PUBLIC

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK
MULTILATERAL INVESTMENT FUND

BOLIVIA

DEVELOPMENT OF MICROFRANCHISES FOR ACCESS TO CLEAN ENERGY IN RURAL AREAS

(BO-M1056)

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ABBREVIATIONS

ABS	Access to Basic Services Unit
AMC	Access to Markets and Capabilities Unit
DNA	Diagnostic needs assessment of the executing agency
Energética	Fundación Energética
MSE	Microenterprises and small businesses
PSR	Project status report

GLOSSARY

Microfranchising	A methodology for the reproduction in a chain of a successful business model whose owners and operators are microentrepreneurs. The business model incorporates elements of a traditional franchise but requires a low initial investment and has low operating costs. It is simple enough to be managed by microentrepreneurs with limited training.
Microfranchise	Product distribution and maintenance business models built using the microfranchising approach, where the businesses are owned and operated by microfranchisees.
Microfranchisor	The owner or beneficiary of the business's distinctive brand or trade name, and of a body of know-how. The microfranchisors in this project may be: (i) a large company; (ii) an existing franchise or small or medium-sized enterprise; or (iii) a nongovernmental organization or social enterprise that develops and manages the brand and promotes a business model that it offers to microfranchisees.
Microfranchisee	A microentrepreneur from a low-income group who acquires and operates a microfranchise and receives ongoing technical support from the microfranchisor.

PROJECT DESCRIPTION

This project will develop a model to facilitate access to clean energy solutions for families living in poor communities in rural areas of Bolivia by creating a sustainable microfranchise network, which is expected to raise their standard of living and improve their productive opportunities.

The MIF will finance the design, validation, and implementation of the microfranchising business model at Energética, for which it will provide microfranchisees with technical support and set up a mechanism for financing the marketing of the equipment. This project represents an important knowledge input for the MIF's microfranchising and clean energy agendas, which will make it possible to see how learnings from these two agendas can be linked to scale up their impact.

The project is expected to benefit 10,000 families living in isolated communities in Bolivia without electricity by providing access to sustainable, high quality clean energy products. In addition, 100 microenterprises will be created under the project, providing a stable source of employment and income for entrepreneurs in the communities.

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I. EXECUTIVE SUMMARY

Country/ Region:	Bolivia
Project title:	Development of microfranchises for access to clean energy in rural areas
Project number:	BO-M1056
Executing agency:	Fundación Energética
Beneficiaries:	Population in rural areas of Bolivia without electricity coverage. Residents of these areas who will become microfranchisees.
Financing:	MIF – Nonreimbursable technical cooperation: US$ 700,000 MIF – Reimbursable financing (senior loan): US$ 300,000 Energética counterpart contribution: US$ 478,000 Total: US$1,478,000
Objectives:	The *impact* of the project will be improved quality of life among Bolivia's rural population. The *outcome* will be expanded access to alternative energy services through a microfranchising model.
Period:	For the nonreimbursable technical cooperation component, the execution period will be 48 months and the disbursement period will be 52 months. The execution period for the reimbursable financing component is described in detail below.
Description of the project and MIF financing:	The MIF will provide nonreimbursable technical cooperation resources and reimbursable financing to develop and implement a distribution and maintenance system for clean energy products, primarily photovoltaic panels and solar lamps, using a microfranchise business model. Under this model, Energética will be the microfranchisor, microentrepreneurs from rural communities will be the microfranchisees, and homes and businesses in Bolivia's remote communities will be the customers for the clean energy products and services. The initiative will create a sustainable distribution network that will support the expansion of other public and private initiatives for rural electrification in the country.

To facilitate both the launch and expansion of the model, and as a necessary precondition for developing the microfranchising business model, the project incorporates the creation of a microfranchise financing mechanism. This lending mechanism will be set up with funding contributions from the MIF and Energética and will be managed by Energética. This mechanism will enable the initial purchase of clean energy products and facilitate deferral of payment by microfranchisees (and potentially customers) of equipment purchases. The MIF's contribution to the mechanism will include reimbursable financing to Energética of US$300,000, which will be leveraged with US$150,000 of Energética's own resources. The objective of this mechanism will be to foster the construction of the model and allow a sustainable microfranchise instrument to be established at Energética that promotes high portfolio quality and thus allows it to expand.

The MIF reimbursable financing component will be structured as a senior loan with a term of 72 months. This loan will have a grace period of 36 months on the principal from the date of signature of the agreement. The interest rate is set at 4% p.a. The MIF loan will be disbursed in U.S. dollars in three tranches as needed by the company. Principal and interest will be repaid semiannually.

Risks and mitigating factors:

Credit risk. The main credit risk arises from Energética's limited lending experience. There is therefore a risk that the institution will be unable to establish adequate management of the loan portfolio to allow the lending mechanism to gain a foothold and expand without becoming decapitalized. To mitigate this risk, the project calls for the creation of a specialized financing unit in Energética, which will be responsible for ensuring that the loan portfolio is of adequate quality. To do so, it will be supported by portfolio management software and specific consulting services for process strengthening. There is also a risk that the loan portfolio may become concentrated at the sector level, and to a certain extent, geographically (given that the targeted rural areas are relatively close together). In order to mitigate this risk, based on the two lending products identified in Component V, Energética will seek to diversify its portfolio by lending to a variety of microfranchisees at different terms and amounts, so that it is able to distribute the portfolio more evenly and avoid concentration risks.

