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1	Introduction	3
1.1	What is eco-innovation?	4
1.2	The Eco-Innovation Project.....	4
1.3	Obstacles to financing SMEs.....	5
1.4	Method.....	6
2	Overview of funding programs to promote eco-innovation – survey results.	7
2.1	Type of institution that currently finances SMEs	7
2.2	Characteristics of the programs surveyed.....	8
2.3	Availability and origin of resources	10
2.4	Access to resources.....	10
2.5	Activities carried out to implement financial mechanisms.....	11
2.6	Benefits, barriers and expectations	12
2.7	Successful case PROMERICA: work at regional level supported by technical coordination.....	13
3	Conclusions and Recommendations	14
4	References	17
5	Annex 1 – Survey	17

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1 Introduction

Over the last decade, the interest on environmental issues has increased notably, in both literature and policy and, consequently, also the business world begins to worry about the impact that their businesses could have on the socio-environmental context. However, information, technical and economic barriers limit the implementation of these measures in the private sector and in particular among smaller companies.

It is expected that most of the economies of Latin America and the Caribbean (LAC) will have a progressive growth in the near future. However, this growth must occur in a sustainable manner due to the increase in industrial pollution, the depletion of resources and human exposure to harmful substances, as well as socio-economic challenges such as persistent income inequality (Rival, Muradian, & Larrea, 2015).

In this context, the Micro, Small and Medium Enterprises (MSMEs) play an important role in the expansion of the economy; in fact, MSMEs represent around 90% of the business and more than 50% of employment worldwide (IFC Annual Report 2015), but in Latin America and the Caribbean these numbers are even higher: MSMEs constitute 99% of companies in the region and 67% of the employed population, representing 30% of the region's GDP and making them an important driver of economic growth (OECD, 2012) and a fundamental actor in economic development. Therefore, the implementation of mechanisms, programs and incentives to achieve a sustainable future has become one of the region's greatest challenges, encouraging companies to implement environmentally friendly practices.

This study is developed within the framework of the project "Efficiency of resources and eco-innovation in developing and transition economies" led by UN Environment with the support of the European Commission. The project aims specifically to support SMEs and their value chain in the adoption of an eco-innovation process by establishing favorable conditions that foster systemic innovation and the development of local resources and experts.

According to the follow-up of more than 84 companies in El Salvador and 90 companies in Nicaragua, under the initiative of GREENPYME of the Inter-American Investment Corporation (IIC), companies are reluctant to implement practices that seek to optimize the energy resource due to lack of economic resources, qualified personnel and technical knowledge. Indeed, despite the fact that for almost 30 years, governmental and non-governmental agencies have been promoting strategies that seek to implement resource efficiencies (cleaner production and energy efficiency) to reduce environmental impact, there are still the barriers and difficulties that MSMEs in particular have to face. Given this situation, eco-innovation can play a crucial role, since it does not only mean a lower environmental impact, but it can allow companies to identify commercially interesting opportunities, have greater access to markets, create value, encourage growth business and increase operational resilience (UN Environment 2014).

To take advantage of the eco-innovation potential, and develop new technologies and implement solutions in order to change the economic model into an efficient one in the use of natural resources, it is essential that companies have access to financing. However, as highlighted by the GREENPYME/CII study, this is a critical point for MSMEs. In the case of implementation of measures to increase energy efficiency, the main motivations of MSMEs are: have access to financial incentives (attractive interest rates, extended and flexible terms, grace period, fees designed based on economic savings, access to specialized technical assistance), reduce production costs and improve environmental performance.

This study presents an analysis of the financing mechanisms used to involve MSMEs in eco-innovation in Latin America, with special emphasis on Central America (El Salvador, Guatemala, Honduras, Nicaragua, Costa Rica and Panama). The Cleaner Production Centers of Nicaragua and El Salvador, with the support of UN Environment, investigated and analyzed, through a survey, the availability and use of existing programs of access to financing for eco-innovation, barriers and obstacles they face, and best practices.

