



**USING REMITTANCES TO
FINANCE CLEAN ENERGY:
INSPIRING THE HAITIAN
DIASPORA TO COMBAT
CLIMATE CHANGE**



“At Sogexpress, we received many requests from customers who wanted to use the products to start a business, by either selling or renting them to make more money. Haitians are very creative in finding ways to make extra income! For the economy this trend is great, and the enthusiasm of happy customers contributes to spreading the news and raising awareness about the project faster.”

DOMINIQUE POLICARD,
Executive Commercial Director of Sogexpress



EXECUTIVE SUMMARY

Haiti has one of the lowest electricity access rates in the world, with only 12.5% of its population connected to the grid. Remittances offer a new solution for helping to finance the purchase and distribution of energy devices. Given its energy needs, and the size and location of its diaspora-based population, Haiti was an ideal country to test a remittances-backed business model for clean energy. The model uses remittance flows to facilitate the purchase and distribution of small-scale renewable energy devices, thereby fostering the use of clean and efficient energy technology among the energy-poor.



INTRODUCTION



↘ HAITI: PIONEERING A REMITTANCES-BACKED BUSINESS MODEL FOR CLEAN ENERGY

Haiti has one of the lowest rates of electricity access in the world, with only 12.5% of its population of nine million connected to the grid. In parallel, Haiti receives substantial remittance flows every year, most of which are sent by members of the diaspora living in the US. In 2012, Haiti received US\$1.99 billion in remittances, constituting about 25% of the country's GDP (according to MIF estimates). Fostering access to clean energy in Haiti is crucial, as it enables substantial improvement in the living conditions of the poor by providing economic opportunities, improving health and supporting education goals. The benefits of clean energy are clear; however, the financial mechanisms to pay for this new type of energy remain scarce. Given the low prevalence of clean energy in Haiti and the dearth of mechanisms to pay for it, a pilot project designed to test the use of remittances as a means to finance clean energy products in Haiti was developed.

In 2011, under the auspices of two grants, one from the Multilateral Investment Fund/Inter-American Development Bank and another from the Clinton Bush Haiti Fund, Arc Finance began implementation of a project to test whether remittances were a viable means to finance clean energy. The stated goal of the project was to radically increase the availability and number of sustainable energy products for Haitian consumers, using remittances as the financing source. The project tested a remittances-based business model in which a sender living outside Haiti uses remittances to buy an energy product from a money transfer organization that has agreed to provide a range of clean energy products, such as basic solar lanterns, solar lanterns with cell phone chargers, and solar home systems, to receivers in Haiti. After selecting the item to be purchased, the remitter provides the contact information of the receiving family member who can then pick up the product at a specific location. The project has been fully operational since March 2012 and during the pilot phase that lasted until April 2013, 6,136 solar lamps were sold - benefiting approximately 30,700 people in Haiti.



REMITTANCES AS A SOURCE
OF END-USER FINANCE FOR
SUSTAINABLE ENERGY



➤ THE CHALLENGE: BRINGING AFFORDABLE AND EFFICIENT LIGHTING TO HAITI

Most Haitians do not have access to the electrical grid; clean energy solutions are not widely available in Haiti and most Haitians cannot afford the energy solutions that are available. Those who have money typically rely on costly diesel generators or kerosene for lighting and electricity. The situation was exacerbated after the January 11, 2010 earthquake, when not only were many existing power lines destroyed, but the cost of diesel fuel spiked, putting that energy source further out of reach of most Haitians. Kerosene lamps are widely accessible, but pose a fire hazard, especially in the tent camps where many Haitians still live today. Furthermore, the ecosystem for delivering modern energy services in Haiti is underdeveloped, and it is very challenging for energy companies and small businesses to penetrate that market, due to a combination of the current regulatory framework and the lack of a conducive environment for small businesses.