Market risks. One risk that has been identified is the potential competition from electrification projects that donate equipment, which could undermine the sustainability of the proposed microfranchise model. To mitigate this risk, the project will form a partnership and coordinate with national, departmental, and municipal governments to ensure that it has timely information and advance notice about rural electrification projects, so it can collaborate with these projects rather

than try to compete with them. A second risk is a possible substantial increase in the price of energy products, making them less affordable for the beneficiary population. Although this risk is difficult for a small institution like Energética to mitigate, the project will seek to diversify the products offered and the number of manufacturers from which it sources them.

Operating cost risk. Firstly, in terms of operational risks, Energética will set up an efficient and cost-effective microfranchise management unit through this project. This unit will have a clear business-oriented approach, allowing it to optimize its costs and focus on profitability and sustainability. To this end, the project incorporates Energética's support in the business plan and strengthens the microfranchise unit's technical and institutional capacity to ensure that it has an independent vision and optimizes its business processes. Secondly, the microfranchise model involves high operating costs related to managing the network (including ongoing monitoring and training of microfranchisees). There is a possibility that these operating costs may end up being higher than anticipated (for example, due to an increase in the microfranchisee dropout rate or escalating transportation costs). In order to mitigate this risk, the project will allocate technical cooperation resources to test and refine the model and reduce the costs associated with learning (e.g. appropriate incentives models to reduce attrition).

Special contractual clauses:	For the technical cooperation component: Project coordinator selected and Operating Regulations approved. For the financing component: Financial statements for the previous financial period, with a clean audit by a firm acceptable to the Bank.
Environmental and social review:	This project has been pre-evaluated and classified as a category "C" operation according to the requirements of the Bank's Environment and Safeguards Compliance Policy (OP-703).
Coordination with other agencies:	None
Exceptions to Bank policies:	None

II. BACKGROUND AND RATIONALE

A. Lack of access to energy in Bolivian rural communities

2.1 Bolivia is a country where approximately 22.5% of the population does not have access to the commercial electricity grid.[1] The bulk of this population segment lives in rural areas of the country, where poverty levels are high. Despite considerable efforts in recent years and the public sector's investments in projects to extend the electricity grid to Bolivia's rural areas,[2] the distribution of energy services and products to families in isolated rural areas continues to be a major challenge. In many cases, households are unable to afford nonrenewable energy sources (kerosene, diesel, candles, and batteries), and when they are able to pay for them, the expense is a significant strain on the household economy. It is estimated that households in rural areas of Bolivia spend an average of 600 bolivianos/year[3] on conventional fuels for lighting.

2.2 The lack of access to clean, reliable, and affordable energy has serious repercussions for rural poverty in Bolivia. Energy provides essential services affecting livelihoods, access to water, agricultural productivity, health, education, and security. These challenges are exacerbated by the limited opportunities for decent work and income generation in areas not served by the electricity grid. These conditions of exclusion and lack of opportunities drive families to migrate from the countryside to towns and cities, which is becoming a problem inasmuch as the country's urban areas do not have sufficient capacity to absorb the newcomers.

2.3 In view of the multitude of challenges related to extending the electricity grid into rural communities, clean energy systems (such as photovoltaic panels or solar lamps) can offer a suitable cost-effective strategy for providing access to energy for very isolated rural communities. These technologies offer additional advantages in terms of cost savings relative to fossil fuels, as well as having strong potential for rapid deployment. Their relatively low cost and ease of installation also mean that these technologies are able to create job opportunities and generate income through local small businesses that serve their own communities. The Bolivian government has run several rural electrification programs leveraging the benefits of clean energy. These programs have facilitated the initial expansion of coverage by distributing equipment, but their sustainability and scope for further expansion, in terms of both distribution of new systems and maintenance of existing systems, are very limited. An instrument is

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1 International Energy Agency, World Energy Outlook 2011.

2 Such as the Ministry of Public Works program: "Electricidad para vivir con Dignidad" [Electricity for a decent life].

3 *Rol e impacto socioeconómico de las Energías Renovables en el área rural de Bolivia* [Role and socioeconomic impact of renewable energy sources in rural areas of Bolivia]. Miguel Fernández. Centro de Estudios para el Desarrollo Laboral y Agrario [Center for Studies for Labor and Agrarian Development] – Energy Platform. La Paz, Bolivia. 2010.

therefore needed that enables an uninterrupted cycle of equipment distribution and maintenance in rural areas so that people living in these communities have a reliable system that gives them access to energy. The direct experience of the project executing agency, Energética, in the implementation of traditional programs for the distribution of clean energy products, has demonstrated the need for new instruments facilitating not only distribution but also the consolidation of a network providing integrated support[4] and facilitating access to clean power in rural areas of the country.

B. Microfranchising as a sustainable tool for distributing and maintaining clean energy solutions

2.4 Microfranchising is a business model that facilitates sustainable product distribution and maintenance. It is based on the replication of a successful business that is low cost and simple to operate, thus making it easier for low-income individuals to set up a business ensuring stable generation of a flow of income and thus improving their quality of life. Microfranchising's ability to reach traditionally isolated regions in a sustainable way makes it a stable distribution channel allowing the microfranchisor (the energy product distribution company) to leverage a network of local microfranchisees (small entrepreneurs with basic electronics skills) to distribute energy equipment and maintain it. The network of local microfranchisees serves as a powerful tool for ongoing feedback on customers' needs, enabling the microfranchisor to update the products it offers. Lastly, microfranchises generally incorporate access to finance for microfranchisees in their business model (and often for customers too), allowing them to overcome one of the central problems faced by systems distributing to low-income populations, particularly those living in isolated areas.

