GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title	
Sustainable Climate-Resilient Electric Power Systems in Vanuatu (SCREPS)	
Region	GEF Project ID
Asia	12343
Country(ies)	Type of Project
Vanuatu	MSP
GEF Agency(ies):	GEF Agency ID
UNDP	10533
Executing Partner	Executing Partner Type
Ministry of Climate Change Adaptation, Meteorology, Geo Hazards, Energy, Environment and Disaster Management (MCCAMGEDM)	Government
GEF Focal Area (s)	Submission Date
Climate Change	5/15/2026
Project Sector (CCM Only)	
Renewable Energy	
Taxonomy	
Influencing models, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Stakeholders, Private Sector, Large corporations, Beneficiaries, Local Communities, Type of Engagement, Consultation, Participation, Information Dissemination, Partnership, Communications, Awareness Raising, Behavior change, Public Campaigns, Strategic Communications, Capacity, Knowledge and Research, Capacity Development, Knowledge Generation, Seminar, Training, Knowledge Exchange, Peer-to-Peer, Field Visit, South-South, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender results areas, Participation and leadership, Focal Areas, Land Degradation, Sustainable Land Management, Improved Soil and Water Management Techniques, Climate Change, Climate Change Adaptation, Climate finance, Climate resilience, Climate Change Mitigation, Renewable Energy	
Type of Trust Fund	Project Duration (Months)
SCCF	36
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
2,639,726.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
250,774.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
2,890,500.00	13,420,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)

100,000.00	9,500.00
PPG total amount: (e+f) 109,500.00	Total GEF Resources: (a+b+c+d+e+f) 3,000,000.00
Project Tags CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No	

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”.(max. 250 words, approximately 1/2 page)

Vanuatu’s electricity sector faces a pressing challenge: while donor investments have expanded renewable energy (RE) generation and grid access, infrastructure remains highly vulnerable to climate shocks such as cyclones, floods, and saltwater intrusion. Grids are unstable due to limited storage and forecasting capacity, system losses remain high, and adaptation is not yet mainstreamed into policies or institutions. Without targeted intervention, these vulnerabilities threaten the sustainability of baseline investments to achieve the 2030 target of 100% RE electricity, and risk reversal of development gains.

The objective of the proposed SCREPS Project is to enable reliable, sustainable, and climate resilient RE‑based electric power systems with stable grid integration, particularly in the islands of Malekula and Espiritu Santo. SCCF funding provides the **critical additionality** needed to safeguard baseline investments: climate proofing RE infrastructure; deploying SCADA and battery energy storage systems to stabilize grids; training and certifying local technicians with resilience modules; mainstreaming climate risk into provincial energy plans; enacting policy reforms harmonizing energy and climate priorities; piloting risk sharing instruments to attract independent power producers; and establishing knowledge platforms to share lessons across Small Island Developing States (SIDS). These measures would not be financed under baseline projects and are essential to ensure that RE expansion is resilient to climate impacts.

The project delivers **Global Environmental Benefits** by reducing greenhouse gas emissions from diesel displacement through expanded RE adoption, improved efficiency, and replicable models regionally. It generates **Adaptation Benefits** by ensuring resilient infrastructure, reliable electricity supply during climate shocks, strengthened institutions and policies, mobilized finance for resilient RE projects, and empowered communities, including women and vulnerable groups. Key expected results include achieving >70% RE share in target provinces, reducing outages by 30%, and improving grid stability by 25%. SCCF’s incremental support ensures that Vanuatu’s energy transition is not only low-carbon but also climate-resilient and sustainable.

The SCREPS Project meets all SCCF A criteria because it is designed with the intent to deliver tangible adaptation benefits in one of the most climate vulnerable sectors of Vanuatu: electricity supply; particularly in the country’s two major islands, Malekula and Espiritu Santo. By financing the incremental resilience measures that baseline donor projects do not cover, SCCF ensures that baseline electric power (RE-, and/or non-RE-based) system and infrastructure investments are not only low carbon but also climate resilient, reducing the inherent vulnerability to cyclones, flooding, and sea level rise; as well as addressing the current “adaptation gaps” in the electricity sector. The project strengthens institutional and community capacity to operate and maintain resilient electricity systems, harmonizes national policies and financing frameworks to incentivize climate change adaptation, and establishes knowledge platforms to replicate innovations in Vanuatu as well as across the Pacific. With strong stakeholder participation; including utilities, provincial governments, communities, and private sector actors; the project guarantees equitable benefits and sustainability. In doing so, SCREPS transforms climate change mitigation investments into durable adaptation outcomes, directly advancing Vanuatu’s NERM, NDC, and NAP targets, and exemplifying the SCCF A mandate to fund incremental adaptation measures that safeguard development gains against climate risks.

Indicative Project Overview

Project Objective

Reliable, sustainable, and climate-resilient low carbon electric power generation and distribution systems

Project Components

1. Climate-Resilient Infrastructure and Grid Stability

Component Type	Trust Fund
Investment	SCCF-A
GEF Project Financing ($)	Co-financing ($)
1,065,000.00	6,000,000.00

Outcome:

Power generation and distribution systems (including support and ancillary facilities) are climate-proofed and stable even during climate events

Output:

1.1. Electric power system infrastructures (including support and ancillaries) designed, constructed and operated to climate-resilient standards.
1.2. Installed and operational adequate storage and hybridization capacity (BESS, microgrid islanding).

1.3.Installed and operational modern grid management systems (SCADA, forecasting, demand-side management).

2.Inclusive Capacity Development and Institutional Strengthening

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing ($)	Co-financing ($)
644,000.00	2,500,000.00

Outcome:

Utilities, provincial governments, and communities have the skills and institutional capacity to operate and maintain resilient electric power systems.

Output:

2.1. Trained utility staff and local technicians in electric power grid integration and O&M.
2.2. Integration of climate risk and grid stability assessments into energy planning of provincial governments.
2.3. Established and operational institutional coordination mechanisms across governance levels.

2.4: Comprehensive knowledge product package for climate-resilient electric power system infrastructures

3. Policy, Finance, and Private Sector Engagement

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing ($)	Co-financing ($)
515,010.00	2,500,000.00

Outcome:

National policies and financing mechanisms incentivize climate-resilient, stable and reliable electric power system projects.

Output:

3.1. Harmonized national energy and climate policies supporting climate-resilient power grid systems.
3.2. Mobilized financing mechanisms to support utilities and private sector climate-resilient electric power system projects.

3.3. Established and implemented regulatory frameworks for reducing risks for independent power producers.

4. Knowledge Sharing and Technology Transfer

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing ($)	Co-financing ($)
170,015.00	1,200,000.00

Outcome:

Knowledge, technology, and best practices for climate-resilient, stable and reliable electric power systems are transferred and mainstreamed in Vanuatu.

Output:

4.1. Established technology transfer agreements with international partners.
4.2. Operational knowledge-sharing platforms for utilities, governments, and communities.

4.3. Documented and disseminated lessons learned in in Vanuatu and the Pacific region.

M&E

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing ($)	Co-financing ($)
120,000.00	

Outcome:

Project implemented according to Results-Based Management principles

Output:

ME1 Project M&E system designed and operational

ME2 Project evaluations completed on time to support project delivery and knowledge sharing

ME3 Monitoring Reports submitted on time to the Implementing Agency

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
1. Climate-Resilient Infrastructure and Grid Stability	1,065,000.00	6,000,000.00
2.Inclusive Capacity Development and Institutional Strengthening	644,000.00	2,500,000.00
3. Policy, Finance, and Private Sector Engagement	515,010.00	2,500,000.00
4. Knowledge Sharing and Technology Transfer	170,015.00	1,200,000.00
M&E	120,000.00	
Subtotal	**2,514,025.00**	**12,200,000.00**
Project Management Cost	125,701.00	1,220,000.00
Total Project Cost ($)	**2,639,726.00**	**13,420,000.00**

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Understanding an Uncertain Future

Vanuatu's electricity sector is shaped by multiple interacting drivers such as intensifying climate events, rising demand for reliable electricity, donor financed renewable energy (RE) expansion, 100% RE electricity target in 2030, and the global imperative to decarbonize. In plausible future scenarios, these drivers interact in ways that could undermine progress. For example, cyclones and floods may damage newly installed RE infrastructure, saltwater intrusion may compromise grid assets, and unstable grids without storage or forecasting could lead to frequent outages. At the same time, population growth and economic development will increase demand for electricity, while global climate policy pressures Vanuatu to reduce reliance on diesel. Without targeted adaptation, donor investments risk reversal, leaving communities vulnerable and undermining both national development priorities and global environmental benefits.

The project is designed to facilitate the shifting of this trajectory. By filling critical **adaptation gaps** by way of climate proofing infrastructure, stabilizing grids through SCADA and battery storage, mainstreaming resilience into provincial energy plans, and harmonizing policies to incentivize private sector participation, the project ensures that current baseline investments are safeguarded and transformed into climate resilient systems. This approach acknowledges uncertainty but builds resilience into the system, ensuring outcomes endure even as climate drivers intensify. A critical adaptation gap in Vanuatu's outer islands, particularly in Malekula, is the non-implementation of climate-informed feasibility analysis of planned electric power system and infrastructure investments. While baseline initiatives funded by the government and donor partners have expanded renewable energy generation and grid coverage, limited attention has been given to assessing how increasing climate risks such as cyclones, flooding, landslides, and prolonged rainfall affect not only electric power system and infrastructure assets but also the support facilities (e.g., substations, inlet and distribution structures for hydropower plants, main and emergency access roads) required for their sustained operation, maintenance, and also for emergency response.

Baseline and Expected Outcomes

In the baseline scenario, several donor and government investments in the country deliver RE access through grid extensions, hydropower capacity expansion, operation and maintenance, and solar PV mini-grid installations. These projects expand generation but do not integrate resilience. Infrastructure remains vulnerable to climate shocks, grid instability persists, system losses remain high (about 15–20%), provincial energy plans and policies do not integrate climate risk, and technical capacity is limited. Private sector engagement is hesitant due to perceived risks, and adaptation co benefits are not captured.

The outcomes needed to improve this baseline include: (a) Application of reliable, sustainable climate resilient electric power systems; (b) Strengthened institutional and technical capacity, with the retention of certified technicians; (c) Harmonized policies and mobilized finance for resilient electric power system projects; and (d) Knowledge transfer across the country and to other Pacific Island Countries (PICs) and SIDS through regional platforms.

These desirable, realistic and applicable outcomes are based on the identified **adaptation gaps** in the country's electricity sector, in particular the two major islands of Malekula and Espiritu Santo; as well as problems/barriers include limited technical skills, fragmented policies, weak incentives for private sector engagement, and infrastructure vulnerability. The enablers to achieve these outcomes include strong national priorities under the NERM and NDC, committed donor partners, and regional cooperation platforms (SPC, IRENA, PIF).

Addressing Adaptation Gaps in the Electricity Sector

This project directly addresses the drivers of vulnerability in the country — the inherent ones (e.g., extreme climate events) and the "adaptation gaps (e.g., unstable grids, climate susceptible power infrastructures, and weak institutional frameworks— rather than focusing solely on expanding electricity supply and access. Other potential options, such as scaling diesel generation or expanding RE without resilience, would not address the systemic risks. By embedding resilience standards in infrastructure, building institutional capacity, enacting policy reforms, and mobilizing private sector finance, this proposed project ensures outcomes endure in the face of future climate uncertainties.

