



**PROJECT IMPLEMENTATION REPORT (PIR)  
FY 2021**

**GEF - IDB**

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

**# of PIR: 8<sup>th</sup>**

**PROJECT GENERAL INFORMATION**

<b>Project Name:</b>	Development of Renewable Energy, Energy Efficiency and Electrification of Suriname		
<b>Project's GEF ID:</b>	4497	<b>Project's IDB ID:</b>	SU-G1001
<b>Project financial information:</b>	Date of First Disbursement	04/23/2014	
	Total disbursements of GEF Grant resources as of end of June 30 <sup>th</sup> , 2021 (cumulative)	US\$ 1,835,577.37	
<b>Project dates:</b>	Agency Approval Date	04/11/2013	
	Effectiveness (Start) Date	05/08/2013	
	Original Last Disbursement Expiration Date <sup>1</sup> (OED)	05/08/2019	
	Current OED	05/08/2022	
	Estimated Operational Close Date <sup>2</sup> (EOC)	08/06/2022	
	Actual Date of EOC, if applicable	Click here to enter text.	
<b>Project evaluation:</b>	Mid-term Date (Expected)	01/30/2020	
	Terminal evaluation Date (Expected)	05/08/2022	

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

<sup>2</sup> 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 rating<sup>3</sup> 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, the likelihood of achieving the project’s development objective for the period 2020-2021 is rated as Satisfactory (S) given the following considerations:</p> <p>The Program has two main outputs: (i) the elaboration of a wind resource assessment (Wind Atlas) for the coastal area in Suriname and; (ii) the implementation of an off grid solar plant to provide 24/7 electricity in an isolated village located in the interior of the country (Godo Holo).</p> <p>The contract to develop the Wind Atlas was signed, 6 wind measuring stations were installed in March 2021 and the monthly wind reports from April to June have been submitted. The firm will collect wind data for a 12 month period before compiling the wind atlas, planned to be completed in April 2022.</p> <p>A Memorandum of Understanding (MoU) was extended in April 2021, between Ministry of Natural Resources (MNH) and the Meteorological Service Department from the Ministry of Civil Works, who is providing technical support and will be in charge of the operation and maintenance (O&amp;M) of the wind measuring stations after the completion of the project. The wind atlas contract includes specific training activities for the O&amp;M of the wind measuring stations.</p> <p>The contract to design, supply and install the solar mini grid in Godo Holo was signed in October 2021, the final engineering design was finalized and approved in 2021 and the goods are being shipped to Suriname. As of June 2021, some of the goods (including the solar panels) have been already transported to Godo Holo and most of the other goods are in Suriname, pending to be inspected by the executing agency. Some preliminary works in Godo Holo have commenced and the solar mini grid is expected to be completed in the first quarter of 2022.</p> <p>A MoU was signed on August 12<sup>th</sup>, 2019, between MNH and EBS. The MoU establishes that the EBS will support MNH during the design, tender, construction and operation of a solar mini grid, the distribution network, and the last mile connection to the customers. The solar contract includes specific training activities for the O&amp;M of the solar mini grid. The MNH is carrying out an engagement campaign in Godo Holo to ensure that villagers understand and accept the project. The villagers are also involved in some activities for</p>	<p>S</p>

<sup>3</sup> See Annex 1: Definition of Ratings.

the construction of the solar mini grid, as land clearing, transportation of materials and production of the wooden poles for the distribution network. This is important to assure the local empowerment and long-term sustainability.