2.5 Along these lines, as has been shown in similar initiatives in Africa,[5] microfranchising has the potential to be a particularly effective mechanism for distributing clean energy products, and in particular, for reaching isolated areas sustainably. It is on account of this potential by microfranchises to promote access among customers in rural areas that Energética, the leading institution in clean energy solutions in Bolivia, with over nineteen years of experience in the field,[6] took an interest in the model as a way to scale up the impact of its programs.

2.6 For the project, Energética will form partnerships with strategic suppliers, such as the company Phocos,[7] which manufactures photovoltaic energy systems in Bolivia. The specific clean energy products sold will be identified and selected

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[4] Within the integrated system, the importance of access to financing when needed (which inhabitants of rural areas cannot obtain through the financial system due to high costs) and to suppliers of clean energy products was highlighted.

[5] For example, the experience of SolarAid.

[6] During that time, it has distributed over 15,000 systems through various support programs.

[7] Phocos AG is among the world's leading manufacturers of solar-based energy solutions. http://www.phocos.com/.

based on a market study financed through component 1, which will build on Energética's prior experience and be backed up with government data. Some of the products that have been preliminarily identified for distribution through the Energética microfranchise are photovoltaic panels, solar lamps, batteries, fuses, etc.

C. Suitability of the MIF intervention

2.7 The project will develop and implement a system for the distribution and maintenance of clean energy products based on a microfranchising business model. Under this model, Energética will be the microfranchisor, the microentrepreneurs from rural communities will be the microfranchisees, and homes and businesses in Bolivia's remote communities will be the customers for the clean energy products and services. The initiative will create a sustainable distribution network that will support the expansion of other public and private initiatives for rural electrification in the country.

2.8 The program is aligned with two MIF agendas. Firstly, it will contribute to the "*developing and promoting the adoption of microfranchising models*" agenda in the Access to Markets and Capabilities Unit by validating a specific model of microfranchising that generates economic empowerment for low-income populations. Secondly, the project will contribute to the "*clean energy*" agenda in the Access to Basic Services and Green Growth Unit by helping facilitate access to energy solutions among poor rural populations that currently lack them.

III. PROJECT DESCRIPTION

A. Goal and purpose

3.1 The *impact* of the project will be improved quality of life among Bolivia's rural population. The *outcome* will be expanded access to alternative energy services through a microfranchising model.

3.2 The project consists of the following components: (i) identification and analysis of the business model; (ii) integration of the microfranchising line in Energética; (iii) expansion of the microfranchisee network; (iv) systematization and strategic communication of the model; and (v) financing of the microfranchising model.

B. Components and activities

3.3 The project consists of the following components:

Component I: Strengthening of the business model (MIF: US$122,000; Energética: US$26,100)

3.4 The purpose of this component is to strengthen the microfranchising model and its operation in rural communities, for which financing will be provided to design and fine-tune the business model. This will include a review of microfranchising experiences in other countries, design of the business model, including aspects of training, financing mechanisms, supervision, marketing, technical support for

microfranchisees, and the fine-tuning and strengthening of Energética's systems to accommodate the microfranchising model, including the development of operating manuals, procedures, monitoring mechanisms, rules for the selection of areas, and accounting systems. Energética will base this analysis firstly on the pilot experiences it has conducted with microdistributors, and secondly on the information it has compiled during its rural electrification work in the country.

3.5 The suitability and feasibility of this project proposal, which aims to use microfranchising as a sustainable and scalable distribution model in rural areas, rests in particular on Energética's[8] prior technical and financial know-how and information. In accordance with this information, the proposed microfranchising business model described for this project incorporates an integrated system going beyond the distribution of clean energy products to include access to finance, product suppliers, technical support, and provision of services, so that the distribution system is sustainable over time and can be expanded even after the project has ended.

3.6 The results of this component include: (i) a market study enabling potential areas of intervention in the microfranchising networks to be identified;[9] (ii) an integrated microfranchising model for the distribution of energy products, which will incorporate specific procedures and manuals on products, legal aspects, scope, location, markets, advisory plan, training, etc.; and (iii) the creation of the brand and image of the Energética network of microfranchises.

Component II: Integration of the microfranchising line in Energética (MIF: US$71,500; Energética: US$94,600)

3.7 The purpose of this component is to establish a microfranchising unit within Energética as a sustainable and efficient business line, building on the foundations of Energética's prior experience. To this end, the project will first train the relevant personnel at Energética on the subject of microfranchising and develop the logistic and administrative support systems to allow Energética to run the network in its role as the microfranchisor. It will also select and train advisors on microfranchising-related topics. These advisors will provide training and advice to microfranchisees on technical, administrative management, gender, marketing, financing, social, family, hygiene, and other aspects. Finally, the project will consolidate the new financing unit at Energética,[10] strengthening its processes and

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[8] Information given in Document 7, attached as an annex to this proposal.

