

Greenlight Planet Nigeria

Pilot Learnings: 2017-2019



I. Background

Nigeria is home to the largest off-grid and under-electrified population in Africa. Government estimates indicate 70 million Nigerians live entirely off the grid or lack reliable access to energy at home, though other sources suggest this number to be upwards of 100 million. Despite the vast energy need, the potential for off-grid products in the country, and an abundance of solar energy, the range of distributed energy solutions currently available in Nigeria is limited, and the distributed off-grid energy industry is far from realising its potential. The majority of manufacturers and distributors of quality off-grid energy solutions that have been successful in East Africa and South Asia are largely absent in Nigeria or still sell in relatively low volumes.

While Greenlight Planet's Sun King solutions have been available in Nigeria through retail distributors since 2011, as of late 2016 product sales were still mostly limited to urban and peri-urban consumers that purchased solar lamps outright, without consumer financing. Earlier that year, Greenlight had validated initial pilots of its pay-as-you-go (PAYG) business model (called Sun King EasyBuy) in East Africa and by the end of 2016, the company had begun scaling the PAYG business in Kenya and Uganda. Given the transformative impact the Sun King EasyBuy offering had on enabling cash-constrained consumers in peri-urban and rural East Africa to access solar powered energy solutions, Greenlight decided to introduce Sun King EasyBuy to Nigeria as well. It was assumed that the combination of technology-enabled consumer financing and an active direct sales agent model could help accelerate access to off-grid energy solutions in Nigeria, particularly in peri-urban and rural locations.

Greenlight invested in a PAYG pilot in Nigeria in early 2017, despite known market challenges

Greenlight was aware of a few market challenges at the time they invested in opening a direct presence in the Nigerian market:

- Extreme fluctuations in the value of the Nigerian Naira between 2015 and 2017 and the scarcity of hard currency, coupled with a history of volatility for the Nigerian currency posed challenges to a new import- distribution business model that also would extend longer term (10-24 months) financing to end consumers.
- A nascent mobile money market with limited reach meant that the prevailing collections method of East African PAYG businesses would not be immediately accessible in Nigeria.
- Security issues in certain regions introduced different pressures on a new entity, including additional costs to conduct business in harder to reach areas.
- Limited knowledge of the industry also meant more effort would need to be invested into building consumer awareness of the product category and in educating sales agents about the potential for employment.

Shell Foundation (a UK registered charity) and the UK Government's Department for International Development (DFID) provided Greenlight with support to design systems that could mitigate these challenges and build a suitable and financially sustainable PAYG business model within Nigeria's market dynamics.

II. Greenlight Planet Nigeria's PAYG: Key Learnings and Continued Challenges

Between early 2017 and early 2019, as Greenlight established an on-the-ground presence in Nigeria, the following emerged as key learnings and continue to inform expansion of the PAYG direct and distribution partner business models:

- 1) PAYG operations in Nigeria must accommodate cash-based and cashless payment channels, though cashless systems result in stronger on-time repayment patterns.
- 2) An understanding of the total cost of ownership significantly influences a decision to purchase a solar home system through a PAYG plan.
- 3) The field sales agents and managers that have taken a leap to the off-grid solar industry have faced steep learning curves.
- 4) Prospective PAYG customers take twice as long to close in Nigeria than in East Africa
- 5) A multi-channel approach is imperative to accelerate market development

