

**PROJECT NAME: Scaling the Delivery of Clean Energy in Haiti through Diaspora Engagement and Agent Sales**

 **PROJECT NUMBER: HA-M1052**

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1. **PROJECT SUMMARY**

In 2011, only 28%[[1]](#footnote-1) of the Haitian population had access to grid electricity. That same year, Haiti received just over $2 billion in remittances, constituting about 26% of the country´s GDP[[2]](#footnote-2). To address this “energy gap” and take advantage of the huge remittance flows, the MIF helped finance a project to demonstrate the potential of using remittances as a source of end-user finance for small-scale clean energy products, with a focus on low-income consumers in Haiti. The pilot was a success, with more than 10,000 solar lamps sold over 18 months through a Miami-based remittance platform and at remittance locations in Haiti. To date, the project has benefitted more than 50,000 Haitians, thereby demonstrating the basic feasibility of the remittance transfer model. From this pilot arose the possibility that even greater distribution could be achieved by selling products locally through street agents (i.e. street vendors).

To test the initial viability of this sales method, at the end of the first project Sogexpress began to use a small number (340) of its cadre of 10,000 street agents to sell lamps. Sales were strong, but the test demonstrated a need to formalize and track the street agents, and a need for a source of supplier credit (inventory finance). This new project will support this new distribution model by formalizing and expanding the nascent street agent network, increasing the reach of sales, and thus bringing renewable energy to a larger number of unserved Haitian rural and urban households in an economically sustainable way.

In addition, during this phase the original Diaspora-led remittance-sales portion of the model will be expanded globally through a partnership with a large international remittance company, Western Union (WU). The potential value of expanding the remittance model through WU’s Quick Pay service cannot be overstated given that it will establish a link between the existing Sogexpress remittance sales platform and WU Quick Pay technology, which will result in a global expansion of the reach of Diaspora sales – enabling the Haitian diaspora anywhere in the world to send products to their families – a significant expansion beyond the Miami-based focus of the pilot. The activities related to this enhancement of the original project can be done with marginal cost and will contribute to filling the energy gap in Haiti.

The target beneficiaries will include i) low-income purchasers of solar lamps –typically women and children– who benefit from improved environments to study and work, as well as improved safety; ii) the environment, benefitting from reduced emissions; and iii) the street agents, who will increase their income by selling new products (solar lamps). The geographical area of intervention will include both urban and rural areas of Haiti, with the percentage of beneficiaries expected to be higher in urban areas.

Project achievements will include: 1) implementation of a Street Agent Business Model, including a) detailed street agent structure and incentive program, b) a card-based loyalty system to track street agent performance and sales and development indicators, and to manage agent inventory, c)product tailoring and diversification; 2) an internal financing facility for the provision of credit to the street agents using a consignment model; and, 3) expanded linkages of the remittance-based product with the WU Quick Pay system, expanding the reach of diaspora sales from a narrow focus on Miami to global reach.

The goal of the project is to increase the use of clean energy products in poor and low income households in Haiti while improving the income opportunities of street agents who distribute these energy products.

MIF non-reimbursable funding will contribute to i) development of the street agent business and distribution model, ii) adaptation of the sustainable energy IT platform to track agents and loans, iii) establishment of a small fund to enable financing for agents, iv) design and implementation of a marketing and awareness raising campaign for both the street agents and the new expanded remittance service, v) monitoring and evaluation tools and training, as well as vi) dissemination. USAID will co-finance the project, and has already begun to roll-out their financing.

1. **PROJECT CONTRIBUTION TO THE ACCESS FRAMEWORK**

The project contributes to the MIF’s mandate for private sector development and poverty reduction by promoting market-oriented approaches that increase income and improve access to clean and efficient energy at the household level. The results and knowledge generated will contribute to the systemic objectives of the Green Growth Agendas, particularly with respect to clean and efficient energy. This project contributes to the knowledge objective of the clean and efficient energy agenda to develop effective business models and finance mechanisms for catalyzing clean and efficient energy products and services. The clean and efficient energy agenda’s knowledge gap-related aspects to be addressed by this project include the development of i) effective distribution business models of clean energy products and ii) effective ways to increase access to supplier finance for clean energy products.

