



Project Implementation Report (PIR)

FY 2022

GEF - IDB

PIR # 8



IMPORTANT: The reporting period is GEF Fiscal Year (July 1st, 2021, to June 30th, 2022)

PROJECT GENERAL INFORMATION

Project Name	Rural Electrification with Renewable Energies in Isolated Areas of Ecuador				
Project's GEF ID	5029	Project's IDB ID:	EC-G1001	Overall Stage:	Disbursing (from eligibility until all operations are closed)
Country/ies	Ecuador				
GEF Focal Area	Climate Change				
Executing Agency	MINISTERIO DE ELECTRICIDAD Y ENERGIA RENOVABLE				
Project Finance	GEF Trust Fund	\$909,090			
	Co-finance at CEO Endors./Approv.	\$3,790,000			
	TOTAL Project Cost (GEF Grant + co-finance)	\$4,699,000			
Disbursements	GEF Grant disbursed as of end of previous fiscal year	\$909,089			
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Project Dates	Agency Approval Date	04/17/2013			
	Effectiveness (Start) Date	11/4/2013			
	First Disbursement Date	11/12/2014			
	Expected Completion Date (in Convergence: OED)	3/4/2018			
	Current Closing Date (in Convergence: CED)	3/4/2020			
	Expected Financial Closure Date (in Convergence: EOC)	6/2/2020			
	Actual Date of Closure (in Convergence: CO)	TBD in 2022			

Project Evaluation	Mid-term Date (Planned)	N/A
	Mid-term Date (Actual)	N/A
	Terminal evaluation Date (Planned)	6/30/2019
	Terminal evaluation Date (Actual)	7/29/2022

Development Objective

The GEF proposed project aims to increase the impact of the FERUM 2011 program, throughout the financing projects of rural electrification in isolated areas to the electrical network. These projects to be implemented in remote regions with low-electrical power coverage will benefit to vulnerable communities with low incomes that in today's world only have access to polluting and inefficient energy systems (kerosene, diesel, candles, etc.). In more accurate terms, this project is in line with the objectives 3 of Climate Change (i) To promote the increased capacity installed of unconventional renewable energies (ERNC) to expand the access of energy to isolated populations with low-income (ii) To support the increased of capacities for the management of local or community projects decentralized energy generation.

Development Objective Rating (DO) & Assessment	PREVIOUS RATING	NEW RATING
For 2021-2022 the objectives of the operation were mostly achieved, component 3 presented partial progress achieving one of three indicators (the impact assessment was not implemented, and regional dissemination of project results was also not carried out). However, in this period, there were delays in the final resource's justification delivered to the Ministry of Energy and Mines (MEM) as advancement of funds (US\$50K), thus the final evaluation was postponed and finalized until 2022. Other delays, during 2020-2021 were due to the COVID-19 pandemic. The final DO rating was MS	S	MS

Project Status Update

The project's final evaluation finalized in 2022. Nevertheless, the executing agency is still working on the resources' return justification needed to close the project but by June 30, 2022, delays persisted. The project team foresees that financial closure will occur during the third quarter of 2022.

Implementation Progress		
Implementation Progress Rating (IP) & Assessment	PREVIOUS RATING	NEW RATING
By the end of the project (2020 to 2022) not all the outputs of the operation were completed. Thus, the Implementation Progress was rated as MS. In summary, component 3 presented partial progress achieving one of three indicators (3 national workshops), the impact assessment was not completed, and regional dissemination of project results was also not carried out. Also, project monitoring and evaluation	S	MS

<p>failed to measure and report all four impact indicators, leading to no quantitative data to support project achievements. Component 1 completed all products, but impact was limited because policies and standards proposed were not officially approved by the Ministry, and many of the technical staff trained left the Ministry after the institutional reform affecting the sector.</p> <p>By the end of the project in fiscal year 2022 PIR, the following activities were finalized:</p> <ul style="list-style-type: none"> - Project's final evaluation and tracking tools - The IDB is working closely with the executing agency to finalize the remaining issues persisting to financially close the operation and be able to report this event to the donor. 		
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Project Risks

Risk Rating (RISK) & Assessment	Previous Rating	New Rating
<p>In general terms, the project's risk rating is still rated as Substantial (S) by the end of the project due to the maintenance of the installed projects. Maintaining equipment is a real challenge as the communities do not have easy access.</p> <p>The terminal evaluation reported that some of the installed equipment is not working anymore, particularly the two mini grids installed in Lorocachi have not been operational for 6-8 months. It has been confirmed that maintenance was not carried out every six months as expected, because the area can only be entered by plane, generating high costs and thus, high risks. Difficulties were also reported with regards to payment of the energy service. The Executing Agency must guarantee the timely maintenance of the equipment, as well as the social contribution so that the communities have a quality service.</p> <p>Additionally, The Remote Monitoring System is still at risk because it requires constant monitoring and maintenance. It is expected that the Executing Agency guarantees the maintenance of the remote monitoring system to measure and obtain the expected results in the long run.</p>	S	S

Stakeholder Engagement

In fiscal year 2022, several meetings were held between the Executing Agency and the beneficiaries. The IDB's specialist traveled to the Amazonian Forest to meet with different community members to get the seven communities involved in the process regarding the monitoring system.