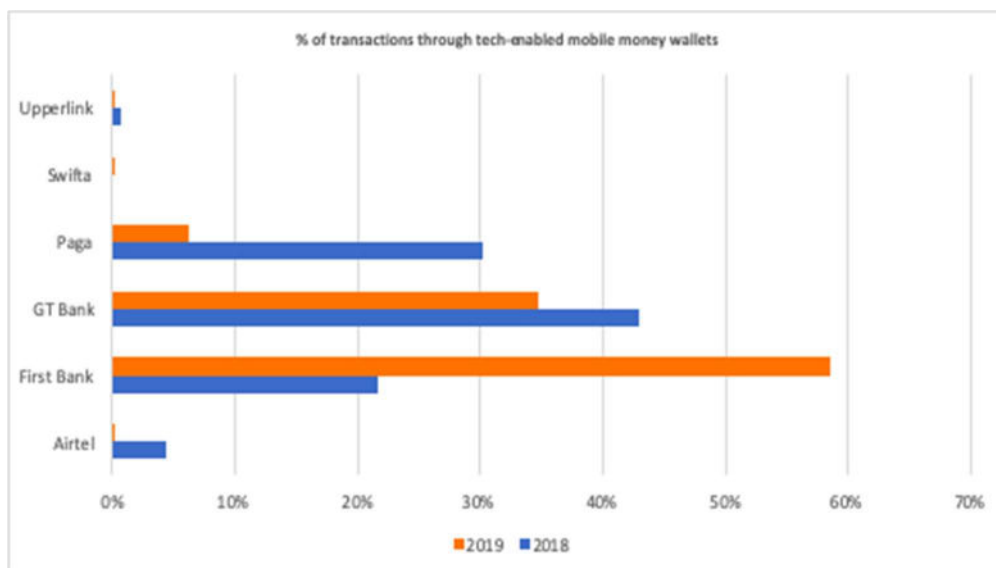
1) PAYG operations in Nigeria must accommodate cash-based and cashless payment channels, though cashless systems result in stronger on-time repayment patterns.

PAYG business models depend on a convenient, cost-effective way for consumers to make frequent top up payments throughout the course of their instalment plan. In East Africa, this happens seamlessly, as customers leverage mobile money to make daily, weekly or monthly payments. This posed an operational design challenge when Greenlight Planet launched their direct sales business in Nigeria: while mobile money and mobile wallet options were growing in Nigeria, they were not yet widely utilised and they were especially limited in rural and peri-urban areas. Moreover, Nigerian consumers tended to prefer transacting with cash.

In East Africa, Greenlight had faced similar experiences with varying degrees of mobile money adoption across each individual market. In Kenya, most prospective customers already had an active mobile money account, almost entirely through the leading telecom and mobile money provider, Safaricom. However, when the Sun King EasyBuy direct sales channel launched in Tanzania and Uganda, mobile money was not as widely utilised as it was in Kenya and neither market had a single dominant mobile money player. In these other East African markets, Greenlight decided to integrate with multiple mobile money operators and place more effort into helping Sun King EasyBuy customers sign onto mobile money accounts for the first time. Greenlight's sales agents and Customer Care (call) centers also allocated more time to helping new Sun King EasyBuy customers acclimate to the new technology, demonstrating how to make mobile money top up payments and troubleshooting mobile transaction errors.

Assuming that cashless transactions would increase in popularity in Nigeria in the near future, and that multiple platforms would eventually be adopted in Nigeria, Greenlight decided to work with multiple cashless payment channels for consumers to choose from. They integrated with several digital payment providers and mobile money networks that had a growing consumer base in Nigeria, including: mobile wallet providers Paga, Upperlink, and Swifta; Airtel's mobile money platform; and traditional banks with digital payment solutions – First Bank and GT Bank.

The following chart illustrates the percentage of payments received through each channel:



Of all the digital payment platforms available, First Bank's has received the greatest traction given the robustness of its services and reach across the geographies in which Greenlight Planet's direct sales channel operates. However, Sun King EasyBuy Direct consumers prefer making payments in cash over leveraging virtual systems.

Cash payments, while preferred by customers, are complicated to manage in an agent based PAYG channel, given some critical factors:

- Security concerns for sales agents that are known to carry cash from daily collections;
- Logistical challenges for mobile commission sales agents to coordinate a collection time and location with customers on a frequent basis.

To combat these issues, Greenlight developed a network of cash collection centres. They appointed fixed retail businesses that act as a collection service for Sun King EasyBuy. These outlets can accept cash payment and provide unlock keycodes to any Sun King EasyBuy walk-in customer.

While this solved for the security risk and scheduling challenges Greenlight's mobile agents faced and worked well for customers that live in close proximity of a collection centre, this model also introduced some logistical and practical complexity to the PAYG operations:

- The retailers require constant training on the PAYG technology and Sun King EasyBuy customer service standards;
- Retailers have to provide more hands on customer service than they are used to providing through their core business when, for example, customers seek assistance entering unlock codes into their Sun King products;
- Inactive or uninformed retailers would leave customers stranded without an alternative method to make payment in their vicinity.

