

Somalia

Introduction

This note was developed by GOGLA with the support of the World Bank Group technical team and Lighting Global Program, the Energy Sector Management Assistance Program (ESMAP), the Shell Foundation, USAID, Power Africa, Africa Clean Energy Technical Assistance Facility (ACE TAF), the UK Foreign Commonwealth & Development Office (FCDO) 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 countries' off-grid solar markets, as well as relevant policies and programs¹.

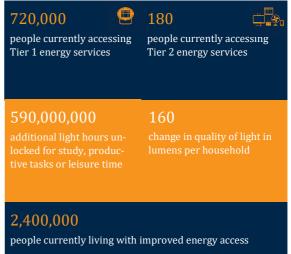
Key statistics

Demographics²

2 cm ograpines	
Total Population	15,442,906
Population Density per km ²	25.3
GDP per Capita	USD 309.4
GDP Growth	-1.5%
Energy Access Deficit ³	
National Electrification Rate	36%
Urban Electrification Rate	66%
Rural Electrification Rate	11%
Number of people without access to electricity ⁴	9,878,333
Electrification Planning	

Electrification Targets universal electrification by 2030

Impact⁵



Sales⁶



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

briefings due a change in the calculation approach. 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 country 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 GOGLA in partnership with IFC Lighting Global and the Efficiency for Access Coalition. The public version of the resulting report of the effort is available heres/heres/heres/heres/heres/heres/heres/heres/<a href="https://example.com/heres/heres/<a href="https://example.com/heres/heres/heres/heres/heres/heres/heres/

¹The information and views expressed in this brief are GOGLA's alone and are based 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://data.worldbank.org/

⁴ https://trackingsdg7.esmap.org/

⁵ Impact numbers have been estimated on the basis of the <u>Standardized Impact Metrics for the Off-Grid Solar Energy Sector</u>. The reported estimates differ from the previous edition of the country



The Voice of the Off-Grid Solar Energy Industry

Current Status

Somalia is a federal state made of five federal regions, namely: Puntland, Galmudug, Hirshabelle, South-West Jubbaland, and the self-declared independent state of Somaliland. While this brief covers Somalia in its entirety, specific developments within Somaliland will be highlighted in this brief as appropriate.

For more than two decades, Somalia has been in a state of political instability, which has limited the delivery of public services including energy access through both grid and off-grid energy solutions. As a result, Somalia has one of the lowest national electrification rates in Sub-Sahara Africa.⁷

Despite this, the market for off-grid solar products in Somalia has significant potential. GOGLA associates have reported sales of over 500,000 units of off-grid solar products since 2018, notwithstanding some gaps in sales reporting.⁸

Demand for energy in Somalie outstrips supply by a wide margin. Estimates indicate that access to energy in Somalia is at approximately 11% in rural areas and 66% in urban areas, with an average of 36% across the country. Studies show that urban areas like Mogadishu have about 60% access to some sort of energy, mostly used for household lighting (e.g., car batteries and kerosene lamps). Generation of electrical power in Somalia stands at about 120MW per hour, of which 96% comes from sub- standard diesel generators.

Policy, Regulation and Sector Planning

Somalia has a draft National Electricity Act 2020. The draft contains legal and regulatory provisions governing the energy sector in Somalia. The provisions cover areas such as: rural electrification, off-grid energy, licensing requirements for the energy sector; energy efficiency and conservation activities; and electricity generation, supply and distribution activities.

Somalia also has a draft National Energy Policy 2020. The draft is a policy document geared towards providing all Somalis with adequate, affordable and sustainable access to energy, with a commitment to environmental stewardship, while also improving quality of life, promoting economic growth, developing clear policies, regulations, building strong institutions, and unlocking the Somalia's renewable energy potential. This draft policy supports rural

⁷ <u>Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.</u>

electrification efforts through the development of offgrid and mini-grid energy infrastructure.

