

Niger

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	21,477,348
Population Density per km ²	17
GDP per Capita	USD 378
GDP Growth	4.9%
Energy Access Deficit	
National Electrification Rate	16.2%
Urban Electrification Rate	65.3%
Rural Electrification Rate	4.6%
Number of households without power	2,454,554
Electrification Planning	
Electrification Targets ^{4&5}	Electrification rate of 60% by 2027/ universal access by 2035

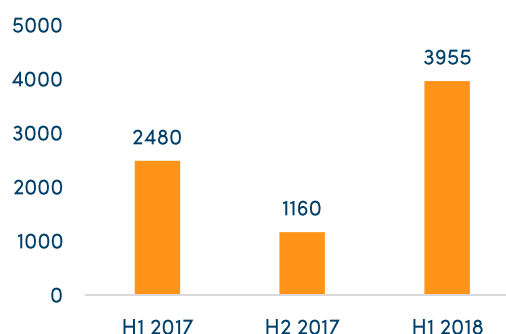
Impact⁶

33,152 people currently living with improved energy access – clean, safe solar light

884 people currently using their products to support an income-generating enterprise

7,735,508 additional light hours unlocked for study, productive tasks or leisure time

Sales (pico and SHS)⁷



Current status

For many years, Niger has been one of the poorest countries in the world and continues to have one of the lowest consumptions of electricity: around 16% of Nigeriens have access to the grid. Access to electricity has more than doubled since 2000, yet a large rural-urban divide remains, with urban access rates surpassing 65% and rural areas still mostly not electrified. The Government of Niger aims to reach 60% energy access by 2027 and universal access by 2035. With extremely low population density at less than half the African average – approximately 80% of the population lives in rural areas –

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 Press Release, The World Bank Group, 2015

⁵ Niger Fact Sheet, USAID, Power Africa, 2018

⁶ 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.

⁷ 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.

there is a strong potential for off-grid solar in Niger⁸.

According to research by Open Capital Advisors (2017), 33% of households in Niger are off-grid but live within 5 kilometres of the grid. These are therefore well suited for relatively inexpensive grid extension initiatives, although the grid in Niger often experiences blackouts and electricity supply is unreliable. At the same time, 17% of households live beyond 20 kilometres from the grid and are unlikely to be reached by the grid in the coming years. This represents an opportunity for off-grid solutions in both urban and rural areas, but the market remains at an extremely early stage.

According to the government, grid extension is the most cost-effective option to electrify 85% of the population by 2035, while off-grid solutions, such as mini-grids and solar home systems, could provide energy access to 15% of the Nigeriens⁹.

In order to increase electricity supply and investment in the energy sector, the government established a regulatory body ARSE (Autorité de Regulation du Secteur de l'Énergie) in 2015 to increase transparency and fair competition among energy actors in the country. The Government also created ANPER (Agence Nigérienne de Promotion de l'Électrification en milieu Rural), mandated with designing, implementing, and monitoring rural electrification programs throughout the country¹⁰.

Promoting Quality

Niger has no mandatory standards in place for off-grid solar products, but the Centre National d'Énergie Solaire (CNES) – which recently changed its name to Agence Nationale d'Énergie Solaire (ANERSOL) – has been requested by the World Bank to adopt IEC/Lightning Global quality standards as part of the Niger Solar Electricity Access

Project (NESAP). The question of how to best promote quality will likely be addressed through the Regional Off-Grid Electrification Project (ROGEP), which is being supported by the World Bank Group's Lighting Africa program.

Taxation

A tax exemption decree came into effect in September 2017, removing import duties and sales tax on all renewable energy products¹². However, to obtain a duty waiver, companies need to put in a lot of effort. In order to speed up the process, a faster, more automatic granting of the exemption would be beneficial.

Investment

Niger has attracted private investment in the past, but this has been limited, for a large part because the country's utility, Nigerien Electricity Society (NIGELEC), had a monopoly on Niger's power supply until May 2016. The government then decided to liberalize the energy market with the Electricity Act to attract private investment.

Sector Support Programs

In 2017, Niger ratified an agreement it closed with the World Bank's International Development Association (IDA) for US\$49.9 million in financing to support the Niger Solar Electricity Access Project (NESAP), an initiative aimed at bringing solar power to rural communities¹³. NESAP consists of four components focusing on market development, financing and technical assistance, and its objective is to increase access to electricity through solar energy. As part of NESAP, with support from the Lighting Africa program, a US\$7 million line of credit will be set-up to provide banks and microfinance institutions (MFIs) with funds to on-lend to off-grid solar companies.

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

⁹ Stratégie nationale d'accès à l'électricité, Ministère d'Énergie Niger, 2018

¹⁰ <https://www.usaid.gov/powerafrica/niger>

¹¹ <https://www.lightingafrica.org/country/niger/>

¹² <https://www.lightingafrica.org/publication/niger-tax-exemption-decree/>

¹³ Niger Solar Electricity Access Project, World Bank, 2017

Opportunities and Barriers

As one of the poorest countries in the world, affordability of solar products remains a barrier for market growth. Until recently, high import taxes meant that products were unaffordable for most customers and poor-quality products dominated the market, undermining consumer confidence. Other market barriers include limited access to company and consumer finance, a lack of partners for distribution and maintenance, high logistic costs and low mobile money penetration¹⁴.

Still, there is considerable demand for access to modern off-grid electricity services, particularly in the agriculture sector. Demand for solar water pumping is expected to grow over the next decade due to declining costs, high reliability, and increased commercial availability in rural areas. The World Bank (2017) estimates that – if consumer financing is made available – the annual market size is US\$30 million for smallholder farmers, US\$10 million for commercial farms, and US\$10 million for public irrigation plots¹⁵.

Further Information

- [Off-grid solar market assessment in Niger & design of market-based solutions, Open Capital Advisors, 2017](#)
- [Niger Fact Sheet, USAID, Power Africa, 2018](#)
- [Lighting Africa Country Page - Niger](#)
- [Regulatory Indicators for Sustainable Energy \(RISE\) - Niger](#)

¹⁴ [Off-grid solar market assessment in Niger & design of market-based solutions, Open Capital Advisors, 2017](#)

¹⁵ [Niger Solar Electricity Access Project, World Bank, 2017](#)