[9] Although, from its experience in the sector, Energética has baseline information on potential demand for the products to be incorporated in the model, a more detailed market survey needs to be conducted once the specific characteristics of the microfranchising network have been defined so as to validate the margins and delimit areas for distribution.

[10] It is important to note that, in parallel with the strengthening of Energética's internal capacities to manage the financing, the project will work on building partnerships with credit institutions, which may, once the model has been validated, complement and expand the scope of microfranchisee and customer financing.

generating internal operations and autonomy, permitting timely and efficient management of the loan portfolio.

3.8 Secondly, the component will validate the microfranchising model identified in Component I by means of a pilot trial. Component activities will finance the identification, selection, and training of approximately 20 microentrepreneurs as microfranchisees, in one or two initial intervention areas.[11] These will validate the model prior to its expansion in case any adjustments are needed. The purpose of the pilot phase is to allow Energética to test, evaluate, document, and fine-tune the business model and training methods, based on the results of the pilot.[12] Only when the business model is cost-effective and operationally sound in a sufficient number of pilot microfranchisees will the expansion phase envisaged in Component III below begin.

3.9 The outcomes of this component will be: (i) two agreements signed with energy product suppliers and two agreements established with public institutions and local organizations; (ii) six advisors trained on technical and operational advisory services for microfranchisees; and (iii) 20 microfranchisees trained and operating in the pilot phase.

Component III: Expansion of the microfranchisee network (MIF: US$287,000; Energética: US$89,480)

3.10 The purpose of this component is to increase the number of microfranchisees taking part in the pilot phase in order to reach the total of 100 microfranchisees envisaged for the project. To this end, the component will develop an operational, commercial, and logistics strategy to bring the system to scale, as well as run a publicity campaign to position the initiative in the communities. Component activities will focus on verifying that the training and monitoring of microfranchisees guarantees the solidity of the network and enables the model to become firmly established by making rapid adjustments as necessary as challenges and/or opportunities are detected.

3.11 The outcomes of this component include: (i) an additional 80 microfranchisees trained and operating, to complete the total of 100 microfranchisees; (ii) expansion of microfranchising in two additional intervention areas; and (iii) at least six new products added to those offered through the microfranchise network during the project.

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[11] The identification of the area in which the microfranchisees operate will depend on the number of households that are potential customers for the system in the area. It is initially envisaged that each microfranchisee will directly serve an area with at least 100 households.

[12] The degree to which the business model is adjusted depends on the specific conditions in each network, but more than a validation of the product or microenterprise it is an adjustment of the price and distribution conditions that the microfranchisor offers to microfranchisees, and that the latter offer to customers.

Component IV: Systematization of knowledge and strategic communication (MIF: US$66,900; Energética: US$14,000)

3.12 The objective of this component is to document the main results and lessons learned from the project, and to systematize the microfranchising model adopted. The main knowledge product that the project will generate is a "Methodological guide for the design and implementation of clean energy microfranchises in rural communities." This will contain step-by-step instructions on: (i) conducting market research; (ii) identifying the microfranchises and microfranchisees with the best chances of success; (iii) conceptualizing the microfranchise model and business plan; (iv) implementing a microfinancing pilot plan; and (v) scaling up the microfranchise. A set of information products will also be developed, including a short case study, a video, and a fact sheet on the project. This methodological guide will be developed based on the framework model prepared by the knowledge and communication team for the microfranchising agenda (ABC currently being prepared for publication) and will also draw on inputs and best practices from the clean energy agenda, such that it constitutes a knowledge product allowing microfranchising models for the distribution of clean energy products to be expanded.

3.13 The main audiences identified in the project framework are: (i) private companies and social enterprises marketing clean energy products in Bolivia and in other areas that are interested in adopting the microfranchising model as a tool for distributing their products; (ii) nongovernmental organizations and foundations—in Bolivia and elsewhere—specifically focused on innovative business models for low-income populations; and (iii) Bolivian government agencies with an interest in expanding the microfranchising model to accompany rural electrification efforts. To this end, the main messages to be communicated through the project are that: (i) microfranchising, by replicating a tried and tested low-cost business model, offers an opportunity to efficiently provide a large number of people living in poor rural areas with economical access to clean energy solutions; (ii) microfranchises also provide rural microentrepreneurs with appropriate tools to set up and grow their own "off-grid" distribution businesses, with a smaller risk of failure than when starting a conventional microenterprise; and (iii) the microfranchisor has the potential to reach greater scale on an economically and socially sustainable basis.

3.14 Some of the communication channels available to reach the target audiences include: (i) online awareness campaigns, using Energética's channels (e.g. websites, social networks, electronic newsletters, brochures); (ii) thematic workshops organized by Energética; (iii) presentations at microfranchising events and clean energy conferences; (iv) online MIF channels (blog, website, social media channels, etc.); and (v) an international workshop organized by Energética to disseminate results at the intercontinental level.

3.15 The outcomes of this component will include: (i) a methodological guide on the intervention model discussed at local events and published in a specialized

journal; (ii) dissemination of project results at an international workshop organized with project funds; and (iii) interest from at least two regional institutions in replicating the energy product distribution model developed and/or receiving technical transfer of the methodology.

Component V: Microfranchise financing (MIF senior loan: US$300,000; Energética: US$150,000)

3.16 To facilitate both the launch and expansion of the model, and as a necessary precondition for developing the microfranchising business model, the project will provide a loan to create a microfranchise financing mechanism. This lending mechanism will be set up with funding contributions from the MIF and Energética and will be managed by Energética. This mechanism will enable the initial purchase of clean energy products and facilitate deferral of payment by microfranchisees (and potentially customers) of equipment purchases.

