

A SUSTAINABLE MODEL FOR COMMERCIAL FINANCIAL INSTITUTIONS TO EXTEND ENERGY FINANCING TO WOMEN IN NIGERIA:

LEARNINGS FROM GREENLIGHT PLANET AND SHELL
FOUNDATION'S SUN KING ASSET FINANCING PILOT



BACKGROUND ON THE PILOT

In early 2019, Greenlight Planet embarked on a pilot, with support from the Shell Foundation and the UK government, to seek to increase the number of women that can access finance to purchase solar products. The aim was to develop a sustainable model for a commercial financial institution to provide financing for modern energy solutions for women in Nigeria.

The grant was intended to evaluate whether:

- Access to finance would increase the rate of purchase of Greenlight’s Sun King solar powered products by female customers.
- Female agents may contribute to increased female adoption of Sun King products
- Energy financing products from financial institutions would drive greater adoption of solar products, as compared with the traditional PAYGO financing provided through product companies

In addition to increasing female adoption of off-grid energy products in the pilot areas, Greenlight Planet

hoped to develop a sustainable model for MFI partnerships that could be replicated across Nigeria and other countries in Sub-Saharan Africa.

The expansion of this model could have far-reaching positive implications on both energy access and financial inclusion throughout the continent. Scalable models with microfinance institutions could accelerate the rate of energy access amongst low-income, underserved populations that may otherwise struggle to purchase distributed energy solutions without subsidized or other financial assistance. Furthermore, while not tested in this pilot, the ability for women to qualify for follow on loans after completing an entry level energy loan, was identified as an opportunity to increase financial inclusion of underbanked customers.

APPROACH AND SUMMARY OF OUTCOMES OF THE PILOT



Greenlight Planet ended up taking a two-phased approach to executing the pilot, since the first partnership proved to be too complex to scale and did not contribute to the intended outcomes. After a few months of following the initial approach, Greenlight decided to pursue a new partnership structure with an entirely different financial institution.

Lessons from the first partnership carried into the second phase, ultimately helping to shape a

successful, scalable model for partnership with micro-finance institutions. This learning report will explore both the risk factors that were identified though the initial phase as well as the success factors that were identified through the successful partnership developed in the second phase.

For the purposes of maintaining confidentiality of Greenlight Planet’s business partners, the names of the financial institutions have been anonymized.

PHASE ONE: IDENTIFYING RISK FACTORS THROUGH A FAILED INITIAL LAUNCH



The initial plan was developed, through Shell Foundation's coordination, along with a leading microfinance bank in Nigeria MFI One¹. MFI One's network spans 12 states in Lagos, with more than 80 branches, nearly half a million historical clients and 50,000 active loans; 60% of the bank's clients are female. MFI One was interested in financing Greenlight's Sun King EasyBuy (pay-as-you-go) products, both for its existing client base and to attract prospective new clients.

Key learnings from phase one: potential risk factors for MFI and SHS partnerships:

- Ensure alignment in technology and operational processes between the energy company and the financial institution
- Make sure the loan approval process and turn-around time align with the sales process
- Secure strategic, senior level buy in from the financial institution
- Identify efficient ways to market to, and generate leads from, prospective borrower clients

Availing a pay-as-you-go solar home system to existing clients represented a relatively seamless, low-risk opportunity to extend the size of MFI One's loan size. The pay-as-you-go technology was especially appealing to MFI One, as the remote switch-off functionality would de-risk some of the uncertainty of serving new clients. The PAYG technology prevents solar products from emitting light and other energy unless payments are made, and MFI One hypothesized that dependency on light would likely serve as motivation for clients to keep up with their loan payments.

¹ The name of the financial institution has been anonymized for business confidentiality purposes, and is referred to as 'MFI One' in this report.