1.1 What is eco-innovation?

In a context in which international organizations and national governments appeal to the need to introduce changes in current patterns of production and consumption to implement a greener economy, eco-innovation emerges as an approach that can generate and contribute significantly to that change. According to the UN Environment for eco-innovation is understood "the development and application of a business model¹ shaped by a business strategy², which incorporates sustainability in all business operations based on the concept of the life cycle³ and, in cooperation with partners of the entire value chain⁴. It implies a coordinated set of modifications or new solutions to products (goods / services), processes, market focus and organizational structure that lead to a better performance and competitiveness of a company "(UN Environment, 2014).

Contrary to a short-term perspective that leads to gradual improvements and only results in limited progress and benefits, eco-innovation is a systemic change that represents a long-term strategy towards sustainability for three fundamental reasons: a) improvement efficiency in the use of resources and satisfies productive processes with lower inputs of materials and energy; b) it minimizes environmental deterioration due to less use of natural resources and less pollution; and c) new sources of employment and entrepreneurship because it generates new demands for services and products (ECLAC, 2017).

In addition, through this method, companies can create value for the company itself, for the environment and for society in general. The result is a more flexible company, capable to respond to changes in market trends with innovative solutions before competitors, thus representing a competitive advantage. In fact, eco-innovation strategies can benefit a company in several aspects, for example attracting investments (it is expected that \$ 6.4 billion will be invested in the next decade in the clean technologies market in developing countries and registered a growth of 19% in investments in technologies in 2012 in the same countries), access new and expanding markets, increase productivity, increase profitability throughout the value chain and help the company to stay ahead of the standards and norms (UN Environment, 2014).

1.2 The Eco-Innovation Project

In collaboration with the European Commission (EC), the UN Environment established a four-year project to promote the efficient use of resources and eco-innovation in developing and transition economies. The objective of the project is to promote the change in consumption and production patterns in developing countries and economies in transition, encouraging companies and their value chains to improve their

¹ Describe how a company does business (how it works), that is, how an organization creates, delivers and captures value. It is the translation of strategic issues, such as strategic positioning and strategic goals in a conceptual model that explicitly states how the business works (Oesterwalder, 2005).

² Describes the long-term goals of the company and the markets in which the company will operate (vision and mission).

³ Consecutive and interrelated stages of a product (good or service), from the extraction of natural resources to the final disposal (adapted from ISO 14040: 2006)

⁴ It is the complete sequence of activities or interested parties that provide or receive value in the form of goods or services (for example, suppliers, external workers, contractors, investors, R & D, customers, consumers, owners) (ISO 14001 CD2, 2013).

environmental, economic and social performance through the implementation of the eco-innovation. The project was carried out in nine countries-Colombia, Peru, Egypt, Kenya, South Africa, Uganda, Malaysia, Sri Lanka, and Vietnam-and involved SMEs in three sectors-Agriculture, Metallurgy, Chemicals.

The Project had a great emphasis on the global network of Resource Efficiency and Cleaner Production, in particular National Cleaner Production Centers and Programs (NCPC) and other providers of this type of services. The purpose is to develop local and national technical capacities in SMEs, in order to implement strategic eco-innovation and sustainable management of value chains.

This study has been required to provide an overview of the opportunities for access to financing for SMEs that seek to implement eco-innovation and share best practices on favorable conditions for eco-innovation in Latin America, with a focus on Central America (Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama).

1.3 Obstacles to financing SMEs

Currently, eco-innovation receives significant attention from international organizations and national governments, however, investing in eco-innovation is difficult and reflects the problems that affect small and medium enterprises. In fact, since the 1990s, the Latin American and Caribbean region has experienced accelerated growth in the banking sector, as well as in the bond and stock markets; participation in financial markets has also grown, as has financial inclusion, but, in comparison with large companies, MSMEs continue to face more stringent financing conditions, higher interest rates for bank credit and greater obstacles to attracting sources financing alternatives (OECD, 2017).

It is possible to identify obstacles and limitations in both the supply and the demand for financing.