3.17 The MIF's contribution to the project will include reimbursable financing of US$300,000 in the form of a senior loan to Energética, which will be leveraged with US$150,000 of Energética's own resources. This financing will make it possible to establish the microfranchising financing instrument necessary for the sustainability and expansion of the model.

3.18 The financing arrangements the project incorporates represent an innovation by the MIF. This arrangement will finance the startup of a new social enterprise being developed in the framework of the technical cooperation component that forms the central plank of the project. As a necessary part of its operation, the social enterprise requires a financing mechanism, which takes the form of a small startup fund, implemented through the MIF reimbursable financing component under the same project. This integrated financing arrangement allows for the creation of a new business model that is more profitable for the managing entity and reduces the cost of access to products and services for customers.

3.19 The financing instrument will be managed directly by Energética.[13] The rationale for handling the financing instrument internally lies, firstly, in the characteristics of microfranchising network customers, who have limited purchasing power and live in isolated rural areas not covered by microfinance institutions. This fact makes partnering with microfinance institutions unfeasible as the additional costs involved would substantially increase the price of the products (Energética attempted unsuccessfully in the past to develop similar partnerships with microfinance institutions, which failed to take off for the reason mentioned). Secondly, by its very nature, operation of the microfranchisee network includes ongoing monitoring and customer service, which makes developing an integrated model that combines network operation services with credit services highly advisable in order to reduce costs. Nevertheless, to facilitate future expansion of

[13] To ensure the mechanism's continuity and the strengthening of internal capacities, Energética will undertake to assign a member of its permanent staff to the management of its lending mechanism on a stable basis.

the model, the project will organize various seminars and presentations to financial institutions in Bolivia once the system has been established in order to share information on the model and disseminate its advantages as an integrated mechanism, so as to facilitate the involvement of financial institutions in in efforts to give rural communities access to clean energy.

3.20 The main terms and conditions of the proposed preferential unsecured loan are outlined below (the term sheet is included in Document 7 of the project's technical archives).

3.21 *Term*. The reimbursable financing will have a term of 72 months (6 years) from the date of signature of the agreement.

3.22 *Grace period*. The reimbursable financing will have a grace period of thirty-six months on the principal from the date of signature of the agreement.

3.23 *Disbursements.* The MIF loan will be disbursed in U.S. dollars in three tranches: 1st tranche: up to US$100,000; 2nd tranche: up to US$100,000; and 3rd tranche: the remaining amount up to US$300,000, to make up the operation total. Tranches will be disbursed at the executing agency's request when the conditions set forth in the covenants have been met.

3.24 *Amortizations.* Every six months, payable on the same dates as the interest payments, counting from the first disbursement.

3.25 *Interest rate*. Fixed interest rate of 4% p.a. on outstanding balances.

3.26 *Contractual commitments.* Energética must comply with the following conditions at the time of the disbursement and throughout the term of the loan.

(i) Results of Energética's institutional management > 0

(ii) Equity/MIF debt ratio > 1

(iii) Project's at-risk portfolio (> 30 days) < 6%

3.27 *Use of financing.* The microfranchising lending mechanism will initially finance equipment credit for microfranchisees. Energética (the microfranchisor) will deliver equipment to the microfranchisees, who will pay for it when they sell it. In practice this will operate as a consignment sale with the financing cost included in the price. Moreover, it is envisaged that 30% of the stock of equipment (more expensive units) will be sold on credit by Energética directly to end users (although the sale will be channeled through the microfranchisee). This second type of sale of equipment will take the form of an installment sale, in which the interest rate is internalized and payments are made in regular installments.

IV. COST AND FINANCING

4.1 The total cost of the project is US$1,478,000 with a MIF contribution of US$1,000,000, of which US$700,000 corresponds to nonreimbursable technical cooperation funding and US$300,000 corresponds to reimbursable financing. The

amount of Energética's counterpart contribution will be US$478,000, of which at least half will be made in cash. The project budget is shown below.

Budget categories	MIF	LOCAL CONTRIBUTION	TOTAL
Component I. Strengthening of the business model	122,000	26,100	148,100
Component II. Integration of the microfranchising line in Energética	71,500	94,600	166,100
Component III. Expansion of the microfranchisee network	287,000	89,480	376,480
Component IV. Systematization of knowledge and dissemination of results	66,900	14,000	80,900
Component V. Microfranchise financing	300,000	150,000	450,000
Administration	51,000	100,820	151,820
Ex post review	12,000	3,000	15,000
Baseline, monitoring, and evaluation	10,000		10,000
Contingencies	4,600		4,600
SUBTOTAL	**925,000**	**478,000**	**1,403,000**
Percentage	65.93%	34.07%	
Institutional strengthening	5,000		5,000
Impact evaluation account (5%)	50,000		50,000
Agenda account	20,000		20,000
TOTAL	**1,000,000**	**478,000**	**1,478,000**

4.2 **Execution and disbursement periods.** The project's technical cooperation component will have an execution period of 48 months and a disbursement period of 52 months. The reimbursable financing component will have an execution period of 6 years (72 months) and a disbursement period of 36 months. The assumption is that the reimbursable financing will begin to be executed in the twelfth month of execution of the nonreimbursable technical cooperation component.