The proposed project fits seamlessly within the current landscape of donor investments in the country. It complements ongoing donor projects by addressing **adaptation gaps**, leverages co financing, and builds on lessons from previous energy access and climate resilience projects in Vanuatu and the Pacific. For example, earlier projects demonstrated the vulnerability of electric power systems to cyclones and the need for storage and forecasting. The project incorporates these lessons by deploying climate-resiliency measures, mainstreaming resilience in planning, and documenting case studies for replication.

The approach aligns with national priorities under the NERM and NDC, ensuring coherence with country strategies. While it also contributes to global priorities by reducing GHG emissions and providing a replicable model for other SIDS, its adaptation activities, i.e., transforming baseline electric power system investments into climate resilient systems. In this regard, the

proposed SCREPS Project will deliver enduring outcomes that address both environmental degradation and climate vulnerabilities.

The project's incremental financing is modest (US$ 2.69M) but catalytic. It safeguards the investments of donors and the Government of Vanuatu, ensures climate resilience, and delivers both global environmental benefits (GHG reductions, RE application expansion, efficiency gains) and adaptation benefits (resilient infrastructure, reliable electricity, empowered communities). This leverage demonstrates the unique value of SCCF funding in transforming donor investments into sustainable outcomes.

Stakeholders and Their Roles

Stakeholders are central to delivering the project's outcomes. These include:

- Ministry of Climate Change Adaptation, Meteorology, Geo Hazards, Energy, Environment and Disaster Management (MCCAMGEDM) provides leadership, policy alignment, and oversight, ensuring coherence with NERM and NDC.
- Department of Energy (under the MCCAMGEDM) harmonizes energy and climate policies.
- Utilities (UNELCO and VUI) implement technical measures, including SCADA and BESS deployment, and manage O&M.
- Provincial Governments (i.e., provinces in Espiritu Santo and Malekula islands) integrate resilience into local planning and facilitate community engagement.
- Independent Power Producers (IPPs) invest in RE projects, incentivized by risk sharing instruments.
- Communities participate in awareness campaigns, training, and O&M, ensuring local ownership.
- Civil society and women's organizations advocate for equitable access and gender inclusion.
- Regional partners (SPC, IRENA, PIF) facilitate knowledge transfer and replication across SIDS.
- Donor partners (ADB, JICA, Australia, NZ) safeguard their baseline investments through SCCF's catalytic support.

The MCCAAMGEDM is the designated project executing partner. Designating MCCAMGEDM as the executing partner secures the policy leverage, inter ministerial coordination, climate science inputs and disaster response linkages required to translate SCCF incremental investments into measurable reductions in outage risk, faster recovery after extreme events, and strengthened local capacity and governance for resilient electricity services.

Together, these actors form a system where national leadership, technical implementation, local ownership, private sector investment, and regional cooperation converge to deliver global environmental benefits and adaptation outcomes. By engaging stakeholders across these groups, the project ensures inclusivity, sustainability, and replication. This explains why the proposed project is the right choice to address the drivers of vulnerability and deliver enduring outcomes in Vanuatu and beyond.

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

Situation Analysis

As of 2025, Vanuatu's national installed capacity is about 43 MW, and the total power generation was 83 GWh, with RE-based power generation systems contributing about 30 %. The commissioning of the 422 kW Brenwe Hydro in Malekula Island (2023) and the East Santo transmission extension (2024) in Espiritu Santo Island have increased RE electricity generation and grid reliability. However, despite the current initiatives of the Government of Vanuatu and its donor partners (e.g., ADB, JICA, Australia, New Zealand and Japan) aimed towards achieving the NERM target of 100% RE electricity by 2030, it is forecast that under a business-as-usual (BAU) scenario, by 2030 RE-based electric power systems contribution to the power generation mix would only reach up to about 40 %. In Malekula Island, it is 27%, while in Espiritu Santo Island it will be 65%. The major issues are:

(a) continued diesel reliance; (b) high system losses (15–20 %); (c) vulnerability to cyclones and floods, and (d) limited climate change adaptation mainstreaming.

Based on the pertinent analyses in Vanuatu's Third National Communications to the UNFCCC, the islands of Malekula and Espiritu Santo face acute climate vulnerability that directly undermines electricity reliability: increasingly intense cyclones, storm surge and heavy rainfall are already causing multi day outages, infrastructure damage and fuel supply disruptions, and projected increases in cyclone intensity and extreme precipitation make the islands' exposed diesel dependent and weakly redundant grids progressively more fragile. Looking forward, regional climate science indicates a clear risk trajectory: while cyclone frequency projections carry uncertainty, there is high confidence that the intensity of the strongest tropical cyclones will increase and that heavy precipitation and compound coastal flooding events will become more frequent as the climate warms. For Vanuatu specifically, next generation projections show shifts in rainfall extremes and an increased likelihood of more intense storms in the coming decades, which raises the probability of more frequent and severe impacts on exposed power infrastructure. Under these projections, the islands' current BAU grid designs, based on historical climate loads, will face growing mismatch with future hazards unless adaptation measures (e.g., elevated equipment, strengthened civil works, distributed storage, islanding capability and advanced SCADA/forecasting) are integrated into electricity generation and distribution project scopes.

Vanuatu's power sector combines small, dispersed grids, legacy diesel dependence and recent donor led RE-based rollouts that were largely designed to historical climate norms. This structural mix creates inherent vulnerability because generation and distribution assets are sited and engineered for past hazard levels rather than projected increases in cyclone intensity, extreme rainfall and sea level rise. The national Vanuatu Climate Futures synthesis and associated tools document rising temperatures, increasing extremes of rainfall and a clear sea level rise signal that already elevates coastal inundation and corrosion risk for energy assets. Baseline donor projects, e.g., ADB's Energy Access Project, are delivering critical RE-based power generation and grid extensions for Malekula and Espiritu Santo but typically fund core hardware rather than the civil and control upgrades needed to withstand stronger storms and surge. As a result adaptation gaps persist where BESS pads, substations and feeders remain exposed. Malekula's vulnerability is amplified by long radial feeders, remote access and a still significant diesel fallback that lengthens restoration times and complicates logistics after events; sparse local monitoring reduces the utility's ability to take anticipatory actions. Espiritu Santo's Luganville corridor concentrates critical loads in low lying coastal zones and relies on exposed overhead distribution that is repeatedly damaged by high winds and surge, increasing the probability of prolonged outages for hospitals, water systems and commerce.

Problem Analysis

The core problem is a limited national capacity - technical, financial and institutional - to fully design, install, operate and maintain climate resilient electric power systems (RE-, and/or non-RE-based) and to manage grid stability as variable RE-based systems are increased. This is a deficiency that is most acute on Malekula and Espiritu Santo islands. This core problem arises from four immediate causes:

- Absence of updated grid codes and climate informed technical standards means designs still rely on historical hazard baselines; and this is exacerbated by adaptation gaps such as the lack of mandatory climate informed procurement clauses and the absence of standardized elevation, wind and corrosion allowances for coastal and exposed sites.
- Insufficient climate resilient storage and hybridization capacity, which reflects both the omission of engineered civil protections for system components and ancillaries (e.g., raised pads, waterproofing and corrosion resistant enclosures) and the lack of dedicated islanding and protection hardware (e.g., priority load controllers and automatic transfer/islanding switchgear) that would allow power grids to sustain critical services during prolonged outages.
- Weak grid management systems and tools (e.g., integration of short term solar/wind forecasting and limited demand side management frameworks); and these are compounded by low telemetry density and the absence of automated sectionalizing and fault isolation capabilities that would enable anticipatory dispatch and rapid restoration.

- Limited knowledge and technical capacity within utilities is driven by shortages of certified technicians for resilient O&M and by weak institutionalization of emergency SOPs and provincial coordination mechanisms, leaving local crews dependent on external specialists and slowing post event recovery.

Each of these immediate causes is therefore both a technical shortfall and a manifestation of measurable adaptation gaps that leave electricity power system investments vulnerable to climate extremes. If these causes persist, the immediate effects will deepen the country's and the islands' electricity system vulnerability. These include:

- Electric power system projects will remain fragmented or fail to scale because instability risks and unmitigated climate exposure will deter private investors and constrain donor financing, perpetuating diesel dependence as the reliability hedge.
- Power generation and distribution systems will remain fragile and increasingly prone to catastrophic failure during cyclones, storm surge and extreme rainfall, producing longer and more frequent outages; on Malekula this will be amplified by long radial feeders, remote access and sparse monitoring that lengthen repair logistics, while on Espiritu Santo Luganville's low lying substations and coastal feeders will face repeated inundation and accelerated corrosion.
- Utilities will continue to rely heavily on imported diesel and costly emergency logistics, undermining both energy security and the economic case for low carbon transition.
- Communities will suffer unreliable electricity, prolonged loss of critical services (health clinics, water pumping, communications), and worsening power quality (voltage and frequency instability) when variable RE is added to under prepared grids.

These effects are not abstract risks but immediate, measurable outcomes—outage hours, days of autonomous operation lost, repair costs and service interruptions—that directly reflect the current adaptation gaps and limited adaptive capacity documented in national assessments.

Objective Analysis

The facilitation of reliable, sustainable, and climate-resilient RE-based power systems with stable grid integration is the objective of the proposed project, which will be demonstrated in the electricity sector of the 2 major islands in Vanuatu, namely Espiritu Santo and Malekula. With the achievement of this objective, the proposed project contributes to the SCCF goal, which is strengthening resilience and reduce vulnerability to climate impacts, while also supporting innovation and mainstreaming adaptation into national development strategies. The project objective is achieved with the realization of the following changes/outcomes in the electricity sector in the two islands:

- Power generation and distribution systems (including support and ancillary facilities) are climate-proofed and stable even during climate events. The following must collectively be in place to bring about this outcome: (1) . Electric power system infrastructures designed, constructed and operated to climate-resilient standards; (2) Installed and operational adequate storage and hybridization capacity; and (3) Installed and operational modern grid management systems.
- Utilities, provincial governments, and communities have the skills and institutional capacity to operate and maintain resilient electric power systems. This outcome will be realized if the following are collectively in place: (1) Trained utility staff and local technicians in electric power grid integration and O&M; (2) Integration of climate risk and grid stability assessments into energy planning of provincial governments; (3) Established and operational institutional coordination

mechanisms across governance levels; and (4) Comprehensive knowledge product package for climate resilient electric power system infrastructures. The latter can be a cache of engineering designs and feasibility analyses like climate resilient access infrastructure designs for priority road segments in Malekula that are critical for the operation, maintenance, and emergency access of renewable energy infrastructure and essential services, including adaptation measures such as improved drainage, flood protection, slope stabilization, and nature based solutions.

- National policies and financing mechanisms incentivize climate-resilient, stable and reliable electric power system projects. The following must collectively be in place to bring about this outcome: (1) Harmonized national energy and climate policies supporting climate-resilient grid systems; (2) Mobilized financing mechanisms to support utilities' and private sector climate-resilient electric power system projects; and (3) Established and implemented regulatory frameworks for reducing risks for private sector participation.

