

Global Program on Climate-Resilient Renewable Energy Systems in SIDS ? National Project in the Independent State of Papua New Guinea

Review PIF and Make a recommendation

Basic project information

GEF ID
12297
Countries
Papua New Guinea
Project Name
Global Program on Climate-Resilient Renewable Energy Systems in SIDS ?
National Project in the Independent State of Papua New Guinea
Agencies
UNIDO
Date received by PM
3/5/2026
Review completed by PM

Program Manager
Katsumasa Tanaka
Focal Area
Climate Change
Project Type
MSP

1. General Project Information / Eligibility

a) Does the project meet the criteria for eligibility for GEF funding?

b) Is the General Project Information table correctly populated?

Secretariat's Comments

April 16, 2026

b) Yes. The comments have been addressed.

March 16, 2026

a) Yes.

b) Not yet.

- Please capitalize the project title properly.
- Please leave the "Project Sector (CCM Only)" blank because this project is not funded by CCM resources.

Agency's Comments This was done.

2. Project Summary

Does the project summary concisely describe the problem to be addressed, the project objective and the strategies to deliver the GEBs or adaptation benefits and other key expected results?

Secretariat's Comments

May 7, 2026

Yes. Thank you.

May 6, 2026

Not yet.

- Thank you for addressing the comment. As mentioned in the core indicator section below, GHG reduction is not CI 6. Please kindly remove the "(GEF-8 CI 6)". Our apologies for not explicitly requesting this earlier.

The project strengthens the climate-adaptive capacity of rural communities, micro, small and medium-sized enterprises (MSMEs), and productive sectors by advancing sustainable, climate-resilient renewable energy and water utility models. It combines institutional reform with field-level demonstration to address technical, financial, and governance barriers through two pillars.

- At the national level, it establishes a support framework to operationalize climate risk assessments and resilience standards for renewable mini-grids tailored to PNG's climate profile. It supports the Off-Grid Regulation for Small Power Systems and creates a gender- and youth-responsive support desk for community utilities. A feasibility study will design a "Beyond the Grid Fund," introducing blended finance and resilience premiums to de-risk private investment in climate-hardened rural systems.
- At the community level, the project installs two climate-resilient solar PV mini-grids and integrated water systems engineered to withstand various climate change impacts. Using "diesel-off" technology with grid-forming inverters and battery energy storage, systems operate autonomously during extreme events while enabling climate-smart cold storage, agro-processing and other productive uses of MSMEs.

The project strengthens 5,000 beneficiaries' adaptive capacity (CI 1: ≥50% women, 30% youth), manages 15 hectares (CI 2), adopts three national policies/plans (CI 3), trains 200 individuals (CI 4), and enables 30 MSMEs (CI 5) to use resilient renewable energy. It also targets 80,732 tCO₂e in direct and indirect emissions reductions (GPIs-CI 6) over 20 years as co-benefit.

5/6/2026

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April 30, 2026

Not yet.

- Please note that GEF often reports both indirect and direct emissions together. As such, please replace 5,000 tCO₂e by 80,732 tCO₂e.

April 16, 2026

Yes. The comment has been addressed.

March 16, 2026

Not yet.

- Please briefly touch on PNG's vulnerabilities to climate change. Currently, natural hazards (droughts, floods, etc.) are mentioned, but how climate change improve/exacerbate these impacts are not clearly articulated.

Agency's Comments

This was integrated and strengthened.

06 May: this was addressed

07 May: this was addressed

3 Indicative Project Overview

3.1 a) Is the project objective presented as a concise statement and clear?

b) Are the components, outcomes and outputs sound, appropriate and sufficiently clear to achieve the project objective and the core indicators per the stated Theory of Change?

Secretariat's Comments

April 16, 2026

b) Yes. The comment has been addressed.

March 16, 2026

a) Yes.

b) Not yet.

•Output 2.1 shall be tagged as Investment activity instead of Technical Assistance.

Agency's Comments

b) This was changed.

3.2 Are gender dimensions, knowledge management, and monitoring and evaluation included within the project components and appropriately funded?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

3.3 a) Are the components adequately funded?

b) Are the GEF Project Financing and Co-Financing contributions to PMC proportional?

c) Is the PMC equal to or below 5% of the total GEF grant for FSPs or 10% for MSPs? If the requested PMC is above the caps, has an exception (e.g. for regional projects) been sufficiently substantiated?