THE MFI ONE - GREENLIGHT PLANET PARTNERSHIP

The energy loans for Sun King EasyBuy products were launched in forty of MFI One’s branches, potentially reaching a universe of more than 20,000 clients. It quickly became apparent that loan officers had limited experience marketing and selling physical products, and passive marketing of the new energy loans was not enough to convert existing, or appeal to new, clients.

MFI One and Greenlight Planet agreed to appoint dedicated Sun King EasyBuy sales agents to more actively generate interest in the solar products. Greenlight Planet hired and trained two female Sun King sales agents to generate interest and support loan officers in six of the forty branches to test the active marketing theory. The goal was to finance at least thirty new Sun King customers each month for the first three months through these six branches.

The share of responsibilities and sales/ loan approval process was as follows:



Lead generation

The dedicated Sun King sales agents marketed the Sun King EasyBuy products with MFI One financing around the branch locations and generated leads of prospective new or existing MFI One clients that were interested in a PAYG solar loan. MFI One agents were also involved in the lead generation process.

Loan approval

MFI One’s branch agents would then follow the bank’s typical ‘know your customer’ (KYC) process to vet and approve the loans.

Customer onboarding

Once a loan was approved, a Sun King EasyBuy field sales agent would visit the customer to initiate the account, install the solar home system and onboard the new Sun King customer.

Loan management

MFI One would then take over management of collections and servicing the loan. The loan was structured into six monthly payments; with the final payment, MFI One’s clients would have completed their Sun King asset loan and would have full ownership of the Sun King solar home system.

EARLY OUTCOMES

Sales of the Sun King EasyBuy units through these pilot regions were surprisingly low during the eight months that the initial phase of the pilot ran, ranging from four to nine units per month. A few factors contributed to these outcomes, despite proper training of Sun King agents and MFI One's staff.

How to avoid potential risk factors in building a partnership between a solar energy company and an MFI: learnings explained

- **Ensure alignment in technology and operational processes between the energy company and the financial institution**

Lesson: a manual workaround in place of PAYG automation slows the process.

MFI One was not able to integrate their IT systems with the Sun King EasyBuy web-based software, resulting in two separate cloud applications that ran in parallel, bridged by a few points of manual entry. New leads were generated and directed to follow MFI One's know-your-customer (KYC) process; once a prospect was approved for a loan, they were entered into the Sun King EasyBuy software as a new account.

However, monthly payments were then processed separately through MFI One's IT systems. Each time a Sun King customer made a top up payment for their loan, an employee from MFI One's branch would have to manually note the payment in the EasyBuy software to generate and send an unlock code to the customer. MFI One's Sun King EasyBuy clients would often have to wait a few hours or an entire day after payment to receive their unlock code to continue using their solar home systems.

In a more typical PAYG business model, a customer's payment is directly accounted for in the PAYG software and an unlock code is immediately generated and sent to the customer by SMS. In this fully automated process, customers generally don't have to wait more than a few minutes to receive their unlock token.

The dependency on a manual, as opposed to automated, payment entry into the PAYG software meant that clients in this pilot often had to wait much longer for their unlock token and frequently reached out the customer care call center for assistance.

□ **Make sure the loan approval process and turn-around time align with the sales process**

Lesson: a long approval process led to loss of client interest

The KYC process for Sun King EasyBuy products followed MFI One's standard loan KYC process, usually involving a multiple day waiting period for interested customers. While this process may be standard for business or cash-based asset loans, many clients found it too cumbersome for a simple PAYG solar home system. For comparison, the approval process is generally completed within a few hours or at most, a single day, through a typical PAYG distribution company. Nearly 50% of the sales leads that the Sun King agents forwarded to MFI One's loan approvals team lost interest by the time the loans were finally approved. While half of the approved clients proceeded with the Sun King EasyBuy product loan, those that declined did so because they: purchase a solar home system from another brand, purchased a Sun King EasyBuy system directly from one of Greenlight Planet's agents, or decided to use the approved loan amount for something else. This low conversion rate impacted agent motivation and earning potential.