4.3 **Project sustainability.** The project is expected to achieve a high level of sustainability, both on the level of the distribution model managed by Energética as the microfranchisor, and on that of the entrepreneurs who will be the microfranchisees. As regards Energética, the model's sustainability will rest on the margin that Energética charges on the distributed products. Energética's microfranchising unit is expected to achieve full financial sustainability before the end of project execution. Additionally, the MIF loan will give Energética a track record that it will then be able to use to attract resources from other donors or investors interested in growing the model. At the level of microfranchisees, the microfranchising model will generate a minimum average monthly income from

the sale of clean energy products that is substantially higher than that from other alternative income sources currently available in the communities.

V. EXECUTING AGENCY AND EXECUTION MECHANISM

A. Executing agency

5.1 The project executing agency will be Energética, a nonprofit organization registered in Bolivia. The organization's vision is to increase access to energy efficiently and equitably, by developing integral solutions through technological and management innovation, and with training of human resources, in order to improve productivity and quality of life among Bolivia's disadvantaged population, while protecting the environment. Energética's main functions and activities include the planning, execution, and coordination of projects and programs, technical organization and advisory assistance, market research, human resources training in the energy and environment fields, and assistance in the event of natural disasters.

5.2 Energética has a sound track record and reputation as the main provider of energy services to rural communities in Bolivia, having worked over the last 10 years with various cooperation agencies (World Bank, European Union, United Nations, Government of Bolivia, etc.). Energética has a team of 23 full-time professional staff with extensive technical experience in clean energy programs in rural Bolivia. Energética's institutional assets in 2011 surpassed US$2 million,[14] deriving from positive earnings on operations over the last three years (see Document 7, the institution's financial statements for the last three years).

5.3 Energética is managed through the following bodies: the General Assembly, the Board of Directors, the Executive Director, the Technical Council, and the Area Chiefs. The first two—the General Assembly and the Board of Directors—are normative bodies, responsible for oversight and decisions on institutional policy and strategy matters. Energética's highest normative authority is the General Assembly, which determines the organization's strategy, mission, and functions. It also decides whether to approve the financial statements (profit and loss statements and balance sheets), annual budgets, and management and institutional performance reports. It usually meets once a year.

5.4 Energética's Board of Directors is appointed by the General Assembly as a permanent normative body with executive powers. It meets at least three times a year. It is responsible for ensuring compliance with the bylaws at all times, submitting reports to the General Assembly, and appointing the Executive Director and overseeing his/her performance. It may also delegate some of its executive functions to the Executive Director. Energética's Board of Directors

[14] However, the analysis of the financial statements has shown that a large share of these assets comprise cash flows deriving from collections from various projects, such that the institution's actual asset position is likely to be much lower.

comprises Nepthalí Sierralta (Chairman of the Board), Tania Vazquez (Secretary of the Board), Sylvia Arnez (Treasurer of the Board), and Miguel Fernández (Executive Director). The Executive Director is the institution's maximum authority for functional, operational, and strategy execution matters.

B. Financial capacity and credit management[15]

5.5 According to independently audited financial information, Energética's financial situation has strengthened considerably over the last two years. Between 2010 and 2011, the institution grew by 172%, with total assets increasing from US$1.4 million to US$2.5 million in December 2011. At year-end 2011, 93% of its total assets were current assets, with US$904,121 available and US$1,430,467 callable, deriving from accounts receivable in relation to Bolivian government projects in progress. The remaining 7% corresponded to noncurrent assets (vehicles, equipment, and two buildings—headquarters and a warehouse). The company's rapid growth is explained by the collection of accounts pending for several years relating to projects executed by Energética with the government and the realization of earnings from these projects, which has allowed the institution to build up its equity. Traditionally, Energética has sourced funding from its own equity, as it does not have long-term liabilities other than the provisions it is required to make for employees, and its short-term liabilities relating to employer contributions, salaries, and accounts payable to suppliers declined between 2009 and 2011, representing 22% and 12%, respectively, of total assets and liabilities on the aforementioned dates. Its debt-to-equity ratio is 0.14.

5.6 The institution's equity in 2011 was US$2,211,881, primarily accrued earnings from the previous three years. At end-2011, the cumulative earnings accounted for 80% of equity.

5.7 *Income statement*. Energética's financial statements show a positive situation in the last three years examined. Its income has varied, with earnings of US$3.1 million in 2009, US$893,000 in 2010, and US$2.1 million in 2011. Its earnings have mainly come from external and domestic funding for rural electrification projects. Its expenses, which also relate to the execution of these projects, have traditionally come to between 75% and 90% of total income, although in the last year they represented just 40%. The company also incurs fixed expenses, which rose from 12% in 2009 to 25% in 2011. Generally, 2011 was an exceptionally good year for Energética, because with the payment of pending projects by national and international counterparts for project execution, the institution obtained positive earnings of US$1.0 million, boosting its financial solvency and cash position to enable it to continue to execute projects.

[15] Document 7 of the technical files annexed to this document contains the institution's financial statements and the projections for the model, on which the project team's recommendations regarding the mechanism and conditions are based.