**IMPLEMENTATION PROGRESS RATING (IP) & ASSESSMENT**

***Make an assessment and provide ratings<sup>4</sup> of overall Implementation Progress, including information on progress, challenges and outcomes on project implementation activities from July 1<sup>st</sup> 2020 until June 30<sup>th</sup>, 2021. As applicable, please include **information on issues and solutions related to COVID-19.*****

OVERALL (IP) ASSESSMENT	RATING
<p>The project is progressing in a satisfactory mode and has achieved important milestones, including the installation of the wind measuring stations and start of the works for the solar mini grid in Godo Holo. There was not disbursement in the last year (last disbursement was in June 2020), however there was significant physical progress and there are several payments pending to be process in the short term. The current amount disbursed is US\$ 1,835,578 (41.7%), from which US\$ 1,552,805 (35.3%) were utilized, and the total committed amount (contracts signed) is US\$ 3,129,344 (71%). Next disbursement is expected to be in third quarter of 2021.</p> <p>The main implementation progress for each component during the reporting period are:</p> <p><b>COMPONENT 1. Strengthening of institutional framework to implement RE and EE technologies</b> (Main output: development of a Wind Atlas for the coastal area of Suriname):</p> <p>The contract to elaborate the Wind Atlas was signed on November 1<sup>st</sup>, 2019 and the materials to install the wind measuring stations arrived to Suriname in March 2020. On March 13<sup>th</sup>, 2020, the first COVID-19 case was confirmed in Suriname and the borders were immediately closed. The personnel from RINA were not allowed to travel to Suriname until March 2021, which created a 12-month delay in this component. The 6 wind measuring stations were finally installed in March 2021 and RINA has sent the monthly wind reports for the months of April to June.</p> <p>MNH hired 2 individual consultants: (i) one to supervise the installation of the wind measuring stations; and (ii) one for the supervision of the monthly wind measuring reports and wind atlas.</p> <p>The MoU between MNH and Ministry of Public Works has been extended until December 2022.</p>	<p>S</p>

<sup>4</sup> See Annex 1: Definition of Ratings.

**COMPONENT 2. Implementation of pilots for on-grid and rural electricity supply using RETs (Main output: Construction of a solar plant to provide 24 hours electricity to the isolated community of Godo Holo):**

The contract for the solar plant (250 kW) was signed in September 2020, with the company JGH for an amount of US\$ 1,155,644. The engineering design was finalized and approved in 2020 and the main materials have been shipped to Suriname. Some of the materials (mounting structures, solar panels, fencing material and geotextile) were already transported to Godo Holo on June 28, 2021. Other equipment for the solar plant such as Generator, Inverter, String inverters, EMS Control equipment, Prefabricated buildings, Lighting package, cables and accessories, Grounding sets, Desktop Computer and Genset have arrived in Suriname and are pending to be inspected. The global delays in shipment of materials created by COVID-19 pandemic have created some delays in this contract.

The tender process for the distribution network materials has been completed, the evaluation report was approved by the IDB on May 2021 and contract in under negotiations with the awarded bidder.

Furthermore, 82 of the wooden poles have been constructed by the villagers and 50 of them have been inspected.

The tender process for the construction of a distribution network was cancelled, as there was not any bid technically compliant. The tender will be relaunched in August 2021.

In the period from July to December 2020, MNH have done 2 site visits to Godo Holo in order to inform and engage the villagers about the project progress. During this campaign, villagers were introduced to the new Minister of MNH, to the new department Free Prior Informed Consent (FPIC) from the MNH and to the Wooden pole Inspection consultant. In the 2<sup>nd</sup> field visit, meetings were held with the local authority and the villagers for the production and delivery of the wooden poles.

During 2021, MNH visited Godo Holo in February and March. The purpose of the site visit in February was to conduct an assessment/inventory about the internal electrical installations in the households, to do an assessment about the water system for the solar plant and to conduct an inventory of *Bruinhart* trees for the production of the wooden poles. During the field visit of March, the EBS informed the community of Godo Holo about the status of the internal electrical house installations, including the cost for upgrading it up to the minimum standards, and the procedure to apply and register for a connection to the electrical grid.

The MNH is having discussion with the villagers and local banks to identify suitable options to finance the upgrade of the internal electrical systems in the households, as well as options to promote energy efficiency in Godo Holo and the use of electricity for productive activities.

**Component 3: Strengthening of business models and stakeholder skills to implement RE/EE technologies in Suriname**

This component will finance the design and implementation of a suitable business model to ensure the long-term sustainability of the solar plant, as well as to be a model to replicate the project in other regions of Suriname.