- Knowledge, technology, and best practices for climate-resilient, stable and reliable electric power systems are transferred and mainstreamed in Vanuatu. This outcome will be realized if: (1) Established technology transfer agreements with international partners; (2) Operational knowledge-sharing platforms for utilities, governments, and communities; and (3) Documented and disseminated lessons learned in Vanuatu and in the Pacific region, are collectively in place.

These outcomes and the corresponding tangible outputs are expected to be realized through removing the identified barriers and associated **adaptation gaps**; grid instability; and weak institutional and policy frameworks, through technology transfer, capacity building, resilient infrastructure standards, and enabling policies, all of them essential to achieve sustainable, climate-resilient energy systems.

The realization of the project objective will bring about these three immediate effects: (1) Strengthened and climate-proofed electricity generation and distribution systems in the provinces ensuring reliable electricity delivery even under extreme weather conditions – which directly contributes to the SCCF goal; (2) Reduced greenhouse gas (GHG) emissions from the progressively decreasing reliance of utilities on diesel-based power generation; and (3) Communities enjoy reliable electricity services with fewer outages and stable voltage and frequency, even as RE-based power generation system penetration increases.

The Objective Analysis described how the project objective will be achieved with the collective realization of desirable changes in the electric power sector in Vanuatu, in general, and in the islands of Malekula and Espiritu Santo, in particular. These are realized through a barrier removal approach, whereby the identified barriers (including the associated adaptation gaps that exacerbate them) are removed. Such changes or outcomes will be brought about by integrated interventions/activities that will be implemented out under the proposed SCREPS Project. Please refer to Fig. 1 for the illustrative description (i.e., Theory of Change) of how the project will bring about the necessary changes/outcomes by removing barriers and **adaptation gaps** to achieve the project objective and thereby contribute to the realization of the SCCF goal.

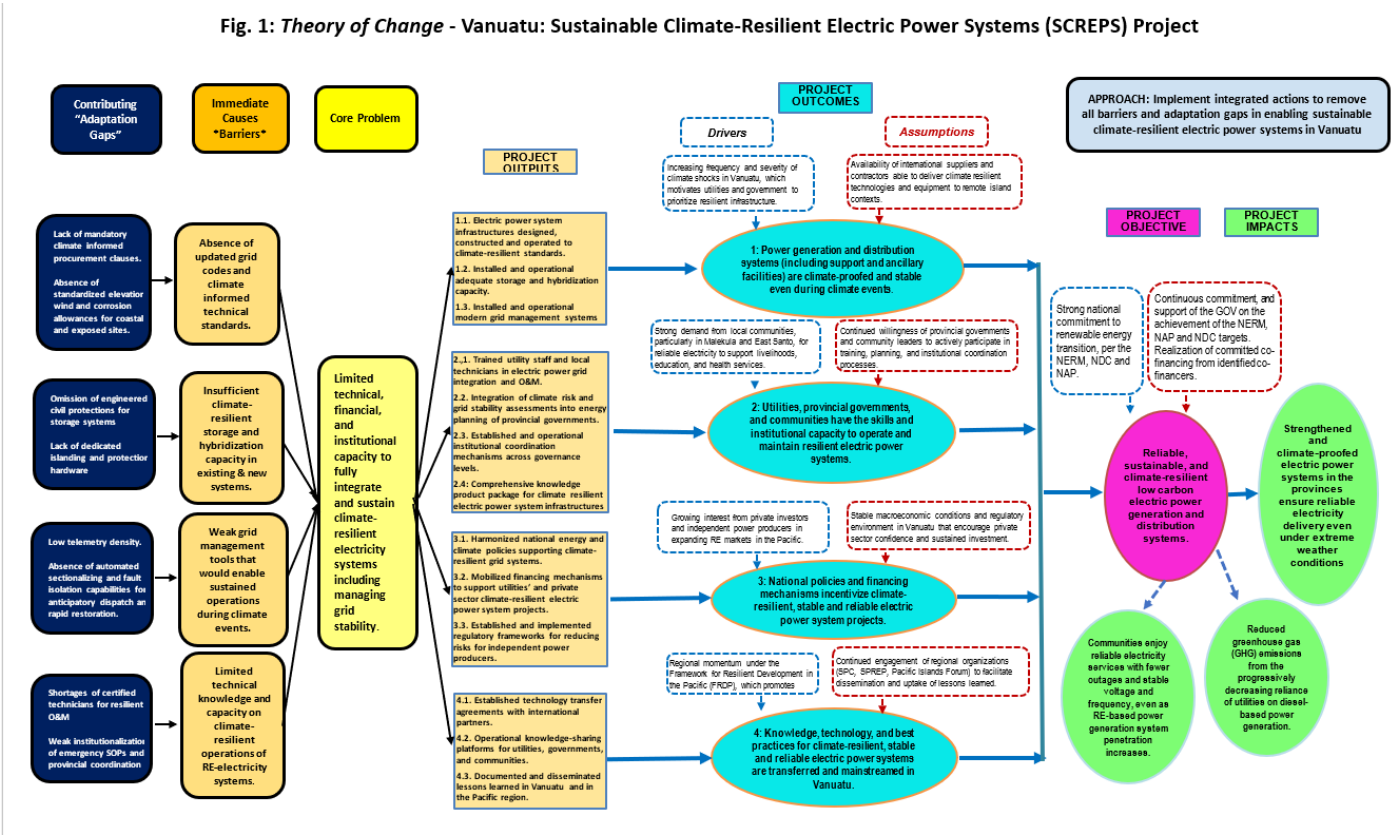
Theory of Change

The SCREPS Project is intended to address the core problem of limited technical, financial, and institutional capacity to design, operate and maintain reliable, sustainable, and climate-resilient low carbon electric power generation and distribution systems. The persistence of such problem negatively impacts the operational performance and increases the climate vulnerability of the electricity sector in Vanuatu. The immediate causes of this core problem includes: (a) Absence of updated grid codes and climate informed technical standards; (b) Insufficient climate-resilient storage and hybridization capacity in existing & new systems; (c) Weak grid management tools that would enable sustained operations during climate events; and (d) Limited technical knowledge and capacity on climate-resilient operations of RE-electricity systems. There are also contributing "adaptation gaps" that exacerbate these problems. To address this core problem requires the Implementation of integrated actions to remove all barriers and adaptation gaps in enabling sustainable climate-resilient electric power systems in Vanuatu. With this barrier removal approach, the actions that will be carried out are expected to deliver tangible outputs that will bring about changes in the

country's electricity sector such as: (1) Power generation and distribution systems (including support and ancillary facilities) are climate-proofed and stable even during climate events; (2) Utilities, provincial governments, and communities have the skills and institutional capacity to operate and maintain resilient electric power systems; (3) National policies and financing mechanisms incentivize climate-resilient, stable and reliable electric power system projects; and (4)Knowledge, technology, and best practices for climate-resilient, stable and reliable electric power systems are transferred and mainstreamed in Vanuatu. Collectively, these changes will bring about reliable, sustainable, and climate-resilient RE-based power systems with stable grid integration in the country. This is in fact the objective of the SCREPS Project. The immediate impacts of achieving this objective are: (a) Communities enjoy reliable electricity services with fewer outages and stable voltage and frequency, even as RE-based power generation system penetration increases; (b) Reduced greenhouse gas (GHG) emissions from the progressively decreasing reliance of utilities on diesel-based power generation; and (c) Strengthened and climate-proofed electric power systems in the provinces ensure reliable electricity delivery even under extreme weather conditions. It should be noted that the last one directly relates to the overall goal of the SCCF – assists developing countries adapt to climate change and reduce vulnerabilities to climate risks.

Figure 1 illustrates the above logic of the SCREPS Project's Theory of Change.

Fig. 1: *Theory of Change* - Vanuatu: Sustainable Climate-Resilient Electric Power Systems (SCREPS) Project



Project Components

The proposed Sustainable Climate-Resilient Electric Power System (SCREPS) Project in Vanuatu is organized into four components, based on the Objective Analysis and as illustrated in the Theory of Change diagram (Fig.1). Each project component addresses an identified hindering barrier that needs to be removed. The following are the description of the various components of the project:

Component 1: Climate Resilient Infrastructure and Grid Stability – This project component addresses the technical barriers and adaptation gaps in the current electric power systems operated by VANPAWA in Malekula Island and VUI in Espiritu Santo Island. The delivery of the planned outputs from the baseline and incremental activities that will be carried out under this component will bring about the changes manifested by power generation and distribution systems being climate proofed and are stable when integrating RE based power systems. These outputs include: (1) Electric power (RE-, and/or non-RE-based) system infrastructures designed, constructed, and operated to climate resilient standards, which will be delivered through activities such as conduct of climate risk assessments, development of resilient design standards, retrofitting and construction of power generation and distribution assets, and operationalization of climate resilient O&M protocols; (2) Installed and operational storage and hybridization capacity (e.g., strengthened BESS housing, microgrid islanding), which will be delivered through activities that include grid modeling, procurement and installation of climate-resilient BESS, configuration of microgrid islanding systems, and technician training; and (3) Operational enhanced grid management systems (SCADA, forecasting, DSM) to improve the overall resiliency, which will be delivered through activities that include enhanced SCADA system design, procurement and installation, DSM program rollout, and operator training. The activities will be carefully staged (Years 1–3), implemented locally in both islands of Malekula and Espiritu Santo, and carried out by utilities, MCCAMGEDM, contractors, and regional partners. Together, these outputs ensure that electric power systems are climate proofed, storage and hybridization capacity is adequate, and modern grid management systems are operational—directly achieving the outcome of reliable, resilient, and stable RE based power systems.

Bulk of the incremental SCCF investments are intended for the resiliency enhancement of subsumed baseline donor-funded electric power system project activities in Component 1. These incremental enhancements involving civil engineering and construction work could include: elevated and strengthened BESS enclosures (raised pads, waterproofing); cyclone rated PV racking and reinforced foundations; islanding switchgear and automated reconnection logic; distribution redundancy, sectionalizers and remote switches; and site climate proofing (elevation of substations, drainage, access road stabilization).

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Component 2: Capacity Development and Institutional Strengthening – This component will address the capacity development barriers and is intended to build the human and institutional capacity needed to sustain resilient electric power systems. The expected outcome from the outputs that will be delivered by the various activities that will be carried out under this project component is utilities, provincial governments, and communities have the skills and institutional capacity to operate and maintain resilient electric power systems. These outputs include: (1) Trained utility staff and local technicians in RE system grid integration and O&M, which will be delivered through activities that curriculum development, design and conduct of training workshops and certification programs, and mentorship networks; (2) Integration of climate risk and grid stability assessments into provincial energy planning, which will be delivered through activities that include participatory planning workshops, drafting resilient energy plans, and formal adoption by provincial councils; (3) Established institutional coordination mechanisms across governance levels, which will be delivered by activities such as creation of provincial platforms, conduct of regular coordination meetings, development and implementation (4) Comprehensive knowledge product package for climate-resilient electric power system infrastructure, which can consists of Procedures and standards manuals; Actual feasibility analyses of planned RE-based projects; Engineering designs and plans (with costing) for feasible projects, including climate-proofed access roads in Malekula and Espiritu Santo; Technical and financial evaluation tools; and Case studies and replication guides. This comprehensive package will be delivered by activities such as stakeholder consultation & needs assessment; development of procedures and standards manuals (in Vanuatu's context); conduct of feasibility analyses of planned RE-based electric power system infrastructures such as in the planned **Malekula Climate-Resilient Roads Infrastructure (MCRRI) Project**; preparation of engineering designs and plans for retrofits and new installations of RE-based electric power system infrastructures, for example the **climate-resilient design and installation of step-down transformers in the hydropower plant** in Espiritu Santo island; development of evaluation tools; documentation of case studies and replication guides; and capacity development and dissemination on the use of this comprehensive knowledge product package of resilience mainstreaming protocols, and institutional performance monitoring. As much as possible, the composition of the knowledge product package that will be delivered shall consider, among others, the local communities' priorities and needs in regards climate resilient electricity supply systems and infrastructures. All the activities are staged across Years 1–3, implemented locally in the islands of Malekula and Espiritu Santo, and carried out by MCCAMGEDM, utilities, relevant provincial governments, regional partners, and civil society. Together, they ensure that utilities, governments, and communities have the skills and institutional frameworks to operate and maintain climate resilient electric power systems. Lastly, knowledge management and learning are particularly central in this project component. Knowledge will be generated through training programs, participatory planning, and institutional coordination, ensuring that technical and governance capacities are strengthened and documented. This will ensure that capacity development is not only delivered but

institutionalized, and that innovations and best practices from Malekula and East Santo are shared nationally and regionally, reinforcing Vanuatu's leadership in climate resilient electric power (RE-, and/or non-RE-based) systems.