□ **Secure strategic, senior level buy in from the financial institution**

Lesson: The financial institution must prioritize the energy product loans

MFI One's teams were not mandated or incentivized to issue energy product loans. The loans issued for Sun King products were counted as part of their overall loan targets, but there was no emphasis or mechanism to ensure the energy product loans received loan officer or branch manager attention. If they met their monthly loan targets through other credit offerings, MFI One Bank employees were not penalized.

Greenlight Planet proposed an additional incentive to motivate MFI One employees to focus on Sun King products, but the bank wasn't interested or ready to do something like this. Without specific loan officer or branch level KPIs for sales of energy products, the efforts of the dedicated Sun King agents ended being misaligned with those of their MFI One counterparts.

□ **Identify efficient ways to market to, and generate leads from, prospective borrower clients**

Lesson: marketing and selling a solar product is different than marketing a typical cash loan product

The dedicated Sun King agents struggled to generate leads through MFI One's branches and client groups. Each new prospective client lead was generated through a one on one conversation, first explaining the value of solar home lighting systems, then the benefits of the Sun King product, then the way the loan offering worked. For each lead cultivated, the agents passed news of the prospective client's interest to the nearby branch manager, and the branch manager then assigned the credit teams to perform the KYC process.

The slow pace of cultivating new client leads made it difficult for the Sun King agents to generate substantial business and to remain motivated in their roles.

OUTCOMES OF THE FIRST PHASE

Overall this phase of the pilot fell nearly 80% short of meeting the target sales numbers, and the dedicated agents didn't earn enough, even after seven months of sales, to continue on in the same roles.

A total of 34 Sun King home systems were sold and financed through MFI One during a seven-month period. More than 60% of these new clients were female, about the same gender split of customers served through the Sun King EasyBuy direct channel (59% female; 41% male during the same time period).

In general, it became apparent that a few elements of the partnership between Greenlight Planet and MFI One would continue to present obstacles to achieving the results initially envisioned:

- Long decision times related the bank's loan approval process would continue to demotivate agents and customers, leading to fewer prospect conversions.
- The lack of automation or full integration of the pay-as-you-go technology with MFI One's IT systems would continue to lead to long customer service turn-around times and low customer satisfaction;
- Limited incentive for MFI One's loan officers and branch personnel to promote the energy product loans meant the dedicated Sun King sales agents would continue working fairly independently, with diminishing motivation over time.



A FRESH APPROACH FOR THE SECOND PHASE

Rather than expand the model from the initial six branches to the rest of the pilot geography in the second phase, Greenlight Planet decided to continue the pilot with another microfinance partner in their distribution network.

For this expansion phase, Greenlight decided to work with MFI Bank Two², a company that had already been financing Sun King products through its energy financing program. The diagnosis of what did not work well in the first phase with MFI One informed modifications to the partnership structure with MFI Bank Two, with hopes of further refining a scalable microfinance distribution model.

MFI Bank Two operates more than 500 branches across 28 states in Nigeria, and services more than two million micro, small, and medium enterprise loans. At start of the second phase, 150 of those branches were already financing Sun King products to their existing clients. At that time, branches generated an average of 1,200 Sun King unit sales per month. Greenlight Planet focused on applying lessons from the pilot with MFI One to increase monthly sales to MFI Bank Two's clients.

In this expanded phase, with a different microfinance partner, Greenlight Planet placed stronger focus on two of the largest challenges that emerged in phase one: lead generation and sales conversion. Agent motivation and morale had dropped in the first phase from shallow prospect pipelines and the repeated loss of interest of clients that waited multiple days for loan approvals. In this second phase, greater emphasis was placed on generating large prospect pools and supporting quick loan approval decisions to maintain client interest.

Key learnings from phase two: success factors for MFI and distributed energy company partnerships:

- The right technology fit for the channel
- Efficient operational processes and loan approval time
- Strategic buy-in from the MFI's senior leadership
- Look for group lending models

¹ The name of the second financial institution has also been anonymized for business confidentiality purposes, and is referred to as 'MFI Bank Two' in this report.