Secretariat's Comments

March 16, 2026

a-c) Yes.

Agency's CommentsN/A

4 Project Outline

A. Project Rationale

4.1 SITUATION ANALYSIS

a) is the current situation (including global environmental problems, key contextual drivers of environmental degradation, climate vulnerability) clearly and adequately described from a systems perspective?

b) Are the key barriers and enablers identified?

Secretariat's Comments

March 16, 2026

a-b) Yes.

Agency's Comments N/A

4.2 JUSTIFICATION FOR PROJECT

a) Is there an indication of why the project approach has been selected over other potential options?

b) Does it ensure resilience to future changes in the drivers?

c) Is there a description of how the GEF alternative will build on ongoing/previous investments (GEF and non-GEF), lessons and experiences in the country/region?

d) are the relevant stakeholders and their roles adequately described?

Secretariat's Comments

April 30, 2026

a-d) Yes. The comments addressed.

April 16, 2026

a-d) Not yet. The following subsections under the Project Rationale and Project Description sections still appear to be overlapping and somewhat redundant. It would be helpful to further streamline these subsections to reduce repetition and improve clarity:

Project Rationale

- 4. Alternative Transformational Project Scenario
- 5. Justification for and value proposition of the project
- Additionality
- Value Proposition

Project Description

- 5. Global Environment Benefits (GEBs) and Additionality (Could be consolidated under C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES)
- Additionality (=> Could be consolidated under Project Rationale)

March 16, 2026

a-d) Not yet.

Overall)

- GEF appreciates the approach of this project which creates robust climate change mitigation and adaptation benefits, as well as socio-economic co-benefits.
- GEF also appreciates multiple mechanisms embedded in this project to sustain/scale the project impacts beyond the project cycle - such as Small-Utility Business Model and robust co-financing from partners.
- Under Section 7 on GRES, please mention the global/regional project (GEF ID: 12229). Please also include the project under the "Alignment with other programs and projects" subsection.
- Since this project is funded solely by SCCF Window A (SCCF-A), please remove paragraphs and sentences mentioning SCCF-B. No need to provide justification for SCCF-B.
- Please briefly explain and justify how the project sites (Buka and Daru) are selected.

Streamlining)

- "National Alignment" subsection under the Project Rational is duplicative with C. Alignment with GEF-8 Programming Strategies and Country/Regional Priorities. Please consolidate it under C. Alignment with (...).
- "Additionality" and "Value Proposition" subsections under Project Rational are duplicative with Section 5 on GEB and additionality under Project Description. Please consolidate and streamline. These elements may fit under "4. Alternative Transformational Project Scenario" subsection, using the [GEF's Incremental Cost Reasoning framework](https://www.thegef.org/documents/incremental-costs). (Ref: <https://www.thegef.org/documents/incremental-costs>)
- "2.2 Strategic Rational and SCCF Alignment" and "2.4 Justification for SCCF Intervention" subsections are duplicative with Alignment with GEF-8 Programming Strategies, so no need to be included here.
- "2.3 Cross-Cutting: Gender and Youth Inclusiveness" subsection under Project Rational is duplicative with Section 7 on gender mainstreaming under Project Description. Please consolidate and streamline.

Agency's Comments

- Overall:** This was integrated. References to SCCF-B were removed. An explanation for the envisaged locations was integrated.
- Streamlining:** The texts were shifted and consolidated.
- 20 April 2026: The sections were further streamlined and shortened.

5 B. Project Description

5.1 THEORY OF CHANGE

a) Is there a concise theory of change that describes the project logic, including how the project design elements will contribute to the objective, the expected causal pathways, and the key assumptions underlying these?

b) Are the key outputs of each component defined (where possible)?

Secretariat's Comments

April 30, 2026

a-b) Yes. All comments have been addressed.

April 16, 2026

a-b) Not yet.

Overall)

- The comments have been addressed. Thank you for the clarification. Please elaborate further on how the project addresses food and water nexus in the CEO Endorsement document.

IPLC)

- Thank you for integrating IPLC considerations; however, not all local population may fall under the category of Indigenous Peoples. Please ensure the inclusivity in the ToC as well as in the project components.

March 16, 2026

a-b) Not yet.

Overall)

- "Alignment with SCCF Core Indicators' subsection is included under Alignment with GEF-8 Programming Strategies, so no need to be placed here.
- Component 1 and 2: In relevant outputs, please ensure that they are responsive not only to the current weather conditions, but also to a range of future climate scenarios.
- Component 2: Please clarify how these interventions contribute to food and water nexus. Currently, it is not clear enough.

