

Country briefing



Accelerating access to electricity in Africa with off-grid solar

Off-grid solar country briefing: **Somalia**

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The analysis and conclusions in this briefing, and other reports from study, are those of the authors and do not necessarily reflect the views of their organisations, ODI, GOGLA, Practical Action and SolarAid, nor those of DFID.

All project reports are available at: www.odi.org/publications/10200-accelerating-access-electricity-off-grid-solar



Background

Following decades of civil war, Somalia is showing “tangible signs of stabilisation”.¹ The new federal state is still forming and a constitution is gradually being drawn up. However, the country is still hampered by civil unrest as well as a swathe of development needs, not least that of energy. Federal elections in 2016 will be an important test of the country’s progress. Power from the few independent power producers (IPPs) operating in cities across the country, mostly using generators brought over from the Gulf, is said to be amongst the most expensive in the world,² and is locally dubbed as costing “one dollar per light per night”.

There is no national grid. The main urban centres, such as Hargeisa and Berbera, have standalone systems which are often inefficient and largely privately owned. Electricity system losses in Somalia are on average 25%, and sometimes as high as 40%.³ In 2012, only 15% of the 10 million population had access to electricity. In urban areas 33% had access, compared with 4% in rural in rural areas.⁴ Those far from urban centres typically pay the most for energy.⁵

There is some activity in the off-grid sector in Somaliland, but the industry is still nascent and there is little engagement in other parts of Somalia. Where organisations have been, or are being, established, they are set up in conjunction with local Somali partners. Interviewees advised that reliable local partnerships are imperative for the success of private enterprises in the country, not only for brand buy-in but also in respect of legal and operational costs and processes.

Despite some clear challenges, including per capita GDP among the lowest in the world,⁶ a dispersed population (17 people per square kilometre),⁷ and

numerous critical development and security needs, interviewees saw great potential for impact through support and focus on small off-grid solar. The huge lack of energy in the country, the difficulties of implementing a centralised network, and emerging private sector and local capacity for entrepreneurship, were cited by interviewees as reasons to hold this view.

Policy environment

Somalia is a nascent and still incomplete federation, with regional state governments. The Federal Government has limited reach beyond the capital Mogadishu. Consequently, the federal regions enjoy a significant degree of autonomy in respect of regional affairs and security forces, even though these are constitutionally subject to the Federal Government of Somalia. This means that there is still a significant degree of regional control over regulation which varies state by state. The Government of Somaliland, a self-declared independent state (though not internationally recognised), is considered to have the most comprehensive regulatory framework, although it is far from complete.

The federal regions are heavily reliant on trade and customs as a primary source of revenue. For example, border taxes (customs and inland taxes) account for around 80% of revenues in Somaliland, while in South Central, 75% of revenues are international trade taxes.⁸ Interviewees indicated that any waiver on duties and taxes would need to be approached at the regional level. One interviewee felt positive that tariff exemptions might be adopted in the longer term if advocated by the Somali federal government, who could act to convene agreements between regional level ministers of trade.

Already support for renewable energies has been explicitly highlighted in the plans of some actors. For example, introducing affordable solar and wind energy was noted in the Puntland Second Five Year Plan (2014-2018),⁹ and investment in solar, highlighting activities already undertaken relating to street lighting, was noted in the Federal Republic of Somalia Economic Recovery Plan 2014-15.¹⁰

¹ Head of UNHCR, Antonio Guterres, Kuwait News Agency (2015) Available from: <http://bit.ly/20xWDPZ>

² Economist (2012) *Power is as valuable as peace* Available from <http://econ.st/1XTI48p>

³ Nunez, J. (2015) *Powering Progress: The Potential of Renewable Energy in Somalia*

⁴ IEA World Energy Outlook (2014). SE4All’s Global Tracking Framework (2015) estimates 33% of the population have electricity access.

⁵ Nunez, J. (2015) *Powering Progress: The Potential of Renewable Energy in Somalia*

⁶ World Bank (2015) Available from: <http://www.worldbank.org/en/country/somalia/overview>

⁷ World Bank (2014) Available from: <http://data.worldbank.org/indicator/EN.POP.DNST/countries?>

⁸ DFID Somalia office

⁹ Puntland State of Somalia (2014) *Puntland Second Five Year Development Plan*

¹⁰ Federal Government of Somalia (2014) *Somalia Recovery Plan*

Electricity provision is referenced in general terms in the current draft National Development Plan which will be finalised in the course of 2016.

Policy, as yet, does not specifically stipulate provision for off-grid objectives and support. Moreover, there is a lack of a legal framework in which to operate. There is no commercial law that coherently enables multi-shareholder entities. Access to ports is limited, a number of cartels hold significant influence (and may look to take over or compete with any new industries) and very few national companies operate throughout country. Those that exist, relate to remittances, airlines and telecoms. Practical implementation of policies may therefore prove challenging.