➤ THE BUSINESS IDEA: USE REMITTANCES TO CHANNEL CLEAN AND EFFICIENT ENERGY TO HAITIANS

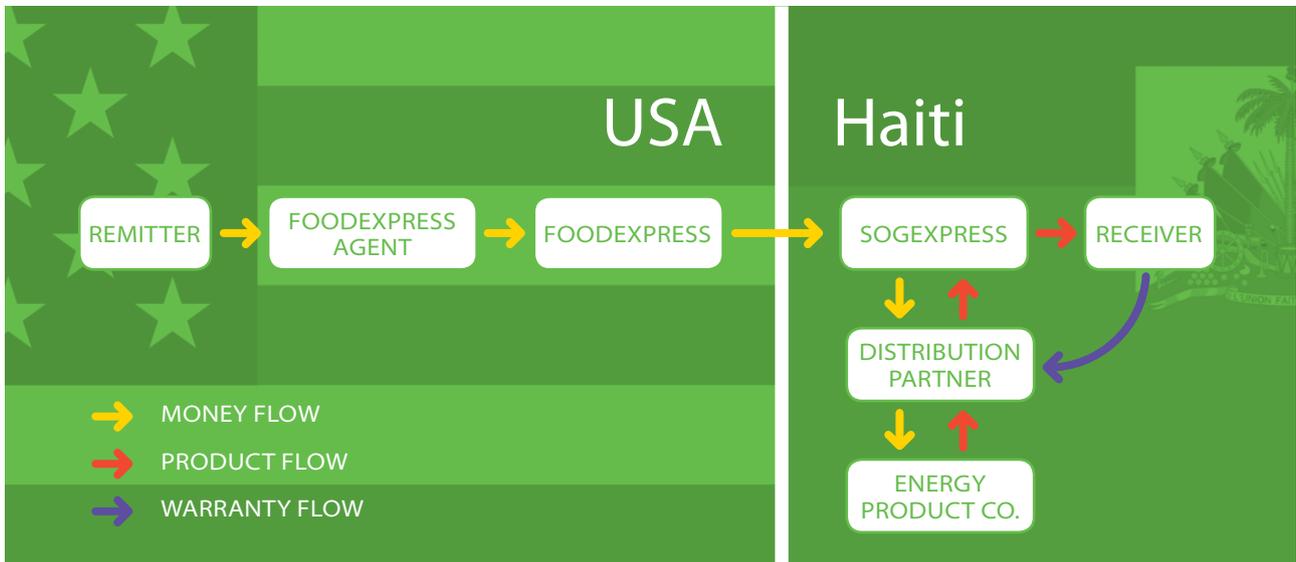
The idea of addressing Haiti's energy challenges by channeling the flow of remittances to provide clean and efficient energy to Haitians represented a potentially innovative solution to increasing energy access in Haiti.

Arc Finance and the Basel Agency for Sustainable Energy (BASE) conducted a market research study to test this idea in the last quarter of 2009. The study was designed specifically to determine if remittances were a viable source of end-user finance for the purchase of energy products in the developing world. The research showed that directing remittances toward renewable energy is consistent with existing consumer practices, since remittances are already frequently allocated to household or livelihood expenses—10% -25% of the money sent is already being used to pay for energy/electricity bills. Ultimately, the market research indicated that there is a very strong appetite among consumers for this business model, and a pilot implementation plan was designed.

The project's goal was to increase the availability and number of sustainable energy products for Haitian consumers using remittances as the financing source, and to create a new business model for the remittance partner to diversify its activities and scale up quickly.

PARTNERS. At the outset of the project a core set of local partners was identified, with each filling a specific role. Food Express, a Haitian-owned goods-remittance company based in Miami, served as the point of contact for senders who wanted to purchase energy products for family members in Haiti. In order to provide a reliable distribution channel and after-sales service for the energy products, Food Express partnered with two Haitian companies: Sogexpress, an established money transfer agency with an extensive network of distribution points across Haiti, including 56 flagship stores; and Micama Soley, a local home appliance distribution company that imported the products and provided the warranty and after-sales service. The diagram below outlines the business model and the role of each partner.

FIGURE 1: DIAGRAM OF THE BUSINESS MODEL



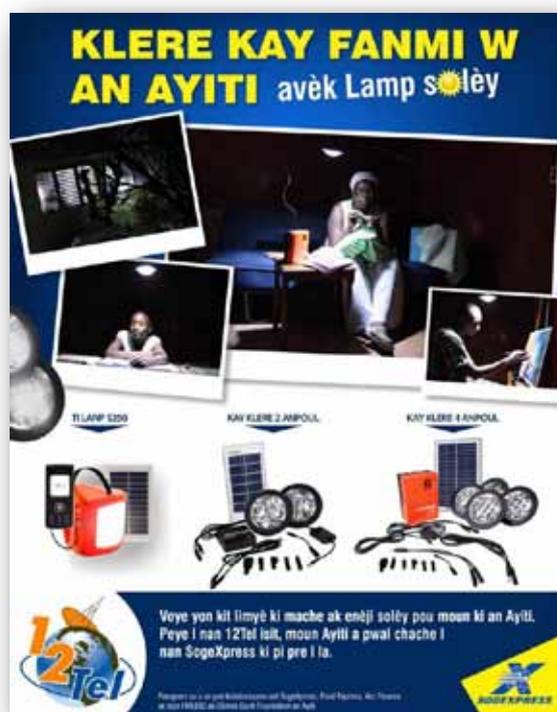
PRODUCTS. Five solar devices with various features, from a simple lamp to a lantern with built-in phone chargers to a combination pack of several items, were chosen after careful evaluation based on a set of previously agreed-upon criteria for the project launch phase. Initially, three larger products were made available on the remittance platform and two smaller, less expensive products were offered for sale on a cash basis in the Sogexpress flagship stores in Haiti, but fairly soon after the launch and in response to customer demand, the team made all the products available for cash in Haiti.