This added complexity has also impacted payment patterns; customers pay less predictably when they have to travel to a physical location or coordinate an exchange with an agent. Greenlight's collections data shows that when customers have fairly autonomous means, they make payments in regular intervals and reasonable frequency, resulting in fewer defaults.

A hybrid payment collection approach is critical to scaling a PAYG business in Nigeria, but it requires sustained and unique management of cash collection centres. Greenlight Planet continues to invest in strengthening the cash collection channel to ensure reliable service and enable easy payment options for the majority of customers that still prefer to transact in cash.

2) An understanding of the total cost of ownership significantly influences a decision to purchase a solar home system through a PAYG plan.

Credit facilities and micro-lending products are relatively new and not very common in Nigeria, especially outside urban centers, and this factored into the development of pricing plans of Sun King EasyBuy products.

A typical PAYG pricing plan is comprised of three considerations: a deposit payment, a daily payment rate, and the total number of daily payments. While in East Africa, consumers seem to be primarily concerned with the value of the minimum daily payment, Greenlight's initial pilots in Nigeria revealed that consumers are particularly interested in understanding their total cost of ownership (the sum of the initial deposit and all the follow-on daily payments). Consumers in Nigeria prefer to save money and make a one-time up-front purchase more frequently than their counterparts in Kenya. For comparison, 20% of products through Greenlight's direct sales channel in Nigeria are purchased up-front, compared with only 2% of customers in Kenya that elect to pay in full in lieu of a longer term PAYG plan.

3) The field sales agents and managers that have taken a leap to the off-grid solar industry have faced steep learning curves.

While the distributed off-grid solutions sector has grown in the last few years, general awareness of the product category is limited, and this had an impact on how quickly Greenlight could build a strong, people-intensive salesforce. The company invested significantly more time to recruit talented, experienced field sales professionals to join their Sun King EasyBuy direct business in Nigeria than they have in any of their East African operations. Experienced sales professionals in rural and peri-urban areas are reluctant to leave the established fast-moving consumer goods (FMCG) or telecommunications industries to join a nascent field when it impacts their livelihoods.

Those that made the leap to join the nascent PAYG industry have faced steep learning curves:

- They spend more time educating prospective consumers about the benefits of solar powered technology and the concept of PAYG instalment plans than their East African peers;
- They spend more time commuting on foot or bicycle than they did as part of FMCG or telecom networks.

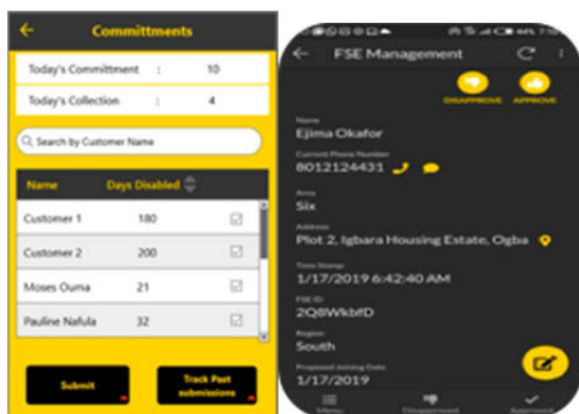
Greenlight employed several strategies to overcome these challenges to grow their field sales network in Nigeria, including:

Launching nationwide agent recruitment campaigns: Greenlight Planet understood early on that qualified, capable sales agents were reluctant to represent a company and brand they hadn't seen before in an industry they were unfamiliar with. Talented sales professionals prefer to work with consumer goods and telecommunications brands that are well known and well present in their localities.

To create awareness of and establish confidence in the Sun King brand, Greenlight launched a series of nationwide agent recruitment campaigns. Designed in a similar spirit as consumer facing campaigns, these activations brought Sun King products and employment opportunities closer to prospective employees and sales agents. While these marketing campaigns were primarily focused on garnering the attention of prospective employees and resellers, they had a secondary benefit of also increasing consumer awareness of the product category and brand as well.

