

PROJECT IMPLEMENTATION REPORT (PIR) FY 2021

GEF - IDB

IMPORTANT: The reporting period is GEF Fiscal Year (July 1st, 2020 to June 30th, 2021)

of PIR: 7th

PROJECT GENERAL INFORMATION

Project Name:	Sustainable Energy Program for Guyana		
Project's GEF ID:	4520	Project's IDB ID:	GY-G1004; GRT/FM-13897-GY
Project financial information:	Date of First Disbursement	10/22/2014	
	Total disbursements of GEF Grant resources as of end of June 30 th , 2021 (cumulative)	US\$ 3,996,075.41	
Project dates:	Agency Approval Date	07/12/2013	
	Effectiveness (Start) Date	12/11/2013	
	Original Last Disbursement Expiration Date ¹ (OED)	12/11/2019	
	Current OED	12/11/2021	
	Estimated Operational Close Date ² (EOC)	3/11/2022	
	Actual Date of EOC, if applicable	Click here to enter text.	
Project evaluation:	Mid-term Date (Expected)	10/22/2018	
	Terminal evaluation Date (Expected)	05/11/2022	

¹ For the GEF, this is equivalent to the project's "Expected Completion Date".

² For the GEF, this is equivalent to the project's "Expected Financial Closure Date".

DEVELOPMENT OBJECTIVE RATING (DO) & ASSESSMENT

Make an overall assessment and provide a rating³ of “likelihood of achieving project objective” during the period (2020-2021). Describe any significant environmental or other changes attributable to project implementation.

OVERALL (DO) ASSESSMENT	RATING
<p>Overall, moderate progress was made towards the achievement of the development objective of the Program, which aims to reduce the barriers to the deployment of RETs in Guyana and demonstrate the viability of delivering renewable electricity to isolated communities and the grid, in a sustainable and cost-effective manner. However, the COVID-19 pandemic remained one of main challenges affecting execution and has resulted in a significant delay in the construction of the Kato mini hydropower project. Due to this delay a request for special extension is being prepared by the Project Unit.</p> <p>Progress has been made with respect to the installation of grid-tie solar-PV systems, with a total installed capacity of approximately 6 MW achieved to date, largely financed by Government funds, and implemented by the Guyana Energy Agency. By the end of 2021 an additional 400kWp of grid- connected solar PV capacity is expected to be commissioned at the CARICOM Secretariat in Georgetown. In terms of off-grid capacity financed with government resources, approximately 1.6 MW has been achieved to date inclusive of a 400-kW solar farm in Mabaruma, Region 1 and for 2021 a further 380 kWp is projected, inclusive of ten (10) solar PV microgrids. GEF project funds have directly financed 180 kW of on-grid capacity as well as approximately 154 kW of off-grid capacity in nine (9) communities, seven (7) of which have been commissioned and the remaining two will be commissioned in September 2021. These results confirm the technical viability of both grid-connected and off-grid solar-PV systems in Guyana and highlight the leveraging effect of the Program, with the GoG moving ahead rapidly with the expansion of the solar-PV program in both the urban and the rural areas.</p> <p>Additionally, in December 2019, and as part of an IDB policy-based loan, the country has moved forward with the development of a Policy document for the diversification of the Electricity Matrix on the National System (DBIS), the document frames the use of cleaner energy fuels in the matrix with the development of large solar and wind projects. Nevertheless, significant challenges remain as the RE National strategy is still to be developed and business and operation models, critical to the sustainability of rural electrification schemes, are still to be developed. Under the current Program a memorandum of understanding was drafted to engage local electric utilities for the maintenance of the nine (9) solar PV microgrids, with associated costs being budgeted by the relevant local government authorities as part of the planned sustainability measures.</p>	MS

³ See Annex 1: Definition of Ratings.