Component 3: Policy, Finance, and Private Sector Engagement – This component addresses the policy and financial barriers. It is meant to strengthen the enabling environment for resilient electric power (RE-, and/or non-RE-based) system investment by harmonizing policies, mobilizing financing, and reducing risks for IPPs, with the resulting outcome manifested by national policies and financing mechanisms incentivizing RE investment and grid stability, reducing risks for private sector participation. This outcome will be realized with the delivery of the following outputs: (1) Harmonized national energy and climate policies supporting RE-grid integration, which will be delivered through activities that include policy reviews, stakeholder consultations, drafting and enacting reforms, and operationalizing policies through guidelines and training; (2) Mobilized financing mechanisms to support utilities and RE projects, which will be delivered by activities that include design of risk-sharing instruments, establishment of financing facilities, investor engagement, and monitoring of financing flows; and (3) Established regulatory frameworks reducing risks for IPPs, which will be delivered through the conduct of activities such as regulatory framework reviews, drafting new instruments, implementation of licensing and tariff frameworks, and monitoring IPP participation. This component creates an enabling environment for private sector engagement, ensuring that investments in resilient RE are incentivized and safeguarded. The activities that will be carried out are staged across Years 1–3, implemented nationally and provincially, and carried out by MCCAMGEDM, Department of Energy, Ministry of Finance, utilities, IPPs, donor partners, and regional organizations. Together, these outputs ensure that national policies and financing mechanisms incentivize RE investment and grid stability, creating a robust framework for private sector participation.

Component 4: Knowledge Sharing and Technology Transfer - Component 4 is meant to address information/knowledge-related barriers. The outcome from the various outputs that will be delivered under this component is that knowledge, technology, and best practices for climate resilient electric power systems are transferred and mainstreamed in Vanuatu. This outcome will be realized from the collective delivery of the following outputs: (1) Technology transfer agreements with international partners, which will be delivered through activities that include partner identification, negotiation of Memorandum of Understanding (MoU), and initiation of pilot technology demonstrations; (2) Operational knowledge sharing platforms for utilities, governments, and communities, which will be delivered by activities that include design of online and physical platforms, workshops, and peer to peer learning networks; (3) Documented and disseminated lessons learned in the Pacific region, which will be delivered through activities such as capturing lessons through M&E, developing replication toolkits, and disseminating knowledge regionally and globally. This component ensures that knowledge and technology are institutionalized in Vanuatu and shared across the Pacific, enabling replication and scale up. The activities are staged across Years 1–3, implemented nationally and provincially, and carried out by MCCAMGEDM, utilities, provincial governments, communities, civil society, and regional/international partners. Together, they ensure enduring knowledge transfer, replication, and scale up across the Pacific. Lastly, like Component 2, knowledge management and learning are particularly central in this project component. It will focus on capturing and disseminating lessons through knowledge platforms, technology transfer agreements, and regional replication toolkits. This will also ensure that capacity development is not only delivered but institutionalized, and that innovations and best practices from the project results in the islands of Malekula and Espiritu Santo are shared nationally and regionally, reinforcing Vanuatu's leadership in climate resilient renewable energy.

Together, the four components form a coherent package, Component 1 secures infrastructure and technical systems; Component 2 builds human and institutional capacity; Component 3 strengthens policies, finance, and private sector engagement; and Component 4 ensures knowledge transfer and replication. The design ensures that outcomes are enduring, resilient to future climate drivers, and aligned with national priorities (NERM, NDC). Stakeholder engagement, gender equality, and private sector involvement are mainstreamed across all components, ensuring co benefits and sustainability.

Incremental Cost Reasoning / Justification

The baseline investments in Vanuatu's electricity sector, supported by ADB, JICA, Australia, New Zealand, Japan, the Government, and utilities, focus on standard renewable energy expansion—hydropower, solar, storage, SCADA systems, utility training, provincial energy planning, policy reviews, and knowledge platforms. These initiatives provide the foundation for renewable energy growth but do not fully address the critical risks of climate vulnerability, grid instability, and the operational challenges of integrating intermittent RE resources in fragile island systems. Without incremental support, electric power system projects, such as those that are RE-based risk remaining fragmented, vulnerable to climate shocks, and unable to deliver reliable electricity to communities in the islands of Malekula and Espiritu Santo.

The SCREPS Project provides the incremental funding necessary to climate proof infrastructure, embed resilience into grid operations, and strengthen institutional and policy frameworks. The requested SCCF resources enable the design and application of climate resilient standards, the installation of hybridization and storage systems, and the operationalization of modern grid management tools. They also support inclusive capacity development, gender responsive planning, and knowledge dissemination that go beyond the baseline. In this way, SCCF financing ensures that renewable energy investments are not only expanded but sustained, transforming baseline activities into resilient systems capable of delivering reliable, low carbon electricity under climate stress. Baseline development and energy infrastructure investments will support major big-ticket items in such projects and for support and ancillary facilities such as access road construction and maintenance The SCCF resources for this project will be used to finance incremental actions to make electric power system work efficiently and reliably by addressing climate adaptation and resiliency gaps that were not adequately addressed in previous and current ongoing projects. The resources will be used to develop and utilize knowledge products that can be used by the government, utilities and private power generators in the planning, feasibility evaluation, design, engineering, installation, operation and maintenance of climate-resilient energy infrastructures (including support and ancillary facilities such as intake and distribution structures of hydropower plants and critical access roads that safeguard the energy infrastructure assets, service continuity, and emergency response to future climate events and conditions. The project will not only help facilitate RE-based power systems, but demonstrably improve their ability to withstand, absorb, and recover from climate shocks, as measured through reductions in outage duration, faster system recovery, and sustained service delivery during extreme events.

In a nutshell, the incremental/additional cost reasoning for the SCREPS Project is clear: baseline donor investments from ADB, JICA, NZMFAT and others finance the core generation, storage, and basic control assets needed to meet energy access and mitigation targets under normal operating conditions, but they do not include the resilience measures required to withstand Vanuatu's projected increases in cyclone intensity, flooding, and coastal corrosion. The SCCF incremental funding is therefore additive, covering only the discrete, site-specific resilience items, e.g., cyclone-rated mounting and foundations, elevated and waterproofed BESS enclosures, corrosion-resistant cabling, reinforced intakes and penstocks, islanding switchgear, enhanced SCADA modules, forecasting and DSM integration that transform mitigation assets into adaptation assets. These incremental measures directly reduce outage hours, maintain autonomous operation of critical services, lower repair costs, and embed resilience into utility protocols and community governance. By financing these tangible adaptation upgrades that are not part of baseline procurement scopes, SCCF closes practical and measurable adaptation gaps, leverages larger donor and private investments, and delivers both Global Environmental Benefits (reduced GHG emissions) and quantified adaptation outcomes, thereby fully satisfying the GEF/C.31/12 criteria for transparent incremental cost justification.

Global Environmental and Adaptation Benefits

The SCREPS Project are expected to generate climate change adaptation benefits. Communities in the 2 major islands of Malekula and Espiritu Santo will gain access to reliable electricity services, reducing vulnerability to outages and voltage fluctuations that undermine livelihoods, education, and health systems. Climate proofed distribution networks and resilient grid management will safeguard energy access during extreme events, strengthening community resilience and adaptive capacity. At the institutional level, provincial governments and utilities will be equipped with tools and skills to integrate climate risk into energy planning, ensuring that resilience is mainstreamed into governance. Regionally, the project's knowledge sharing and technology transfer activities will enable replication across Pacific SIDS, amplifying both environmental and adaptation benefits beyond Vanuatu.

In addition, the SCREPS Project will also generate global environmental benefits from the operation of climate-resilient RE-based electric power systems by reducing greenhouse gas emissions through the displacement of diesel generation with RE sources. In the islands of Malekula and Espiritu Santo, the integration of solar, hydropower, and battery storage systems will mitigate approximately 45,000 tCO_2e over the project period, contributing to Vanuatu's nationally determined contributions (NDCs) and the global effort to limit warming. By embedding resilience into infrastructure and operations, the project also ensures that emission reductions are sustained over time, even in the face of increasing climate shocks.

Innovation: The SCREPS Project introduces innovation by integrating climate resilient design into every technical element of low carbon electricity systems so that mitigation investments simultaneously deliver adaptation outcomes. Rather than treating resilience as an afterthought, SCREPS embeds elevated BESS platforms, cyclone rated civil works, corrosion resistant materials, automated islanding switchgear and enhanced SCADA with forecasting and DSM as standard components of RE and hybrid projects. This systems approach is novel in the Vanuatu context because it converts generation and storage assets into service guaranteeing infrastructure able to withstand stronger cyclones, higher flood levels and accelerated coastal corrosion. The innovation is also institutional: SCREPS couples these hardware upgrades with updated grid codes, procurement templates and operational SOPs so that resilient specifications become replicable procurement items, and it pilots performance based resilience metrics (reduction in outage hours for critical loads, days of autonomous operation) that can be used to de risk future investments and attract blended finance.

Replication and Scale up: The SCREPS Project will be designed to be readily emulated across Vanuatu and other Pacific SIDS by packaging technical specifications, procurement language, resilience KPIs and institutional modalities into a replicable toolkit. The project will produce standardized design templates for elevated BESS pads, cyclone rated PV mounting and islanding switchgear, a SCADA/forecasting integration guide, and model grid code amendments that regulators and utilities can adopt without bespoke engineering for each site; these outputs, combined with documented cost breakdowns and evidence of reduced outage metrics, create a clear business case for donors and private investors to finance similar resilient RE upgrades at scale. By demonstrating how modest incremental investments convert mitigation assets into durable adaptation outcomes and by documenting lessons on community engagement, gender inclusion and blended financing mechanisms, SCREPS creates a practical, evidence based pathway for scaling climate resilient, low carbon electricity infrastructure across the Pacific.