Maintenance was not carried out every six months as expected, because the area could only be entered by plane, generating high costs. This constituted a real challenge for the efficient and timely execution of the project.

Impact assessment was not finalized, leaving no qualitative data on the benefits generated by the project in beneficiary communities.

Recommendation: The Executing Agency must guarantee the timely maintenance of the equipment, as well as the social contribution so that the communities have a quality service.

Gender

Although it is true that the project in its original design did not contemplate gender issues, no specific indicators were included to measure the extent of woman empowerment. Women participation was limited across various interventions, only 2% of people beneficiaries of the photovoltaic training processes were woman. It is also important to point out the fact that women in the remote areas of the Amazon, thanks to this project, now have seen salient improvements in the quality of their lives by replacing candles and kerosene with the electricity access provided.

Recommendation: It is recommended that gender indicators are included in the project's design so that gender responsive actions can be monitored and reported.

Knowledge

The implementation of the socialization workshops has been successful. It is important to highlight two aspects:

1. The technical segment which consists of an applied methodology with the conformation of a multidisciplinary team, a technician, and a sociologist. The technician defines the technical contents that must be taught; while the sociologist translates the technical content into an appropriate language so that the information is understood by the audience to which the training is developed.
2. The social aspect that offers knowledge of the indigenous communities, their practices, and their behavior (particularly where the group is integrated by women only, by men only, and bisexual members) has been crucial in defining how the workshops are taught. After the first implementation phase of the workshops, information that was not available before was produced in the region.

The inputs obtained from the first phase of workshops have contributed to the elaboration of terms of reference for the implementation of SFV and information gathering in the Amazonian region of Ecuador. Once the training intention agreement has been obtained by the community, the schedules should be agreed between the community board and the Electricity companies. Workshops during the implementation stage have provided valuable information about the development of SFV project.

As a result of these workshops, knowledge has been created, and this process of knowledge gathering is being considered in other sector operations where the service is focused.

The Remote Monitoring system, the first in the region was implemented, but the pilot was not finalized leading into a gap in terms of replication, scale up and knowledge dissemination. Several technicians from the Ministry of Energy participated in the implementation and received adequate training. However, most of the staff trained is no longer in the Ministry. Also, knowledge sharing and regional dissemination under component 3 was not carried out.

Recommendation: The Executing Agency must guarantee the maintenance of the remote monitoring system to obtain the expected results.

Lessons Learned / Best Practices

Lessons during FY 2022

The COVID-19 pandemic added an important hindrance on how to continue to operate within these critical adverse conditions in already remote areas with difficult access.

Lessons from the Final Evaluation (TER):

Rural electrification projects are not profitable from a financial perspective, but they certainly are from a social and economic perspective. In the current context of fiscal austerity, it is relatively difficult to obtain financing for new initiatives from the government. It is critical for the MERNNR to have a technical team capable of sizing, formulating, and executing similar projects with resources from international cooperation and development banks. Since the restructuring of the MERNNR and the removal of a large proportion of the team that formulated and nested this Project, no similar projects have been executed in the country.

Future projects related to the installation of rural electrification solutions should consider the specific conditions of those areas. For one thing, the long travel distances require allocating enough resources and time to run complete tests before installing any solution. Also, the communities' conditions in terms of distance and income make it difficult for users to travel to pay for the service.

As a legacy, the Project leaves a standardization document for PV system property units, the results of which have already been tested by three electric utilities. It is important that this information is not wasted, although it will require updating to keep up with technological advances.

In terms of the electric utilities, in future projects it will be important to consolidate the progress made with this Project in relation to the management model. In the opinion of many stakeholders interviewed during the final evaluation, it is critical to cover all aspects in relation to the collection process and return to the most efficient system.

Successes

By the end of the project, the socialization workshops followed a process that has being successful by giving access to the indigenous communities. This process has helped with the assessment of the supplies and materials requirements and with the resources needed to implement the activities in an appropriate manner.

