



Distributed Renewable Energy Market - Africa and Asia

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Photo: National Geographic

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RESEARCH SCOPE

Distributed Renewable Energy Market - Africa and Asia

According to 2016 statistics, there were an estimated 1.1 billion people without access to electricity globally. Countries like India and Nigeria have a significant number of people living off-grid. An estimated, 200 million households do not have access to electricity, or are living with an unreliable electricity supply.* In such a scenario, decentralised systems have proven to be the most cost-effective solutions for the population to access to electricity in rural areas.

This study focuses on the distributed renewable energy market in the developing world, primarily Africa and Asia, with a specific focus on Kenya, Tanzania, Uganda, Nigeria, India and Bangladesh. For purposes of this research, distributed renewable energy covers 'PAYGO' products and cash sales that are not connected to any centralised grids.

This report captures the following information on the African and Asian DRE Market:

- Market Size, Growth Rate, Revenue Forecasts (2017-2024)
- Growth Drivers & Restraints
- Market Trends
- Market Landscape
- Supplier Landscape
- Strategic Recommendations

*Source: GOGLA

TERMS AND DEFINITIONS

Distributed Renewable Energy Market - Africa and Asia

Distributed Renewable Energy: These are renewable energy based power generation systems, which are typically independent from centralized power plants, they include but are not limited to; solar panels, wind turbines, geothermal systems, and micro-hydroelectric systems.

Off-grid: People or locations not covered by a country or a region's electrical grid are considered off-grid; most off-grid locations are located in rural Africa.

Microgrid/ Mini-Grid/ Nanogrid: According to the World Bank, these are small-scale distribution networks that provide power to a localized group of consumers. They typically produce electricity from small generators. In many developing countries, these are used to provide electricity to remote locations without access to a centralized grid (Off-grid).

Pico: Lanterns and light systems with a capacity between 0-11 watt peak (Wp).

Rent-to-own/Lease-to-own: A supplier takes a deposit, or an installation fee from the customer, which is followed by either daily, weekly, or monthly payments for a certain time period. At the end of the payment period, the ownership is transferred from the rental company to the customer.

Perpetual Lease: The end user pays a fixed amount, either on a daily, weekly or monthly basis, for a fixed period. During the lease period, the solar PV home system rental company provides free services to the end user.

Watt Peak (Wp): This value specifies the output power achieved by a solar module under full solar radiation under standard test conditions. Solar radiation of 1,000 watts per square meter is used to define standard conditions.*

TERMS AND DEFINITIONS

Distributed Renewable Energy Market - Africa and Asia

Mobile Money: An electronic wallet service that allows users to store, send, and receive money using their mobile phone.

Microfinance and Microcredit model: Banking services of relatively lower monetary amounts; they specifically meet the banking requirements of individuals with low-incomes.

Solar Photovoltaic (PV) Home Systems (SHS): Distributed as a package comprising of a number of lights, mobile phone charging cable(s), and a solar PV panel, among others. A solar PV panel powers the other appliances offered in the package.

Solar PV Panel: These power the solar PV home systems. When sunlight falls on the solar PV panel, it generates electricity, which then powers various appliances or circuits connected to the solar PV panel in solar PV home systems.

Solar Lantern: It has a LED lamp, battery, solar panels and possibly an inverter.

Pay As You Go (PAYGO): Refers to a business model that allows users to pay for their product via embedded consumer financing. A PAYGO company will typically offer a solar product (predominantly solar home systems and multi-light pico devices) for which a customer makes a down payment, followed by regular payments for a term ranging from six months to eight years. Payments are usually made via mobile money, though there are alternative methods that include scratch cards, mobile airtime and cash. *

Cash: refers to a sale of distributed renewable energy products an upfront payment either through a retail or an online purchase.

*Source: Gogla's Off-Grid Solar Market Trends Report 2018

METHODOLOGY

Distributed Renewable Energy Market - Africa and Asia

Interviews with Key Market Participants: The research methodology adopted while creating this research involved conducting interviews with various key market participants enabling Verify Markets to identify various trends in the distributed renewable energy market. Furthermore, discussions with industry participants enabled us to provide a comprehensive country-level view of the overall market. Next, the information was validated through our internal databases and market experts. Later, the collected information was structured and collated into this report.





About Verify Markets

ABOUT US

Expert Advice and Strategy Consulting

Verify Markets is a Research Firm specializing in Industrial, Environmental, Energy and Water markets. Our Research & Consulting practice provides global industry analysis, custom engagements, end-user analysis, strategy consulting, strategic market intelligence, and forecasts that are designed to facilitate strategic decision-making. Our team of consultants, industry experts and analysts continually monitor and evaluate information to create insights for your business needs. We are comprised of a group of analysts that have been tracking their respective markets for a number of years.

Our goal is to help you reach yours.



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METHODOLOGY

The methodology when formulating market trend projection is outlined below. Historical trends were determined through secondary research and Verify Markets in-house database.

- Secondary research was conducted. A list of key industry participants was put together.
- Telephonic interviews were conducted. Most of the leading participants across all countries were contacted.
- Bottom up methodology was used to calculate the market size.
- Market drivers and restraints were built into the forecasting model to estimate the revenue growth and market size figures.

METHODOLOGY

Profiles of Interviewees: Vice President, Marketing Manager, Business Development Manager, Brand Manager, CEO (for smaller companies).

Most of the primary interview data was captured through telephonic interviews. Pictures, company contacts, preliminary data was captured through secondary research. Images are derived from company websites and other web sources.

AWARDS

Verify Markets identifies companies that are leaders within a respective industry. These companies are given awards, which are selected by the consultant writing the report. Companies can promote their award publicly to boost brand awareness and confidence.

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DISCLAIMER

Despite Verify Markets' best efforts, certain challenges were encountered and certain assumptions had to be made. The extremely competitive nature of the African and Asian distributed renewable energy market often results in an increased reluctance on the part of several competitors to discuss their market position, future plans, or market trends. Verify Markets used its skills and experience to extract the relevant data in order to complete the analysis.



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CAPABILITIES & MARKET COVERAGE

Water & Wastewater Treatment

Air Treatment

Environmental Technologies

Energy & Power Equipment

Power Supplies & Batteries

Oil & Gas

Building Technologies & Efficiency

Consumer Products

Healthcare IT

Competitive Intelligence

Market Research

Custom Consulting

Strategic Planning

White Papers

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Customized Monthly Newsletters

LOCATIONS

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ANY QUESTIONS?
CONTACT US AND SET UP A TIME TO
SPEAK WITH OUR ANALYSTS.

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