The offer may be limited by:

- The administrative costs of managing small loans
- The competitive priorities of government policies and private sector financing
- Strict regulations for the disbursement of funds

On the demand side, many MSMEs may not access these financing options because:

- Lack of technical capacity and availability
- Perception of greater complexity and lower profitability compared to other types of investment.
- Lack of tangible capital for leverage due to indebtedness, lack of guarantee, aversion to risk or inability to provide property or income information (Gregory, 2013).

Therefore, it is not enough to increase the supply of financing options, it is also necessary to address the reasons why a large number of MSMEs do not seek external finance in the first instance.

In particular, when it comes to eco-innovation, there are some specific challenges evidenced in the literature. Eco-innovation focuses on incorporating sustainability into business models and not around a common technological platform; instead of a specific intervention, it is a general approach that covers a wide variety of different technologies, products, services and markets. These measures includes energy efficiency and renewable energy, and go beyond less developed topics such as sustainable management of chemicals and alliances with suppliers. Often technologies and business models are not tested in that specific context, markets

are unknown and many investments have not yet come out, leaving investors with high levels of uncertainty (Oxford, 2011).

1.4 Method

The objective of the study is to conduct an analysis of the availability and use of financing mechanisms for eco-innovation among MSMEs in six countries of Central America: Costa Rica (CR), El Salvador (SV), Guatemala (GT), Honduras (HN), Nicaragua (NI) and Panama (PA). Through this research, we look to identify:

- Existing sources of financing, expectations and possible expansion credit lines for eco-innovation;
- Trends and best practices in the region to encourage small businesses to access financing for the implementation of practices based on eco-innovation;
- Challenges and obstacles faced by the organizations that implement the financing programs during their development and administration

34 programs and initiatives were identified in Central America that promote eco-innovation through financing. Some of these programs have already been implemented and others are on implementation phase, and are categorized by country, types of incentives provided, companies supported and the focus of the projects (See Table 1). The diversity in the type of actors that are part of these programs and initiatives is reflected in Figure 1.

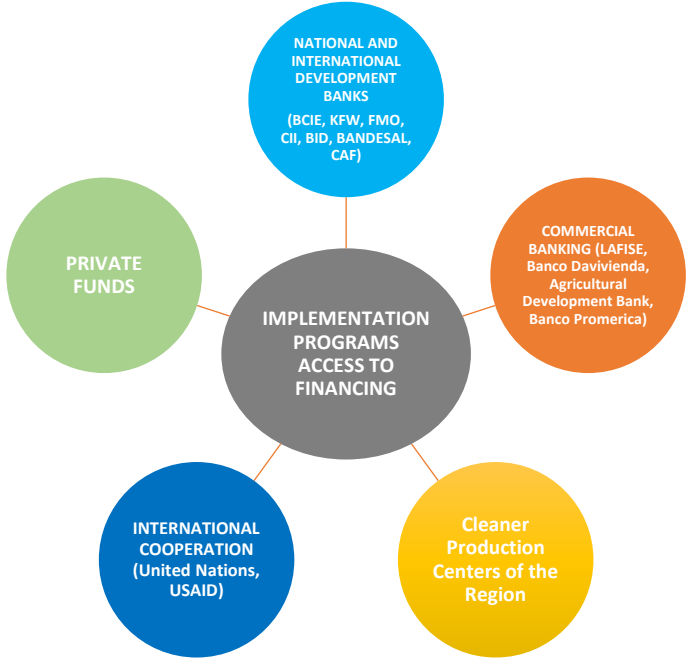


Figure 1 Map of actors identified in funding access programs relevant to eco-innovation in Central America.

Detailed information about the programs (example number and size of recent applications and awards, dissemination strategies) and respondents' opinions about the performance, challenges and future of such programs was collected through a survey directed to the representatives of the programs.

2 Overview of funding programs to promote eco-innovation – survey results.

Eighteen of the 34 programs identified answers to the questionnaire. The following describes the institutions that finance and administer the programs, their general characteristics, the availability of resources, access to them, and the barriers identified during their execution, among others.

