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FINANCIAL MECHANISM FOR THE PROMOTION OF SOLAR TECHNOLOGIES IN A MICRO FINANCE INSTITUTION (MFI) IN PERÚ

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Overview

Energy deeply influences people's lives and is an engine for social development and economic growth. Energy contributes to fulfilling the most basic human needs, including nutrition, warmth, and light. In order to achieve access to energy, financial services is the key elements alleviating and achieving this goal. New financial perspectives it can attract new customers and keep current customers for green financial services.
Solar technologies often have barriers for example equipment costs, limited knowledge about the its benefits , availability of suppliers, among others. Through a financial mechanism that helps to boost the technologies market based on solar energy, especially solar water heaters and other technologies, it allows the development of new potential markets.

Methods

The research is developed based on the following main tools: Interviews with key actors in the macro context, surveys and interviews with financial intermediaries and technology providers, as well as focus groups with users.

1. **Interviews with key actors of the macro context**
   The main objective was to gather diagnostic elements from varipus perspectives (for example, the range of households needs and companies regarding specific technologies and the priorities in the region at the moment).
2. **Surveys and interviews with financial intermediaries and technology suppliers**
   Once the macro context was covered, the study focused on financial intermediaries and suppliers of green technologies,they are key players in the analysis, given that the concerted action of actors is what makes possible the promotion of technologies and their financing of energy efficiency and sustainability in homes and businesses.
3. **Focus groups (users)**
   Through this tool, the target population habits and needs in energy consumption were identified, in order to determine which sustainable technologies could be applicable. It also helped to measure their awareness of environmental impacts generated by the use of energy and its financial capacity for sustainable technologies acquisition.

Limitations for the study were by the following:

- *The climatic conditions of the study region* allow solar energy having radiations greater than 5 kWh / m^2, this means that the study area has a great energy potential that can be exploited with solar technologies such as solar heaters, solar panels photovoltaic, solar dryers, solar cooler and solar lamps are options that are allowed to cover needs such as lighting, sanitary hot water, food freezing among others.
- *According to the survey*, there is a *potential demand* in the study region for both homes and business.
- The business advisors of MFI are willing to offer a new loan in their portfolio, which can be promoted as an innovative product.
- There are technology suppliers in the study region.

Results

In this study propose the following green financial product that can be included in the portfolio of the MFI.

Summary of credit product

Product Name	Green Energy Credit
Target Group	All current or potential new customers who have payment capacity and meet the profile requested by MFI, framed in its credit policy.
Interest rate of the credit	• According with regulation in MFI. • An interest is suggested of 51.11%
Currency and amount	• Credit only in soles currency. • Minimum amount S/. 500. • Maximum amount S/. 5,000.

Time limit	• Minimum period 6 months • Maximum term until 1 month.
Disbursement	Deposit in saving account or current account to the provider.
Grace period	There is the option of having grace periods, as long as there is a need for the installation of the technology. The maximum grace period should not be longer than 1 month

To carry out the credit, the procedure required for disbursement is explained. The loan process will begin with the promotion of these technologies, explaining the characteristics and benefits of the product, by the advisers of the cashier to the clients, if the credit is confirmed, the consultant will contact the supplier to carry out the technical visit and then the disbursement is made to the client to make the purchase, as a measure of compliance, the advisor will make a post-disbursement visit to the client's home or business.
The main activities to be carried out are the following:

Pilot stage	**Expansion stage**
1. Adaptation of regulatory instruments (product regulation, definition of administrative procedures, interest rates, remuneration policies and promotion of the product). 2. Getting in touch suppliers in the study region. 3. Managers and / or managers of MFI visit others MFIs that have successfully implemented green credit product. 4. Establishing which agencies/offices of IMF will take for implementation. 5. Training on clean energy technologies to credit analyst.	1. Carry out a market study to identify the supply of suppliers in other areas of the country and the demand for credit for the purchase of clean technology. 2. Monitoring the performance of the pilot stage placements and adjust the financial projection. 3. Supporting in the selection of new agencies. 4. Update the normative instruments (if necessary), depending on the evaluation of the pilot experience.

Conclusions

Where MFI is able to provide the loans for energy services, they can go a step further by being aware of the energy efficiency characteristics of the energy products. By advising clients to consider energy efficient and renewable energy-based products, MFI can help clients manage high fuel prices and help clients increase their incomes.

Implementation of this product offers advantages for the MFI as the opportunity to diversify its loan portfolio, lead the market in green loans in the region, growth of the portfolio, the possibility of obtaining funding at special rates, product with high rate for the quality of service to offer
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Recommendation for implementation

- Develop strong relationships with reliable energy partners and build internal technical capacity.
- MFI should carefully manage how they partner with energy companies.
- Working with energy – partners to find ways to reduce the risk surrounding energy investments
- Being flexible in piloting energy lending models
- Investing in internal capacity so that staff feel ownership and mastery of the energy product.
- Initiating market awareness activities through targeted pamphlets, radio shows, promotional displays in MFI branches, field demostrations, etc
- Targeting highly visible business and institutions, such as market vendors, community centers, etc., as the initial clients for energy-loans to build word-of-mouth promotion and demonstration of products.

References

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