

Context

Sierra Leone's Solar Market

More than 85 percent of Sierra Leone's approximately 7 million people lack access to electricity. Towns and communities outside of the country's capital, Freetown, are disproportionately negatively affected. To compensate, most households and businesses rely on expensive alternatives: low-quality, battery-powered lights and diesel generators. On average, Sierra Leonean consumers spend SLL 240,000 (USD 32) per year for their primary lighting source. For low-income consumers, such expenditures can amount to 30-50% of their disposable income.

However, Sierra Leone also boasts vast renewable energy potential. The country is particularly well suited to increase energy access via pico and solar home systems. The cost of these solar products has fallen dramatically in recent years, making solar a feasible alternative to traditional energy sources. Moreover, off-grid solutions that complement grid expansion could generate more than \$28 million per year in cost savings to Sierra Leoneans when compared with sole reliance on the grid. To date, solar market performance has been inhibited by the following:

Policy and regulatory environment

Prior to the launch of the Energy Africa Compact, Sierra Leone taxed certified solar products with 25% duty and 15% sales tax. The costs associated with import strongly discouraged investment in the sector.

- Sierra Leone's Finance Acts of 2016 and 2017 have been ratified and adopted as law. These extended fiscal concessions to quality solar importers that included complete elimination of import duty and sales tax a value of up to 40% of the costs of delivered goods at the port
- Operationalization of the law is as important as the law itself. Fiscal incentives must be streamlined, coordinated, and implemented on a timely basis; this is ongoing
- Sierra Leone's first-ever renewable energy industry association formed at the onset of regulatory reform and Compact discussion process. The Renewable Energy Association of Sierra Leone (REASL) now plays an important role as an advocacy body and quality assurer. However, as an emerging association in a high-paced market, continued professionalization and ongoing positioning will be required to demonstrate value and to maintain influence ongoing.

Business and investment fit and performance in Sierra Leone's solar market

At the signing of Energy Africa Compact, there were few solar resellers in Sierra Leone. Most were limited in experience, capacity and capital. All lacked sufficient understanding of how to distribute and to market pico and solar home systems effectively to Sierra Leone consumers.

- Professional services: As the solar sector continues to evolve, the challenges that it faces grow in complexity. With more investment and business activity, improved and supportive professional services must step up to service small and growing business needs. Marketing, mobile and mobile payments, and transport and logistics are all key services gaps.
- Finance and investment: Solar resale requires significant working capital, both to continue to shift in containers of solar as well as to manage long-term pay-as-you-go lending practices that significantly boost product uptake. Currently, consumer and commercial financing is limited.

Consumer solar awareness and appreciation

Consumer awareness of the benefits of uptake as well as the availability of pico and solar home systems is low. Sierra Leone's market is filled with poor or unknown quality solar products that have resulted in 'market spoilage' – consumer perceive all lighting products to be of similar poor quality and are unwilling to invest more in new, more expensive solar options.