A tender for a Rural Electrification Plan (REP), which will support to definition of the business model for Godo Holo, was launched in March 2021 and the shortlist was completed in April 2021. The specific objectives of the REP are to:

- a. Prepare a georeferenced least-cost rural electrification plan to achieve universal energy access in Suriname.
- b. Support to establish the roles and responsibilities of the main stakeholders in the rural electrification sector (planning, execution, and operation).
- c. Support to define the partnership model for the installation and operation of solar mini grids, including the tariff structure and payment mechanisms.
- d. Prepare a financial analysis for the execution of the energy access projects.
- e. Develop a methodology and tools for tracking the progress of energy access projects.
- f. Prepare a Strategic Environmental Social Impact Assessment (SESIA) for energy projects in the hinterland.
- g. Support the establishment regulations for the rural electrification sector in Suriname.
- h. Strengthen the capacity of the main stakeholders related to the rural electrification sector.

The scope of the REP is being discussed internally in MNH before sending the RfP to the shortlisted firms.

**RISK RATING & ASSESSMENT**

***Make any adjustments necessary to the assessment ratings<sup>5</sup> of overall Project Risk<sup>6</sup> 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
For the period 2020-2021, the remaining project's risks were assessed as <u>Modest</u> due to the following reasons:	M

<sup>5</sup> See Annex 1: Definition of Ratings.

<sup>6</sup> These should include risks identified at CEO Endorsement AND any new risks identified during implementation.

- **High level decision making:** A Steering Committee, composed by members of different ministries, is in charge to take high level decisions. It might be complicated to get a consensus on some decisions due to political implications. A specific case is the revision and approval of the scope of the Rural Electrification Plan. Mitigating measure: Dialogue engagement with the minister of MNH
- **Public Management and Governance:** Lengthy approval procedures within the government (bureaucracy). In Suriname, all payments must be approved by the Ministry of Finances, which slows the implementation of projects (Single Treasury Account). In September 2020, after a 50% devaluation of the local currency (from 7.4 SRD / US \$ to 14.1 SRD / USD), the Ministry of Finance and Planning unilaterally decided to proceed with payments to various consultants and local firms using the old exchange rate, which generated complains. Mitigating measure: Discussions between the IDB and the Ministry of Finances are taking place.
- **Technical capacity:** The Ministry of Natural Resources has limited managerial and technical capacity. This lack of capacity caused delays in the project execution due to difficulties to prepare technical documents and take strategic decisions. This also creates a risk in the supervision of the works. Mitigating measure: Technical support is being provided by the Meteorological Service Department and the EBS through MoU's. Hiring of external consultants to provide technical support and supervise some contracts (for example consultant to supervise the wind measuring stations, the wind atlas or the fabrication of wooden poles).
- **Acceptance of the solar plant by the community:** The community has had sporadic although free electricity supply for 4 to 6 hours a day, produced by diesel generator. To assure the long-term sustainability of the project, the customers will need to pay for the electricity. Mitigating measure: To assure the success of the project it is fundamental to have good communication with the community, especially with the elders, and a proper management of the cultural and social aspects. This can be challenging as the community is very isolated, only accessible by boat or plane. This risk is being mitigated with several awareness campaigns done by MNH (with the support of the FPIC unit), in the community and a fluid communication with tribal elders.
- **Delays related to COVID-19 pandemic** is negatively impacting the project schedule, especially the development of the wind atlas and shipping of goods for the solar mini grid. Mitigating measures: Opportune dialogue with the contractors to review work plans and flexibility to extend contracts.
- **Delays related to the transport and logistics, in Godo Holo**, considering rainy and dry season might affect the execution schedule of the solar plant. Mitigating measure: To mitigate this risk, it is necessary to take into consideration the meteorological factors in the project plan. Also, the winner of the contract has demonstrated experience in working in these conditions in Suriname.
- **Financial audit:** The financial audit of 2020 has not been submitted by April 30, 2021. The main reason why the financial audit was not completed on time is

because in September 2020, after a 50% devaluation of the local currency (from 7.4 SRD / US \$ to 14.1 SRD / USD), the Ministry of Finance and Planning unilaterally decided to proceed with payments to various consultants and local firms using the old exchange rate. This impacted one of the payments to the auditing firm, which decided to stop its services until the remaining amount was paid. After a long and complex negotiation, a new contract was signed in April 2021 with the auditing firm and work was resumed. Mitigating measure: The IDB granted an extension of the deadline to submit the financial audit by August 13, 2021 and it is following up with the PEU with weekly meetings to review the status of the financial audit.

