

Nigeria

Introduction

This note was developed by Global Off-Grid Lighting Association (GOGLA) with the support of the World Bank Group Lighting Global Program, the Energy Sector Management Assistance Program (ESMAP), the Shell Foundation, USAID, Power Africa, the UK Department for International Development (DFID) and Sustainable Energy for All (SEforAll). It is part of a series of briefing notes that provide a high-level overview of the status of different countries' off-grid solar markets, as well as relevant policies and programs¹.

Key statistics^{2&3}

Demographics	
Total Population	190,886,311
Population Density per km ²	209
GDP per Capita	USD 1,968
GDP Growth	0.81%
Energy Access Deficit	
National Electrification Rate	59.3%
Urban Electrification Rate	86%
Rural Electrification Rate	41.1%
Number of households without power	20,000,000
Electrification Planning	
Electrification Targets ⁷	Universal access by 2030

¹ The information and views expressed in this brief are GOGLA's alone and are based on our current understanding of the policy situation in this country. We welcome any updates, revisions or clarifications at info@gogla.org.

² <https://data.worldbank.org/>

³ <https://www.usaid.gov/powerafrica>

⁴ Quality-verified products are tested according to the Lighting Global Quality Standards. For more information please see the [Lighting Global Quality Assurance Program](#).

⁵ Share of non-QV sold by GOGLA and Lighting Global affiliates.

⁶ Data on a specific region, country or product category is only included when it has satisfied the three-data point rule, meaning that at least three separate product manufacturers have reported data for any single data point. When we have fewer than three responses for a region, country or product category, no results are shown to protect the proprietary interests of the companies who have supplied data in support of this industry report.

⁷ [Nigeria Fact Sheet, USAID Power Africa, 2018](#)

⁸ These impact numbers have been estimated using the revised [Standardized Impact Metrics for the Off-Grid Solar Energy Sector](#). Data is drawn from the sales of off-grid solar products by GOGLA Members and IFC/Lighting Global affiliates since mid-2014. The impact of sales in previous years and by non-affiliated organizations are not included.

⁹ GOGLA and Lighting Global Semi-Annual Data Collection.

¹⁰ [Energy Access Outlook 2017, International Energy Agency, 2017](#)

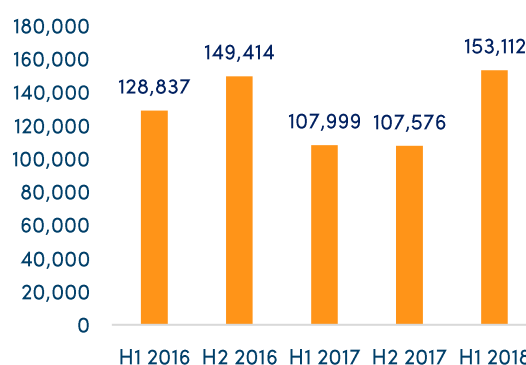
Impact⁸

2,823,884 people currently living with improved energy access – clean, safe solar light

75,304 people currently using their products to support an income-generating enterprise

860,132,417 additional light hours unlocked for study, productive tasks or leisure time

Sales (pico and SHS)⁹



Current status

Approximately 80 million people lack access to electricity in Nigeria, giving it the second largest energy access deficit in the world in absolute terms¹⁰. The Rural Electrification Strategy and Implementation Plan (RESIP), approved by the President in 2016, seeks to make 'full use of both grid and off-grid approaches, with subsidies focused on

expanding access¹¹. RESIP envisages that private sector providers will be ‘heavily involved’ and calls for a particular focus on underserved rural areas.

The Rural Electrification Agency (REA) has been authorised to establish the Rural Electrification Fund (REF) to help finance rural electrification. The REA has also recently announced a plan to power 500,000 small businesses over the next three to four years as part of the Off-Grid Electrification Strategy¹². An Energy Africa Compact has been signed with DFID, although progress on implementing the agreed reforms has been limited. The Renewable Energy Association of Nigeria (REAN) is well-established and a Distributed Renewable Energy ‘taskforce’ has been set up bringing together government, private sector and aid agency stakeholders¹³.