Interviewees advised that a policy toolkit to support the off grid sector, as well as assist with changes to corporate law, could significantly help to accelerate growth in the market, both in terms of on the ground operations and to mitigate lenders' perception of, and exposure to, risk. As a step towards addressing these issues, the African Development Bank has assisted the government to undertake an energy assessment, and the World Bank has plans to develop an energy implementation plan.¹¹

Access to finance for the private sector

Due to the political, social and economic situation in Somalia, access to finance is expensive. The cost is significantly higher than the already high interest rates provided to off-grid players in neighbouring Kenya. The Somali market has a very high perceived level of risk. Assistance in resolving the problem of high interest debt could lead to a scaling up of operations across the sector.

The industry is extremely capital constrained and finance is key to enabling organisations to meet growing demand. Interviewees felt that start-up seed finance, as well as a competitively rated revolving loan pot for more established players, could provide strong catalysts for the sector. However, due to a lack of legal recourse and established finance mechanisms, it was noted that there would be a high risk to donor funds.

Interviewees advised that, as yet, there were no obvious tools for financing off-grid solar in the country. Shuraako, part of the One Earth Foundation, was noted as playing a strong role in financing Somali enterprises following specially designed risk profiling. Other funds were highlighted as having the potential to play a future role, including the Somaliland Business Fund and the forthcoming Somalia Business Fund and Africa Enterprise Challenge Fund.¹²

Import of solar household related equipment and fiscal barriers

Due to the federal makeup of the country, cross-country tariffs and taxes are not standardised. One interviewee advised that, in relation to goods coming in to different states, ports compete in respect of duty rates in order to secure import traffic, rates varying from around 10%-15%. While another interviewee, working in Somaliland, advised that due to the social nature of their work, their imports are already granted a waiver.

A more comprehensive approach to tariff and tax exemptions was noted as desirable by one interviewee, particularly if linked to quality assurance. They suggested that the federal government could seek to facilitate a cross-country waiver on tariffs and taxes in respect of off-grid solar products, and/or that well-publicised waivers on solar products by certain states could lead to goods being imported via the ports where exemptions exist, before being transported over land (thereby avoiding some tariff charges).

A caution was raised in relation to building 'across the board' fiscal exemptions because of the complexity of the political economy. Any exemptions would need to be carefully approached and developed if they are to ensure benefits are passed on to consumers and provide the desired social benefits.¹³ Moreover, exemptions may prove difficult to implement given competing revenue priorities, such as budget deficits and security forces wage arrears. Somaliland is already reviewing existing exemptions with a view to cancelling many.¹⁴

¹¹ DFID Somalia office

¹² DFID Somalia Office

¹³ DFID Somalia Office

¹⁴ DFID Somalia Office

Consumer protection and quality assurance

Stakeholders were unaware of any regulations concerning import restrictions or consumer regulation. One interviewee had found a lack of trust in technologies due to the low-quality of some products which had entered the market and a lack of after sales service. A lack of customer care was also cited by another stakeholder as a key issue, both in terms of consumer protection and in maintaining trust in the technology.

Consumer awareness

Solar energy has become quite well known in cities such as Mogadishu, Hargeisa and Kismayo where solar street lights have been installed. Solar for household use is also increasingly understood in areas of Somaliland where private companies have been operating and through some NGO distribution schemes. However, interviewees advised that awareness is relatively limited and that, in most cases, if families do know about solar energy, they will not know where to access it.

As the market grows, it is important that consumers are aware of brands which provide good quality products and services are quickly copied, if they achieve success in the Somali market.

One interviewee advised that Lighting Africa may be undertaking awareness raising activities in the near future. This could create an opportunity to work with the government to launch a comprehensive support package for the sector at the same time. An awareness campaign could also provide an opportunity to demonstrate to consumers the difference between high and low quality solar products.

Providing a level playing field

Kerosene is not subsidised. Interviewees noted that some NGOs have given away solar products, which can have a negative impact on the market, as potential customers might wait for lights to be given to them rather than purchase them. Interviewees also expressed concern about the subsidisation of products.

Interviewees stressed that their concerns about give-aways undermining the growth of the off-grid market did not extend to the critical humanitarian

interventions by UNHCR programmes, which provide vital services within the country.

Availability of consumer financing

Lighting and basic power takes up around 20% of household expenditure, so for those who can afford to switch to solar there is already a strong financial incentive. This means that some customers want, and choose, to buy solar lights and home systems directly. In some regions, direct sales may also be the least risky option for operators given the early stage of the sector.

Two consumer financing methods were mentioned by stakeholders: loans and mobile phone enabled payment plans. In respect of the former, one interviewee advised that credit systems do not work well in Somalia. As they have previously been used primarily by NGOs, leading to a culture where it is seen as acceptable not to repay. In addition, for practical purposes, any lending finance needs to be Somali-fronted which brings with it the question of Riba restrictions on usury.