In 2019, the Federal Government of Somalia developed the Somalia Power Master Plan, a plan to enhance the provision of adequate, reliable, affordable and clean modern energy services to the people of Somalia. The plan proposes the establishment of modern, cost-effective and reliable electricity supply systems supplied through both grid and off grid energy access solutions.⁹

The 2020 - 24 Somalia National Development Plan recognizes the critical role of off-grid solar energy in enabling energy access to households in rural and remote parts of the country through solar home systems (SHS). The plan also recognizes the potential of productive energy use in Somalia's agricultural sector to spur socio-economic growth, enhance national food security and achieve national developmental goals.

In 2010, the Somaliland government launched the Somaliland Energy policy¹¹, to outline the provision of adequate and reliable modern energy services to the people of Somaliland in a sustainable and cost-effective manner. The policy, however, focuses on grid electrification and does not provide clear guidance on off-grid electrification.

Promoting Quality & E-Waste Management

Somalia has no mandatory standards in place for offgrid solar products. However, programs such as the World Bank- funded Somalia Electricity Recovery Project and Somalia Electricity Access Project (SEAP) require products to adhere to IEC quality standards.

Somalia has no specific laws and regulations on e-waste.

Investments

Investments in the off-grid solar sector in Somalia have been limited due to years of political instability and insecurity. However, the situation has been gradually improving in recent years with the Federal Government of Somalia focusing its efforts on creating an investor-friendly environment.¹²

Local financing for off-grid solar companies is mostly obtained through commercial bank loans. Lending is

⁸ 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 GOGLA in partnership with IFC Lighting Global and the Efficiency for Access Coalition. The public version of the resulting report of the effort is available <a href="https://example.com/heres/briefle/brief

⁹ https://moewr.gov.so/projects/energy-projects/

¹⁰ The 2020 - 2024 Somalia National Development Plan, Federal Government of Somalia.

¹¹ The Somaliland Energy Policy 2010.

¹² Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.



The Voice of the Off-Grid Solar Energy Industry

based on Shariah Islamic banking principles, which apply a service fee rather than charging interest.¹³

Sector Support Programs

The Somalia Electricity Recovery Project is a US\$150 million World Bank-funded project, which seeks to accelerate access to clean and affordable energy for 1.1 million Somali households. The project has US\$40 million component, to support the electrification of public facilities (health and education) in rural and peri-urban areas through mini-grids and stand alone solar systems. The project was approved in 2021 and is scheduled to end in 2026.¹⁴

The Regional Infrastructure Finance Facility (RIFF) project is an investment financing facility project with funding from the World Bank to the Common Market for Eastern and Southern Africa (COMESA) and the Trade and Development Bank (TDB). RIFF will be implemented in Somalia among other COMESA countries. RIFF has a US\$75 million component targeting renewable energy small and medium-sized enterprises (SMEs) dealing with solar home systems (SHS) and operating in Somalia and other target COMESA countries. RIFF also has a US\$10 million capacity building and technical assistance subcomponent which is geared towards supporting the enabling environment for private infrastructure finance with a focus on building a robust COMESA regional off-grid energy market. The subcomponent will enable the COMESA Secretariat to support: regional integration activities within the off-grid energy sector and offgrid energy sector market development activities in the in Fragile Conflict and Violence (FCV countries such as Somalia. The project was approved in 2020 and is scheduled to end in 2025.15

The Somalia Electricity Access Project (SEAP) is a US\$7.2 million World Bank funded Project that facilitates access to electricity in rural and peri-urban areas of Somalia and Somaliland. SEAP has a US\$3.3 million off-grid component which promotes electricity access through stand alone SHSs. SEAP also has a technical Assistance and capacity building component worth US\$1.5 million. The component supports capacity building in the various government agencies involved in implementing and managing the project. SEAP was launched in 2018 and is scheduled to end in 2022.16