Sustainability: Sustainability under SCREPS is achieved by making resilience self-sustaining technically, financially and socially. Technically, strengthened civil works, standardized islanding logic and SCADA driven forecasting reduce the frequency and severity of damage, lowering lifecycle repair and replacement costs and improving asset longevity. Financially, demonstrating measurable reductions in outage risk and repair liabilities improves the bankability of resilient RE projects and creates a pathway for concessional and private co finance to follow the initial SCCF tranche; by explicitly tying SCCF incremental funding to discrete resilience items that baseline donors do not cover, the project leverages existing generation investments rather than duplicating them. Socially, sustainability is reinforced through targeted capacity building, gender responsive training and community governance arrangements that transfer O&M skills locally, ensure prioritized service to clinics and water systems during shocks, and institutionalize maintenance and emergency procedures within utilities and provincial authorities so adaptation gains persist beyond project close.

Gender Equality and Women Empowerment

The SCREPS Project design will embed gender equity and women's empowerment across all four components, recognizing that women in Vanuatu, particularly in the islands of Malekula and Espiritu Santo are central to household energy use, community resilience, and local governance, yet remain underrepresented in technical and decision-making roles. In Component 1, women will be actively engaged in consultations on infrastructure siting and design, ensuring that climate resilient energy systems reflect community priorities and household realities. Training programs for technicians under Component 1 and Component 2 will include specific targets for women's participation, enabling them to acquire technical skills in renewable energy operations, grid

management, and climate resilient maintenance. This not only addresses gender disparities in the energy workforce but also strengthens the sustainability of resilient systems by broadening the pool of skilled professionals.

In Component 3, gender considerations will be integrated into policy reforms and financing mechanisms, ensuring that women led enterprises and cooperatives can access opportunities created by resilient renewable energy investments. This is particularly relevant in the towns and communities in the islands of Malekula and Espiritu Santo, where women are active in small businesses and community organizations but often face barriers to finance. By embedding gender sensitive criteria into risk sharing instruments and regulatory frameworks, the project will create pathways for women entrepreneurs to participate in and benefit from the energy transition. Component 4 will highlight women's leadership in adaptation and resilience through knowledge platforms and regional dissemination, ensuring that women's experiences and innovations are documented and shared across Vanuatu and the Pacific. In this way, the SCREPS Project not only ensures equitable participation but also amplifies women's agency as drivers of resilience, aligning with Vanuatu's National Gender Equality Policy and GEF 8's emphasis on gender mainstreaming as a catalyst for transformational change.

Stakeholder Engagement

Stakeholders consulted during the SCREPS PIF preparation included a broad cross section of national, provincial, utility and community actors. At the national level consultations engaged MCCAMGEDM (including the Department of Energy, Department of Environment, Department of Climate Change, Department of Meteorology, Department of Geo hazards and NDMO), the Ministry of Infrastructure & Public Utilities (including Department of Public Works), the Ministry of Finance and Economic Management, and the National GEF Operational Focal Point. Provincial and local inputs came from Malampa and Sanma Provincial Governments (PTACs), area councils and community leaders on Malekula and Santo. Utilities and private sector perspectives were provided by UNELCO and Vanuatu Utilities and Infrastructure (VUI), while civil society and community voices included women's groups, youth representatives and community based organizations. These consultations surfaced practical priorities—feasibility stage risk assessments, climate informed siting, resilient access needs, provincial capacity building, and inclusive engagement—that directly informed the SCREPS adaptation focus and Component 2 knowledge products.

More detailed consultations will be carried out during the PPG phase with the same stakeholders to refine technical designs, define roles and responsibilities, and agree implementation modalities; these follow up engagements should explicitly map what each stakeholder will contribute to detailed design and to implementation. In addition to the groups already consulted, the PPG should extend outreach to customary landowners and chiefs, local contractors and equipment suppliers, telecom and transport authorities, health and water sector agencies, donor partners and financing institutions, NGOs active in gender and community resilience, academic and technical training institutes, and representatives of persons with disabilities. Engaging this wider set will ensure SCREPS captures site specific access and social safeguards needs, secures social license for siting, builds local O&M capacity, and aligns sequencing with complementary investments such as the MCRRI roads program.

Private Sector

The involvement of the private sector in the SCREPS Project is both justified and essential. In Vanuatu, private enterprises, particularly utilities such as VANPAWA, VUI and UNELCO are central to electricity generation, distribution, and operations. Their participation ensures that climate resilient standards are embedded directly into infrastructure design, grid management, and daily operations. Beyond utilities, local contractors, cooperatives, and service providers in the 2 major islands are critical for the construction, installation, and maintenance of renewable energy systems. Engaging these actors not only strengthens technical delivery but also creates opportunities for local employment and entrepreneurship, thereby enhancing community ownership and sustainability. The project design recognizes that without private sector involvement, the transition to resilient renewable energy

systems cannot be fully realized, as these entities provide the operational expertise, investment capital, and innovation needed to complement public sector leadership.

Private sector roles are envisioned across all components of the project. In Component 1, utilities and contractors will deliver climate proofed infrastructure, install battery storage systems, and operationalize modern grid management technologies. In Component 2, private training institutes and cooperatives will contribute to capacity development, ensuring that technicians—including women and youth—are certified and equipped to sustain resilient systems. In Component 3, financial institutions and independent power producers (IPPs) will be engaged through risk sharing instruments and regulatory frameworks that reduce investment risks, enabling them to mobilize capital for renewable energy ventures. In Component 4, private enterprises will participate in knowledge platforms and technology transfer agreements, ensuring that innovations are disseminated and replicated. In the islands of Malekula and Espiritu Santo, where small businesses and cooperatives are active in community development, the project will deliberately create pathways for women led and youth led enterprises to access financing and service provision opportunities. Through this multifaceted engagement, the private sector becomes a driver of resilience, contributing directly to project outputs and ensuring that the desired outcomes—stable, climate resilient renewable energy systems—are achieved and sustained.

Environmental & Social Safeguards

The proponents of the SCREPS Project had undertaken a preliminary evaluation of potential environmental and social risks linked to the design and implementation of climate resilient renewable energy systems. At the environmental level, risks include localized land disturbance from the construction of solar arrays and small hydropower facilities, potential impacts on water flows and ecosystems, and the need for careful management of waste materials such as batteries and electronic components. Social risks primarily relate to land access and tenure arrangements, ensuring equitable participation in consultations, and safeguarding vulnerable groups—including women and youth—from exclusion in decision making processes. In the islands of Malekula and Espiritu Santo, where communities are closely tied to land and natural resources, these risks are particularly sensitive and require proactive management to maintain trust and legitimacy.

To address these risks, the project will adopt internationally recognized safeguards and mitigation measures. Environmental risks will be managed through climate resilient design standards, environmental impact assessments, and site-specific management plans that incorporate erosion control, vegetation restoration, and water flow monitoring. Waste management protocols will ensure safe handling and disposal of batteries and electronic equipment, while promoting recycling where feasible. Social risks will be mitigated through inclusive stakeholder consultations, transparent land access agreements, and gender sensitive engagement strategies that guarantee women's and youth's voices are heard and integrated into planning. For the latter, key elements of the Gender Action Plan that will be prepared will be fully considered in the design of the activities in each project component. The project results framework is formulated to also include gender-specific indicators to facilitate monitoring and reporting during project implementation and during required evaluations (e.g., PIRs, MTR and TE). Appropriate resources shall be allocated to facilitate and support the implementation of the GAP. A grievance redress mechanism will be established to provide communities with a formal channel to raise concerns and seek resolution. These measures will be consolidated into a comprehensive Environmental and Social Management Framework (ESMF), ensuring that risks are systematically identified, monitored, and addressed throughout the project cycle. In this way, the SCREPS Project safeguards both environmental integrity and social equity, reinforcing its commitment to sustainable and inclusive development in Vanuatu.

Knowledge Management

The SCREPS Project adopts a structured approach to knowledge management and learning, ensuring that information generated through capacity development, infrastructure deployment, and institutional strengthening is systematically captured, analyzed,

and disseminated. Knowledge products will include technical guidelines, training curricula, policy briefs, and community case studies, all designed to be practical and replicable. In Vanuatu, this approach will be anchored in national institutions such as the Ministry of Climate Change and the Department of Energy, while the relevant provincial governments in the 2 islands will play a central role in contextualizing lessons to local realities. Community level experiences, particularly those of women's groups and youth cooperatives, will be documented to ensure that knowledge reflects diverse perspectives and is directly relevant to households and small enterprises.

Dissemination will be guided by a communication strategy that combines traditional and modern channels. Locally, village meetings, radio broadcasts, and awareness campaigns in Bislama and vernacular languages will ensure accessibility. Nationally, workshops, online portals, and technical reports will provide decision makers and practitioners with timely information. Regionally, partnerships with SPC, SPREP, and the Pacific Islands Forum will enable lessons to be shared across Pacific SIDS, contributing to replication and scale up. By embedding inclusivity, accessibility, and gender sensitivity into knowledge management, the SCREPS Project ensures that learning is not only documented but actively applied to strengthen resilience at multiple levels.

Core Indicators

GEF Core Indicators (Relevant to SCREPS Project)

Project Core Indicators		Expected at PIF
4	Area of **landscapes under improved practices** (hectare) *(Estimated footprint of climate-proofed RE installations)*	0.002 million ha
6	**Greenhouse Gas Emissions Mitigated** (metric tons of CO_2e) *(Displacement of diesel-based power generation by RE installations)*	0.045 million tCO_2e
11	People benefiting from GEF-financed investments **disaggregated by sex** (count) *(Beneficiaries of RE power supply and capacity development opportunities)*	12,000 people (50% female, 50% male)

The SCREPS Project contributes to three GEF-8 Core Indicators. The first one is Core Indicator 4 (Area of landscapes under improved practices; excluding protected areas, million ha). This is through improved land use for RE infrastructure. Based on the relevant project activities, the estimated footprint of climate proofed RE installations is about 0.002 million ha (≈20 ha). Core Indicator 6 (Greenhouse gas emissions mitigated, million metric tons of CO_2e) is of high relevance. The project promotes RE expansion and grid efficiency, displacing diesel-based power generation, and in so doing reduce about 0.045 million tCO_2e (≈45,000 tCO_2e). Core Indicator 11 (Number of direct beneficiaries disaggregated by gender) is highly relevant. This is based on population coverage in Malekula and East Santo and the extent of the benefits from reliable RE electricity supply and the capacity development initiatives. This is approximately 12,000 people (6,000 women, 6,000 men).

For all 3 core indicators, the methodological approach combines quantitative estimation and logical reasoning grounded in project design and baseline data. For CI-4, the estimation basis is land area of RE infrastructure and buffer zones, and that is the sum of site footprints (solar + hydro) based on climate resilient land management around installations. For CI-6, the estimation basis is diesel displacement and grid efficiency, and that is baseline emissions × % reduction in fossil fuel use since RE expansion directly reduces CO_2 emissions. For C11, the estimation basis is the population served by improved electricity reliability, and that is Utility coverage × demographic ratio, based on the logic of equitable access and gender balance in service delivery. In a nutshell, for these indicators, the underlying logic emphasizes transformation through renewable energy adoption, inclusive participation, and climate resilient land management.

Since the SCREPS Project is funded by the SCCF, the tracking of the achievement of LDCF Core Indicators that are relevant to climate change adaptation shall also be done during project implementation.

