Impact of VAT and Import Duty on the Stand-Alone Solar Sector in Kenya

A policy position paper presented by: The Kenya Renewable Energy Association (KEREA) and GOGLA

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Introduction

In 2020, the VAT exemptions for Stand-Alone Solar (SAS) products were removed through amendments to the Value Added Tax Act, No. 35 of 2013 that were enacted through the Finance Act, 2020. In addition, the Legal Notice No. EACC/89/2020 removed import duty exemptions for SAS products through amendments to the East African Community Customs Management Act, 2004.

The removal of tax exemptions on SAS products to comply with the national fiscal policy to raise revenue and gradually eliminate tax exemptions, will have a negative impact on access to SAS products and retard the achievement of universal access to electricity, especially among low-income households.

The Kenya National Electrification Strategy (KNES), 2018 recognises SAS as a preferred mode to electrify 1.9 million households by 2022. The KNES also authoritatively states that as much as the government is driven to reach universal access, private sector delivery of access to electricity to meet the needs of lower income households via SAS is a necessary component of that plan.

The policy statements in the KNES 2018 outlining the government's goal to achieve universal access to electricity is at risk, as it is impacted by the imposition of VAT and import duty on SAS products. These products if supported can accelerate the achievement of this goal, especially when compared to the cost of grid extension at US\$ 1,000¹ per connection, and that the cost of acquiring a solar product is borne by the consumer. The industry has proven to be innovative and supportive of off grid communities by putting in place Pay-As-You-Go (PAYG) models which have enabled underserved populations to light their homes.

The economic impact assessment on the removal of the tax conducted by GOGLA and the Kenya Renewable Energy Association (KEREA) revealed that:

- Kenya will not meet the universal access to electricity by 2022, with the SAS contribution (1.9 million households) falling short due to decreased sales owed to both taxes and COVID 19.
- The government stands to lose a total of 19.6 million per year from VAT and import duty, a mere 0.1% of the total national revenue if the exemptions are reinstated.
- Prices of SAS products have increased by between 10-24%, and sales have slowed down by 20%.
- On the contrary, the government would gain US\$ 46 million in taxes per year from 250,000 households starting new businesses and an additional US\$ 2.7 million from 2,500 new jobs per year.
- In total, VAT exemptions for SAS products would result in a net cost to Treasury of around USD 13 million per year and would generate over USD 40 million in annual benefits from corporate taxes and other economic activity.
- Women's productivity is another indirect benefit that is derived from the increased uptake of SAS and growth of the sector. Out of the jobs created, 27% would be taken up by women. According to the National Policy on Gender and Development, there are gender inequalities in the job market with women accounting for only 30% of formally employed Kenyans. The boost from this sector would help bridge this gap, albeit, slightly.
- With removal of VAT and import duty, households can switch to SAS products from paraffin, wax or candles. Although they would not eliminate spending on all energy sources, but they should reduce spending on other sources by at least 70%. These savings would amount to US\$ 38 million more per year by the end of 2025.

Access to electricity would support rural economies to gain jobs, incomes, additional study hours, and an overall improvement in the quality of life. In addition, the gains to growth in the economy would see an upside in tax collection from the VAT and import duty exemption of SAS products. Finally, Kenya would be viewed as meeting its commitment to SDG 7, and more importantly meeting the KNES 2018 goals.

¹World Bank, Off-grid Solar Access Project for Underserved Counties. Project appraisal, July 2017

The Industry Position and Policy Recommendations

The Constitution of Kenya 2010 provides for the right to equality and freedom from discrimination. Article 27(6) obliges parliament to come up with laws to cushion disadvantaged communities. In fact, the expectation is that laws would be provided to improve the financial situation and quality of life of these communities. As indicated in figure 6, access to electricity has many benefits for these off-grid communities.

As rightly stated in the KNES 2018 and the SDG 7, Kenya should aspire to provide universal access to electricity for all. It is a key component of decent and dignified lives of Kenya's off grid communities who have been underserved for years.

To achieve universal access to electricity for the 1.9 million households via SAS products, the government will need to take decisive actions, including providing fiscal incentives for SAS investments. The national government should adopt the following policy measures:

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The VAT exemption on SAS products should be reinstated for a period of at least 10 years after which a Regulatory Impact Assessment should be conducted to establish the suitability of retention or removal of the exemptions.

- Through amendments to the East African Community Customs Management Act, 2004, all import duties previously adopted should be reinstated. Kenya is a net importer of SAS products. Import duties, though a source of revenue directly contributes to high costs of products, and the total import duty collected is only 0.06% of total income collected.
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Provide further fiscal incentives to subsidize the cost of SAS products especially the 0-3-Watt single lighting systems and 3-11-Watt multi-light systems, which consist of 75% of total consumption of SAS products. The products are predominantly consumed by the low-income households.



Provide fiscal incentives to create enabling investment opportunities for local manufacture of SAS products.

For rural households, access to electricity cannot and should not wait. Kenya should harmonise the policy framework to ensure that nothing hampers the achievement of universal access to electricity.

²Kenya National Bureau of Statistics (2019). Kenya Population and Household Survey

Situational Assessment of the SAS Sector

Kenya has made great milestones towards universal access to electricity. The main source of electricity in Kenya is the grid which currently covers 50% of the households, of which 88% are urban, and 26% are rural.

