



TELEVISIONS

Solar Appliance Snapshot

MAY 2021

EFFICIENCY FOR ACCESS COALITION

The market for off-grid TVs has grown significantly since 2017, with major improvements in energy efficiency and price. TVs are now one of the most popular and most accessible off-grid appliances available to consumers.

MARKET INSIGHTS

As one of the most desired and accessible off-grid appliances, TVs are a critical driver for solar adoption. [80% of off-grid TVs](#) are sold with an accompanying power system. The market opportunity for off-grid TVs was estimated at [USD 6.8 billion](#) in 2019 and is expected to reach USD 9.5 billion in 2030.

While the price of TVs has declined in recent years, affordability remains a major barrier to scale. [94% of TVs](#) are sold on pay-as-you-go (PAYGo) basis. If financing were widely available, the market could encompass [50% of all off-grid households](#), approximately 221 million people.

CONSUMER IMPACTS

While many view TVs as an appliance for entertainment purposes only, they serve as a vital conduit for information broad and contribute to 10 United Nations Sustainable Development Goals. Access to cable television is associated with [positive changes](#) in school enrollment, literacy, family planning, financial decisions and health.

[A survey of 2,300+ off-grid TV customers](#) in East Africa found 93% of respondents reported an improvement in their quality of life after purchasing a TV. 32% of respondents felt better connected to others, and 9% used their TV to generate additional income for their household or business



472,000

GOGLA affiliates sold 472,000 TVs in 2019, 96% of which were sold in East Africa, West Africa, or Central Africa.



USD 9.5 B

The estimated market opportunity for off-grid TVs is expected to reach USD 9.5 billion in 2030.



93%

In a survey of 2,300 off-grid TV customers in East Africa, 93% of respondents reported an improvement in their quality of life after purchasing a TV.



25%

Of respondents in the same survey reported increased access to information and education after purchasing a TV.

CURRENT SUCCESSSES

The off-grid TV market has shown promising improvements in price, efficiency and innovation since the last technology summary. Average off-grid [TV efficiency has improved by 48%](#) since 2016, with some models more efficient than on-grid TVs sold in Europe.

TV prices are also improving. Recent research indicates [the average price of an off-grid TV has decreased by 44%](#) since 2016. Technology improvements are rapidly enabling customers to enjoy larger, higher-performing TVs at similar prices to much smaller models available on the market just a few years ago.

REMAINING CHALLENGES

Despite recent progress, more work is needed to grow the off-grid TV market and achieve a balance between efficiency, quality and price. While prices are declining, [only 1% of off- and weak-grid households](#) can afford a TV in a cash sale. Ensuring that TVs are high quality is also crucial, but inconsistencies in performance reporting, lack of reliable data and limited regulations or standards make quality prioritization difficult. As the market grows more competitive, companies may elevate quality considerations in business decisions. Finally, last-mile distribution can be very costly given the fragility of TVs, the remoteness of some customers and the frequently poor quality of rural roads.

RECOMENDATIONS AND PATHWAYS TO SCALE

Promoting affordable, high-quality and interoperable TVs by defining quality standards and establishing a more robust enabling environment will accelerate the growth of the off-grid TV market.



Increase Access to Consumer Financing

Business models can target off-grid consumers not typically served by traditional finance institutions, while utility-enabled financing offers an alternative for weak-grid consumers.



Define Quality Standards

Quality assurance programmes, like [VeraSol](#), can help formalize the frameworks needed to evaluate the quality and efficiency of off-grid appliances on a continuous basis.



Improve Affordability

Innovative programmes, like [results-based financing](#), can help further catalyse the price reductions off-grid TVs need to scale by lowering procurement or distribution costs.



Promote Interoperability

Improved interoperability in the off-grid appliance market would lower costs, increase consumer flexibility and promote a wider selection of appliances.



Enhance Last-Mile Distribution

A tight network of distribution points are vital to efficient and secure TV delivery. Networks like the [Global Distributors Collective](#) can help address collective challenges.



Foster a Supportive Enabling Environment

Governments can impose new policies, improve existing policies, and develop strategies (e.g. reduce import taxes, tariffs and VAT) that favour of high-quality, energy-efficient TVs.