LDCF Core Indicators (Relevant to Climate Change Adaptation)

Core Indicator	PIF	CEO Endorsement	Mid-Term Review	Terminal Evaluation
1: Number of direct beneficiaries	25,000	25,000	18,000	25,000 (12,500 Male; 12,500 Female)
2: Area of land managed for climate resilience, ha	2,000	2,000	1,400	2,000
3: Total number of plans, policies and frameworks that will mainstream climate resilience	3	3	2	1
4: Number of people trained or with awareness raised	600	600	400	600 (300 Male; 300 Female)
5: Number of private sector enterprises engaged in climate change adaptation and resilience actions	5	5	2	5

The adaptation benefits that are brought about by the project can include number of direct beneficiaries such as people benefiting from reduced exposure to outages; improved access to reliable power for households, clinics, schools and water systems. The area of land managed for climate resilience refers to the hectares of land resources with reduced flood and erosion risk at generation and substation sites through raised platforms, drainage and vegetative buffers. The number of plans, policies and frameworks mainstreaming climate resilience refers to institutional changes that results from SCREPS Project activities such as institutionalization of grid codes, procurement templates and emergency SOPs that require resilient RE design. The number of people trained or with awareness raised refers to benefits such as strengthened local capacity for resilient O&M, emergency response and community governance, including women and vulnerable groups. Lastly, the number of private sector enterprises engaged refers to benefits such as mobilized local contractors, O&M firms and suppliers to deliver resilient RE works and sustain services.

The explanations for the estimated annual targets for each Core Indicator are as follows: Beneficiaries (Indicator 1) – these are proportional to infrastructure investments (Component 1 baseline + incremental); and a general rule of thumb: ~2,000–3,000 beneficiaries per US$ 100,000 incremental investment in energy resilience. Land managed (Indicator 2) – This refers to the footprint of climate-proofed infrastructure. The estimate is based on a rule of thumb: ~0.0007 M ha per US$ 100,000 incremental investment in infrastructure resilience. Policies mainstreamed (Indicator 3): These are typically 1–2 per year, aligned with national planning cycles. People trained (Indicator 4) - this is Proportional to Component 2 incremental budget and based on a general rule of thumb: ~100–150 trained per US$ 100,000 incremental investment in training/capacity. Private sector enterprises engaged (Indicator 5) – this is proportional to Component 3 incremental budget and based on a general rule of thumb: ~10–15 enterprises per US$ 100,000 incremental investment in policy/finance engagement.

In addition to GEF Core Indicators, the project will monitor adaptation outcomes through resilience performance metrics, including: (i) reduction in average outage duration during extreme climate events; (ii) reduced recovery time for electricity services following cyclones; (iii) increased continuity of electricity supply to critical services; and (iv) enhanced integration of climate risk into utility operations and provincial energy planning. These indicators will be refined at CEO Endorsement stage based on baseline assessments and system modelling.

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

The proposed SCREPS Project will be implemented in synergy with a diverse portfolio of ongoing and planned initiatives in Vanuatu's energy and climate sectors. This cooperative approach ensures complementarity, avoids duplication, and maximizes synergies across national and regional programs.

Several projects provide the baseline activities that are directly subsumed into SCREPS components and outputs. These include the ADB Energy Access Project (expanding hydropower capacity in Malekula Island and extending the VUI grid in East

Santo in Espiritu Santo Island), the Sarakata Hydropower Expansion, and the NZ funded RESSET Project introducing solar and storage systems in Efate and Tanna. Parallel adaptation programs such as PEBACC+, the National Adaptation Programme of Action (NAPA) and National Adaptation Plan (NAP), the Climate Futures Portal, and provincial disaster risk reduction initiatives provide climate risk data, resilience planning, and community awareness. SCCF financing adds the critical dimension of climate resilience, ensuring that these baseline investments are safeguarded against climate shocks.

The proposed SCREPS Project is comprised of subsumed activities from relevant baseline projects in the country and incremental activities that are intended to bring about climate change adaptation (CCA) benefits. The proposed incremental activities are clearly additional to the ongoing and planned donor funded baseline projects because they finance tangible, site specific resilience measures that are not standard components of power generation or basic hybridization packages. Baseline projects supported by ADB, JICA, NZMFAT and others typically fund the core assets—turbines, PV arrays, battery energy storage systems and basic control equipment—designed to meet energy access and mitigation targets under normal operating conditions. The SCREPS incremental package, by contrast, pays for engineered upgrades and civil works (e.g., cyclone rated mounting and foundations, elevated and waterproofed system enclosures, corrosion resistant materials for coastal cabling, reinforced intakes and penstocks) and for control and protection hardware and software that explicitly reduce vulnerability to extreme wind, flooding and salt corrosion. Because these resilience items are not routinely budgeted into the baseline procurement and construction scopes, funding them through SCCF is additive: it closes adaptation gaps left by the baseline investments rather than duplicating them.

Other initiatives, while not subsumed, provide complementary benefits. The Vanuatu Green Transformation (VGET) Project, funded by Japan, supports the achievement of 100% renewable electricity by 2030. SCREPS complements this by embedding resilience into RE expansion, ensuring that VGET's investments are climate proofed. Ongoing GEF projects also provide synergies, including the Integrated Sustainable Land and Coastal Management Project, the Strengthening Climate Information and Early Warning Systems Project, and regional initiatives under the Pacific SIDS cluster. Planned GEF 8 projects such as the Enabling Next Generation Energy Finance (eNGEF) and the Pacific E Mobility Project will strengthen financing and transport decarbonization. SCREPS complements these by piloting risk sharing instruments and embedding resilience criteria into financing frameworks, ensuring that future investments mobilized through eNGEF and related programs are climate resilient.

Coordination will be formalized through the Project Board, which will include government, utilities, donor partners, and civil society. This platform will ensure alignment with national priorities, facilitate information exchange, and promote complementarity with ongoing programs. Through this cooperative approach, the SCREPS Project safeguards and enhances the impact of baseline investments, reduces climate vulnerability in 2 major islands of Espiritu Santo and Malekula, and generates adaptation benefits with mitigation co benefits. It positions Vanuatu's energy transition as both low carbon and climate resilient, while creating replicable models for other Small Island Developing States.

In summary, the proposed SCREPS Project will have climate-resilience integration with some of these ongoing baseline projects/programs, wherein specific activities of these are subsumed into it. The subsumed Baseline Activities are from the following: ADB Energy Access Project, Sarakata Hydropower Expansion, NZ RESSET Project, PEBACC+, NAPA/NAP, Climate Futures Portal, Provincial DRR Programs. On the other hand, the proposed SCREPS Project will gave complementary synergies with other ongoing projects/programs such as: Vanuatu Green Transformation (VGET), GEF Integrated Sustainable Land & Coastal Management, GEF Strengthening Climate Information & EWS, Planned GEF 8 eNGEF, and GEF 8 Pacific E Mobility Project.

Core Indicators

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

META INFORMATION – SCCF

LDCF **false**	SCCF-B (Window B) on technology transfer **false**	SCCF-A (Window-A) on climate Change adaptation **true**
Is this project LDCF SCCF challenge program? **false**		

This Project involves at least one small island developing State(SIDS). **true**
This Project involves at least one fragile and conflict affected state. **false**
This Project will provide direct adaptation benefits to the private sector. **true**
This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs). **true**
This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below

Green Climate Fund **false**	Adaptation Fund **false**	Pilot Program for Climate Resilience (PPCR) **false**

This Project has an urban focus. **false**
This project will directly engage local communities in project design and implementation **true**
This project will support South-South knowledge exchange **true**
This Project covers the following sector(s)[the total should be 100%]: *

Agriculture	10.00%
Nature-based management	70.00%
Climate information services	0.00%
Coastal zone management	15.00%
Water resources management	0.00%
Disaster risk management	0.00%
Other infrastructure	5.00%
Tourism	0.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise **true**	Change in mean temperature **false**	Increased climatic variability **true**	Natural hazards **true**
Land degradation **true**	Coastal and/or Coral reef degradation **true**	Groundwater quality/quantity **false**	

CORE INDICATORS – SCCF

	Total	Male	Female	% for Women

CORE INDICATOR 1 Total number of direct beneficiaries	25,000	12,500.00	12,500.00	50.00%
CORE INDICATOR 2 (a) Area of land managed for climate resilience (ha) (b) Coastal and marine area managed for climate resilience (ha)	2,000.00 0.00			
CORE INDICATOR 3 Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	3.00			
CORE INDICATOR 4 Number of people trained or with awareness raised	600	300.00	300.00	50.00%
CORE INDICATOR 5 Number of private sector enterprises engaged in climate change adaptation and resilience	5.00			

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Substantial	Assessment: Extreme exposure to cyclones, floods, droughts Mitigation: Climate-proof design; hazard risk assessment; adaptive management
Environmental and Social	Substantial	Assessment: Catchment disturbance; land tenure disputes; FPIC requirements Mitigation: ESIA, ESMP, IPP, grievance redress mechanism
Political and Governance	Moderate	Assessment: Land tenure complexities; limited institutional capacity Mitigation: Stakeholder engagement; institutional strengthening
INNOVATION		
Institutional and Policy	Moderate	Assessment: Limited prior experience in adaptation-energy integration Mitigation: Policy support; capacity-building
Technological	Moderate	Assessment: Limited policy support & capacity-building Mitigation: Use of knowledge products that include technical guidance on carrying out feasibility studies; climate-proof design, etc.
Financial and Business Model	Moderate	Assessment: Limited innovative blended finance and ownership models Mitigation: Transparent financial management; community training
EXECUTION		

Capacity	Moderate	Assessment: Limited technical/managerial capacity Mitigation: Training; PMU support; UNDP oversight
Fiduciary	Low	Assessment: Potential misuse of funds Mitigation: UNDP fiduciary standards; audits
Stakeholder	Moderate	Assessment: Potential exclusion of vulnerable groups Mitigation: FPIC; Gender Action Plan; participatory monitoring
Other	Moderate	Assessment: External shocks (fuel prices, pandemics) Mitigation: Diversified financing; adaptive management
Overall Risk Rating	Substantial	Unavoidable contextual and safeguard risks in Vanuatu's fragile environment and land tenure systems, even though most innovation and execution risks are reduced to Moderate or Low.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

The proposed SCREPS Project is firmly aligned with the strategic directions of the GEF 8 Programming Framework and with Vanuatu's national and regional priorities. Within the GEF 8 architecture, the project contributes most directly to the Climate Change Focal Area, specifically the programming strategy on "Accelerating the Energy Transition" and "Building Resilience in Small Island Developing States (SIDS)". By embedding climate resilience into renewable energy infrastructure, grid management, and institutional frameworks, the project advances both mitigation and adaptation objectives in a highly vulnerable SIDS context.

The project also supports the GEF 8 emphasis on systems transformation. It does so by integrating resilience into the energy system as a whole—linking infrastructure, institutions, policies, and knowledge platforms. This systemic approach ensures that renewable energy expansion is not only achieved but is sustainable under conditions of increasing climate variability. The project's design reflects GEF 8's call for innovative financing mechanisms, through the piloting of risk sharing instruments and the embedding of resilience criteria into energy finance frameworks, complementing initiatives such as the planned GEF 8 eNGEF project.

