

OPPORTUNITIES AND TRENDS BRIEF

March 2021

Ethiopia: The second largest addressable market for stand-alone solar in Sub-Saharan Africa

60m

Unelectrified
Population

110m



Total
Population



109

People per km²
Population
Density

81



out of

100

Framework for Stand-alone Systems
Score

Regulatory Indicators for Sustainable
Energy (RISE).

64

out of

100

PAYG Market
Attractiveness
Index (Score)

100% by

2025



Government target for
universal electrification.

grid - 65%, off-grid - 35%

159

out of

190¹



Ease of doing
business rank



8

Donor Programmes
supporting SAS



Before the Covid-19 pandemic, Ethiopia was one of the fastest growing economies globally with an average of **10% gross domestic product growth** in the past decade. However, the International Monetary Fund (IMF) predicts that economic growth will decrease to **3.2 per cent in 2019/2020** and to **3.7 per cent in 2020/2021**.



The country has an **upcoming election in June 2021** while parts of the country like the Tigray region are already experiencing political instability.

Ethiopia is the **second largest market** for stand-alone solar in Sub-Saharan Africa after Nigeria.

Highest solar sales at **71,000** were recorded in July-December 2019 but **reduced by 60%** in January-June 2020.

Over **45,000** schools and health centers require electrification. Solar systems will be more cost-effective to deploy than extending the grid, if the 2025 universal access to electricity target is to be met.

The Ministry of Agriculture plans to deploy **400,000 irrigation pumps between 2020 - 2025**. It is estimated that solar water pumps could **potentially irrigate 7 million hectares of smallholder farms**.

The Government has offered support, but more is required for the universal access target to be met.



The National Electrification Program plans to electrify 9.2 million households using SAS. However, for this to be achieved, the annual supply of SAS must increase by an average of 12% from 1.7 million units in 2021 to 2.7 million units in 2025.



There is a new regulation that allows non-financial local institutions to engage in digital payments and money transfer services²



Larger solar home systems with quality certificates are exempted from customs duties but 15% VAT and 3% withholding tax are still applicable.

Success with the Market Development Credit Line (MDCL) has led to more financing facilities that are currently in design phase:



Between 2012 - 2019 World Bank and the Development Bank of Ethiopia (DBE) implemented the MDCL where **31 SAS companies** received concessional foreign currency loans, **13 microfinance institutions** took part in a consumer financing facility, and over **1.2 million SAS products** were distributed³.



World Bank is currently designing a new **USD 400 million** credit facility under the **Accelerating Distributed Electricity and Lighting in Ethiopia (ADELE)** project, which is expected to be launched in 2021.



African Development Bank (AfDB) plans to provide **USD 100 Million commercial loan** for supporting off-grid energy-based electrification. It will partner with the Commercial Bank of Ethiopia (CBE) to work on the Credit Facility



Under the National Electrification Program (NEP) 2.0, the government estimates a financing need of **USD 1.76 billion** between 2019 and 2025 to achieve **9.2 million off-grid connections**.

Trends show that Ethiopia is opening to the private markets...



Foreign companies can participate in local manufacturing and assembly of solar products but not in the distribution.



There is potential for local manufacturing of solar products to address forex challenges, but this needs to be piloted first before going full scale. The country already has companies assembling televisions and mobile phones.



Private investments directly into SAS companies have been limited due to a restrictive regulatory environment.



The Ethiopia Solar Energy Development Association is gaining credibility having established national committees to address solar issues. The association draws membership from four regional associations - Amhara Solar Energy Development Association (ASEDA), Tigray Solar Energy Development Association (TSEDA), Southern Solar Energy Development Association (SSEDA), and Oromia Solar Energy Development Association (OSEDA).

What is the impact of political instability in the northern regions and other challenges to the sector?



The COVID-19 pandemic coupled with the worst attack by desert locusts in 25 years that destroyed crops are expected to push 2 million people into poverty.



The inconsistent enforcement of quality standards, import duties and taxes makes the quality-verified products more expensive and hence out of reach for the vulnerable.



Limited access to forex to enable companies to import solar products, thus the need for increased concessional forex loans in the market.

In conclusion

Ethiopia has a large addressable market that needs the private sector and development partners to closely work with government to address existing challenges. This will make SAS more affordable and the government will make progress towards universal access to electricity by 2025.

References

¹World Bank (2020) Doing Business

²GoE (2020) Licensing and Authorization of Payment Instrument Issuers Directive No ONPS/01/2020

³OCA consultation with Development Bank of Ethiopia (DBE), 2020