2.1 Type of institution that currently finances SMEs

Figure 2 illustrates the different funding sources of the programs identified in the study. The largest representation is on behalf of development banks and private banks. Additionally, it is worth noting that the development banks were the most receptive to the survey. The Government Sector is also active in this space (6), and reflects the interest of governments in fostering practices that lead to more sustainable development patterns. Development agencies, cooperation and embassies represent 12% of the active programs identified. However, these types of actors are also involved in programs implemented and / or financed by other actors mentioned above, such as the German Cooperation that sponsors, through the KFW bank, an initiative of the Central American Bank for Economic Integration (BCIE.) (development bank) and a program of the National Bank of Costa Rica (private bank). Finally, this study identified three private funds willing to finance eco-innovative initiatives. As mentioned above, there are more stakeholders interested in this process, but generally they are not direct providers of financing and often they cover the role of information facilitators or project implementers.

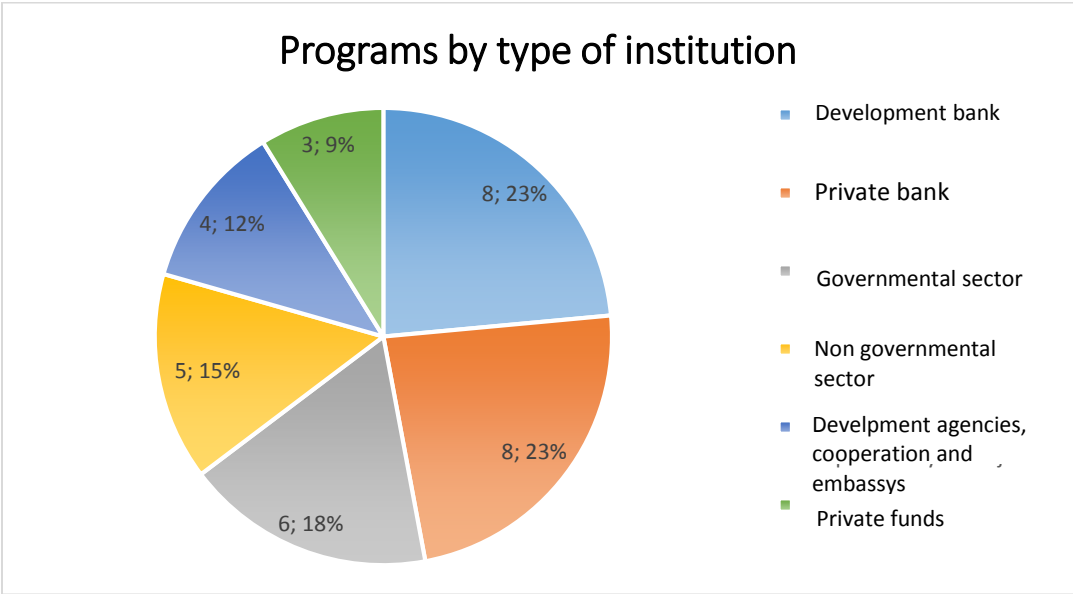


Figure 2 Number of programs identified by type of actor

Although the institutions that are most willing to finance investments in the framework of eco-innovation are banks (development and private) it is necessary to highlight that, often, these are initiatives that arise from a cooperation between different types of subjects, both private and public, cooperation agencies and entities of the non-governmental sector.

2.2 Characteristics of the programs surveyed

Eighteen of the 34 programs identified answered to the survey. Table 1 summarizes the general characteristics of these programs: the geographic focus, the sponsoring organization and the thematic focus of the project, among others.