As shown in Figure 1, more rural households use off-grid solar technologies (30%) as their primary source of lighting compared to 26% that are connected to the grid. There is still a significant gap to reach the universal access targets, particularly in rural areas where 46% of the population relies on paraffin, gas lamps, torches, batteries, firewood and candles.



Figure 1: Primary source of lighting by energy source

Source: ACE TAF analysis of Kenya National Bureau of Statistics (2019). Kenya Population and Household Survey

Stand-alone solar technologies offer the most cost-effective electrification option for a significant proportion of Kenyan households, predominantly those in remote areas. Not only are they hard to reach with other forms of clean and modern energy sources, but also the poorest and most vulnerable communities.

The KNES, 2018 identifies a number of key barriers to achieving universal access to electricity especially for low income communities including: lack of proper incentives to attract private investors; high costs and low affordability of off-grid services; low quality off-grid projects; and lack of enabling legal frameworks for off-grid services. Fiscal subsidies such as VAT and import duty exemptions are a key incentive for private sector to deliver electricity in remote areas.

Impact of VAT and Import Duty on SAS products in Kenya

The economic impact assessment on the impact of VAT and import duty demonstrates that there is an impact on access to electricity via SAS especially in the off-grid areas (especially arid and semi-arid areas served under the Kenya Off-Grid Solar Assess Project (KOSAP), and employment in the SAS value chain among others. Specifically:

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The imposition of VAT and import duties will push Kenya off-course in meeting its energy access targets. As shown in Figure 2, (scenario 4), the imposition of VAT and import duties will reduce annual sales volumes. By 2025, 600,000 fewer households (mostly in poor and marginalised communities) will have access to SAS products if the current taxes are maintained.



Figure 2: Energy Access progression by scenario (Total households)

Source: ACE TAF analysis



The retail prices have gone up by between 10% - 24%

The customer subscription has gone down by about 20%

Sales volumes have gone down by about 25%

С

Nonetheless, it is important to recognize that maintaining the VAT and import duty exemptions comes at a cost to national revenues. As shown in Figure 3, the new VAT rate at 16% would raise an additional USD 9.6 million per year, while import duties may add a further USD 10 million per year. This constitutes 0.1% of the USD 16 billion, which is the total annual revenue.





Source: ACE TAF analysis

Corporation tax receipts may be expected to increase as the sector matures, although this will not significantly offset the foregone VAT if the exemptions are reinstated. The margins for SAS operators are low - in the analysis modelled as a net margin of 5% - so the ability to raise corporation tax revenues from this margin is limited. The estimated corporation tax boost from maintaining the VAT exemption would only be around USD 100,000, although this would increase if the sector achieves higher and more stable margins.

On the other hand, jobs created in the solar value chain will provide important economic opportunities and may generate direct income tax revenues. With the VAT exemption maintained, an additional 2,500 full time jobs in the SAS value chained would be generated each year. Apart from providing valuable livelihoods and skilled job opportunities, these jobs could also contribute about USD 2.7 million per year in income taxes as shown in Figure 4.



Figure 4: Income taxes from jobs in the SAS value chain (USD Millions)



Similarly, the SAS subsector generates employment opportunities and productive economic potential for households (as observed in Figure 5). Maintaining the VAT exemption and reaching more households with SAS products would result in around 250,000 more households using their SAS products to support a new businesses or start a new job. In total, including households who use their SAS product to boost productivity in their current economic activities, the additional income could be as much as USD 46 million more per year, which is far greater than the foregone VAT tax receipts of just USD 9.6 million per year (and noting this is also offset by up to USD 2.7 million of extra tax generated elsewhere from the SAS sector).

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The benefits of improved productivity and economic empowerment often impact most on women and people in more vulnerable communities. Of the jobs created by the SAS sector, 27% of the positions would be filled by women. Similarly, the main beneficiaries of access to electricity for "downstream" users in households is often women, who get improved access to information and communication technologies and can start businesses from the house which would otherwise not be possible.

In addition to fiscal impacts, taxation policy changes have significant impact on the nonfiscal aspects of the economy. Households will save expenditure on other energy sources; in particular kerosene, battery-powered torches, and diesel gensets. Switching to SAS products would not completely eliminate spending on these energy sources but should reduce spending on other sources by at least 70%. These savings would amount to USD 38 million more per year by the end of 2025, with VAT exemptions in place.

Source: ACE TAF analysis

Benefits of fiscal incentives for access to SAS products

While achieving universal access to energy is a worthy goal in itself, the benefits of access to SAS technologies are wide-ranging. Providing fiscal incentives in support of the SAS sector supports the aspects highlighted in Figure 6 below:

Figure 6: Benefits flow of SAS sector to broader macro-economic outcomes



Achieving universal energy access policy objectives



energy products

A level "technology neutral" playing field with other



High and low skill job creation in the formal sector





Reduced expenditure on other forms of energy access for households



and growing sector on a path to maturity and generation, and skills profitability

SAS supports productive use, income

development



A mature SAS sector generates economic benefits to citizens and communities. It will also generate employment, raise productivity and skills, and increase direct taxation revenues from PAYE and other direct income taxes

Source: ACE TAF analysis



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