Success factors for MFI and distributed energy company partnerships, explained:

□ The right technology for the channel

Use of 'classic' instead of PAYG Sun King products

Since MFI Bank Two was interested in financing Sun King asset loans only for existing customers, they did not need the PAYG technology to de-risk loans for new clients. Use of the classic (non-PAYG) products simplified the sales and supply chain process. Since technical integration between MFI Bank Two's and Greenlight's systems was not required, clients did not have to wait for unlock codes to use their Sun King products, and client payments to MFI Bank Two followed their traditional monthly payment plans.

□ Efficient operational processes and loan approval time

Faster lead conversion time

MFI Bank Two committed to making loan decisions on a shorter time frame - within 24 hours - to avoid losing the interest of a prospective client. The standard loan approval process is significantly faster at MFI Bank Two; they leverage a mobile application that enables loan officers to seek almost immediate approval for loans for interested clients. Standard KYC information is entered into a handheld device, and the loan officer can receive verification of the approval within minutes, ensuring that clients don't lose interest in the loan product, and agents and loan officers experience fast conversion of leads to clients.

□ Strategic buy-in from the MFI's senior leadership

Stronger collaboration between Greenlight and MFI Bank Two to drive sales

Greenlight Planet was permitted to create incentive programs and additional marketing tactics to generate client interest and build motivation with MFI Bank Two's loan officers. At the start of this second phase, Greenlight worked with MFI Bank Two's leadership to identify a few mechanisms that would likely increase the rate of sales. In particular, MFI Bank Two and Greenlight Planet agreed to three collaborative efforts to accelerate sales of Sun King products to the bank's clients:

1. Direct marketing of the Sun King loan product to borrower groups:

Instead of conducting separate marketing activities as was the case in the first phase with MFI One, the dedicated Sun King agents began conducting product demonstrations alongside MFI Bank Two's loan officers during regularly scheduled client meetings. This had two meaningful impacts on the sales:

1. It helped loan officers become more familiar with the products, and
2. From the client's perspective, it connected the Sun King product offering with MFI Bank Two's core offerings.

2. Specific Sun King loan targets for MFI Bank Two's loan officers:

MFI Bank Two set specific KPIs related to the number of Sun King loans their loan officers initiated. Whereas MFI One's loan officers had limited financial interest the number of Sun King loans issued, MFI Bank Two's staff were intrinsically motivated to work with the Sun King agents to serve more clients with energy loans.

3. Targeted loan product to serve female consumers

MFI Bank Two understood that energy products disproportionately benefit women in under-electrified communities, and their energy loan product was designed with their majority female client base in mind. The marketing materials, price points and product selection were intentionally designed for this target female borrower.

□ Look for group lending models

Marketing to clients in a group lending model as opposed to an individual lending model

The most significant difference in the second phase of the pilot centers around the different ways each MFI has structured their loan products. Whereas MFI One lends directly, and only, to individual clients, MFI Bank Two only lends to clients in a group lending model. MFI Bank Two clients must join a ten or fifteen member group made up of individuals from their community to become individually eligible for small business or asset loans. Each individual in the group commits to ensuring the entire group upholds its collective loan requirements. This group lending model enables MFI Bank Two to issue more loans at a faster pace, since the social pressure of group commitments leads to lower default rates. This approach also supports financial inclusion; the strength of the social security mechanism of group lending decreases the financial institution's risk in lending to lower-income, previously unbanked individuals. The emphasis on financial inclusion is evidenced in the minimum loan size each institution offers: MFI Bank Two's minimum size is NGN 30,000 (approx. \$80) vs. MFI One's minimum of NGN 50,000 (approx. \$135).

These borrower groups also tend to mostly be comprised of women: 70% of MFI Bank Two's clients are female. This may have to do with the nature of social trust and individual commitments to support their group's obligations; it may also be influenced by the way MFI Bank Two approaches existing informally developed community groups women have formed to join their client base as a group entity.