- **Geographical scope:** there is evidence of programs in the six countries of interest in this study. Additionally, four programs with a regional focus are highlighted, in at least four of the countries of interest: Dynamic Initiative of the Central American Bank for Economic Integration (BCIE), GreenPyMEs of the Inter-American Investment Corporation, MSMEs Verde of BCIE, Green Line of Promerica Group and FMO.
- **Focus on MSMEs:** Almost all of the programs have a specific focus on MSMEs, with the exception of the recognition of environmental benefits in Costa Rica, the energy saving programs of El Salvador and the National Award for Cleaner Production that also support big enterprises.
- **Financing Mechanisms:** a variety of available financing mechanisms are evident, including within each program, with a greater preponderance of the credit lines. Five of the programs were grant programs (S), which offered funds to buy clean technology or offset the cost of technical assistance or audits (TA). Ten are the credit lines offered, which allow companies to obtain more easily loans to finance their activities. Two were award programs (P) that give recipients public recognition for their efforts and, in some cases, cash prizes.
- **Year of initiation:** there is evidence of an increase in the availability of programs, with a few initiated in mid-2000 and the vast majority in execution since the last five years. In addition, two programs will begin in 2018, the Loan Portfolio Guarantee Agreement of USAID and the BANDESAL / Danish Energy Agency / BID "Energy Savings Insurance" program, as well as the second phase of the BCIE SMEs program.
- **Thematic focus:** Fifteen of the eighteen programs are directly related to energy (EE or RE). The CABEL Dynamic Initiative and the Environmental Benefits Recognition Program also include innovation issues, while the green credit lines offered by the Promerica group through FMO financing and the Green SMEs program from BCIE explicitly include improvements and efficiency. in agro-industrial value chains as criteria for project selection.

Eco-innovation is a management approach and although it is not the specific focus of the initiatives surveyed, many of the programs surveyed address one or more elements that contribute to it, most of them focused on Energy Efficiency and Renewable Energy; The trend towards greater support for the implementation of projects of better environmental practices through funding is highlighted given the young nature of the programs, the majority initiated in the last five years.

Table 1 Characteristics of financing programs in six Central American countries

ID	Geographical reach	Name of the Program	Sponsoring Organization	Start Year	Project Approach	Focus on SMEs	Mechanism (s)
1	GT, SV, HN, NI, CR	MIPYMES VERDES	BCIE – with KfW funds and LAIF of European Union	2012	EE	Yes	LC/TA/G
2	GT, SV, HN, NI, CR, PA	Dynamic Initiative		2016	INN/EE	Yes	LC/TA/G
3	CR, SV, GT, HN, NI, PA	Green Pymes	Inter-American Investment Corporation (IIC)	2012	EE	Yes	TA/G
4	GT, SV, NI, CR	Green credit lines PROMERICA	Promerica Group / FMO	2010	EE/RE/Others	Yes	LC
5	SV, GT, HN	Climate Economic Analysis for Development, Investment and Resilience	USAID/CEADIR	2015	RE/EE	Yes	TA
6	CR	Program of Recognition of environmental benefits	Ministry of Agriculture	2004	INN/Others	No	G
7	CR	Tailor made financing	FUNDECOOPERACION	2010	EE/RE/Others	Yes	LC
8	GT	Financial and environmental sustainability of small rural forest enterprises	Grupo financiero de Occidente/Rainforest Alliance	2011	Otros	Yes	LC/AT
9	NI	National Cleaner Production Award	Government of Nicaragua - MIFIC	2006	PL/EE/ER	No	P
10	NI	Techno Links Plus	Asociación Menonita para el Desarrollo Económico (MEDA) con fondos DFATD	2016	Otros	Yes	S
11	NI	Eco Credits	Banco Lafise	2016	EE/RE/CP	Yes	LC
12	SV	Guarantee agreement	USAID/Development Credit Authority	2018	EE/RE	Yes	TA
13	SV	Club of Sustainable Companies	Banco Davivienda	2014	EE/RE	Yes	LC/TA
14	SV	Renewable Company	Banco de Desarrollo de El Salvador (BANDESAL)	2006	EE/RE	Yes	TA/LC
15	SV	Negocios Verdes	Banco de Fomento Agropecuario (BFA)/BCIE	2015	EE/RE	Yes	LC
16	SV	National Award for Energy Efficiency	National Energy Council (CNE)	2014	EE	Yes	A

