative

The Energizing Economies Initiative (EEI) is a Federal Government of Nigeria initiative implemented by the Rural Electrification Agency (REA) that aims to support the rapid deployment of off-grid electricity solutions to MSME's in economic clusters (such as markets, shopping complexes and agricultural/industrial clusters), through private sector developers.

The Federal Government of Nigeria (FGN) launched the initiative in September 2017 as part of its wider Micro, Small, Medium Enterprise (MSMEs) programme.

Objectives of the Energizing Economics Initiative (EEI)

1. The EEI seeks to increase energy access and economic growth by providing clean, reliable and affordable power to economic clusters across Nigeria; such as markets, shopping complexes and agricultural/industrial clusters.
2. Promote efficient, clean, safe, cheaper and sustainable power to catchment areas that have high growth impact on the economy.

Projected Impact

The objective of this project is to connect over 100,000 establishments in these clusters across the country at a relatively rapid pace, with 70% of these projects to be renewable energy based. This will directly or indirectly positively touch the lives of approximately 7 million people. As part of the wider EEI, over 340 economic clusters have already been identified across the country. The total estimated energy demand from these clusters is 3-4GW with a combined market opportunity of ~ USD 955M annually. It is also estimated that 70% of these projects will be based on renewable energy.

Projected impact of the EEI can be summarized in these four key projected outcomes:

(i) **Job creation** – over 2,500 jobs will be created.

(ii) **MSMEs empowerment** – over 200,000 MSMEs will be transformed.

(iii) **Improved access to stable electricity** – over 80,000 shops will receive clean, safe and reliable electricity by 2018.

(iv) **Reduced carbon emissions** – Greenhouse carbon emissions will be reduced annually by 25,000 metric tonnes.

Project Partners

Federal Government of Nigeria – *Project Owner*

The role of the Federal government is to provide an enabling environment to private investors participation towards the provision of reliable power supply to the market clusters across the country. The FGN through the Federal Ministry of Power Works and Housing is also implementing favorable regulations to allow the successful implementation of the project.

Rural Electrification Agency (REA) – *Implementing Agency*

The REA is the implementing agency of the Energizing Economies Initiative under the Federal Ministry of Power, Works and Housing. The agency is mandated to provide access to reliable electricity for rural dwellers and the underserved, irrespective of their location. The agency is responsible for creating an enabling environment for private sector-led projects which includes conducting pre-feasibility assessments, energy audits, enumeration, data analysis, identification of a qualified private sector developers, and project stakeholder engagements. The USAID Nigeria Power Sector Programme (NPSP) provides REA with technical and program management support for the Initiative.

Private Sector – *Project Developer*

Project construction, delivery, operation and maintenance under the Energizing Economies Initiative is carried out by the private sector investors and developers. The project is fully funded by the developer and they take ownership of the project. These developers and selected based on their ability to produce rapid results while committing to the long-term success of the initiative for the beneficiaries.

Project Timeline

The EEI will be implemented sequentially across several phases beginning with a pilot. The pilot phase of the project has been concluded with Phase 1 of the project underway.

Pilot Phase

Using specific industry indicators such as population density, trade, employment sustainability amongst others, REA identified and selected three catchment areas in the North West, South East and South-Western parts of Nigeria for immediate intervention under the eligible customer policy directive - *Sabon Gari Market, Ariaria Market and Sura Shopping Complex.*

Sabon Gari Market, Kano State *(also known as Muhammadu Abubakar Rimi)*

Sabon Gari market, built in 1914, is a one-stop, all-inclusive market for commodities located in the heart of Kano city. It covers an area of approx. 22 hectares with over 13,000 shops. In 2016, the market experienced fire outbreaks due to electrical faults resulting from unregulated generating sets. This led to the disruption of economic activities and significant losses in assets.

Sabon Gari Energy Solutions Limited (SGESL), is the developer of this project. The energy audit carried out indicated that most shops were powered by alternative sources of power. Close to 98% of the audit respondents relied on some form of generator for their power supply. In February 2018, SGESL commissioned high capacity solar lithium based standalone systems providing stable power to the market. From October 2018, SGESL is providing sustainable power to 1,198 shops with plans to expand the customer base to over 13,598 shops.

Ariaria Market, Abia State

Ariaria market, located in Abia State and spans 159 hectares, has up to 37,000 shops with less than 5% unoccupied or under construction. The market is divided into 90 zones, with each zone consisting of at least 300 shops. All zones are under the Ariaria International Market Association. Provision of electricity for trading operations have been primarily through privately owned generators installed for each zone.

The Developer on this project is Ariaria Market Energy Solutions Limited (AMESL), an SPV consisting of three companies. The companies are Total Support, a project sponsor providing power generation services; Talevares, a project sponsor providing power distribution services; and Candesco Limited, a project sponsor providing metering services. A customer centre located in the market serves as a customer registration and payment point, responds to all queries and quickly resolves technical issues while providing hands-on after sale services.

Sura Shopping Complex, Lagos State

Sura shopping complex is located in Lagos. It is an ultra-modern market designed to improve the market experience from the old Sura market adjacent to it. The shopping complex covers a land area of about 42,000 sqm, with 1,047 shops used mainly for commercial purposes. The shopping complex is only 2KM away from an existing independent power plant (IPP) located within Lagos Island; therefore, the electricity solution is taking the excess capacity at the Lagos Island power plant to power the shopping complex through a dedicated underground distribution network.

The developer for Sura shopping complex is Sura Independent Power Limited (SIPL). SIPL

covers the cost of design, distribution network infrastructure to connect the IPP to the complex, distribution equipment (control panels) upgrade within the complex, metering of every shop and provision of alternative power as backup for the power plant.
A customer centre located in the market serves as a customer registration and payment point, responds to all queries and quickly resolves technical issues while providing hands-on after sale services.

Phase 1

Phase 1 of the Energizing Economies Initiative has another 13 clusters at various stages of development and construction across the country and will be solar-powered across board.

These markets include:

- Nnamdi Azikiwe Market, Lagos State
- Bariga Market, Lagos State
- Balogun Market, Lagos State
- Iponri Shopping Complex, Lagos State
- Nepa 2 Market, Ondo State
- Nepa 1 Market, Ondo State
- Isinkan Market, Ondo State
- Kantin Kwari, Kano State
- Ita Osun Market, Ogun State
- Eriwe Fish Farm, Ogun State
- Edaiken Market, Edo State
- Bola Ige International Business Complex (BIIBCO), Oyo State
- Ultra Modern Business Complex Market (UMBC), Oyo State

These thirteen (13) clusters of Phase 1 were identified after a prefeasibility assessment across 60 clusters using below criteria:

- **Easy Deployment** – Solar technologies are faster and less complicated to deploy. These decentralized systems offer a simple lasting solution to people without access to electricity.
- **Reduced Dependence on Fossil Fuels** - Solar energy production does not require fossil fuels and is therefore less dependent expensive natural resource.
- **Environmental Advantages** - Solar power production generates clean electricity with a limited impact on the environment as compared to carbon based fossil fuels

- **Modularity and Scalability** - As the size and generating capacity of a solar system are a function of the number of solar modules installed, applications of solar technology are readily scalable and versatile.
- **Legal & Regulatory requirements** – for small scale solar systems, there are no permits or Licenses required, making the project advance faster.
- **Remote Monitoring** – the technology possesses a back-end solution that allows for transparency and effective monitoring across the market places. Service centres are also present at each site to allow for quality customer service.

For more information, please visit www.rea.gov.ng/energizing-economies/