## **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 did not include gender equality disaggregated indicators in its results matrix.

## **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.*****

To assure the long-term sustainability of the solar plant in Godo Holo it is critical that the community accepts and takes ownership of the project. The MNH continues to implement several engagement campaigns during 2020 and 2021 with the objectives to explain the project and the technology, agree on the location of the solar plant and sign a land use agreement, involve local villagers during the construction of the plant (transportation of equipment, production and installation of the electric poles, land clearing, etc.) and issues related to the Operation and Maintenance of the solar plant, as defining the method that will be used to charge the villagers for the electricity.

**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.*****

Not applicable at this stage.

**PROJECT MODIFICATIONS**

***Please report any significant modifications made to the project design since July 1<sup>st</sup>, 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 1<sup>st</sup>, 2020 until June 30<sup>th</sup>, 2021? If yes, please explain below. As applicable, please include **information on issues and solutions related to COVID-19.*****

In April 2019, the Program was extended for 24 months, and a 2nd extension for 12 months was granted in November 2020. The current closing date is May 8th, 2022.

The COVID-19 pandemic and the related measures that have been imposed by the government and authorities in Suriname and other countries have created a negative impact in the work schedule:

- a. Project Management and Administration: the different work schedules of the PEU, at which government officials sometimes works part time, as well as the work from home restrictions, created delays in some procedures such as processing payment or evaluation of bids.
- b. Installation of the wind measuring stations: as the contractor team was not authorized to travel to Suriname until March 2021.



- c. Supply of goods for the Solar Micro grid in Godo Holo, which were delayed due to global delays in shipment of goods.

The COVID-19 impacts were mitigated using agile planning and periodic follow up meetings with contractors and the IDB. COVID-19 required the PEU to work online, work from home and alternative ways to keep the workflow efficient and minimize extensive project delay. Tools like Microsoft Teams have been proven to be a necessity for team meetings.

### **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
Program management	COVID-19 required for innovative ways to work, to avoid extensive project delay while working online and from home. Collaborative tools as Microsoft Teams have been proven to be a necessity for team collaboration and virtual meetings. Additionally, the PEU is using 2 agile planning and monitoring tools: (i) contract management tool, aimed to keep track of contract status and payments. The tool is updated by the financial specialist and sent to the IDB team at the end of each month; and (ii) to-do-list tool, aimed to keep track and plan the activities that need to be completed for the coming 15 days. Every 2 weeks the IDB team has a meeting with the PEU to update the tool.
Technical	MNH has low technical capacity and requires hiring external technical expertise in different areas: (i) supervision of installation wind measuring stations, (ii) supervision of wind atlas, (iii) inspection of wooden poles. The support from Meteorological Service Department (component 1) and EBS (component 2) is crucial for project execution.
Technical	Delays encountered during installation of the wind measuring stations due to adverse weather conditions resulted in the schedule of installations being regularly adjusted. This required minor relocation of the wind towers and reinforcement of anchors in 3 towers to account for potential future ground conditions.
Technical	Transportation of the goods to Godo Holo is very challenging and require very skilled boat drivers. Goods needs to be transported during rainy season. Also, the collaboration of villagers of God Holo to transport some of the heaviest goods to the final destination was necessary.
Procurement	MNH has low procurement capacity and training provided by the Bank is necessary. Before launching a tender process, it is necessary to have a session to review all steps and distribute responsibilities within the executing unit.
Procurement	Local firms have low procurement capacity. It is important to have a pre-bid meeting to review with potential bidders all the requirements and documentation that needs to be submitted.

## **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.