# POWER AND RENEWABLE ENERGY

# INTRODUCTION

- With a population of approximately 8 million people in the state, over 55% of residents lack access to electricity, while those with access, suffer from erratic supply.
- With a power deficit of 94,500MW, about 41% of businesses within the state generate their own telectricity.
- The power sector remains one of the sectors of the economy with vast room for investment, this brings to light, the urgent need to have Solar Farms, mini grid and many other forms of renewable energy opportunities.
- Oyo State in line with the general trend in the country has constantly suffered huge electricity supply gaps.
- However, in order to meet the electricity demand, Oyo State needs to explore various opportunities abounding in the State for alternative power generation especially in hydroelectric power generation and waste to energy.
- At the current moment, there is no IPP operational in Oyo State.

# MARKET OPPORTUNITIES

- There is an increased awareness for the application of renewable energy at both urban and rural settings, at the rural settings and these community-based projects which power boreholes where 5KVA solar powered units to power water pumps between 1hp-2hp. At urban settings, homes are gradually utilizing solar panels to power their home needs when the national grid fails, usually these range between 1KVA to 20KVA depending on their consumption. Commercial enterprises are gradually investing in solar panels.
- Solar powered street lights on major roads within some key cities in the state.
- Some private gated estates also power their community lightning using inverters and solar energy.
- There is a massive opportunity for investors to offer renewable energy solutions at every level, both urban and rural communities in the State.



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30% of the population in rural areas in Oyo State are not on the national grid. 3000 MT of waste is generated daily in Oyo State offering significant opportunities for waste to energy solutions.

Oyo State has 30 dams, three of which are the most active dams in South West, Nigeria; Ikere- Gorge Dam, Oyan Dam and Asejire Dam

# • Power related companies (distribution)

- Oyo State is home to Nigeria Wires and Cables, an organization producing housing wires, armored cables, aluminum conductors, telecommunications cable and customized cables.
- Electric concrete pole manufacturing: There are many companies in the State that manufacture concrete poles for electricity distribution i.e. Conpole Nigeria Limited (a State joint- owned company)

# **NATURAL ENDOWMENTS**

- About 3000 MT tonnes of waste is generated daily in Oyo State and these can be converted into energy. The waste is converted to refuse derived fuels which can be used to heat up thermo plants.
- Biofuels and biomass can also be generated from our waste and converted to energy.
- Weather- we have excellent weather to support massive solar farms. In the same regard, our weather is also conducive for wind powered plants
- The State has 30 dams which can be utilized for renewable energy solutions.

## **CAPACITY**

- In a bid to maximize the vast opportunities in Renewable Energy generation in Oyo State, the current government set up a new Ministry called the Ministry of Energy and Mineral Resources with a mandate to undertake the following:
- Strategize, promote and develop sustainable policies for energy planning to ensure access to and availability of reliable energy for all residents in the State;
- Formulate and evaluate policies relating to energy and mineral resources in the State; o Develop sustainable policies for both conventional and renewable power solutions;

- Collate power audit data to ensure energy planning and availability and collate available data on minerals and their locations;
- Liaise with relevant Ministries, Departments, Agencies and/or Organizations to provide modalities for initiatives within the energy and minerals resources sectors in
- Because of the growing culture of urban residents in generating energy through renewable sources, the local technical skills base has increased, concurrently there has also been a sharp rise in the number of local investors in this sector.
- Oyo State Rural Electrification Board- to provide electricity to rural and peri-urban areas

## INVESTMENT OPPORTUNITIES

Oyo State government is willing to partner with Investors to provide on and Off grid electricity to power homes, government offices, hospitals, provide streetlights and community areas, to safeguard lives and properties.

Investment opportunities abound in the power sector in Oyo State in the following areas:

- Power generation through the establishment of independent power project and captive power generation
- Large amount of metric tonnes of waste available to be converted to energy
- Technical and investment support to tap the 450MW potentials of the Ikere Gorge Dam as well as optimise other earth dams and rivers in the State for hydroelectric power generation.
- Wind and Solar farms for power generation
- Opportunity for an IPP to provide energy within a number of Special Economic Zones