ID	Geographical reach	Name of the Program	Sponsoring Organization	Start Year	Project Approach	Focus on SMEs	Mechanism (s)
17		El Salvador Saves Energy		2012		No	TA
18	SV	Energy Savings Insurance	BANDESAL/Agencia de Energía Danesa/BID	2018	EE	Yes	LC/G

Notes: Project focus: Cleaner Production (PL), Energy Efficiency (EE), Renewable Energy (RE), Innovation (INN) or Others; Types of mechanisms included: Awards (P), Subsidies (S), Lines of Credit (LC), Technical Assistance (TA), and Guarantees (G).

2.3 Availability and origin of resources

Based on information from ten of the eighteen programs surveyed that provided the size of their funds, an availability of more than US \$ 170 million is estimated. The main source of resources is from foreign governments, although there are also programs financed by national entities and international financial institutions. Foreign governments and international organizations contributed 98.3% of these US \$ 170 million. The programs financed directly by the national entities are: the National Cleaner Production Award of Nicaragua, the Credit to your measure of Fundecooperación and the Program Recognition of Environmental Benefits in Costa Rica and Green Businesses in El Salvador (BFA). The resources of international financial institutions are implemented directly or through local institutions.

2.4 Access to resources

Although most of the programs surveyed have a focus on SMEs, many of them do not directly grant resources to them. The resources are channeled through other actors that support and accompany the companies in the development and implementation of the projects. For example, the USAID Program for Credit Guarantees, which will begin in 2018, will be executed through local banks.

The range of financing of the projects is quite broad, from US \$ 1,000 to US \$ 5 million (Green SMEs). The range of funds available to beneficiaries depends on the activities supported by the programs. As mentioned above, SMEs tend not to access available resources because of the complexity of the application processes and the uncertainty about the success of their application. Most of the application requirements are related to the identification of the economic risk, the size of the funds and the possible environmental benefits. The latter is particularly relevant in this framework, and almost half of the programs confirmed that applicants must present evidence of positive environmental externalities that their project might generate. For example, in the Green Line of Credit program of Grupo Promerica and FMO, one of the essential requirements is that the project requesting financing must generate a reduction of at least 20% of CO² emissions. Credit lines appear to be the most rigorous instruments, all of which require an economic and environmental audit and / or environmental benefit goals in addition to financial requirements.

In this regard, subsidies for international cooperation can be considered less strict than typical local instruments, such as credit lines. This may be associated in part with a higher prescription on the type of projects that are eligible to receive financing. For example, FMO establishes a white list of eligible technologies (eg installation of air conditioning, boilers, lighting, etc.) and a gray list (requires at least 20% reduction in energy consumption, water consumption, consumption of raw material or any environmental aspect). In the case of KWF, the positive list details what kind of projects are eligible and what type of project has to refuse funding.

The percentage of approval of the applications varies depending on the type of programs and on average goes from 60% to 90%. The case of the Recognition of Environmental Benefits program is highlighted, which

approved 100% of the applications. This is because the projects presented already had a guarantee from local institutions.

The programs surveyed use a variety of channels to publicize their program, raise awareness of the importance of implementing better environmental practices and generate interest in accessing resources. These channels include digital media, social networks, special promotional events, and participation in specific fairs, forums and conferences. The design of programs such as the Club of Sustainable Companies stands out, with the aim of increasing the knowledge on energy efficiency, renewable energy, etc., in companies.

Most of the resources available to support eco-innovation come from the International Development Banks and International Cooperation. However, projects and access to resources are carried out with the participation and cooperation of local actors. The availability of resources per project varies significantly and depends to a large extent on the activities supported. Access to resources requires the satisfaction of different economic and environmental criteria for which it is necessary to present evidence of the positive effects that the project could generate.

2.5 Activities carried out to implement financial mechanisms

From the eighteen programs, the key activities and those involved in each phase were identified (see Figure 3).