Mobile money appears to have penetrated the market and was seen to be the dominant currency by one stakeholder operating in Somaliland, who termed it, “part of the fabric of life.” Mobile payment systems were enabling them to operate relatively smoothly and with low levels of customer default. GSMA figures show that, across the country, half the population has a mobile phone. However, mobile money in Somalia is “top up credit”, rather than a finance mechanism backed up by cash elsewhere. This makes reliance on mobile money riskier than in other countries and efforts are still needed to regulate the sector.¹⁵

In Somalia, the primary driver for the economy is remittances (many family run), followed by aid and then trade, such as livestock. In rural areas, this agriculture-based economy can create practical challenges for families paying for solar home systems in instalments. One interviewee advised that having local teams who closely interact with customers enabled them to accommodate local realities into the repayment schedules in areas where there are few, or no, salaried incomes. The high cost of debt and capital constraints set limitations on how much they can reduce the cost of

¹⁵ DFID Somalia Office

their products and increase the flexibility of repayment schemes (e.g. by matching repayment plans to harvest times). More, and cheaper, capital finance was seen as an enabler for lower cost, longer term or seasonally flexible repayment plans.

Level of local skills

There is a lack of skilled workers within the sector and one interviewee noted that some of his team have never received school education. Interviewees advised that the Somali people are extremely enterprising and much expertise and aptitude (such as that relating to logistics, sales and customer service) can be found locally.

Though an increase in training capacity would be needed to rapidly expand the sector, interviewees felt that skills could be picked up relatively quickly and that, where gaps remained, it may be possible to bring in talent from neighbours such as Kenya or the large Somali diaspora.

Summary and recommendations

In many ways, the high cost of electricity and lack of grid infrastructure make off-grid renewables an obvious solution for energy access in Somalia. However, capital finance is particularly expensive internationally, and difficult to obtain locally. Awareness of solar is limited to urban centres, parts of Somaliland and regions that have received specific NGO support. Operators need to work through local partnerships, and the complexity of the political economy adds even greater risks and challenges for the nascent market.

Federal and state support through enabling policy, as well as seed finance and de-risking instruments by donors agencies, potentially aligned with a Lighting Africa awareness campaign, could greatly accelerate market growth.

Area	Situation	Opportunities
Policy Framework	Although there is a focus on renewable energies in national energy policy, as well as that of some states, there is no regulation specific to off-grid. Significant challenges are also presented by the political economy. The forthcoming World Bank Energy Plan may create a framework which supports the sector.	<p>The exceptionally high cost of electricity and focus on rebuilding creates an opportunity to engage with policy makers around off-grid energy access.</p> <p>Engage with the World Bank around support for off grid in the Energy Plan.</p> <p>Assist in developing and adopting wider commercial regulations and laws that will underpin the sector.</p>
Access to Finance	Given the long history of instability, a high premium is added to the cost of finance.	Seed finance, from a competitively rated revolving loan fund, and de-risking instruments would significantly accelerate the growth of the market.
Fiscal Barriers	Tariffs of around 15% apply on imports, though exemptions appear to be possible.	<p>Determine federal and state government desire / ability to remove tariffs.</p> <p>Given the complex political economy, further consider the pros and cons of ‘across the board’ exemptions, and of more formalised exemptions for individual organisations selling quality solar products.</p>
Consumer Protection and Quality Assurance	There are no consumer protection or quality assurance measures in place.	Tying any fiscal and financial incentives to the import of quality products will help increase the flow of good quality products into the country.
Consumer Awareness	There is very little consumer awareness of off-grid solar products. Where people know of solar it is largely via NGOs, in Somaliland or in urban areas there are solar street lamps.	<p>Consumer awareness campaigns and awareness raising through local leaders (e.g. school and community campaigns) could help drive demand for products.</p> <p>Campaigns should be run in conjunction with market actors’ ability to supply quality products.</p>
Level Playing Field	Kerosene is not subsidised but some market distortion has occurred due to giveaways of solar products.	Build communications between stakeholders, including NGOs and private sector actors to minimise market distortion through giveaways in areas the private sector can operate.
Consumer Financing	Microfinance is not recommended as it is not thought highly of locally. In Somaliland some PAYG solar products purchased with mobile money are now available.	<p>Capital finance for PAYG operators, such as a revolving loan fund.</p> <p>De-risking instruments.</p> <p>Working capital support for businesses selling</p>

		high quality solar lights and solar home systems.
Level of Local Skills	There is a huge lack of education and formal skills within the country. But there are high levels of entrepreneurship and a large, more educated diaspora.	<p>In the short term, private enterprises seem able to find good staff that they can train to fill the roles needed in the relatively small market place.</p> <p>To significantly accelerate the market, a sector specific training and capacity building programme could be launched in conjunction with other government efforts.</p>



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