5.8 *Lending experience.* Energética has no lending track record with other funders. However, it does have experience managing microlending programs tied to the financing of clean energy products. The institution currently has a small loan portfolio of US$237,000, with limited procedures that need strengthening. The arrears rate on this portfolio in 2011 was 2.52%. In connection with the proposed microfranchising model, Energética has developed small pilot operations with microfranchisees (service microenterprises) and conducted market studies. These form the preliminary basis for the model proposed in this project. The two experiences just cited constitute the foundation on which Energética can develop its role as a microfranchisor by providing technical assistance and credit to the project's microfranchisees.

C. Execution mechanism

5.9 **Disbursement by results:** Technical cooperation disbursements will be contingent upon verification of achievement of the milestones, in accordance with the means of verification agreed upon by Energética and the MIF. Achievement of milestones does not exempt Energética from its responsibility to fulfill the logical framework indicators and project objectives.

5.10 Under the risk- and performance-based project management modality, the amounts of project disbursements will be determined according to the project's liquidity needs over a maximum period of six months. These needs will be agreed upon by the MIF and the executing agency and will reflect the activities and costs scheduled in the annual planning exercise. The first disbursement will be contingent upon fulfillment of milestone 0 (conditions precedent) and successive disbursements will be made when the following two conditions are met: (i) verification by the MIF that the milestones have been met, as agreed in the annual plans; and (ii) that the executing agency has provided supporting documentation for at least 80% of the cumulative funds advanced.

5.11 **Intellectual property.** In order to promote the project's replicability, the microfranchising development methodology and all knowledge and communication materials developed as part of the project will be the property of the IDB/MIF. Nevertheless, Energética may request the issuance of a license to use and disseminate these materials as part of its commitment to publicize them and promote their transfer to other interested institutions.

5.12 **Procurement of goods and consulting services.** The executing agency will apply the Bank's policies (documents GN-2349-9 and GN-2350-9) for the procurement of goods and contracting of consulting services. The diagnostic needs assessment of the executing agency (DNA) yielded a medium need/risk level. The project team has therefore decided that, pursuant to Appendix 4 of the aforementioned policies, the executing agency will use Bank rules and follow the technical cooperation operating guidelines. Additionally, project procurements will be reviewed ex post on a semiannual basis. Using project resources, the IDB/MIF will hire a consulting firm to provide training on the

procurement topics that need strengthening, as was identified in the DNA (http://mif.iadb.org/projects/prjrissummary.aspx?proj=BO-M1056). Before initiating project procurements, the executing agency will submit the project procurement plan to the MIF for approval. This plan will be updated annually and whenever there is a change in the methods and/or goods or services being procured.

5.13 **Monitoring of the reimbursable financing.** The reimbursable financing component of this project will be monitored jointly by the Access to Markets and Capabilities (AMC) and Access to Basic Services (ABS) specialists who have led the operation, together with the MIF specialist in Bolivia.

VI. MONITORING AND EVALUATION

6.1 **Baseline and monitoring system.** Energética will establish a project results and impact monitoring system based on the logical framework indicators, the annual work plan, and other programming instruments agreed upon with the MIF. This system should plan for the creation of an appropriate baseline at the start of the project to measure progress made during project execution and upon its completion. Energética will provide the MIF with updated data for the baseline for the indicators presented in the logical framework on the date of signature of the agreement between the MIF and Energética. Energética will be responsible for compiling and analyzing the relevant information to perform ongoing monitoring of program execution and the indicators established in the logical framework (Annex I).

6.2 **Project status reports.** The executing agency will submit project status reports (PSR) to the MIF within 30 days after the end of each six-month period or more frequently, and on the dates set by the MIF, which will inform the executing agency at least 60 days in advance. These reports will cover the status of project execution, achievement of milestones, results obtained, and their contribution to the project objectives, as stated in the logical framework and other operational planning instruments. They will also report on any problems encountered during execution and outline possible solutions. Within 90 days after the end of the execution period, the executing agency will submit a final PSR to the MIF in which it will highlight results achieved, the sustainability plan, the findings of the final evaluation, and lessons learned.

6.3 **Financial supervision.** Energética will establish and be responsible for keeping adequate financial accounts, internal control mechanisms, and filing systems for the project, pursuant to IDB/MIF accounting and auditing rules and policies. As the diagnostic needs assessment of the executing agency (DNA) found a medium level of need/risk for the financial management section, the supporting documentation for disbursements will be reviewed **ex post** on a semiannual basis. Additionally, using funds from the MIF contribution, the IDB/MIF will hire a consulting firm to train the executing agency in those areas of financial

management that need strengthening, as identified in the DNA (http://mif.iadb.org/projects/prjrissummary.aspx?proj=BO-M1056).

6.4 The MIF, through the Country Office in Bolivia, will hire independent auditors to conduct ex post reviews of procurements and the supporting documentation for disbursements. The scope of the ex post reviews will include analysis of the financial reports the executing agency will prepare as part of its financial management. The cost of these services will be financed by the MIF contribution pursuant to Bank procedures. During project execution, the MIF may change the frequency and modality of reviews of procurements and supporting documentation for disbursements. It may also modify the need for additional financial reports based on the findings of the ex post reviews conducted by the external auditors.