The 150 kW Kato mini hydro project was successfully retendered and works contracted in September 2019, with an expected timeline of 18 months. However, due to various unforeseen challenges execution has been significantly delayed. Among the main issues affecting execution were the shortfall in the contractor's liquidity during the early stages of the contract, and the various challenges arising from the COVID-19 pandemic, including travel restrictions, delays in manufacturing and supply chain disruptions. Currently the major hurdle for the successful completion of the project is the delivery of the electromechanical equipment, which is now expected to arrive in Guyana by the end of December 2021, shortly after the current disbursement deadline. The Bank has engaged the Ministry of Finance and the Executing Agency on this issue, and a special extension request is being prepared by the Project Unit. Notwithstanding, civil works have continued to advance and are expected to be substantially completed by December 2021 to facilitate the installation of the electromechanical equipment. The Kato mini hydropower project continues to be an important and transformative project for the people of the area. In addition to the 20 kW pico-hydropower plant which was commissioned in the Hosororo Region 1 in 2019, the Government of Guyana and the ISDB have launched international tenders for the construction of three small hydropower plants at Moco Moco (0.7 MW), Kumu (1.5 MW) and Ikuribisi (1 MW). A key input for the Moco Moco redevelopment will be the geotechnical study which was completed under the current Program.

The Onverwagt wind measurement tower which was originally commissioned in January 2019 has recorded 13 months of wind data thus far, and an international wind expert is supporting the Project Unit with the analysis and data review. Unfortunately, in May 2021 it was reported that the Onverwagt wind station was once again vandalized - the second such incident at this site. The site was previously vandalized in February 2019. Despite the various security measures that have been employed at the site, this remains a major issue for current and planned wind measuring stations, mainly due to the remoteness of these locations. The PCU is currently exploring various options to enhance security arrangements including the possibility of full-time security officers. The critical issues related to land ownership and the availability of suitable public lands also persisted during the period, and the possible use of private lands is being further explored. Given these setbacks, it is unlikely that the remaining three towers will be installed by December 2021. The PCU has therefore requested the inclusion of this activity in the special extension request.

Overall, the project continued to face setbacks due to the CoVID-19 pandemic, with significant impacts on the advancement of the mini hydro project as well as the installation of the wind measuring stations. In the case of the solar PV systems, although installation is substantially complete, due to the COVID-19 pandemic villages were temporarily closed and works had been suspended.

The COVID-19 pandemic has also affected disbursement plans, however based on current projections the next major disbursement of the Program is expected by September 2021.

IMPLEMENTATION PROGRESS RATING (IP) & ASSESSMENT

Make an assessment and provide ratings⁴ of overall Implementation Progress, including information on progress, challenges and outcomes on project implementation activities from July 1st 2020 until June 30th, 2021. As applicable, please include **information on issues and solutions related to COVID-19**.

OVERALL (IP) ASSESSMENT	RATING
<p>Despite significant advancement over the last three years, the COVID-19 pandemic together with the land availability and the security challenges affecting the wind measurement towers, have negatively impacted overall implementation progress over the period. Nonetheless, the program has continued to advance creditably, committing approximately 96% of GEF funds and the Government has maintained its support to leverage new funds of co-financing for the pending deliverables of the projects. However, improved coordination among Government agencies will be needed during the remaining period of execution, particularly to resolve the land availability issues and to ensure timely delivery of the Kato Project within revised timelines.</p> <p>Disbursements have increased by 43% from 56% at the end of the last reporting period to 80% at the time of the current report. Given the special extension that will be required to complete the Kato Project and the wind stations, the Program is rated as “Marginally Satisfactory”. The cancellation of funds from two previously committed co-financing sources, delays in the selection of the communities to benefit from the demonstration RE projects, and the cancellation of the first mini-hydro tender, have significantly impacted the overall rate of execution of the Program. During 2020, these activities were also delayed due to the CoVID-19 pandemic, a protracted electoral process, and the subsequent transition of Government.</p> <p>Currently the program is fully in execution and the Project Unit is focused on the achievement of the remaining outputs, which as highlighted above are contingent upon the approval of the special extension.</p>	MS

⁴ See Annex 1: Definition of Ratings.

RISK RATING & ASSESSMENT

Make any adjustments necessary to the assessment ratings⁵ of overall Project Risk⁶ that you provided in the last PIR (2019-2020). Please include details and remedial measures for High and Substantial Risks, specifying who will be responsible for these measures.