The Africa Enterprise Challenge Fund (AECF), through the Renewable Energy and Climate Technologies Sub-Saharan Africa (REACT SSA) programme, is supporting private companies that are promoting the use of renewable energy in Somalia and Somaliland. Funded by the Swedish International Development Authority (SIDA), the REACT SSA initiative seeks to reduce poverty through a transformational increase in the use of renewable energy by off-grid households. In the REACT SSA programme, qualifying companies will receive between US\$100,000 and US\$1.5 million of pure grants, awarded upon the achievement of mutually agreed milestones. The grants will be given to commercially viable companies out of which 25% will be women owned or managed.¹⁷

USAID funded the Power Africa Off-grid Project (PAOP) which provides technical assistance and targeted grant funding to support the development of Africa's off-grid SHS and mini-grid sectors in Somalia and Somaliland. Through a team of resident technical advisors, PAOP works with companies, investors, and governments to advance the role of the private sector in extending energy access while integrating gender considerations into all its work streams.¹⁸

Industry Associations

The Somali Green Energy Association (SOGEA) is a non-profit organization that brings together actors in the renewable energy sector to promote the growth and development of the renewable energy industry in Somalia. SOGEA was established in 2021 and believes that with the right support, the renewable energy industry can scale to provide affordable solar products and services to the millions of Somalis, in line with Sustainable Development Goal 7.

The Somaliland Renewable Energy Association (SOM-RENA) is a non-profit industry association representing the interests of the renewable energy industry in Somaliland. SOMRENA was established in 2018 and has a strong presence in Somaliland's energy sector. ¹⁹ SOMRENA is dedicated to promoting the growth and development of the renewable energy industry in Somaliland by engaging with the public and private sector to guide advocacy, policy formulation and investment in the renewable energy sector.

Opportunities and Barriers

The key barriers and challenges facing the off-grid solar sector in Somalia include the lack of an enabling

¹³ Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.

¹⁴ https://projects.worldbank.org/en/projects-operations/project-detail/P173088

¹⁵ https://projects.worldbank.org/en/projects-operations/project-detail/P171967

 $^{^{16}\,\}text{https://projects.worldbank.org/en/projects-operations/project-detail/P165497}$

¹⁷ http://www.aecfafrica.org/react-ssa-somalia

¹⁸ https://www.usaid.gov/powerafrica/wherewework/somalia

¹⁹ Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.



The Voice of the Off-Grid Solar Energy Industry

environment due to political instability and insecurity, lack of access to finance and the lack of a national quality assurance framework for off-grid solar products. Moreover, many households in Somalia struggle to afford off-grid solar products and consumer financing mechanisms fall short in improving affordability.

In 2021, a nationwide off-grid energy consumer awareness campaign was commissioned by the Somalia Ministry of Energy and Water (MoEWR). The aim of the campaign is to address demand-side barriers such as the understanding of product quality and financing options.²¹

While Somaliland has seen relative stability, the key barriers and challenges facing the off-grid solar sector in Somaliland include lack of access to finance and the lack of a national quality assurance framework for off-grid solar products. Moreover, many households in Somaliland struggle to afford off-grid solar products and consumer financing mechanisms fall short in improving affordability. ²²

The off-grid solar market in Somaliland has the potential for steady growth over the next few years, with growth being mainly driven by the presence of a large un-electrified market, the emergence of mobile money platforms and a vibrant private sector. ²³

Further Information

- Global Off-Grid Solar Market Report H1 2021, GOGLA.
- Global Off-Grid Solar Market Report H2 2020, GOGLA.
- Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.
- The 2020 2024 Somalia National Development Plan, Federal Government of Somalia.
- Somalia Fact Sheet, USAID Power Africa.
- Lighting Africa Somalia country page.

²⁰ Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.

²¹ https://somalijobs.net/wp-content/uploads/2020/01/REOI-Consumer-Awareness-Advert.pdf

²² Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.

²³ Stand Alone Solar Market Update: Somalia, Africa Clean Energy Technical Assistance Facility, 2021.