6.5 **Evaluations.** The project calls for two process evaluations: a midterm and a final evaluation, conducted by a specialized consultant selected and contracted directly by the executing agency. The midterm evaluation will be performed 24 months after the first disbursement or when 50% of the committed resources under the nonreimbursable technical cooperation component have been disbursed. This evaluation will cover, *inter alia*, the following points: (a) the relevance of the project components and activities to fulfillment of the defined objectives; (b) a review of the progress made during project execution; (c) the results achieved in executing the components; (d) any deviations in the project execution process; (e) lessons learned during project execution; and (f) any recommendations that may be considered necessary to fine-tune project execution to achieve the defined goals. In particular, the quantitative and qualitative indicators defined in the operation's logical framework will be taken as a guide. Based on the status reports and midterm evaluation, the Bank's Country Office in Bolivia will conduct an analysis, with the support of the Bank's project team, to determine whether the project should continue, be adjusted, restructured, or even partially or totally cancelled.

6.6 The final evaluation will be conducted at the end of project execution or when 95% of the resources under the nonreimbursable technical cooperation component have been disbursed, and will cover the following points, in addition to those in the midterm evaluation: (i) the level of access among families in rural areas to the clean energy products introduced under the microfranchising model; (ii) the scope and coverage of microfranchises in terms of the rural areas targeted, (iii) the likelihood of achieving the long-term impact indicators established for the project; and (iv) lessons learned and recommendations for the sustainability of the initiative as well as for the design of similar future projects. The specific evaluation questions raised for the project are: (i) to what extent does the adoption of microfranchising help increase microfranchisees' income?; (ii) to what extent is the adoption of microfranchising a useful way of facilitating access to clean energy for isolated rural populations?; (iii) does access to clean energy improve the living conditions of beneficiary families?; and (iv) to what extent does

microfranchising represent a clean energy distribution business model that has a better chance of survival than other similar business models?

6.7 **Launch and closing workshops.** A project launch workshop will be held at the start of project execution, and a closing workshop will be held at least three months prior to the end of the execution period. These will attended by Energética, the MIF, and other participants to be agreed upon with the MIF. The purpose will be to jointly evaluate the outcomes, identify additional tasks to ensure the sustainability of the actions initiated under the project, and identify lessons learned. A results workshop will also be held prior to the start of the microfranchising expansion phase (Component III) to determine the outcomes, adjustments made, and lessons learned during the pilot phase.

VII. BENEFITS AND RISKS

A. Beneficiaries

7.1 The direct beneficiaries of the project will be, firstly, the 100 microentrepreneurs from rural communities in Bolivia who will have the opportunity to have a business of their own and increase their income by running a microfranchise. These microfranchisees will be trained by Energética so that as well as distributing energy products they will be able to do minor repairs. In gender terms, the energy services will be provided to the beneficiary population equitably (based on differences in use and needs between men and women in the community), and in particular, the selection conditions for the microfranchisees will ensure equitable access for men and women.

7.2 Secondly, 10,000 families in Bolivia's poor rural communities who currently lack an electricity supply will benefit from the project. The expectation is that many of these families will belong to indigenous populations, so the manuals and products will be translated into their main languages (Quechua and Aymara).

B. Risks and considerations

7.3 **Credit risk.** The main credit risk arises from Energética's limited lending experience. There is therefore a risk that the institution will be unable to establish adequate management of the loan portfolio to allow the lending mechanism to gain a foothold and expand without becoming decapitalized. To mitigate this risk, the project calls for the creation of a specialized financing unit in Energética, which will be responsible for ensuring that the loan portfolio is of adequate quality. To do so, it will be supported by portfolio management software and specific consulting services for process strengthening. There is also a risk that the loan portfolio may become concentrated at the sector level, and to a certain extent, geographically (given that the targeted rural areas are relatively close together). In order to mitigate this risk, based on the two lending products identified in Component V, Energética will seek to diversify its portfolio by

lending to a variety of microfranchisees at different terms and amounts, so that it is able to distribute the portfolio more evenly and avoid concentration risks.

7.4 **Market risks.** One risk that has been identified is the potential competition from electrification projects that donate equipment, which could undermine the sustainability of the proposed microfranchise model. To mitigate this risk, the project will form a partnership and coordinate with national, departmental, and municipal governments to ensure that it has timely information and advance notice about rural electrification projects, so it can collaborate with these projects rather than try to compete with them. A second risk is a possible substantial increase in the price of energy products, making them less affordable for the beneficiary population. Although this risk is difficult for a small institution like Energética to mitigate, the project will seek to diversify the products offered and the number of manufacturers from which it sources them.

7.5 **Risk of increased operating costs**. Firstly, in terms of operational risks, Energética will set up an efficient and cost-effective microfranchise management unit through this project. This unit will have a clear business-oriented approach, allowing it to optimize its costs and focus on profitability and sustainability. To this end, the project incorporates Energética's support in the business plan and strengthens the microfranchise unit's technical and institutional capacity to ensure that it has an independent vision and optimizes its business processes. Secondly, the microfranchise model involves high operating costs related to managing the network (including ongoing monitoring and training of microfranchisees). There is a possibility that these operating costs may end up being higher than anticipated (for example, due to an increase in the microfranchisee dropout rate or escalating transportation costs). In order to mitigate this risk, the project will allocate technical cooperation resources to test and refine the model and reduce the costs associated with learning (e.g. appropriate incentives models to reduce attrition).

VIII. ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

8.1 This operation has been pre-evaluated and classified according to the requirements of the Bank's Environment and Safeguards Compliance Policy (OP-703). Given that the impacts and risks are limited, the proposed classification for the project is as a category "C" operation.