IPLC/Stakeholder/Safeguard)

- Please ensure Indigenous Peoples (and CSOs if relevant) are involved in Component 1 and 2, not only as beneficiaries, but also as partners of the activities, particularly in North Bougainville District (Same comment included under Annex D: Safeguards Screen and Rating below).
- Please consider integrating existing Indigenous Peoples governance, ensuring security of tenure and territories and capacity building of Indigenous Peoples and local communities as a part of project activities, particularly in Component 1 and 2 (Same comment included under Annex D: Safeguards Screen and Rating below).

Agency's Comments

Overall: This was incorporated.

IPLC/Stakeholder/Safeguard): This was considered under Component 1 and 2. References to indigenous people were integrated.

20 April 2026: It is now clearly indicated that there is a rural and indigenous population. This was also included in the TOC diagram.

5.2 INCREMENTAL/ADDITIONAL COST REASONING

Is the incremental/additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?

Secretariat's Comments

April 30, 2026

Yes. All comments have been addressed.

April 16, 2026

Not yet.

•Please see the comment on further streamlining under 4.2 JUSTIFICATION FOR PROJECT above.

March 16, 2026

Not yet.

•Please see the comment on Incremental Cost Reasoning under 4.2 JUSTIFICATION FOR PROJECT above.

Agency's Comments

? Incremental cost reasoning is now clearly explained.

20 April 2026: This was incorporated as suggested.

5.3 IMPLEMENTATION FRAMEWORK

a) Is the institutional setting, including potential executing partners, outlined and a rationale provided?

b) Comments to proposed agency execution support (if agency expects to request exception).

c) is there a description of potential coordination and cooperation with ongoing GEF-financed projects/programs and other bilateral/multilateral initiatives in the project area

d) are the proposed elements to capture and disseminate knowledge and learning outputs and strategic communication adequately described?

Secretariat's Comments

April 16, 2026

a) Yes. Thank you for the clarification. Please elaborate on the implementation arrangement further in the CEO Endorsement document.

March 16, 2026

a) Not yet.

- There is a concern that involvement of multiple executing entities complicate the project execution. Please clarify how the project intend to confirm the executing entities and how they coordinate within the implementation structure.

b-d) Yes.

Agency's Comments

? These are just options. I clarified that we envisage to work with one main executing entity.

5.4 a) Are the identified core indicators calculated using the methodology included in the corresponding Guidelines (GEF/C.54/11/Rev.01)?

b) Are the project's indicative targeted contributions to GEBs (measured through core indicators)/adaptation benefits reasonable and achievable?

Secretariat's Comments

May 6, 2026

- a-b) Yes. All comments have been addressed.

April 30, 2026

a-b) Not yet.

- Our apologies for the previous overlook, but the following para and table duplicate with each other. Please consolidate them.
- Also, GHG reduction is not part of the SCCF-A Results Framework. Please remove the row of CI 6 from the table.

Contribution to Adaptation Core Indicators and Co-Benefits

The project's success is defined by measurable outcomes tracked through the SCCF/GEF-8 Results Measurement Framework:

- CI 1: 5,000 direct beneficiaries (50% women / 30% youth) gaining enhanced adaptive capacity through resilient energy and water services.
- CI 2: 15 hectares (10 ha land, 5 ha coastal) managed in a climate-resilient manner to support productive value chains.
- CI 3: 3 policy documents/plans adopted, including National Resilience Standards and Community Climate Emergency Plans.
- CI 4: 200 individuals (50% women / 30% youth) trained and certified in resilient RE and water utility operations.
- CI 5: 30 MSMEs (50% women / 30% youth-led) in key value chains (agriculture and fisheries) with increased adaptive capacity for productive uses..