Based on the impact the one on one marketing approach with MFI One's clients had on the slow pace of lead generation and conversion in the pilot with MFI One, Greenlight Planet decided to better leverage MFI Bank Two's group lending model to accelerate sales. Whereas prior to the second phase, Sun King sales agents simply ran marketing activities near MFI Bank Two's branches to appeal to nearby clients, Sun King agents began visiting MFI Bank Two's lending groups with the loan officers. The dedicated Sun King agents began pitching directly to an entire group of borrowers at a time, which was much more efficient than pitching to one of MFI One's clients at a time.

Moreover, by accompanying the loan officer to regularly scheduled borrower meetings, the dedicated Sun King agents had scheduled marketing visits with captive audiences. In the second phase of the pilot, the dedicated Sun King agents tended to collect a minimum of ten prospective customer leads from each product demonstration, compared with only one lead for each product demonstration to MFI One's clients.

A PERFECT COMBINATION: GROUP ACCOUNTABILITY, EFFICIENT SALES CALLS, FAST, TECHNOLOGY-ENABLED DECISION MAKING



Based on the significant difference in outcomes between the first and second phases of this pilot, it appears that the elements of the partnership model with MFI Bank Two microfinance reflect those of a scalable, sustainable approach for a partnership between a microfinance institution and an off-grid solar company.

Not only does the accountability of a group lending model create efficiency in the lead generation process and minimize loan default, but it also leverages social influence in marketing new products. In many cases, MFI Bank Two clients would follow a fellow group member's decision to take a loan for a Sun King solar system. The trust and respect for a client's fellow group members often influenced her decision to purchase a solar home system for her family. Sun King sales agents and MFI Bank Two loan officers would often convert not one but a handful of group members' interests at a time.

OUTCOMES OF THE EXPANSION PHASE

The refined model that was developed to work in partnership with MFI Bank Two proved to be successful in serving more female customers with Sun King asset financing, by the pilot's goals:

- More than 14,000 Sun King loans were issued to MFI Bank Two's clients
- More than 80% of the loans disbursed served female clients, whereas only 61% of the customers reached through the Sun King EasyBuy direct channel were female during the same period.
- Average monthly sales through MFI Bank Two's network increased by 66% after modifying the partnership model through this pilot

Interestingly, the expanded phase of the pilot did not illustrate a significant difference in the number of consumers reached or amount of solar asset financing based on the gender of the dedicated Sun King sales agent. Twenty percent of the dedicated Sun King agents in the MFI Bank Two model were female, and their average sales were comparable to those of their male counterparts (123 units, on average, by female agents, compared with 125 units by male agents).

Going forward, Greenlight Planet intends to improve the gender balance of Sun King sales agents that support the MFI Bank Two microfinance channel, with plans to balance the gender representation of the growing sales agent pool.

SUMMARY OF LEARNINGS FROM THE SOLAR ASSET FINANCING PILOT

The intention of this pilot was to assess how partnerships between off-grid solar companies and microfinance institutions can increase the number of women that access solar asset financing loans.

The success of the second phase of the pilot illustrates that partnerships with microfinance institutions can increase the number of female customers served with off-grid energy products; more than 80% of the clients in this phase were female. The likelihood of reaching more female clients may be stronger with MFIs that use a group lending model, since women intentionally make up the majority of the borrower groups.

Most significantly, through the two distinct partnership models Greenlight developed with MFI One and MFI Bank Two in the first and second phases of the pilot, Greenlight Planet was able to narrow in on a seemingly scalable partnership model with microfinance institutions in Nigeria and other markets.

Drawing from the successes in the second phase of the pilot, Greenlight Planet is expanding the energy products partnership with MFI Bank Two to all of its branches across Nigeria. Greenlight has also started to apply the learnings from the first phase and the successes from the second phase to the construct of partnerships with new MFIs in Nigeria and other West African countries.



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