1. **INFORMATION**

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| **COUNTRY:** | Haiti | **TEHCNICAL COOPERATION:****INVESTMENT:** **LOAN:****TOTAL MIF FUNDING:** | $ 837,000$ 000,000$ 000,000$ 837,000 | 67 % |
| **LOCATION:** | National (urban and rural areas) | **COUNTERPART:** | $ 163,900Sogexpress | 13 % |
| **EXECUTING AGENCY:** | Arc Finance | **COFINANCING (IF AVAILABLE):** | $ 244,973USAID  | 20 % |
| **ACCESS AREA:** | ABG | **TOTAL PROJECT:** | $ 1,245,873 | 100 % |
| **AGENDA:** | Clean and Efficient Energy | **NUMBER OF DIRECT BENEFICIARIES:** | 75,000 households[[3]](#footnote-3) as end users of clean energy products 1,000 street agents (vendors) |
| **COMPLEMENTARY BANK OPERATIONS (IF ANY):** | Remittances as a source of end-user finance for sustainable energy: HA-M1038 | **NUMBER OF INDIRECT BENEFICIARIES:** | 300,000 household members[[4]](#footnote-4) |
| **QED SCORE:** | 9.17 |

1. **PROBLEM DIAGNOSIS**

The problems addressed by this project include: i) energy poverty and associated social and health challenges in low income households in Haiti, especially for women and children, ii) few fully developed, field-tested, effective and sustainable business and distribution models for energy product sales in Haiti, iii) lack of access to credit finance for clean energy product distributors.

The problems confronted by the different beneficiary groups are as follows:

**Low income households, and especially women and children**: The lack of reliable light after dark limits home study, with adverse educational effect. Current energy sources such as kerosene lamps are a fire hazard and result in indoor air pollution. Low light can contribute to crime and insecurity for poor households. The absence of energy sources reduces productivity of micro-businesses, as economic activity stops when the sun sets.

**Street agents**: The pilot project showed that demand for solar products from street agent customers is high and that: i) utilization of the network of street agents can create further capillary distribution channels for products, but ii) these agents need supplier credit for inventory.

At the macro-level, problems are related to Haiti’s lack of electricity infrastructure. While infrastructure issues are being addressed by the Haitian government, it will take years for grid electricity to reach most Haitians. A private sector approach is viewed as an important contribution to solving the problem in the short-term.

At the micro level, until the pilot project, Sogexpress had not contemplated using its agent network to sell solar lamps or other devices. Entrepreneurs within the Sogexpress network organically began selling products on the street, and Sogexpress managers informally began offering supplier credit on a short-term basis. As a result of the pilot, Sogexpress decided to actively examine how it can leverage its agent network for solar sales. Increased sales of diversified product will create income for low-income street vendors, and sales of their products will increase access to energy for their customers

***Classify the problem*** in one or more of the following categories that most apply:

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| **Market failure** | x | **Skill deficit** | x |
| **Institutional weakness**  | x | **Collective action problem** |  |
| **Policy weakness/failure**  |  | **Lack of appropriate technology** | x |
| **OTHER:**  | **Explain as needed** |

There are two sets of project beneficiaries:

1. **Poor and low-income households (consumers of solar products).**

These are low-income households in Haiti who -based on two follow-up surveys carried out for the pilot project to assess impact and satisfaction among users- have the following profile:

* The vast majority either lack grid access or have very limited (e.g. 2 hours a day) or unreliable access to electricity (e.g. frequent power cuts).
* Of those lacking access to grid electricity, around 50% use kerosene lamps, which results in indoor air pollution and high fuel costs[[5]](#footnote-5).
* Many Haitians have cell phones, which cannot be charged without electricity. Currently they pay a fee to charge phones at third-party locations.
* Typical end consumers are already remittance clients and live in homes with at least five household members, including children and women.
* Around half of the end user households live on less than US$2/day.
1. **Street agents (microbusinesses):**