Challenges

Due to the characteristics of the place where the project is located, the Amazon region of Ecuador, it is very difficult to achieve communication with the monitoring equipment, currently only 3 of 7 teams are communicating, the challenge is to get all these equipment online to report the data.
Due to the characteristics of the Amazon region of Ecuador, where the project is located, it is very difficult to achieve communication with the monitoring equipment. Currently only three of seven teams are able to communicate. Therefore, the challenge is still to get all these equipment online and reporting the data.
Due to the Covid-19 pandemic, there was a delay in the final evaluation of the Project. This also caused the technical and environmental supervision activities to be carried out remotely.
In this Project, Governance proved to be a complex issue. To implement each activity, the Executing Agency must first verify and confirm internally in the Ministry of Energy (MEER) and the Regulatory and Control Energy Agency (ARCONEL), that all areas are coordinated. Once the coordination process takes place, Electricity Companies will begin the implementation stage (electricity companies are responsible for the implementation of works and services). The initial phase of the SFV implementation consist of a workshop. The main objective is training in the processes and preventive maintenance for SFV technical users.
Likewise, an information survey is being carried out with the appropriate planning phases with three main objectives: (i) to document the difficulties in the field; (ii) to perform planning adjustments for future interventions; and (iii) to obtain additional information about the challenges for the implementation of solar PV systems in indigenous communities, many of which have been solved by the experience of early interventions.
The implementation of the workshops has been successful. It is important to highlight two aspects: The technical segment which consists of an applied methodology with the conformation of a multidisciplinary team, a technician, and a sociologist. The technician defines the technical contents that must be taught; while the sociologist translates the technical content into an appropriate language so that the information is understood by the audience to which the training is developed. The social aspect that offers knowledge of the indigenous communities, their practices, and their behavior (particularly where the group is integrated by women only, by men only, and bisexual members) has been crucial in defining how the workshops are taught. After the first implementation phase of the workshops, information that was not available before was produced in the region. The inputs obtained from the first phase of workshops have contributed to the elaboration of terms of reference for the implementation of SFV and information gathering in the Amazonian region of Ecuador. Once the training intention agreement has been obtained by the community, the schedules should be agreed between the community board and the Electricity companies. Workshops during the implementation stage have provided valuable information about the development of SFV project. As a result of these workshops, knowledge has been created, and this process of knowledge gathering is being considered in other sector operations where the service is focused.
The installation of all the equipment represents a great challenge, in the first place the entry is made by air and the communities are far from each other, complicating the transport and installation of the equipment.

Project Results Framework Modifications

Category	Fiscal Year	YES NO	APPROVED BY	DESCRIPTION OF CHANGE AND EXPLANATION
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Outcome	2018	NO	IDB	NONE
	2019	NO	IDB	NONE
	2020	NO	IDB	NONE
	2021	NO	IDB	NONE
	2022	NO	IDB	NONE
Output/Activities	2018	NO	IDB	NONE
	2019	NO	IDB	NONE
	2020	NO	IDB	NONE
	2021	NO	IDB	NONE
	2022	NO	IDB	NONE

Project Extension or Other Modifications

Not applicable, as the project has been in its closing stage since 2020 and no minor modifications were applied to this project.

ANNEX 1. DEFINITION OF RATINGS

Development Objective Ratings

1. Highly Satisfactory (HS): Project is expected to achieve or exceed all its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”.
2. Satisfactory (S): Project is expected to achieve most of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings.
3. Marginally Satisfactory (MS): Project is expected to achieve most of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environment benefits.
4. Marginally Unsatisfactory (MU): Project is expected to achieve some of its major global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.
5. Unsatisfactory (U): Project is expected not to achieve most of its major global environment objectives or to yield any satisfactory global environmental benefits.
6. Highly Unsatisfactory (HU): The project has failed to achieve, and is not expected to achieve, any of its major global environment objectives with no worthwhile benefits.

Implementation Progress Ratings

1. Highly Satisfactory (HS): Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as “good practice”.

2. Satisfactory (S): Implementation of most components is in substantial compliance with the original/formally revised plan except for only a few that are subject to remedial action.
3. Marginally Satisfactory (MS): Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.
4. Marginally Unsatisfactory (MU): Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.
5. Unsatisfactory (U): Implementation of most components is not in substantial compliance with the original/formally revised plan.
6. Highly Unsatisfactory (HU): Implementation of none of the components is in substantial compliance with the original/formally revised plan.

Risk ratings

Risk ratings will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risks of projects should be rated on the following scale:

1. High Risk (H): There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks.
2. Substantial Risk (S): There is a probability of between 51% and 75% that assumptions may fail to hold and/or the project may face substantial risks.
3. Modest Risk (M): There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/ or the project may face only modest risks.
4. Low Risk (L): There is a probability of up to 25% that assumptions may fail to hold or materialize, and/ or the project may face only modest risks.