

Benin

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	11,175,692
Population Density per km ²	99
GDP per Capita	USD 829
GDP Growth	5.6%
Energy Access Deficit	
National Electrification Rate	41.4%
Urban Electrification Rate	70.7%
Rural Electrification Rate	18%
Number of households without power	1,000,000
Electrification Planning	
Electrification Targets ⁴	Urban/rural electrification rates of 95%/65% by 2025

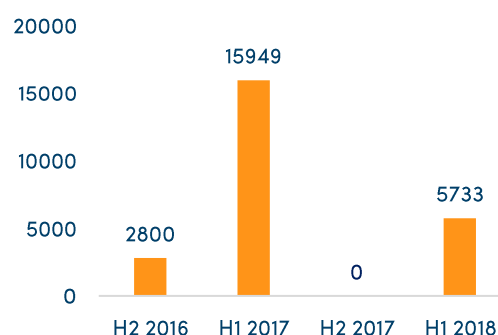
Impact⁵

861,987 people currently living with improved energy access – clean, safe solar light

22,986 people currently using their products to support an income-generating enterprise

229,358,052 additional light hours unlocked for study, productive tasks or leisure time

Sales (pico and SHS)⁶



Current status

Around 41% of Beninese currently have access to electricity, with a sharp divide between urban (70%) and rural areas (18%). Electricity consumption in Benin is below the average for Africa's low-income countries at 110 kWh/capita per year, equivalent to only 0.01 percent of the average for middle-income countries⁷.

In order to improve energy access, the government has adopted a far-reaching policy reform agenda, with the support of the Millennium Challenge Corporation (MCC). On September 9, 2015, the government signed a second grant agreement 'the Benin Compact', which is

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 <https://www.se4all-africa.org/seforall-in-africa/country-data/benin/>

⁵ 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.

⁶ GOGLA and Lighting Global Semi-Annual Data Collection. 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. This explains the zero sales for Benin in 2017 in the figure above.

⁷ [Millennium Challenge Corporation Congressional Notification, 2015](#)

valued at US\$375 million, with Benin providing US\$28 million. In order to implement the program, the 'Millennium Challenge Account – Benin' was created to accelerate investment in the electricity sector from June 2017 to June 2022.

As part of this programme, the Benin government has created the 'Off-Grid Clean Energy Facility' (OCEF), which aims to improve access to and availability of electricity for use by households and public infrastructure. Secondary goals include the stimulation of the market for off-grid electricity, adoption of energy efficiency measures, the creation of a regulatory framework, supporting private sector investment and developing governance capacity⁸.

Promoting Quality

Benin currently has no mandatory standards in place for off-grid solar products. However, donor programs like EnDev Benin – coordinated by The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Netherlands Enterprise Agency – do require that products adhere to the IEC/Lightning Global quality standards. As part of the Economic Community of West African States (ECOWAS), Benin is likely to adopt national standards that are harmonized with the IEC/Lightning Global quality standards in the near future.

Taxation

Import duty and sales tax are applied to off-grid solar products. However, in 2014, the government's renewable energy agency agreed to waive the then 40% import duty for all solar products meeting Lighting Global Quality Standards⁹, for a project under the Power out of Poverty Partnership – which was a public-private initiative led by the Netherlands Development Organisation (SNV) in partnership with MTN Benin, the

Government of Benin, local solar power companies and a local micro-finance institution¹⁰. Under the EnDev Benin program, solar products are currently also exempted from import duty and sales tax.

Investments

In the past, private investment in the off-grid solar sector in Benin has been limited. By creating a long-term electrification policy, the government is now aiming to increase predictability and to attract private sector investment.

Sector Support Programs

As part of the Benin Compact, the MCC is inviting proposals for grants to support solar and other clean energy projects in underserved parts of the country. The first call was in May 2018, while the second call is open from December 6, 2018 to March 8, 2019¹¹. The MCC and the government of Benin are looking for proposals from companies and non-profit organisations for projects that meet growing demand for power at various levels. Grants of US\$100,000 to US\$5 million are being offered for projects ranging from household generation (including pay-as-you-go PV kits) and community-level mini-grids, to systems to support public infrastructure, such as hospitals or health clinics.

The EnDev Benin program (2005–2021) – with a budget of US\$18 million – promotes markets for improved cookstoves and solar products by financially supporting importers and distributors, and advocating for access to clean energy¹².

Benin is also part of the forthcoming World Bank Regional Off-Grid Electrification Project (ROGEP). The project, with an estimated overall budget of US\$200 million will support the acceleration of regional off-grid markets and improve access to finance.

⁸ <https://www.niras.com/development-consulting/projects/off-grid-clean-energy-facility-ocf-in-benin/>

⁹ Known at the time as the 'Lightning Africa Quality Standards'

¹⁰ https://energypedia.info/wiki/Solar_Power_in_Benin

¹¹ Visit GOGLA Bridge for more information.

¹² [Energising Development partnership – Country Project Benin, GIZ, 2018](#)

Opportunities and Barriers

There is political will to create policy to further develop the off-grid solar sector, underlined by the signing of the Benin Compact and the start of the OCEF. The Benin Compact will provide opportunities for companies and investors to enter the off-grid solar market, as considerable investments will be made in infrastructure, policy reform and financing facilities.

Major barriers hindering the scaling up of the off-grid sector in Benin currently include taxation on quality-verified solar products which affects the affordability of products, lack of access to company and consumer finance, and high costs of rural distribution.

Further Information

- [Plan Directeur d'Électrification Hors Réseau, IED & PAC, 2017](#)
- [Politique et Stratégie. Etude pour la mise en place d'un environnement propice à l'électrification hors-réseau, IED & PAC, 2017](#)
- [Benin Fact Sheet, USAID Power Africa, 2018](#)
- [Lighting Africa Country Page - Benin](#)
- [Regulatory Indicators for Sustainable Energy \(RISE\) - Benin](#)