Street agents are very common in Haiti. These are independent self-employed street vendors who sell products, such as food, ‘Pap Padap’ (mobile recharge) and other mobile phone products (such as Digicell credits). The integration of clean and efficient energy devices into their offerings represents a new line of business, thereby diversifying their existing commercial activities. These vendors are predominantly male (around 80%), the majority are between 22 and 35, and they specialize in selling relatively cheap products on the street. The income generated by agents is mostly used to support their families (paying for food, school fees, and other basic needs).

1. **PROJECT DESCRIPTION**

The goal of the project is to increase the use of clean energy products in poor and low income households in Haiti while improving the income opportunities of street agents who distribute these energy products. The project will also expand the Diaspora sales model developed in the first pilot.

Specific project objectives include:

* Increase of sales of clean and efficient energy products (solar lanterns, solar home systems, efficient cook-stoves, multifunctional solar energy products that include mobile charging and radios, etc.) from 10,000 to 75,000 units by developing and implementing new sales modules as well as a targeted marketing and awareness raising campaign.
* Development of an i) IT system loyalty card system to track street agent performance, credit and inventory ii) an advanced sales platform with diversified product offerings.
* Development of internal credit facility to enable Sogexpress to provide supplier credit (consignment model), backed by the project.
* Development of an innovative street agent sales and distribution business model that will radically increase energy access as well provide employment opportunities.
* Linkage of the existing Sogexpress remittance sales platform with WU Quick Pay technology to expand the reach of the sales in the Diaspora.
* Both of these business models are innovative because they are geared at radically increasing distribution for clean energy, and in particular solar products, at the BoP, and are suitable for replication and/or scaling up locally and globally.
* Urban as well as rural areas of Haiti will be covered. This reach will be accomplished by leveraging the Sogexpress network whose stores cover each region of the country as supply points for street agents who can further infiltrate remote areas.

**Component 1: Development of detailed business model**

Conducting market research; Design of agent business model; Research and design of loyalty card and inventory tracking systems; Development of pricing strategy; Design of commission system; Development of monitoring criteria and systems.

Component 1 will establish a formal street agent business model to maximize street agents’ performance (incentives, tracking, monitoring, access to inventory financing), as well as to tailor the products and the pricing to meet end user needs, preferences and economic abilities.

**Component 2: Implementation**

Creation of Sogexpress staff training; Creation of agent/vendor training; Adaptation of Sogexpress IT systems; Development of supplier credit facility; Linkage of Sogexpress Diaspora sales platform with WU Quick Pay technology.

This component will include the training of Sogexpress staff, as well as street agents to familiarize them with the relevant aspects of the business model. The Sogexpress IT system will be adapted accordingly, including the establishment of a link of the remittances sales platform with the WU Quick Pay technology. Furthermore, a fund will be established that will enable inventory financing for agents.

**Component 3: Marketing and awareness raising**

Design and implementation of marketing campaign in Haiti and in the diaspora.

Component 3 will include a targeted marketing and awareness raising campaign for the street agents, as well as the new expanded Sogexpress/WU remittances platform.

**Component 4: Monitoring and evaluation**

Determination of baseline; Determination of metrics to measure indicators; Definition and development of monitoring tools; Configuration of software and hardware; Training for monitoring and evaluation.

The objective of this component is to monitor and document the results of the project, including the development and configuration of relevant tools, as well as software and hardware. Sogexpress staff and street agents will receive relevant training, as well.

**Component 5: Dissemination and leveraging results**

Documentation of results (; Closing workshop; Creation of media kit; Dissemination of results; Final report.

The objective of this component is to systematize, document, and disseminate the experience and knowledge generated, with the aim of sharing a new sustainable business model. This component also includes knowledge generation and scaling-up strategy-related aspects. The main knowledge sharing products are a how-to guide, workshops, and an infographic, which will demonstrate the business and distribution model, including the supplier credit component and the methodology for mobilizing an agent network. The target audiences for the knowledge products include other multilaterals, other remittance businesses, other clean energy businesses, and international stakeholders[[6]](#footnote-6).

