

Niger

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	22,442,948
Population Density per km ²	18
GDP per Capita	USD 411.7
GDP Growth	5.2%

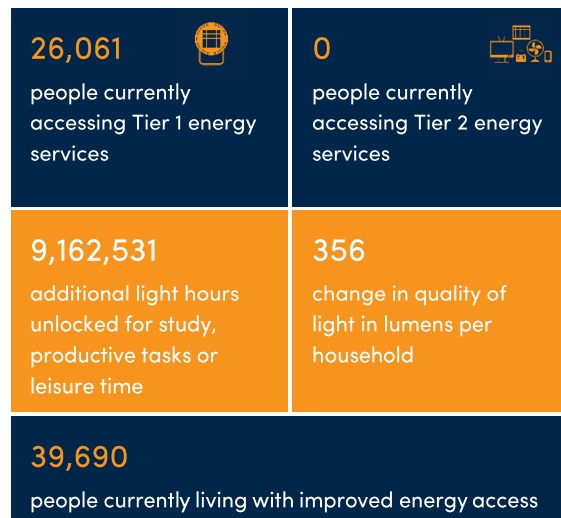
Energy Access Deficit

National Electrification Rate	20%
Urban Electrification Rate	67.1%
Rural Electrification Rate	10.8%
Number of households without power	3,8 million

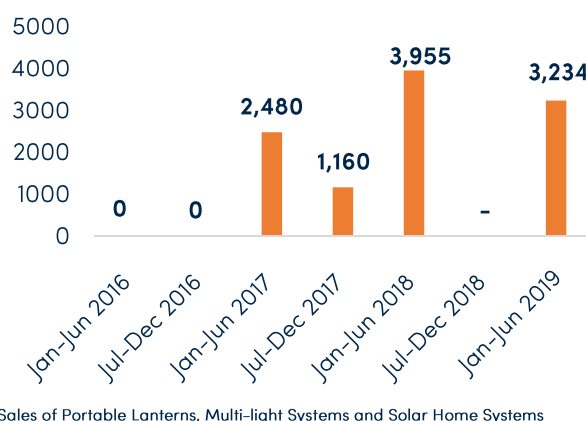
Electrification Planning

Electrification Targets ^{4,5}	Electrification rate of 60% by 2027/ universal access by 2035
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Impact⁶



Sales⁷



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 Press Release, The World Bank Group, 2015

⁵ Niger Fact Sheet, USAID, Power Africa, 2018

⁶ 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.

⁷ 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

For many years, Niger has been one of the countries in the world with the lowest consumptions of electricity: around 14.3% 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 67% 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 live in rural areas – 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 Régulation 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 country^{10&11}.

the Government of Niger, together with ECREEE/ROGEP has created a multi-stakeholders Task Force Platform. In the framework of the Regional Off-Grid Electrification (ROGEP), multi-stakeholders task forces are being set up in each of the 19 countries, to serve as platforms to facilitate the continuous involvement of all the relevant stakeholders. These groups aim to facilitate regular technical exchange between actors of the off-grid electricity subsector and to get their contributions in the implementation of ROGEP and also to develop synergies with other off-grid projects.

Promoting Quality & E-Waste Management

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.

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/>

Investments

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.

USADF and Power Africa are currently requesting proposals for the Sahel-Horn Off-Grid Energy Challenge that is looking for entrepreneurs to provide off-grid energy solutions to rural communities. The award grants are up to \$100,000 each to African off-grid enterprises that deploy renewable resources and power local economic activities. The request for proposals is open until November 2019¹⁴.

Niger is also part of the Regional Off-Grid Electrification Project (ROGEP) which aims to increase electricity access to households, businesses, and communities through modern off-grid electrification in the 15 Economic Community of West African States (ECOWAS) countries.

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 penetration¹⁵. Low levels of consumer awareness of solar solutions, particularly in rural areas is also a major barrier.

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 plots¹⁶.

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](#)

¹³ [Niger Solar Electricity Access Project, World Bank, 2017](#)

¹⁴ [USADF – Off-Grid Energy](#)

¹⁵ [Off-grid solar market assessment in Niger & design of market-based solutions, Open Capital Advisors, 2017](#)

¹⁶ [Niger Solar Electricity Access Project, World Bank, 2017](#)