Figure 3 Support services identified in the process of implementing financing programs

2.6 Benefits, barriers and expectations

For most respondents, the success of their programs is determined in terms of the growth in the number of projects awarded and the amount of funds disbursed, as well as the economic and environmental benefits obtained by the beneficiary companies. Among the benefits perceived by entrepreneurs according to program implementers, cost reduction and greater environmental awareness predominate. The majority of the program representatives considered that their programs had generated positive impacts, for example, with the implementation of other initiatives and mechanisms in their respective countries.

However, there are still barriers that limit the availability of financial resources to support eco-innovation as well as the number of projects seeking these resources. From the point of view of those who develop and manage the programs, the companies that want to participate in the programs find the following barriers:

- a) Limited information on the profitability of these projects and the existing financing opportunities

- b) Lack of capacity to develop projects
- c) Lack of knowledge about the eligible technologies
- d) Little willingness of entrepreneurs to make changes in their business
- e) Lack of awareness among entrepreneurs in the face of environmental challenges

Within their programs, respondents identify the following barriers:

- a) Lack of preparation and training of its personnel to evaluate projects, technologies and best practices
- b) Lack of innovative and complementary financial mechanisms (eg insurance), differentiated with respect to the conventional offer, and which are of interest to companies
- c) Limited funds and with very rigorous technical eligibility criteria for SMEs

Additionally, respondents identified strategies to strengthen their programs in the future, which include: accessing additional resources, adjusting program structures and collaborating with others in this space. The programs indicated that there are favorable conditions for eco-innovation in the region: the application of regulations focused on the implementation of environmentally friendly practices; a growing demand for programs and incentives that can help save energy, water and other resources; and the emergence of multiple and diverse programs to address this interest.

Despite the generation of positive impacts, there are still many barriers and needs that the organizations in charge of the financing programs show as obstacles to the implementation of their programs; among all, the need for training and the lack of information both in companies and within programs, which do not allow creating an investment culture within the framework of eco-innovation.

2.7 Successful case PROMERICA: work at regional level supported by technical coordination

The PROMERICA Group begins the process of creation of the Green Lines financial product since 2014, initially in the Banks of Nicaragua and Costa Rica and later in the Dominican Republic, Ecuador and the rest of the countries of Central America. The focus of the Green Lines in PROMERICA is mainly on **Energy Efficiency and Renewable Energy**. However, the evolution from the first green credits to the present has allowed strengthening the alliances with International Banks that cover more broadly, the possibilities of applicability of the funds towards other topics included in international green financing.

The Project "**Technical Advice requested by the PROMERICA Group for the Promotion of Green Lines in the Latin American Region**" of the Promerica group and co-financed by FMO, was based on the experience developed in Nicaragua through BANPRO. The intermediation of green funds from three different international sources (BCIE, FMO and GCPF), allowed BANPRO to acquire a series of lessons learned that were relevant for the other countries of the group that had just started the process of launching their Green Lines.

A regional work model was identified among the group's banks and the World Network of Resource Efficiency and Cleaner Production (RECP Net) of UNIDO / UN Environment in each country. In this process, the technical assistance of the Cleaner Production Center of Nicaragua (CPC-N) was key to the initial development of the

bank's internal capacities in understanding the environmental aspects of green investments, and in compliance with the technical requirements of the line.

In this alliance, actions were taken to provide technical assistance to companies interested in investing in energy efficiency and renewable energy projects. In addition to technical assistance to banks in the technical evaluation of investment projects and compliance with technical requirements of international resource providers. Also, alliances were established with technology providers, to carry out activities such as: publication of efficient technological options, participation in promotional events and the exchange of information and approach of potential customers.