Attracted by the size of the potential market, several more established solar PV companies are now operating in Nigeria, using both cash sales and pay-as-you-go business models. Approximately 14 SHS distributors are actively distributing Lighting Global quality-verified products from a broad range of manufacturers. For these companies to grow rapidly they must fund an ever-increasing amount of stock in the supply chain and invest heavily in building distribution capacity to reach and serve new customers. Key regulatory challenges include high taxes on imported solar products and components, managing mobile payment systems, and competing with low-quality generic products.

Promoting Quality

Nigeria currently has no mandatory standards in place for off-grid solar products. However, as part of the Economic Community of West African States (ECOWAS), Nigeria is likely to adopt national standards that are harmonized with the

IEC/Lighting Global quality standards in the near future.

Taxation

Solar products are subject to sales tax and import duty equivalent to approximately 25% of the cost of goods.

Investment

Private companies and their investors have invested heavily in building off-grid solar businesses in Nigeria. However, given the size of the underserved population, there is still a significant need for access to finance. Key financial barriers include a lack of access to local currency loans for operating expenses, and hard currency loans for capital costs.

Sector Support Programs

The World Bank Group’s Lighting Africa program has been carrying out consumer awareness campaigns across Nigeria, which have reached at least 50 million people across 21 states, while collaborating with more than a dozen MFIs to support microloans for the purchase of pico solar and SHS. Training was also provided to retailers and after-sales technicians.

Furthermore, the World Bank launched the Nigeria Electrification Project (NEP) that includes a standalone solar component worth US\$75 million in grant funding, which is expected to leverage an additional US\$230 million in private sector funding¹⁴. NEP’s off-grid component is comprised of US\$15 million of competitively awarded grants and US\$60 million of performance-based grants. An assessment is envisaged to determine which additional financing instruments may be needed to meet working capital needs.

The African Development Bank announced it will parallel cofinance the NEP with a US\$150 million sovereign loan provided to the

¹¹ Rural Electrification Strategy and Implementation Plan, Federal Republic of Nigeria, 2016

¹² <https://guardian.ng/energy/rea-to-power-500000-businesses-in-five-years/> and <http://rea.gov.ng/download/rural-electrification-strategy-implementation-plan-resip/>

¹³ <https://www.powerforall.org/campaigns/nigeria/nigeria-energy-access-taskforce-sets-new-targets>

¹⁴ Visit [World Bank Nigeria Electrification Project](#) for more information.

Nigerian government, directed mostly to mini-grids, together with the Africa Growing Together Fund (AGTF), which approved a loan of US\$50 million. DFID and the Shell Foundation are supporting the Nigeria Off-grid Market Acceleration Program (NoMAP), an off-grid market accelerator. In its first year the accelerator is focusing on building market data for SHS and mini-grids, and piloting an off-grid payment systems for SHS companies¹⁵.

Other support programs include the Nigeria Energy Support Program II of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)¹⁶, and the Energizing Economies Initiative of the REA¹⁷.

Opportunities and Barriers

The establishment of the Rural Electrification Fund and the strong development partner support provides many opportunities for off-grid sector development in Nigeria, such as targeted concessional finance and technical assistance for companies, and the creation of quality standards.

In terms of barriers, it is important that access to foreign exchange and local currency working capital is made available to the sector. More also needs to be done to promote quality in the market and address the risk of market spoilage due to counterfeit and low-quality products, especially amongst more basic solar lights. Reducing taxation on quality-verified solar products would significantly improve affordability, which remains a major barrier.

Further Information

- [Rural Electrification Strategy and Implementation Plan, Federal Republic of Nigeria, 2016](#)
- [Nigeria Electrification Project Appraisal Document, World Bank, 2018](#)
- [Power for All: Nigeria Call to Action, Power for All, 2017](#)

- [Nigeria Fact Sheet, USAID Power Africa, 2018](#)
- [Lighting Africa Country Page – Nigeria](#)
- [Regulatory Indicators for Sustainable Energy \(RISE\) – Nigeria](#)

¹⁵ Visit [Shell Foundation Roving Heights](#) for more information.

¹⁶ Visit [Nigerian Energy Support Program II](#) for more information.

¹⁷ Visit [Energizing Economies Initiative](#) for more information.