Building an internal training and mentoring department: Dedicated to supporting field sales teams, Greenlight's Knowledge Management team continuously develops and deploys curriculum focused on technical product knowledge, direct selling skills, and internal business processes to keep sales teams informed, motivated and performing.

Introducing a productivity and task management application: Greenlight Planet developed a mobile based application to increase agent productivity and engagement. The internal application provides remote training and product demonstration videos, helps agents monitor product installations, enables them to manage collection related tasks, tracks individual incentives and keeps agents informed of product and company updates.



Screenshots from the sales agents' mobile application

4) PAYG prospects in Nigeria take twice as long to convert to customers.

Given limited awareness of both the solar powered systems product category and the PAYG concept, sales agents in Nigeria spend almost twice as long to convert a customer as their peers do in East Africa. The sales pitch generally begins with a general explanation of solar technology and the advantages of solar powered solutions over kerosene lamps, generators, or battery-powered torches. Once the consumer understands the concept of solar energy, the sales agent can begin pitching the individual merits of a particular brand, and eventually the concept and reliability of a longer term instalment payment plan.

In contrast, consumers in East Africa and South Asia generally have an understanding of solar technology and the value of purchasing solar home systems as an alternative to traditional energy sources. Thanks to the presence of many off-grid technology players, numerous consumer awareness campaigns sponsored by Lighting Global, national electrification programmes and other donor-funded initiatives, consumers in these regions have a common understanding of the product category, and sales agents can immediately focus on the features and performance superiority of a specific brand or product model and convert customers fairly quickly. Sales agents and retailers then earn enough money from the sales of solar powered products to stay financially productive and remain motivated.

As the market in Nigeria matures, sales agent conversion time will reduce, monthly sales rates will increase and entrepreneurs, retailers and distribution businesses will find the profession to be more economically viable. Until then, solar product companies need to invest more effort and money to increase consumer awareness and incentivise sales agents and resellers.

5) A multi-channel approach is imperative to accelerate market development

Given that most Nigerian households and businesses face severe power cuts, the potential customer profile of an off-grid solar powered systems ranges from the rural, lower-income consumer to a salaried professional living in urban Nigeria.

Greenlight Planet's solutions especially target lower income households, many of whom also live in harder to reach, mostly rural parts of the country. Forty percent of Sun King customers in Nigeria earn between 30,000 NGN to 100,000 NGN per month (US\$82-US\$275 per month), often seasonally, as opposed to continuously throughout the year. While the PAYG business model has the potential to accelerate energy access in Nigeria, especially to these lower income consumers, Greenlight have realised that it is not the only way to reach Nigerian households and businesses.

Microfinance institutions, savings and loan organisations and traditional consumer durable distribution networks all represent viable sales and financing channels and comprise a critical portion of the Sun King distribution network in Nigeria.

The distribution, customer care and after-sales service networks established to support Greenlight's PAYG direct channel serve as the backbone of support for their external, third party distribution channels, ensuring Nigerians of various regional and socio-economic backgrounds can access off-grid solar products through familiar, accessible networks.

These expanded, more hands-on services from the company's PAYG business operations have enriched their network of distribution partners. Greenlight Planet's ability to provide last mile delivery, hands on customer care and quick, just-in-time, product delivery has accelerated sales through parallel microfinance and retail channels. Greenlight Planet expect to reach more customers through external distributors as their direct channel grows and to collectively reach significantly more Nigerian households in hard to reach, underserved areas than they could with only a direct, or only an indirect, channel.

III. Conclusion: The market will take some time and additional investment to build, but the initial response and potential remain promising.

Overall, the Nigerian market holds many challenges, especially compared with some of the more developed markets for distributed off-grid energy solutions, but it also holds a lot of promise and can be developed with meaningful investments, patience and local adaptation. As mobile money and other cashless transaction services become more prevalent, as consumer awareness of the product category grows and as sales professionals realise their professional potential in the off-grid solar industry, the cost and effort to reach and serve under-electrified Nigerian consumers will soften. In the meantime, companies like Greenlight Planet will have to continue expanding their operations and sales presence with patience.