OVERALL RATING FOR PROJECT RISK	RATING
<p>The overall risk is modest (M) according to the following considerations:</p> <p>Co-Financing: The cancellation of co-financing resources by the MIF has had a negative impact on the Program execution. With potential new sources of parallel financing identified, it is anticipated that resources will be directed to close the gaps.</p> <p>Hydro component: The 150 kW Kato hydro project was awarded in September 2019 and civil works have progressed substantially. However, delivery of electromechanical equipment which are being procured internationally has been delayed due to the current pandemic. A special extension request is being prepared by the Executing Agency to allow for completion of the Kato project by the first semester of 2022. Given the pace of execution to date, close monitoring of project advance will be required. In this regard the Bank has requested updated manufacturing, shipping and civil works timelines which must be strictly adhered to by the contractor and should also be consistent with the proposed timelines of the special extension.</p> <p>Wind component: The development of the 300kW wind installation will not be possible due to the significant delays in the implementation of the wind measurement activities with data analysis commencing in January 2020. All data recorded at the site is backed up in the equipment supplier's database, and on the Project Unit's computers. It is expected that the data collected will be useful for the appraisal and development of future wind projects. The international wind expert is providing technical support to the PCU in this regard. The component resources were reallocated to the installation of solar projects in rural areas of which 7 sites have been commissioned. At this stage given the challenges with land availability and the security issues the installation of the measuring towers represents a high risk for project execution.</p> <p>Additionally, the mid-term evaluation, identified the following risks:</p> <p>Public Management and Governance: The risk that the Government of Guyana (GoG) withdraws its commitment to the Program is not present as it is expected to fund an additional on-grid and utility scale PV systems, which will be installed in Demerara-Berbice Interconnected System (DBIS) and other isolated grids in Essequibo and Linden. Moreover, GoG has recommitted to the adoption of a Low Carbon Development Strategy, which, among other priorities, is focused on a near 100% transition to renewable energy over the medium to long term. While there was a change in Government on August 2, 2020, resulting in some structural changes in the sector, there</p>	M

⁵ See Annex 1: Definition of Ratings.

⁶ These should include risks identified at CEO Endorsement AND any new risks identified during implementation.

were no major changes with regards to the Government's commitment to renewable energy. It is therefore expected that the development of the RE sector in Guyana will continue, thus the risk is considered Low.

Availability of RE Resources and Data: The availability and reliability of existing data needed for the deployment of RETs in Guyana was identified as a "Medium" risk during Program preparation. Notwithstanding, the program implementation unit is continuing with its work of collection of data related to various projects under the Program and those projects implemented by the Guyana Energy Agency. GEA has started to develop a common database. However, that still needs to be strengthened. This is an issue that must be addressed during the remaining period of execution of the Program.

GENDER

Please add information on any progress, challenges and outcomes with regards to any and all gender-responsive measures that were undertaken in the project's activities during the 2020-2021 GEF Fiscal Year. Also: Were indicators on gender equality and women's empowerment incorporated in the project's results framework? (Yes/No). If applicable, include the indicator with its baseline, target and current value (2020-2021).

The program does not have any specific indicator on Gender.

STAKEHOLDER ENGAGEMENT

*Please add information on any progress, challenges and outcomes with regards to stakeholder engagement, based on the project's activities during its implementation through the 2020-2021 GEF Fiscal Year. As applicable, please include **information on issues and solutions related to COVID-19**.*

Both prior to and during the execution of RE projects in Hinterland communities, the Project Unit has successfully conducted surveys and consultations with village leaders and residents to determine the energy needs both at the residential level and as it relates to social infrastructure. These assessments also examined opportunities for productive uses of energy through interviews with various community groups involved in such activities. Before commencement of works meetings are also held with community stakeholders to apprise them of the final project scope, and the Ministry of Indigenous People's Affairs was consulted for the final selection of communities to benefit from the interventions.

Communities through their respective village councils were also allowed to directly participate in the projects through pole supply contracts, as part of the microgrid installation aspect of the Solar PV projects. Village councils are also contacted on a regular basis by the Project unit to get feedback on contractor performance

and to be made aware of any relevant issues. The project team also complies with the established guidelines for requesting permission to visit the indigenous communities both for project supervision and to facilitate the work of contractors. Local teams were also trained in the use and simple maintenance of the solar PV systems. It should be noted that the local utilities operating in the neighboring more populated townships will oversee the operation and maintenance of the systems.