FIGURE 2: CLEAN ENERGY PRODUCTS



PROJECT ROLLOUT. Staff and agents were trained in both Miami and Haiti on how the products worked and on after-sale services. The remittances platform was adapted to accommodate the new business model and launched in April 2012. The marketing team designed and implemented an extensive awareness-raising, outreach and marketing campaign for remittance senders, receivers and the energy-poor in Haiti. In partnership with a major Haitian marketing company, a media campaign was developed that included a range of marketing channels including TV, radio, street marketing and print media.

FIGURE 3: “LAMP SOLEY” POSTER FOR THE DIASPORA



➤ THE RESULTS: SOCIAL, ENVIRONMENTAL, ECONOMIC AND FINANCIAL

One of the goals of the project was to heighten awareness of small-scale clean energy in Haiti. The project received very strong media exposure and thousands of people in Haiti were reached via direct marketing, including street fairs and SMS (text message) campaigns. Many more people were addressed indirectly via TV and radio programs in both Haiti and Miami. After 6 months and again after 12 months, the project team conducted follow-up surveys to assess customer satisfaction levels and to determine how effective the project was in meetings its goals. Below are some of the results as of April 30th 2013, 12 months after the launch of the project.

SOCIAL. As of April 30, 2013, 6,136 energy devices had been remitted or sold. An overwhelming majority of households (96%) included one or more women who benefited from the lamp, and 89% had one or more children who benefited. Most customers (95%) said they used products mainly at home, and of these, 36% used the products to spend time with family, 34% for children’s homework and 15% for security reasons. More than 90% of the customers who bought a lamp indicated that they were remittance clients, suggesting that for the majority of people, remittances contributed either directly or indirectly to the purchase of the clean energy device. In addition, some people reported that they were remitting lamps within Haiti to family members in rural and remote areas. About 55% of sales were in Port-au-Prince and the remaining 45% went to other provinces. More than 99% of the customers interviewed said they were satisfied with the lamp, and 95% said they encouraged relatives and neighbors to buy a lamp. Of those surveyed, more than 40% did not have access to grid-supplied electricity.

"It is very useful for everything I do, from spending time with my family, to doing domestic tasks. It helps me to prepare my children for school as they have to get up early, before the sun rises."

HOUSEHOLD USE - WOMAN WHO BOUGHT A BAREFOOT 2.5W LAMP IN HAITI

"I am a student at university, and I have to wake up around 4 am every morning to study. Before I got the solar lamp, I was using kerosene lamps. The smoke was bothering me and it was costing me money, now the light is free and no more annoying smoke around the house!"

EDUCATION - STUDENT WHO BOUGHT THE BAREFOOT FIREFLY LAMP IN HAITI

"The solar lamp is much safer to use than kerosene or candles."
"I feel more secure when I go outside to use the bathroom at night."

WOMEN WHO BOUGHT THE BAREFOOT 5W AND THE D.LIGHT S1 LAMPS IN HAITI

ENVIRONMENTAL. As a result of the project, 495 tons of CO₂ were reduced as a direct result of the clean energy products purchased during Year 1. Based on the products sold as of April 30th 2013, a total of 1,221 tons of CO₂ is projected to be reduced by the end of Year 2.

