

OPPORTUNITIES AND TRENDS BRIEF

March 2021

Kenya: A mature stand-alone solar market that is moving to new frontiers

8m

Unelectrified
Population

52.5 m



Total
Population



90

People per km²
Population
Density

97



out of

100

Framework for Stand-alone Systems
Score

Regulatory Indicators for Sustainable
Energy (RISE).

99

out of

100

PAYG Market
Attractiveness
Index (Score)

100% by
2022



Government target for
universal electrification.

56

out of

190



Ease of doing
business rank

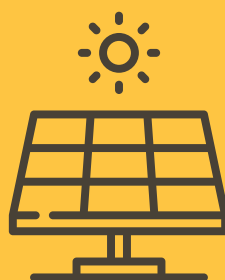


9

Donor Programmes
supporting SAS



Kenya's national electrification access increased from **23 per cent in 2009** to **75 per cent in 2020**, including off-grid access. The proportion of households using solar as the main source of lighting increased significantly from **1.6% in 2009** to **19.3% in 2019**.² About 99% of Kenya's off-grid electrification is through solar home systems.



Nearly **1.28 million households** and businesses that government targeted to connect through the grid by **June 2020** were not electrified due to budget constraints and long approval processes for tax exemptions³. Deploying stand-alone solar could be a cost-effective way of bridging that gap and attaining the universal access target.



Consumers are willing to pay between **KES 153 (USD1.46)** and **KES 805 (USD 7.67)** per month for solar home systems through the pay-as-you-go model⁴.

The government has been active in supporting the SAS sector, but there was a setback in 2020

- » The key setback was re-introduction of 16% VAT and 25% import duty for SAS under the Finance Act 2020. The Act also introduced 3% turnover tax for businesses whose gross sales do not exceed KES 5 million (USD 5000). This has affected affordability of SAS and will hamper access to electricity for marginalized communities under Kenya Off-Grid Solar Access Project (KOSAP).
- » The Energy Act, 2019 mandates the Rural Electrification and Renewable Energy Corporation (REREC) to enhance uptake of renewable energy, especially SAS systems in off-grid areas.
- » The Kenya National Electrification Strategy, 2018 estimates the market opportunity for off-grid solar at 2.2 million households by 2022.
- » KOSAP is a government initiative that is funded by World Bank and aims to electrify 277,000 households through solar home systems and deploy 380 solar pumping systems in the arid and semi-arid parts of the country. The project will also deploy solar to power 784 health facilities, 207 schools and 106 public offices in the same region⁵.
- » In February 2021, the Kenya Bureau of Standards gazetted the new standard KS IEC 62257-9-8 to replace the old KS 2542 standard. The new standard covers the plug-and-play systems and appliances with a peak power rating of 350Wp. The test methods KS IEC 62257-9-5 will be gazetted later in the year.

Many of the international SAS companies in Kenya have attracted significant financing over the last 10 years. Some of the funding focusing on Covid-19 recovery includes:



GET.invest Finance Catalyst COVID-19 window support on strategy including business continuity, business and financial structuring as well as financial modelling, access to finance support and transaction advisory.



CLASP's Conversion of Results-Based Financing incentives for appliances together with funding from **USAID Power Africa** and **Energizing Development program**



Private Financing Advisory Network (PFAN) with focus on business continuity, access to special Covid-19 Relief Funds and rescheduling and renegotiation of existing facilities.



The **Energy Access Relief Fund (EARF)** has been designed to provide up to four-year tenure, subordinated, unsecured, low-cost, subsidised loans to viable companies that are facing liquidity challenges due to COVID-19. Its primary focus is expected to be on loans of less than **USD1 million**, within a range of **USD100,000 to USD2.5 million**.



AfDB's Covid-19 Off-Grid Recovery Platform is providing concessionary loans to support companies that are struggling through the pandemic.

The Kenya Renewable Energy Association is active in advocacy and gaining credibility. Other key trends we noted were:



SAS companies in Kenya were recognized as essential service providers during the COVID-19 lockdown.



The Kenya Renewable Energy Association has about 90 members. The Association has been advocating for the return of tax exemptions, after VAT was reinstated through the Finance Act 2020.



E-waste Management Regulations that cover SAS are being developed by the National Environmental Management Authority. This will affect solar companies.



The Ministry of Energy launched a Gender Policy in 2019 to promote the participation of women and youth in the energy value chain.

A referendum and national elections and could affect the country's economic recovery. The significant challenges likely to affect the SAS



The economic and social disruption caused by COVID-19 has resulted in over two million more Kenyans sliding into poverty.⁶



A national referendum to amend the constitution could take place before the end of 2021 while the national elections will be held in August 2022. Historically, a referendum and national elections create tension and political instability in the country.

In conclusion

Given the maturity in the market, there are increasing opportunities in the market to utilize solar energy as an enabler for small cottage industries and agriculture. This will lead to improved livelihoods, higher incomes and economic development.

References

¹World Bank (2020) Doing Business

²Economy Survey, 2020

³Business Daily (2020) Kenya Fails to connect 1.28m to power grid

⁴IFC (2018) PAYG Market Attractiveness Index

⁵Lighting Global (2018) Kenya Off-Grid Solar Access Project for Underserved Counties

⁶<https://www.worldbank.org/en/country/kenya/publication/kenya-economic-update-covid-19-erodes-progress-in-poverty-reduction-in-kenya-increases-number-of-poor-citizens>