A formal review of the effectiveness of the renewable energy public awareness campaigns was conducted by an independent consultant and a draft Final Report was submitted to the PCU during the reporting period. The report is currently under review by the Project Unit and other stakeholders.

KNOWLEDGE

Please add information on knowledge activities and products developed in relation to the project (with GEF or non-GEF resources), with special emphasis on activities carried out during the 2020-2021 GEF Fiscal Year. As applicable, please include **information on issues and solutions related to COVID-19.**

A further revision of the legal and regulatory framework of the sector was completed and recommendations were made for the adoption of a framework to facilitate private sector involvement in distributed generation and IPPs. The Final Report was submitted in January 2021 following consultation with key sector stakeholders.

Under component I, the Public Awareness Strategy was developed and implemented comprising of four (4) public awareness campaigns. These campaigns included the publication and distribution of RE and EE brochures and posters to schools and various government agencies, public service announcements and panel discussions via radio and television that illustrate the benefits of RETs, and collaboration with GEA and the Ministry of Education to launch school competitions related to sustainable energy. The review of the effectiveness of the campaigns is currently under review by an independent consultant.

The project has also facilitated increased inter-agency collaboration and knowledge sharing between GEA and HECI through the technical work conducted under the hydropower and wind projects.

PROJECT MODIFICATIONS

Please report any significant modifications made to the project design since July 1st, 2020. (The basis for comparison is the Project Results Framework Matrix included in the original Request for CEO Endorsement Document.) This should be based on the Project Results Framework Matrix included in the original Request for CEO Endorsement Document.

CHANGE MADE TO	YES/NO	DESCRIPTION OF CHANGE AND EXPLANATION
Objective	No	
Outcome	No	

Output/Activities	No	
Other	No	

Has the project been granted any extension or other modification covered by the OA-420 from July 1st, 2020 until June 30th, 2021? If yes, please explain below. As applicable, please include **information on issues and solutions related to COVID-19.**

No. However, since the Program is scheduled to end in December 2021, and considering the delays in the mini-hydro and the wind measurement installation, a request for special extension of approximately 6 months is being prepared.

LESSONS LEARNED / BEST PRACTICES

*If the project generated any lessons learned or best practices during the 2020-2021 GEF Fiscal Year, please provide a short description. As applicable, please include **information on issues and solutions related to COVID-19**.*

TOPIC/THEME	LESSONS
Covid-19 Pandemic	The issues surrounding the Covid-19 pandemic have introduced significant delays in project execution primarily where international procurements are involved. In the case of the hydropower project, supply chain disruptions combined with strict health and safety protocols have drastically affected manufacturing timelines. The solar PV microgrid projects also suffered setbacks due to lockdowns of hinterland villages. Execution timelines have therefore been adjusted considering these challenges. Notwithstanding, to minimize project delays and transmission of the virus all project activities are proceeding in accordance with national Covid-19 guidelines.
Legal and Regulatory Framework	Considering the country's transition towards RETs it was important to review the Legal and Regulatory Framework of the Electricity Sector to identify potential barriers and deficiencies prior to the drafting of amendments. Given the critical role of the private sector in the promotion and deployment of RETs, the review focused on the facilitation of Private Sector Investment in Renewable Energy Development through IPPs and Distributed Generation. This study made recommendations for targeted amendments to the current framework which will allow for increased participation of the private sector. The recommended amendments are expected to be drafted under a separate initiative.
Oversight and Implementation Arrangements	The support of a program assistant has proven very useful for administrative and monitoring activities. Planning and hiring an M&E responsible is something that programs should address at early project stages.
Co-financing	Co-financing arrangements and stakeholder commitment fall away quickly if the Program is not implemented on schedule. Also, donors and other agencies present their own timelines and commitments could change. Significant pressure is on the Government for finding new co-finance options (to replace the lost ones) is observed. Therefore, from the design of the program the co-finance needs to be secured or presented with a strong commitment of realization.

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.