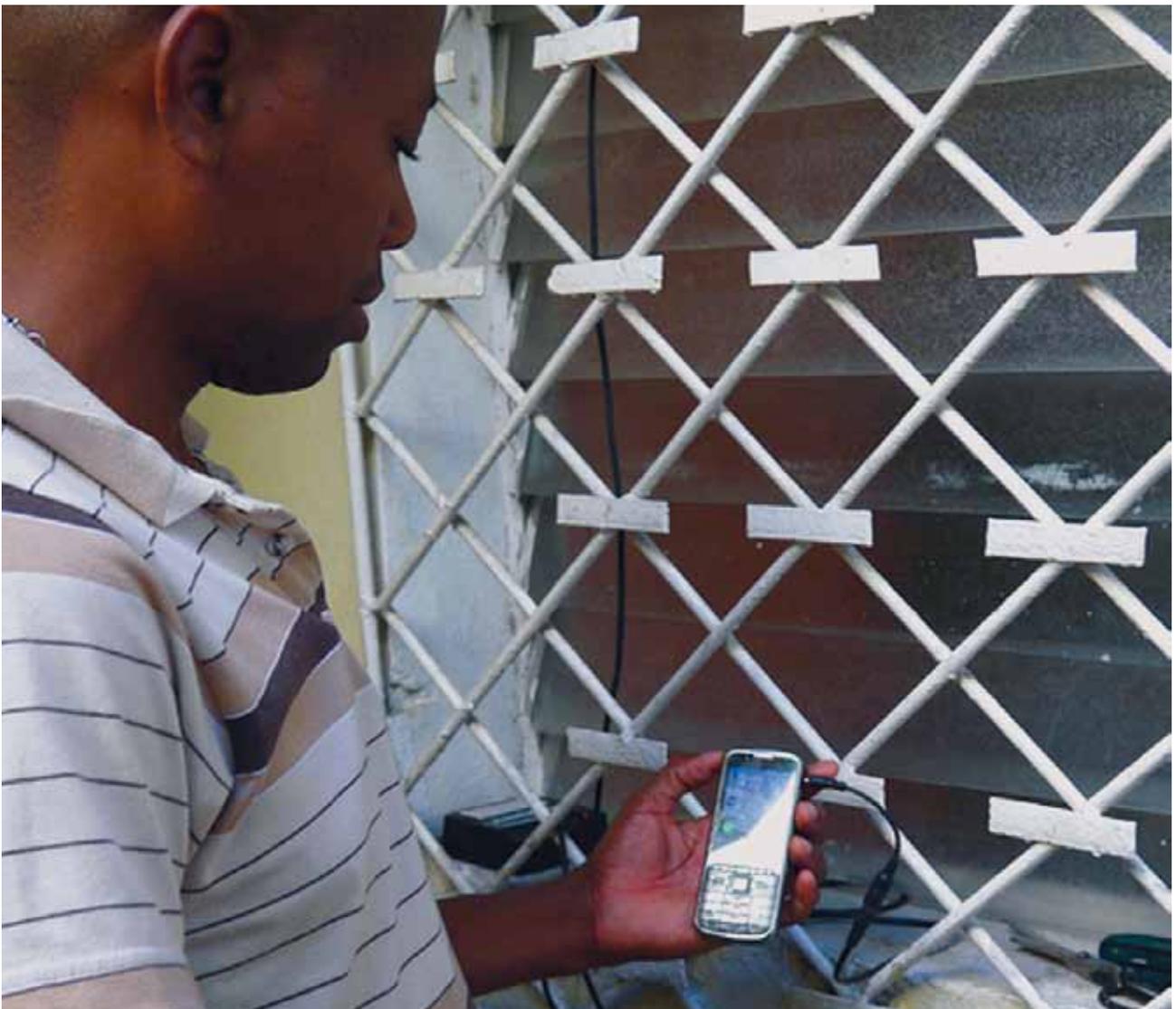
ECONOMIC AND FINANCIAL. In order to make the economic case for switching to clean energy, the team decided to measure how much money consumers would save by purchasing solar lanterns and using them as an energy source. As of April 30th, 2013, they calculated that the energy cost savings for consumers as a result of the project equaled \$223,460 in Year 1, with US\$759,125 projected as savings for sales to date by the end of Year 2.

In addition, the project had entrepreneurial offshoots at three different levels: for Sogexpress, for its agents and for its clients. For Sogexpress, the energy products offered via its remittance platform created a new and profitable business line. At the same time, in order to increase sales, in February 2013 Sogexpress created incentives for its network of independent agents to sell the products on the street, and by April 2013, 500 agents were actively selling solar lamps and sales increased dramatically. The Sogexpress agents noted that the opportunity to sell the energy products as street vendors in Haiti gave them the chance to diversify their existing businesses and represented a new and attractive business opportunity. They became important ambassadors for the project. At the client level, focus groups revealed that some entrepreneurial customers reported that they were renting their lanterns' mobile phone charging capacity to others. The solar lamps also enabled a range of business owners in Haiti to increase their own, or their employees' productivity, with a direct impact on revenues and livelihoods.

Most of the customers interviewed (91%) reported that if they were to have access to finance they would be interested in purchasing a more expensive lamp.