Based on the experience developed in the Green Lines, it can be concluded that the technical assistance activities have been fundamental for the good management of green funds and the increase in demand for green investments. The priority actions identified are:

- Assistance in the technical evaluation of projects that apply to the Green Line, include the design and use of formats for environmental projects, manuals with the procedures of green lines and technological files to facilitate the identification of green projects by credit executives.
- Implementation of a registration system for environmental and social indicators of the Green Line.
- Creation of capacities in board of directors, middle managers, credit executives (SMEs, corporate, agricultural and consumer), credit analysts, portfolio managers and other collaborators that contribute to the process of green fund placement.
- Assistance for the marketing and promotion of the Green Line.
- Alliances with Suppliers in the promotion of efficient technologies.
- Design and implementation of innovative financial products aimed at SMEs and consumer segments

3 Conclusions and Recommendations

SMEs in Latin America and the Caribbean have limited access to sources of financing. This study identified and analyzed a series of programs that seek to close this gap through financial mechanisms to support these companies and their value chains in the implementation of improvement measures from the environmental point of view. Here is a summary of the main findings:

- **Eco-innovation is more than energy management:** Most programs do not focus explicitly on eco-innovation as a management approach, but rather on more specific technologies and projects; mainly in energy efficiency and renewable energy. Eco-innovation embraces a wide variety of different technologies, products, services and markets, which means that a company that wants to implement measures not related to clean energy, may see limited options to finance their project. From the point of view of eco-innovation, an energy-restricted approach restricts opportunities to generate positive impacts on multiple issues relevant to sustainable consumption and production and increases the risk of ignoring other environmental impacts.
- **The role of donors and investors:** The programs involve a diversity of actors in their design, administration, and implementation, and highlight the role of foreign donors in the first programs of this type, in particular the European and American governments. through development banks and

cooperation agencies. More recently, the private banking sector has assumed an important presence in the supply of financial products and services and the government sector also offers interesting opportunities mainly through prizes. In general, lines of credit and subsidies seem to be the most common mechanisms.

- **Focus on the particularities of SMEs:** The administrators of funding programs identified barriers to financing measures related to eco-innovation in SMEs that limit the expansion and impact of their programs, both in supply and demand of this type of mechanisms. In financial institutions, the need for staff training in eco-innovation issues, its benefits and its implications, and the need for products, services and processes more suited to SMEs are highlighted. On the side of the companies, the representatives of these programs point to the lack of awareness among SME managers regarding the need to improve their environmental performance, and the lack of information on the profitability of these projects and the existing financing opportunities.
- **Involvement of local technical institutions improves the success rate of applications:** Programs that have had technical coordination through local institutions and more information on the type of projects eligible to access resources, show greater success in the application process for the resources (up to 100% approval of the submitted projects).
- **The future:** The funding programs surveyed are relatively recent and the respondents have positive expectations about their future and the expansion of their programs, both in the amounts of available resources and in the mechanisms used.

An approach that supports more strategic approaches such as eco-innovation and the circular economy, and a better adaptation to the capabilities and particularities of SMEs, can increase the positive impact of these financing programs. Based on the above and with a view to supporting SMEs in the implementation of eco-innovation through access to financial resources, it is recommended that:

- Service providers of resource efficiency and cleaner production and other organizations that support eco-innovation (and other similar approaches):
 - Foster a sustainable investment culture in companies and financial institutions, through the promotion of concrete projects that demonstrate the positive results and the sustainable, profitable and competitive nature of this type of investment in SMEs.
 - Strengthen knowledge in eco-innovation through training aimed at the variety of stakeholders involved in the development, implementation and financing of eco-innovation activities and projects, particularly the personnel of financial institutions. At the same time, enable the owners of SMEs, as well as national governments in the financing opportunities specific to eco-innovation and SMEs.
- The administrators of the financing programs:

- Include a technical component in their programs, through work in partnership with organizations that are experts in eco-innovation, to help companies visualize their financing needs and increase their technical capacities, and at the same time allow the managers of the programs the development of innovative and complementary mechanisms that respond to the particular conditions of SMEs.
- Promote dialogue between existing and developing programs, and the parties involved in their administration and implementation to share good practices and identify measures to overcome the barriers that limit their impact and expansion. For example, through the definition of financial and sustainability criteria for approaches such as eco-innovation and the circular economy, and specific for SMEs.

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5 Annex 1 – Survey

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