The knowledge gaps this project intends to fill are how to develop i) effective business models for street agent-based distribution of clean energy products to the BoP based on a novel technology, financing structure,and ii) effective ways to increase access to supplier credit for clean energy products, in turn also increasing access to clean energy products for end consumers.

This project leverages work conducted in earlier phases where a market for clean energy products in Haiti was established and the use of remittances as a means to finance clean energy was validated. Although it was not the main goal of the prior phases of the project, the project team and the partner organization in Haiti, Sogexpress, recognized the tremendous potential of the agent network. Thus the goal of this phase is to leverage that potential in Haiti. It will also scale the Diaspora sales model.

Arc Finance has experience testing agent models in Uganda and India and will bring this knowledge to bear in the Haiti case.

This project also complements other clean energy-related initiatives at the IDB, by bringing energy to those who are currently unserved by the grid.

The lessons learned from the pilot project are as follows:

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| **Aspect** | **Description** | **Incorporation into project design** |
| Design and implementation | Market research is crucial for the identification of the project components, the selection of the products for the platform, the most suitable business model, as well as Haitian consumer preferences and behavior. Implementation and marketing partners need to be strong, professional and well-coordinated. | The market research component includes all identified lessons learned from the prior phase. |
| Capacity building | Tailored training for agents is essential. | The project includes more specifically tailored training for agents. |
| Warranties and after sales service | Warranty and after-sales service needs to be embedded in the distributor agreements, taking into account that client satisfaction is a key variable in this type of commercial relationship. | This is reflected in the development of the business and distribution model. |
| Platform | Currently used for solar devices only.  | As the design of the platform is modified it could support a range of other products, including potentially efficient cook stoves. |
| Customer-responsive marketing | Understanding customer purchasing behavior is key to developing an effective marketing strategy and campaign.  | The marketing campaign will take into account country-specific promotion approaches such as the appeal of “special promotions” and “hands-on experience” to Haitians. |

1. **MIF ADDITIONALITY**

The MIF pioneered the initial market research and basic business modeling that resulted in the pilot project model. Given that this is a model that had not yet been tested anywhere else in the world, it was path breaking. The MIF now has the opportunity to support another path breaking adaptation of this model through the expansion of the agent network. In addition, as a result of its long-term work in remittances and industry contacts, and the success of the pilot, the MIF has been able to secure the involvement of WU, a world leader in money transfer with 500,000 agent locations in over 200 countries. The role of WU in this project will be to offer the capability to send directed remittances by the Haitian Diaspora worldwide. WU is also interested in learning from the pilot to perhaps expand the program to other countries and products.

The MIF has clear added value in this project given its great knowledge of remittances and access foci on clean and efficient energy, payments and credits, and Haiti.

The MIF intervention is required to bridge the pioneer gap and pilot this new agent distribution model in Haiti, given that upfront investment to establish this model requires grant funding and the establishment of an internal credit mechanism for the vendors that is not currently financeable on commercial terms. It is also required to support the expansion of the Diaspora business, as the MIF acts as an honest broker between the project partners and a large international remittance company. Finally, MIF financing enables USAID cofinancing of this project, which would otherwise not be available.

The establishment of this business model in Haiti requires: a) training of the agents to become familiarized with the new sales and distribution model and the tailored product platform, b) the adaptation of the sustainable energy IT platform to track agents and loans, and c) marketing and awareness raising campaign. Therefore, the MIF grant is crucial to moving this project forward by covering business model development, training, monitoring and evaluation as well as dissemination costs.

