Market Analysis for Solar Home Systems in Sierra Leone

SNAPSHOT : SOLAR FINANCING GAP
SEPTEMBER 2016

At present, only a handful of certified solar home systems and other small scale solar products are available in Sierra Leone. Limited availability of tailored financing to meet distributor's working capital needs and lack of consumer credit are critical barriers to expanded performance.

Barriers to Working Capital and Consumer Credit Finance

Solar distributors in Sierra Leone are high risk investments.

- Sierra Leone is a small market with limited attractiveness, boasting just under seven million people. It is also among the poorest countries in the world. Significant inflation has challenged USD lending while the Ebola epidemic further undermined investor confidence.
- Most businesses in Sierra Leone, including solar distributors, are small, poorly capitalised and limited in capacity. None have established distribution channels or sales teams. Many are start-ups with no track record of sales.
- In more established solar markets, the sale of small scale solar products such as Solar Home Systems (SHS) and solar lanterns have yielded small margins while demanding significant capital outlay to prime the market and to establish distribution channels.

Distributors require significant working capital to finance needs but find limited financing options.

- Significant working capital is needed to cover the large orders required to avoid high transportation costs into Sierra Leone as well as to facilitate customer repayment options such as Pay-As-You-Go (PAYG), which have the potential to boost sales.
- International solar suppliers are unwilling to provide trade financing. At best, they may offer a percentage payment on an order and a final payment on arrival in port.
- There is limited SME finance available from banks, often at very high interest rates and inaccessible for start-ups. This financing often requires high quality collateral. Banks also require strong and consistent performance track record making it difficult for start-ups to qualify for loans.

Long-term consumer finance is required to grow solar sales.

- SHS and SHS with plug and play devices are much more expensive than battery-powered alternatives and in most cases are well over what households expect to pay for access to lighting.
- Most rural households do not have the savings and are not considered credit-worthy enough to access funding to purchase these kits upfront.
- Microfinance institutions may be positioned to meet consumer financing requirements in the future. Currently however, the terms are ill-fit for solar products. Solar products are perceived as too high risk due to factors such as limited quality controls/ assurances and poor technicians.

Promising Financing Alternatives

1) Pay-As-You-Go (PAYG) solutions

PAYG enables consumers to assign a portion of their budget for lighting each week. It offers a realistic payment alternative that aligns to current energy expenditures, opening up sales options.

Moreover, PAYG is now well-established; solar products come with a standard PAYG chip and most telecoms are experienced in servicing PAYG company needs.
This is a relatively straight-forward adaption for the Sierra Leone market.

2) Patient capital and impact investment

Access to debt financing for a few key solar distribution players would open up product availability and distribution in the short-term, helping to prove market viability and reduce risk that will attract more financiers and distributors in the future.

Distributors that are more structured, with better financial management and some track record of sales are best-placed to attract financing. The current limited spectrum of investment funds will need to be broadened to enable growth of the solar market.

3) Blended financing options are emerging as a new, high potential alternative to standard commercial options.

A number of companies – led by Ignite Power – have indicated they will try an energy project financing approach to small scale solar product financing in Sierra Leone. A single company manages product financing and brings solar to Sierra Leone. The company would tender out the distribution and after sales service requirements associated with moving products to households.

Financiers have also suggested they will accept blended payment options, including shared margin, which may attract many more candidates for distribution.

Ignite Power's approach has quickly shifted the status quo. Several other financing and solar companies are considering similar strategies. This new strategy is yet to be tested and its potential to open up the market remains to be seen.

The margins for solar products are low. Limited consumer awareness also limits sales. For this approach to be attractive to local distributors, margins must still be substantial and demand on the rise.