

Madagascar

Introduction

This note was developed by Global Off-Grid Lighting Association (GONGLA) 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	26,262,368
Population Density per km ²	45
GDP per Capita	USD 460.8
GDP Growth	5.2%

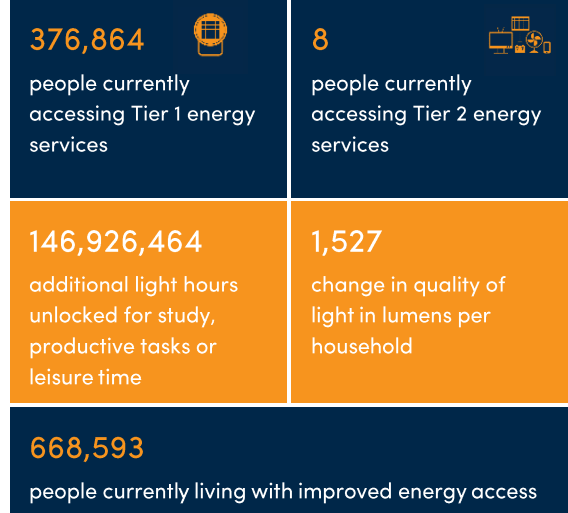
Energy Access Deficit

National Electrification Rate	24.2%
Urban Electrification Rate	68.7%
Rural Electrification Rate	0%
Number of households without power	4.33 million

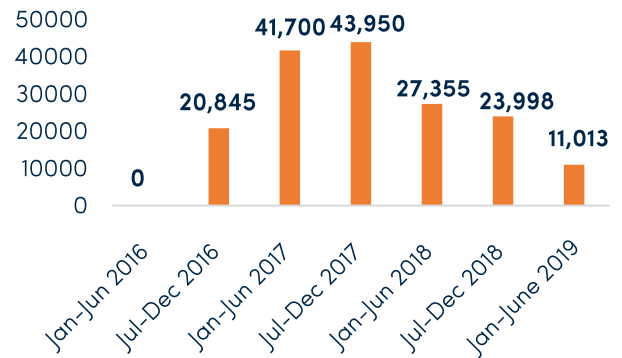
Electrification Planning

Electrification Targets ⁴	Electrification rate of 75% by 2020.
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Impact⁵



Sales⁶



Sales of Portable Lanterns, Multi-light Systems and Solar Home Systems

¹ The information and views expressed in this brief are GONGLA'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 Madagascar Power Sector Operations Improvement Project, World Bank Group, 2018

⁵ Impact numbers have been estimated by plugging the most recent sales data into the [Standardized Impact Metrics for the Off-Grid Solar Energy Sector](#). The reported estimates differ from the previous edition of the country briefings due to the use of a smaller, yet more consistent and recent dataset, considering only products sold by GONGLA members and Lighting Global affiliates since 2016. Note that while the numbers shown represent the aggregate impact of key players in the off-grid solar sector, these estimates do not present the full global impact of off-grid solar lighting products sold.

⁶ All sales data included in this briefing is derived from the "Global Off-Grid Solar Market Report Database", result of a joint primary data collection effort carried out by GONGLA in partnership with IFC Lighting Global and the Efficiency for Access Coalition. The public version of the resulting report of the effort is available [here](#).

Current Status

Madagascar is one of the poorest countries in the world, with an estimated 24% of the population having access to electricity, either through the grid or through off-grid solutions. It is a large country with low population density and poor transport connections, especially during the rainy season, making it a challenging place for off-grid solar companies to do business. There is, however, clear demand for off-grid solar, especially amongst wealthier households in off-grid areas.

No official data exists regarding the size of the off-grid solar market, although a multi-tier framework survey is currently being undertaken by the World Bank. Preliminary analyses suggest that off-grid solutions would be the most cost-efficient option for nearly 60% of the Malagasy households. An off-grid plan is in place, integrated into the national electrification strategy⁷.

The market is dominated by generic products that do not meet Lighting Global quality standards. However, a number of companies have recently entered the market that do sell Lighting Global quality-certified products. Many of these companies are well-capitalized, and able to leverage their core businesses such as telecommunications and microfinance to help build off-grid solar businesses. The World Bank has developed a program which addresses the specific constraints and barriers faced by these companies. It is focused on bringing down the risk of expansion into new areas, as well as reducing the risk of offering consumer credit – in order to make quality-verified solar lights and home systems more widely available and more affordable.

Promoting Quality & E-Waste Management

The Government of Madagascar is moving towards adoption of national quality standards, which are harmonized with IEC/Lighting Global quality standards, covering both solar lights and home systems⁸. Voluntary standards have been introduced in 2018, with the potential to become mandatory at a later date. Meeting standards will, however, be a requirement for companies seeking support through the forthcoming Least Cost Electricity Access Development (LEAD) project by the World Bank.

Taxation

There is a sales tax and import duty waiver in place for solar products. The tax waiver will be extended to all off-grid photovoltaics (PV) products, including solar home systems, brought in under a specified list of off-grid solar relevant harmonized system (HS) codes, and covers both quality-verified and generic products.

Investments

Whilst there have been some private investments made by companies entering the market, especially telecommunications companies exploring the sector, there are no national concessional financing facilities currently available. The European Union is supporting one company through its Electrifi facility⁹.

Sector Support Programs

The forthcoming US\$150 million World Bank LEAD project includes a major US\$60 million off-grid component, which will be supported by the Lighting Africa program. It envisages consumer awareness activities to help people identify and choose quality-verified products, technical assistance to the government with the development of national quality standards, and concessional financing. Access to finance will be provided through a local currency working

⁷ Document d'Etude de la Politique et Stratégie de l'Energie, Ministère de l'Energie et des Hydrocarbures, 2015

⁸ <https://www.lightingafrica.org/country/madagascar/>

⁹ Visit the [Electrification Financing Initiative](#) for more information.

capital facility and a 'Quality and Service' Results-Based Financing facility, which includes three kinds of results-based financing: a) based on sales achieved; b) for pay-as-you-go products, designed to bring down the risk of customer default; c) seed funding designed to incentivise smaller companies to meet key milestones such as entering a new area or completing training of sales staff.

Opportunities and Barriers

Although there is an increasing demand for off-grid solar products, companies have mentioned several barriers for growth, such as low customer purchasing power, limited access to finance and high cost of rural distribution due to poor infrastructure. In addition, complex customs procedures and unclear application of sales tax rules are causing delays with the clearance of goods, and low levels of quality assurance is undermining consumer confidence, as there are many low-quality solar products on the market.

Further Information

- [Lettre de Politique de l'Energie de Madagascar 2015-2030, Ministere de l'Energie et des Hydrocarbures](#)
- [Plan National d'Electrification 2018-2030, Ministère de l'Energie et des Hydrocarbures, 2018](#)
- [Madagascar Fact Sheet, USAID Power Africa, 2017](#)
- [Lighting Africa Country Page - Madagascar](#)
- [Regulatory Indicators for Sustainable Energy \(RISE\) - Madagascar](#)