1. **RESULTS INDICATORS**

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| **Expected results** | **Results Indicators (\*denotes disaggregated by gender) (CRF indicator number)** |
| Street agents |
| Training sessions completed with street agents. | Number of people trained in improved business skills\* (110100) |
|  |  |
| Access to supplier credit (via consignment) for street agents | Number of people who access credit products\* (210800) |
|  |  |
| End consumers |
| 75,000 clean and efficient energy products sold | Number of households with access to new or improved basic services, e.g. energy (220700)[[7]](#footnote-7) |
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1. **IMPACT INDICATORS**

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| **Expected impacts** | **Impact Indicators (\*denotes disaggregated by gender) (CRF indicator number)** |
| Significant increase in sales / street agent. | Average street agents’\* (micro and small businesses’) annual sales growth (330100) |
| Significant increase in sales / street agent. | Number of street agents\* (micro and small businesses) with annual sales growth of 10% or more (330101) |
| Significant reduction in annual energy costs. | Average reduction in annual energy costs (households: 320200) |
| Significant number of households with reduced annual energy costs. | Number of end consumers with reduced annual energy costs (households: 320201) |
| Reduction in GHG emissions. | Tons of CO2e in GHG emissions reduced or saved (340100) |
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1. **SYSTEMIC IMPACT**

This project will create a business and distribution model to achieve significant market growth of clean and efficient energy products for low-income consumers and micro and small businesses in Haiti. The project outcomes can be used for further scaling and replication in other developing countries. The agent model can be adapted for use by microfinance institutions or other intermediaries.

The partnership with WU is potentially a game changer and could radically alter the accessibility to finance for clean energy, as this model could be replicated, with WU support, elsewhere.

The metrics that will be used to track and measure systemic impact are as follows:

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| **Expected systemic impacts** | **Systemic Impact Indicators (\*denotes disaggregated by gender) (CRF indicator number)** |
| Significant expansion of the clean and efficient energy product sector in Haiti | Number of sectors that expanded with MIF support (450600) |
| Business and distribution model significantly scaled to increase geographical scope, target sales and number of agents. | Number of MIF-introduced models scaled or replicated (450100) |
| Application of business and distribution model by WU and Sogexpress to achieve significant market growth of clean and efficient energy products for low-income consumers in Haiti. | Number of key private sector actors changing or applying new practices based on MIF-sponsored projects or knowledge (450300) |

1. **BASELINE DATA, MONITORING MECHANISMS AND EVALUATIONS**

Baseline data will be established from existing and new market research and reporting at the time of signing up for the loyalty card. The card will track street agent performance, credit, and inventory.

In monitoring results and impacts the baseline diagnostic will be revisited annually to assess change. Changes in the indicators are best assessed after each project year. The indicators will be monitored via surveys conducted by the EA and the use of the loyalty card will allow the tracking of street agents’ sales, credit and inventory.

In consultation with the other project partners, a common evaluation methodology will be agreed upon that can serve the MIF and other partners. The project is expected to have one external evaluation, at a time that will allow reporting on interim results, while still allowing for the option to correct suboptimal project aspects before the end. The evaluation will take place after three quarters of the project has been completed and will focus on the process and areas of improvement of the project and the type of results that can already be extracted at that stage with respect to the relevant indicators. The decision to have only one evaluation was made due to the short timeline of the project, with an eye on cost efficiency. Evaluation questions will include: Have street agents reached clients that otherwise would not have been customers of the product? Are solar lamp sales a significant portion of agent income? What is the capacity of agents to manage and service supplier credit? What impact does having a large remittance company have on the ability of the Diaspora sales model to reach clients?

1. **EXECUTING AGENCY**

The Executing Agency will be the non-profit organization, Arc Finance, that carried out the MIF pilot project (also as EA) on which this intervention is based. That pilot demonstrated the potential of using remittance flows as a source of end-user finance for clean energy products, with a focus on low-income consumers in Haiti. Arc Finance is particularly well suited to execute this project given its long-standing experience in this area (both technical, as well as geographical) and its role in the previous MIF intervention.

Arc Finance's mission is to promote and expand access to financing for energy, water and other basic needs to build the income and assets of poor people around the world. The organization’s core business is to bring together practitioners, funders, pro-poor enterprises, and end-users to develop solutions for access to finance for clean energy and water. Arc Finance’s expertise is in the provision of the tools, technical services, catalytic investment, and linkages that allow these diverse groups to find common opportunity and achieve mutual benefits.