SCCF Core Indicator	Male	Female (50%)	Youth (30%)	Total Target	Description / Rationale
CI 1: Number of direct beneficiaries	2,500	2,500	1,500	5,000	Two tiers: (i) ~300 residents/MSMEs in target sites with direct RE mini-grid access; (ii) 4,700 nationwide benefiting from the NEA Support Desk and new Resilience Standards.
CI 2: Land & Coastal Area (ha)	N/A	N/A	N/A	15 ha	Nexus Management: 10 ha of agricultural land and 5 ha of coastal fisheries zones managed via resilient energy/water services to prevent climate-induced degradation.
CI 3: Policies & Frameworks	N/A	N/A	N/A	3	National Frameworks: Includes (1) National Resilience Standards for Mini-grids; (2) Off-grid Regulation Guidelines; and (3) Community Climate Emergency Plans.
CI 4: Number of people trained	100	100	60	200	Professionalization: Technical training for NEA/PPL staff and community operators, leading to official Certification in GFM/BESS operations.
CI 5: Private enterprises (MSMEs)	15	15	9	30	Value Chain Resilience: Targeted support for MSMEs in agriculture and fisheries (cold storage/processing). <i>Asterisk denotes targets for women/youth-led businesses.</i>
Climate Mitigation (tCO₂e)	N/A	N/A	N/A	5,000	Co-benefit: Estimated lifetime emissions avoided over 20 years by displacing diesel and kerosene with solar-powered nexus systems.

April 16, 2026

a) Yes. The comments have been addressed.

March 16, 2026

a) Not yet.

Meta Information Section

- Please uncheck the SCCF-B field because this project is funded exclusively by SCCF-A.
- Please check the fragility and conflict checkbox since PNG is included in WBG's FY26 FCS List.
- Please reconsider the sectoral distribution. It is not clear how it contribute to NbS, climate information service, and costal zone management, whereas contribution to water resources management is evident.

b) N/A

Agency's Comments

Done.

This is being addressed now.

5.5 NGI Only: Is there a justification of financial structure and use of financial instrument with concessionality levels?

Secretariat's Comments N/A

Agency's Comments N/A

5.6 RISKS

a) Is there a well-articulated assessment of risk and identification of mitigation measures under each relevant risk category?

b) Is the rating provided reflecting the residual risk to the likely achievement of intended outcomes after accounting for the expected implementation of mitigation measures?

c) Are environmental and social risks, impacts and management measures adequately screened and rated at this stage and consistent with requirements set out in SD/PL/03?

Secretariat's Comments

April 16, 2026

a-c) Yes.

- The ratings of stakeholder and fiduciary risks appears somewhat lenient. Please thoroughly reassess the risks during the PPG phase.

March 16, 2026

a-c) Not yet.

- PNG is included in the WBG's FY 26 Fragility and Conflict-affected Situations List. Is there any conflict/fragility-related risks? If so, please articulate them in the risk table.
- Under the Fiduciary risk, please analyze the risks related to procurement since Component 2 involves procurements of mini-grid systems.
- Under the Stakeholder risk, please analyze the risks related to the buy-in from local communities since the buy-in is crucial to implement Component 2.
- Please explain how the overall risk rating was identified.
- The rating under the Environmental and Social risk category (currently low) should be the same as the rating under the key risk table, Environmental and Social Safeguards (ESS) risk, as per the GEF risk appetite GEF/C.66/13.

Agency's Comments The risk section was improved and amended as proposed. The ESS Screening sheet was revised.

5.7 Qualitative assessment

a) Does the project intend to be well integrated, durable, and transformative?

b) Is there potential for innovation and scaling-up?

c) Will the project contribute to an improved alignment of national policies (policy coherence)?

Secretariat's Comments

March 16, 2026

a-c) Yes.

Agency's Comments N/A

6 C. Alignment with GEF-8 Programming Strategies and Country/Regional Priorities

6.1 Is the project adequately aligned with focal area and integrated program strategies and objectives, and/or adaptation priorities?

Secretariat's Comments

April 30, 2026

Yes. Thank you.

April 16, 2026

Not yet.

- There is a discrepancy in the figures for GHG avoided: the PIF presents two separate values? 75,134 tCO₂ and 80,732 tCO₂. The latter matches the GHG spreadsheet, so please ensure consistency for this indicator throughout the PIF.

March 16, 2026

Not yet.

- The alignment with the LDCF/SCCF Strategy is clearly presented. However, it would be appreciated if the Agency could also briefly indicate the alignment with the GEF-8 CCM Strategy entry point 1.2 'Enable the transition to decarbonized power systems' to demonstrate coordination across the GEF family of funds and to showcase the CCM-CCA synergy the program aims to achieve.
- It is also appreciated if the agency could provide the GHG spreadsheet.

Agency's Comments

Alignment with CCM was integrated + sheet was uploaded.