"I gave lamps to my employees as gifts. Before that they had to drive to another town to recharge their mobiles but now they not only recharge their mobiles for free but they are also renting the charger for 10 Gourdes (US\$0.23) to other people and making a small income from it. They love it!"

INCOME GENERATION - WOMAN WHO BOUGHT THE D.LIGHT S250 LANTERN IN HAITI



CONCLUSION



The project incorporated new approaches, concepts, business models and tools to improve access to renewable energy in Haiti and transform people's lives. Testimonies from customers indicated that the project directly contributed to improving livelihoods by enhancing literacy efforts by providing light for studying, and to improving women's lives by providing them with a greater sense of security. The project had important environmental effects, not only by increasing awareness of the role of clean energy but also by contributing directly to CO2 reduction. The project also contributed to the development of a self-sustaining market for renewable energy products in Haiti, created a new business line for the project's main partners as well as its beneficiaries, and provided a mechanism for customers to save substantial amounts of money on energy costs. The project partners are now hoping to scale up the project.

Beyond the positive impact of the project on partner institutions and their agents and clients, the project has had a much bigger impact. Three short years after a devastating natural disaster, an innovative business model promoting renewable energy is offering an effective solution to the persistent energy crisis in one of the poorest countries in the Western Hemisphere. By showing that this is a viable business model, Arc Finance and its partners have demonstrated the potential for replication efforts in other parts of the world. Indeed, there is already interest from Africa and Asia.

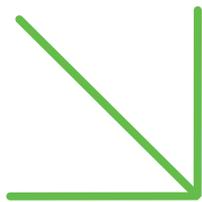
"The goal of the project was to create a viable business model to finance clean energy via remittances. When I discovered that Sogexpress wanted to continue the project after the pilot stage I knew we had been successful!"

NICOLA ARMACOST, MANAGING DIRECTOR, ARC FINANCE, LTD.

"Nothing is more gratifying than meeting customers and hearing how the solar lamps have improved their lives. I meet children who can now do their homework after school, women who are not scared to go to the toilet at night and business owners who have improved their productivity just by having access to a safe, cheap and efficient energy source"

YARA AKKARI, PROJECT COORDINATOR, ARC FINANCE, LTD.

↳ LESSONS LEARNED



IMPLEMENTATION

PARTNER SELECTION: Strong, professional and well-coordinated implementation and marketing partners are keys to success.

PRICING AND INCENTIVE STRUCTURES: Incentives need to be sufficient to encourage agents to promote the products enthusiastically and should be embedded in the pricing.

PILOTING: A soft launch helps to iron out kinks in the system quickly and effectively.

CAPACITY BUILDING: Capacity building is needed at all levels, and tailored training and awareness-building needs to be provided to both managers and agents in order to enable them to be effective ambassadors for the project.

WARRANTIES AND AFTER SALES SERVICES: Warranty and after-sale service arrangements need to be embedded in the distributor agreement to ensure customer satisfaction.

MARKETING

SELECT PRODUCTS AND DETERMINE PRICES BASED ON CONSUMER RESEARCH: Market research was key in enabling the team to determine that products costing about the amount of the average remittance are optimal for the platform.

MARKETING CAMPAIGN SHOULD BE SENSITIVE TO CONSUMER PURCHASING BEHAVIOR: Campaign should take into account country-specific promotion tactics, such as the appeal of “special promotions” to Haitians.

SALES TACTICS SHOULD FOCUS ON WHAT ATTRACTS CUSTOMERS: Customers stressed importance of “hands-on experience,” so sample products were made available for examination, helping customers in Haiti understand the products’ features and contributing directly to increases in sales.

SUSTAINABILITY

ONGOING MONITORING ENABLES TIMELY STRATEGY ADJUSTMENTS: Monitoring the success of the project on a periodic basis and adjusting the strategy to respond to lessons learned results in better outcomes.

PLATFORM IS PRODUCT NEUTRAL: Platform is currently used for solar devices but design could support a range of other products, such as efficient cookstoves, in the future.

REVOLVING FUND MITIGATES PARTNER RISKS: Donor funding (MIF & CBHF) was used to purchase initial batch of products. This served to catalyze the project by reducing partner risk. All profit from sales is channeled into a revolving fund that “recycles” money received to ensure that the money is used for future product purchases.

This Case Study was prepared by
Yara Akkari and **Niki Armacost**,
Arc Finance Ltd



Fondo Multilateral de Inversiones
Miembro del Grupo BID

MULTILATERAL INVESTMENT FUND

1300 New York Avenue, N.W.,
Washington, D.C. 20577

✉ mifcontact@iadb.org

f www.facebook.com/fominbid

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