Arc Finance will partner with Western Union (WU), a world leading cross-border financial services and Money Transfer Organization (MTO) and Sogexpress, the leading Haitian MTO for the implementation in Haiti and the largest WU partner in the country.

The roles of Sogexpress and WU will be as follows: Sogexpress will be the implementing partner in Haiti. The project will leverage its agent network and its remittances platform for the project. The role of WU will be to provide use of its Quick Pay technology to allow the Diaspora worldwide to send products using the remittance platform.

USAID will provide cofinancing for this project.

1. **PROJECT RISKS**

Several **risks** could undermine the project’s ability to achieve success, including:

* External risks: Haiti is the least developed country in the region, and as such is particularly vulnerable to potential external shocks that could affect the normal development of the project execution, including at the political, social or economic level. Mitigation includes close observation of these aspects and suitable risk management strategies.
* Sector risks: i) Potential emergence of similar, competing clean and efficient energy products, and misperception regarding the value for money of higher-priced products. Mitigation measures include observation of the relevant market, as well as targeted marketing activities.
* Sustainability risks: Due to i) varying and/or suboptimal street agents’ sales performance, ii) insufficient quality of the clean and efficient products, iii) insufficient after-sales service, iv) insufficient availability and/or suitability of financial products for higher priced products, v) insufficient quality and/or relevance of the project’s business and/or distribution model, replication/scale up aspects and/or knowledge products, vi) suboptimal functionality of any the financial products to be generated by the project (e.g. internal facility for the provision of supplier credit to the street agents), vii) suboptimal functionality of any of the IT-related aspects of the project (e.g. adaptation of the clean energy IT platform to track agents’ business-related activities). Mitigated by training, research and quality control.
* Potential financial risks stemming from unforeseen impacts to the operational and/or capacity of the counterpart. Mitigation through due diligence and risk management.
* Reputational and/or environmental risks potentially arising from suboptimal functionality of clean energy products to be sold, resulting in health/safety issues. Mitigated by quality control and risk management.
1. **ENVIRONMENTAL AND SOCIAL ASPECTS**

The project will have the following positive environmental benefits: i) reduced CO2e emissions (replacement of kerosene).

The social spillover effects will include: i) provision of reliable light after dark, ii) promotion of home study, resulting in positive educational effects, iii) creation of an atmosphere of safety and security for women and children, iv) if efficient cookstoves are sold, reduction of daily wood fuel collection time for women and children thereby facilitating the participation of children in school and positively impacting their literacy levels.

1. **COUNTRY OFFICE COMMENTS**

The country office submitted detailed comments on the intervention and the profile of the beneficiaries, which have been addressed accordingly.

1. World Energy Outlook 2013, Electricity Access Database, data from 2011. [↑](#footnote-ref-1)
2. Regaining Growth: Remittances to Latin America and the Caribbean in 2011, FOMIN, 2012: http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36723460. [↑](#footnote-ref-2)
3. 75,000 clean energy devices will be sold. The end users will be households. [↑](#footnote-ref-3)
4. Average household size in Haiti: 5 (Source: Haiti: Social Resilience and State Fragility in Haiti a County Social Analysis, World Bank, April 2006: http://siteresources.worldbank.org/SOCIALANALYSIS/1104894-1115795935771/20938696/Haiti\_CSA.pdf), therefore number of indirect beneficiaries: 5 - 1 (i.e. the direct beneficiary who purchased the clean energy product) times the number of sold products. [↑](#footnote-ref-4)
5. Estimated at around US$10/month [↑](#footnote-ref-5)
6. For example, certain global development organizations such as the Shell Foundation are target audiences (and already expressed interest) to replicate this model in other parts of the developing world. [↑](#footnote-ref-6)
7. Requires further analysis to identify which households did not have access to these services before the purchase of the product. [↑](#footnote-ref-7)