20 April 2026: This was corrected. Thanks.

6.2 Is the project alignment/coherent with country and regional priorities, policies, strategies and plans (including those related to the MEAs and to relevant sectors)

Secretariat's Comments

March 16, 2026

Yes.

Agency's Comments N/A

6.3 For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e. BD, CC or LD), does the project clearly identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and how it contributes to the identified target(s)?

Secretariat's Comments N/A

Agency's Comments N/A

7 D. Policy Requirements

7.1 Is the Policy Requirements section completed?

Secretariat's Comments

March 16, 2026

Yes.

Agency's Comments N/A

7.2 Is a list of stakeholders consulted during PIF development, including dates of these consultations, provided?

Secretariat's Comments

April 16, 2026

Yes. The comment has been addressed.

March 16, 2026

Yes. However,

- Please clarify whether MSME, Indigenous Peoples, and other vulnerable populations were consulted during the PIF preparation stage, and how the results of consultations were integrated. (Same comment included under the Annex D: Safeguards Screen and Rating).

During the PPG phase,

- Please conduct more thorough stakeholder engagement around the project sites. Currently, only one university has been consulted from the IPLC or CSO/NGO/Academic sector. Please also refer to the comments under Annex D: Safeguards Screen and Rating.

Agency's Comments

- Done.

- During the PPG phase, we will undertake more comprehensive and structured stakeholder engagement across the proposed project sites. Thank you for the comment.

8 Annexes

Annex A: Financing Tables

8.1 Is the proposed GEF financing (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):

STAR allocation?

Secretariat's CommentsN/A

Agency's CommentsN/A

Focal Area allocation?

Secretariat's CommentsN/A

Agency's CommentsN/A

LDCF under the principle of equitable access?

Secretariat's CommentsN/A

Agency's CommentsN/A

SCCF A (SIDS)?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

SCCF B (Tech Transfer, Innovation, Private Sector)?

Secretariat's CommentsN/A

Agency's CommentsN/A

Focal Area Set Aside?

Secretariat's CommentsN/A

Agency's CommentsN/A

8.2 Is the PPG requested within the allowable cap (per size of project)? If requested, has an exception (e.g. for regional projects) been sufficiently substantiated?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

8.3 Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

Annex B: Endorsements

8.4 Has the project been endorsed by the country? (ies) GEF OFP and has the OFP at the time of PIF submission name and position been checked against the GEF database?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

Are the OFP endorsement letters uploaded to the GEF Portal (compiled as a single document, if applicable)?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

Do the letters follow the correct format and are the endorsed amounts consistent with the amounts included in the Portal?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

8.5 For NGI projects (which may not require LoEs), has the Agency informed the OFP(s) of the project to be submitted?

Secretariat's CommentsN/A

Agency's CommentsN/A

Annex C: Project Location

8.6 Is there preliminary georeferenced information and a map of the project's intended location?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

Annex D: Safeguards Screen and Rating

8.7 If there are safeguard screening documents or other ESS documents prepared, have these been uploaded to the GEF Portal?

Secretariat's Comments

April 16, 2026

Yes. The comments have been addressed.

March 16, 2026

The ESS document has been uploaded. However, please address the following comments:

- PIF states ?Output 1.1.3 will capture and integrate indigenous local knowledge on climate hazards and community-level risks?. LandMark, one of the references of IPLCs lands and territories by CBD, also shows that the project areas as ?Indicative Areas of Indigenous and Local Community Lands?. However, UNIDO's E&S Screening Template does not recognize any potential impacts on Indigenous Peoples. Please clarify is there any Indigenous Peoples in the project areas. (Ref: <https://landmarkmap.org/map>)
- Please clarify whether MSME, Indigenous Peoples, and other vulnerable populations were consulted during the PIF preparation stage, and how the results of consultations were integrated. Please clarify this under the Stakeholder Engagement subsection of D. POLICY REQUIREMENTS (Same comment included under 7.2 on stakeholder engagement above).
- Please ensure Indigenous Peoples are involved in Component 1 and 2, not only as beneficiaries, but also as partners of the activities, particularly in North Bougainville District (Same comment included under 5.1 THEORY OF CHANGE above).
- Please consider integrating existing Indigenous Peoples governance, ensuring security of tenure and territories and capacity building of Indigenous Peoples and local communities as a part of project activities, particularly in Component 1 and 2 (Same comment included under 5.1 THEORY OF CHANGE above).

During the PPG phase,

- Since PNG is listed in the WBG's FCS list, please ensure that the project conducted conflict and fragility assessment/analysis and integrating mitigation measures including capacity building activities and collaboration with local partners into the project design.
- Please ensure obtaining Free, Prior and Informed Consent (FPIC) from Indigenous Peoples about project design during PPG and throughout the project implementation including monitoring.
- Please also consider including monitoring indicators related to: Indigenous Peoples and local communities 1. governance, 2. capacity building, and 3. ensuring security of tenure and territories.

Agency's Comments

? This was changed and complemented. Moreover, the ESS was updated.

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Annex E: Rio Markers

8.8 Are the Rio Markers for CCM, CCA, BD and LD correctly selected, if applicable?

Secretariat's Comments

March 16, 2026

Yes.

Agency's CommentsN/A

Annex F: Taxonomy Worksheet

8.9 Is the project properly tagged with the appropriate keywords?

Secretariat's Comments

April 16, 2026

Yes.

March 16, 2026

Not yet. Please properly select appropriate keywords. Please check other approved PIFs for your reference.

Agency's CommentsDone.

Annex G: NGI Relevant Annexes

8.10 Does the project provide sufficient detail (indicative term sheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table to assess the project capacity of generating reflows? If not, please provide comments. Is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

Secretariat's CommentsN/A

Agency's CommentsN/A

9 GEFSEC Decision

9.1 Is the PIF and PPG (if requested) recommended for technical clearance?

Secretariat's Comments

May 7, 2026

Yes. All comments have been addressed. This PIF is recommended for technical clearance.

May 6, 2026

Not yet.

- Please address the last minor comment on the Project Summary.

April 30, 2026

Not yet.

- There are two minor comments for the **Project Summary** and **Core Indicator** sections.
- In addition, to finalize the PIF, please remove all yellow highlights throughout the document and resubmit for clearance.

April 16, 2026

Not yet. Please address the remaining comments.

March 16, 2026

Not yet. Please address the comments above.

Agency's Comments 7 May, 2026

The remaining comments are addressed.

9.2 Additional Comments to be considered by the Agency at the time of CEO Endorsement/ Approval

Secretariat's Comments

General

During the PPG phase,

- Please conduct further analysis on **how underlying factors and drivers of the project** (weather conditions, natural hazards, energy infrastructure, food and water security, as well as the drivers identified under 1.3 of "Project Rational") **are affected by different scenarios of the climate change.**
- Please conduct further **climate and socio-economic analysis** more specific to project sites (Buka and Daru).
- GEF understand the project will pilot two PV mini-grids and integrated water systems. At CEO endorsement, please indicate **how these two sites will be selected** and elaborate on the **specification of the systems and coordination with local grid operators, if relevant.**
- Please liaise closely with key relevant projects, such as **World Bank' NEAT project** and **ADB's Sustainable Energy Sector Development Program**, and clarify how this project can benefit from the coordination with these projects in the CEO ER. Since these broader electrification program in the country led by the World Bank and ABD, is the project planning to benefit from bulk purchasing of the equipment? Bulk purchase can potentially bring cost savings, reduced transaction costs, faster development and logistical efficiencies among others.
- Please also liaise closely with **co-financers**, including the World Bank and ADB, to materialize co-financing and obtain co-financing letters.
- Please **rigorously reassess the risk ratings**, particularly stakeholder and fiduciary related risks and include mitigation measures as relevant.

IPLC/Stakeholders/Safeguard

During the PPG phase,

- Please conduct more thorough **stakeholder engagement**, including IPLC and CSOs.
- Since PNG is listed in the WBG's FCS list, please ensure that the project conducts **conflict and fragility assessment/analysis** and integrates mitigation measures including capacity building activities and collaboration with local partners into the project design.
- Please ensure obtaining **Free, Prior and Informed Consent (FPIC) from Indigenous Peoples** about project design during PPG phase and also throughout the project implementation including monitoring.
- Please also consider including **monitoring indicators** related to: Indigenous Peoples and local communities 1. governance, 2. capacity building, and 3. ensuring security of tenure and territories.

Agency's Comments Well noted.

Review Dates

	PIF Review	Agency Response
First Review	3/18/2026	4/8/2026
Additional Review (as necessary)	4/15/2026	
Additional Review (as necessary)	4/30/2026	
Additional Review (as necessary)	5/6/2026	
Additional Review (as necessary)	5/7/2026	