At the national level, the project is fully consistent with Vanuatu's National Energy Roadmap (NERM), which sets the target of achieving 100% renewable electricity by 2030, and with the country's Nationally Determined Contribution (NDC) under the Paris Agreement. It directly supports the implementation of the National Adaptation Plan (NAP) by mainstreaming climate resilience into energy planning and policy. The SCREPS Project also complements the Vanuatu Green Transformation (VGET) Project funded by Japan,

ensuring that the drive toward 100% renewable electricity is accompanied by climate proofing measures that safeguard investments against extreme events.

Regionally, the project contributes to the Framework for Resilient Development in the Pacific (FRDP) and aligns with the priorities of the Pacific Islands Forum (PIF) and the Pacific Community (SPC). By generating knowledge products and disseminating lessons learned, the project will benefit at least five other Pacific SIDS, thereby advancing regional cooperation and replication.

In summary, the SCREPS Project embodies the spirit of GEF 8 programming by delivering transformational change in the energy sector of a highly vulnerable SIDS. It strengthens resilience, accelerates the energy transition, and ensures coherence with national and regional strategies. Through this alignment, the project maximizes global environmental benefits while safeguarding national development gains.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

Summary of Stakeholder Consultations

Key Issues to Address: The stakeholders identified a compact set of interlinked issues that the planned SCCF-funded SCREPS Project must address to secure electricity services against a changing climate: electricity infrastructure is already suffering increasing damage from stronger cyclones, heavier rainfall, flooding and landslides, and utilities face acute challenges maintaining and accessing generation and distribution assets during extreme events, which underscores the urgent need for improved grid reliability, climate-resilient storage and tested islanding solutions; transport and access routes—especially on Malekula—are themselves climate-vulnerable, and loss of roads, wharves or landing sites materially lengthens outage durations and undermines

O&M and emergency response, so feasibility-stage, site-specific risk assessments and targeted access works are essential prerequisites for resilient energy siting; institutional and capacity shortfalls at provincial and utility levels—limited local technical skills for climate-proof design and maintenance, and weak national-provincial coordination—must be closed through hands-on training, formalized SOPs and decentralized planning support; and social and environmental safeguards are central to success, requiring early engagement with customary landowners, transparent grievance mechanisms and deliberate measures to include women, youth and vulnerable groups in training and employment so that resilience investments are socially legitimate, technically sustainable and equitably beneficial.

Recommendations for proposed SCCF Project: The stakeholder consultation recommendations for SCREPS converge on a coherent set of priorities that should be made explicit in the project design: require climate-informed feasibility and hazard mapping to guide resilient siting and civil works; attach engineered resilience to any RE scale-up (elevated and waterproofed BESS pads, cyclone-rated mounting, corrosion-resistant cabling, islanding switchgear); expand meteorological monitoring, short-term forecasting and telemetry to feed SCADA and enable anticipatory dispatch; strengthen telecommunications and early-warning links to communities; institutionalize contingency planning, priority-load arrangements and tested emergency SOPs; build provincial technical capacity and decentralized financing windows; and mainstream social safeguards including early customary landowner engagement, transparent grievance mechanisms and gender-responsive training and employment. These recommendations align with the planned SCREPS components and are helpful in designing the project to close the adaptation gaps identified while coordinating effectively with complementary programs such as the planned MCRRI Project.

Dates of Stakeholders Consultations

Consultation	Date	Venue	Participation
Sanma Provincial Council	3 February 2026	Espiritu Santo, Luganville - Sanma Provincial Council – Women's Center Building	Sanma Provincial Council, PTAC Membership
Malampa Provincial Council	4 February 2026	Malekula, Lakatoro – LDC Building	Malampa Provincial Council, PTAC Membership

Stakeholder consultation process.

The stakeholder consultation process for the SCREPS PIF was actively led by senior officials from the Ministry of Climate Change (including the Departments of Meteorology, Environment, Climate Change and Energy) in close collaboration with Malampa and Sanma Provincial Governments and the Provincial Technical Advisory Commissions, and it combined targeted bilateral meetings with national ministries and departments, multi-stakeholder workshops with provincial authorities and utilities, community-level consultations with local leaders, women's groups and youth representatives, and focused discussions with private sector actors and development partners; all engagements emphasized inclusive participation, gender sensitivity and culturally appropriate communication, and where relevant were conducted in Bislama or local languages to ensure broad understanding and input.

Stakeholder engagement will be conducted throughout the project cycle to ensure transparency, inclusiveness, and responsiveness to community needs. More detailed stakeholder consultations need to be carried out at the local level during the PPG phase. During the PPG phase, structured stakeholder consultations will be conducted with national institutions, provincial authorities, community representatives, and civil society organizations. A full Stakeholder Engagement Plan (SEP) will be developed during the PPG phase as a key deliverable. The SEP will detail how communities, civil society organizations, and other stakeholders will participate throughout project implementation and monitoring.

Stakeholder participation will continue throughout project implementation to support ownership and sustainability of outcomes. Future engagement will therefore be structured, continuous, and formally documented through the SEP, ensuring that stakeholder voices are embedded in decision-making, monitoring, and adaptive management processes across the project

lifecycle. Among the identified stakeholder groups that are planned to be consulted during the PPG stage in regards their potential contributions/roles in the design and development, and implementation of the SCREPS Project, are the following:

Stakeholder Group	Contribution & Role in Project Design & Development	Contribution & Role in Project Implementation
Government of Vanuatu (MCCAMGEDM; DoE; VUI; Malampa & Sanma Provincial Governments; Ministry of Health; NDMO)	Lead policy alignment and approvals; provide climate/hazard data; define technical requirements; coordinate donor inputs and provincial consultations.	Oversee procurement and contracting; supervise compliance and integration into national plans; operate provincial coordination platforms; provide counterpart staff and emergency coordination.
Indigenous Peoples & Local Communities (customary chiefs; Village Development Committees; women's groups; disability representatives)	Provide local knowledge for site selection, customary land tenure guidance, participatory risk assessments and priority load mapping.	Serve on Community Energy Committees; co manage local O&M; perform routine monitoring and first line repairs after training; lead local NBS and grievance mechanisms.
Non-Government Organizations (Live & Learn; Oxfam Vanuatu; Care International; Wan Smolbag)	Advise on community engagement, gender sensitive safeguards, participatory planning and NBS design; support baseline studies.	Deliver community outreach and capacity building; implement ecosystem restoration pilots; monitor social safeguards and support post event recovery.
Civil Society Organizations (VNCW; VDPA; local church networks)	Represent vulnerable groups in consultations; co design accountability, equitable tariff and subsidy approaches; advise on inclusion measures.	Mobilize community monitoring and awareness campaigns; support inclusive training and grievance redress; act as independent social safeguard monitors.
Private Sector (UNELCO/ENGIE; VANPAWA; contractors; local suppliers; battery/PV vendors; logistics firms)	Provide technical specifications, cost estimates, O&M models and commercial input for resilient hardware and blended finance structures.	Execute construction and installation; supply and warranty equipment; deliver O&M under performance contracts; provide apprenticeships and local supply chain services.
Academe (USP Emalus Campus; Vanuatu Institute of Technology; Sanma Technical Institute)	Supply applied research, downscaled climate analysis, vulnerability assessments, feasibility studies and curriculum development for certification.	Deliver formal training and certification; host knowledge platforms and data repositories; conduct independent M&E and document lessons for replication.

Local communities in Malekula, Espiritu Santo and Efate will be engaged not merely as passive beneficiaries but as full partners in the governance and delivery of SCREPS from design through operation. From the outset, the project will institutionalize community representation in decision making bodies, including seats for customary chiefs, women's group representatives, youth and persons with disabilities so that site selection, priority load lists for islanding, and social safeguards reflect local priorities and customary land arrangements. Community Energy Committees will be formalized with clear mandates to participate in procurement review for local works, to co-manage community level O&M contracts, and to approve benefit sharing arrangements such as community resilience funds or subsidized tariffs for vulnerable households. Free, prior and informed consent processes and culturally appropriate consultation protocols will be used to secure land access and to ensure that traditional governance structures and local knowledge shape technical choices (e.g., siting elevated BESS pads away from sacred sites and aligning drainage works with local land use practices).

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNDP	SCCF-A	Vanuatu	Climate Change	SCCF-A Country allocation	Grant	2,639,726.00	250,774.00	2,890,500.00
Total GEF Resources ($)						**2,639,726.00**	**250,774.00**	**2,890,500.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

100000

PPG Agency Fee ($)

9500

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
UNDP	SCCF-A	Vanuatu	Climate Change	SCCF-A Country allocation	Grant	100,000.00	9,500.00	109,500.00
Total PPG Amount ($)						**100,000.00**	**9,500.00**	**109,500.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CCA-2-1	SCCF-A	2,639,726.00	13420000
Total Project Cost		**2,639,726.00**	**13,420,000.00**

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	National & Provincial Government	In-kind	Recurrent expenditures	1000000
Recipient Country Government	National Government	Grant	Investment mobilized	11500000
Private Sector	UNELCO, VUI, IPPs	Grant	Investment mobilized	770000

GEF Agency	UNDP	In-kind	Investment mobilized	150000
Total Co-financing				**13,420,000.00**

Describe how any "Investment Mobilized" was identified

The Government of Vanuatu (GOV), as represented by the MCCAMGEDM, which is the designated implementing partner for this proposed SCCF-funded project has been developing and implementing projects (including those funded by the GEF) with various regional development and bilateral donor agencies. They work together with these donor partners for mobilizing the funds for these projects that contributes to the sustainable social, energy and economic development of the country. Among these projects are those funded by ADB, JICA, ADFAT, and NZMFAT on renewable energy expansion, electric power system infrastructure development, energy access initiatives, climate and disaster resilience programs and energy planning. The proposed SCREPS Project builds on interventions from some of these projects, and specific activities from some of these are to be subsumed into the proposed project as baseline activities. The funds allocated for such activities are considered investments mobilized from the GOV. Private sector entities (mainly the two utilities, and any interested entrepreneurs in power production and distribution in the project areas will be encouraged to co-finance relevant project activities under proper agreements with the project authorities. During the project design and development, expressions of interest and commitments from the pertinent provincial governments in the 2 major islands (Malekula and Espiritu Santo) and the private sector entities to participate and co-finance pertinent activities of this proposed project. In this regard, the proponents of the SCREPS Project is leveraging some of the investments mobilized by the GOV for the ongoing and planned projects and initiatives funded by its donor partners. The MCCAMGEDM (specially the Department of Energy) will explore further commitments as needed during the design and development stage of the project.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Nancy Bennet	5/15/2026	Director, Quality and Impact Hub/ Executive Coordinator , Vertical funds		nancy.bennet@undp.org
Project Coordinator	Karma Rapten	5/15/2026	Regional Technical specialist		Karma.rapten@undp.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Mr. David Gibson	Director General	Ministry of Climate Change Nambatu Area	5/5/2026

ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place

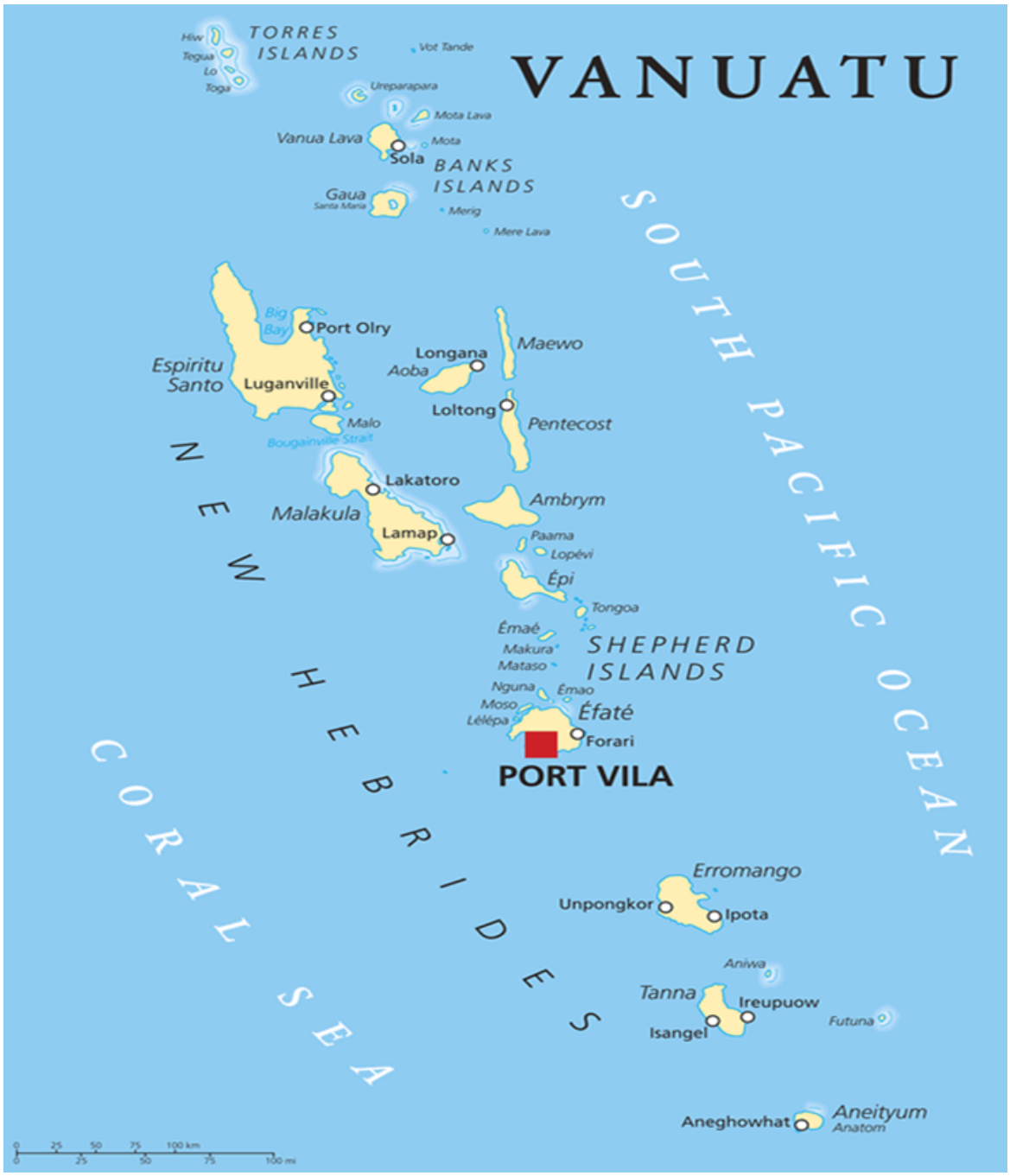
Geo-Referenced Coordinates of Intervention Sites

- **Malekula Island**
  - Latitude: **16.3038° S**
  - Longitude: **167.4078° E**

- Focus: Climate-resilient renewable energy infrastructure upgrades, grid extension, and community resilience programs.

- **Espiritu Santo Island**
  - Latitude: **15.2337° S**
  - Longitude: **167.1763° E**
  - Focus: Grid strengthening, hydropower expansion, and integration of resilience measures into provincial energy planning.

The Project interventions are concentrated in **Malekula** and **East Santo**, two provinces that are both highly vulnerable to climate shocks and central to Vanuatu's renewable energy transition. Malekula will benefit from climate-proofed infrastructure and community-level resilience measures, while East Santo will host grid strengthening and hydropower expansion activities.



ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title
SESP SCREPS final_16 June 2026
Pre_SESP_clean

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Principal Objective 2	No Contribution 0	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

Level1	Level2	Level3	Level4
☒ Influencing models			
	☒ Transform policy and regulatory environments		
	☒ Strengthen institutional capacity and decision-making		
	☐ Convene multi-stakeholder alliances		
	☐ Demonstrate innovative approaches		
	☐ Deploy innovative financial instruments		
☒ Stakeholders			
	☐ Indigenous Peoples		
	☒ Private Sector		
		☐ Capital providers	
		☐ Financial Intermediaries and market facilitators	
		☒ Large corporations	
		☐ SMEs	
		☐ Individuals/Entrepreneurs	
		☐ Non-Grant Pilot	
		☐ Project Reflow	
	☒ Beneficiaries		
	☒ Local Communities		
	☐ Civil Society		
		☒ Community Based Organization	
		☐ Non-Governmental Organization	
		☐ Academia	
		☐ Trade Unions and Workers Unions	
	☒ Type of Engagement		
		☒ Information Dissemination	
		☒ Partnership	
		☒ Consultation	
		☒ Participation	
	☒ Communications		
		☒ Awareness Raising	
		☐ Education	
		☒ Public Campaigns	
		☒ Behavior Change	
		☒ Strategic Communications	
☒ Capacity, Knowledge and Research			
	☐ Enabling Activities		
	☒ Capacity Development		
	☒ Knowledge Generation		
		☐ Course	
		☐ Professional development	

		☐ Workshop	
		☒ Seminar	
		☐ Master Classes	
		☒ Training	
	☐ Targeted Research		
	☐ Learning		
		☐ Theory of Change	
		☐ Adaptive Management	
		☐ Indicators to Measure Change	
	☐ Innovation		
	☒ Knowledge Exchange		
		☒ South-South	
		☒ Field Visit	
		☐ North-North	
		☒ Peer-to-Peer	
		☐ Conference	
		☐ Exhibit	
		☐ Twinning	
☒ Gender Equality			
	☒ Gender Mainstreaming		
		☒ Beneficiaries	
		☐ Women groups	
		☒ Sex-disaggregated indicators	
		☐ Gender-sensitive Indicators	
	☒ Gender results areas		
		☐ Access and Control over natural resources	
		☒ Participation and leadership	
		☐ Access to benefits and Services	
		☒ Capacity development	
		☒ Awareness raising	
		☐ Knowledge generation and Exchange	
☒ Focal Areas/Theme			
	☐ Sustainable Development Goals		
	☐ Integrated Programs		
		☐ Commodity Supply Chains(Good Growth Partnership)	
			☐ Sustainable Commodities Production
			☐ Deforestation-free Sourcing
			☐ Financial Screening Tools

			☐ High Conservation Value Forests
			☐ High Carbon Stocks Forests
			☐ Soybean Supply Chain
			☐ Oil Palm Supply Chain
			☐ Beef Supply Chain
			☐ Small holder Farmers
			☐ Adaptive Management
		☐ Food Security in Sub-Sahara Africa	
			☐ Resilience (climate and shocks)
			☐ Sustainable Production Systems
			☐ Agroecosystems
			☐ Land and Soil Health
			☐ Diversified Farming
			☐ Integrated Land and Water Management
			☐ Small holder Farming
			☐ Small and Medium Enterprises
			☐ Crop Genetic Diversity
			☐ Food Value Chains
			☐ Gender Dimensions
			☐ Multi-stakeholder Platforms
		☐ Food Systems, Land Use and Restoration	
			☐ Sustainable Food Systems
			☐ Landscape Restoration
			☐ Sustainable Commodity Production
			☐ Comprehensive Land Use Planning
			☐ Integrated Landscapes
			☐ Food Value Chains
			☐ Deforestation-free Sourcing
			☐ Smallholder Farmers
		☐ Sustainable Cities	
			☐ Integrated urban planning
			☐ Urban sustainability framework
			☐ Transport and Mobility
			☐ Buildings
			☐ Municipal waste management
			☐ Greenspace
			☐ Urban Biodiversity
			☐ Urban Food Systems
			☐ Energy efficiency
			☐ Municipal Financing

			☐ Global Platform for Sustainable Cities
			☐ Urban Resilience
	☐ Biodiversity		
		☐ Protected Areas and Landscapes	
			☐ Terrestrial Protected Areas
			☐ Coastal and Marine Protected Areas
			☐ Productive Landscapes
			☐ Productive Seascapes
			☐ Community Based Natural Resource Management
		☐ Mainstreaming	
			☐ Extractive Industries(oil, gas, mining)
			☐ Forestry(Including HCVF and REDD+)
			☐ Tourism
			☐ Agriculture & agrobiodiversity
			☐ Fisheries
			☐ Infrastructure
			☐ Certification(National Standards)
			☐ Certification(International Standards)
		☐ Species	
			☐ Illegal Wild life Trade
			☐ Threatened Species
			☐ Wildlife for Sustainable Development
			☐ Crop Wild Relatives
			☐ Plant Genetic Resources
			☐ Animal Genetic Resources
			☐ Livestock Wild Relatives
			☐ Invasive Alien Species(IAS)
		☐ Biomes	
			☐ Mangroves
			☐ Coral Reefs
			☐ Sea Grasses
			☐ Wetlands
			☐ Rivers
			☐ Lakes
			☐ Tropical Rain Forests
			☐ Tropical Dry Forests
			☐ Temperate Forests

			☐ Grasslands
			☐ Paramo
			☐ Desert
		☐ Financial and Accounting	
			☐ Payment for Ecosystem Services
			☐ Natural Capital Assessment and Accounting
			☐ Conservation Trust Funds
			☐ Conservation Finance
		☐ Supplementary Protocol to the CBD	
			☐ Biosafety
			☐ Access to Genetic Resources Benefit Sharing
	☐ Forests		
		☐ Forest and Landscape Restoration	
			☐ REDD/REDD+
		☐ Forest	
			☐ Amazon
			☐ Congo
			☐ Drylands
	☐ Land Degradation		
		☒ Sustainable Land Management	
			☐ Restoration and Rehabilitation of Degraded Lands
			☐ Ecosystem Approach
			☐ Integrated and Cross-sectoral approach
			☐ Community-Based NRM
			☐ Sustainable Livelihoods
			☐ Income Generating Activities
			☐ Sustainable Agriculture
			☐ Sustainable Pasture Management
			☐ Sustainable Forest/Woodland Management
			☒ Improved Soil and Water Management Techniques
			☐ Sustainable Fire Management
			☐ Drought Mitigation/Early Warning

		☐ Land Degradation Neutrality	
			☐ Land Productivity
			☐ Land Cover and Land cover change
			☐ Carbon stocks above or below ground
		☐ Food Security	
	☐ International Waters		
		☐ Ship	
		☐ Coastal	
		☐ Freshwater	
			☐ Aquifer
			☐ River Basin
			☐ Lake Basin
		☐ Learning	
		☐ Fisheries	
		☐ Persistent toxic substances	
		☐ SIDS:Small Island Dev States	
		☐ Pollution	
			☐ Persistent toxic substances
			☐ Plastics
			☐ Nutrient pollution from all sectors except wastewater
			☐ Nutrient pollution from Wastewater
		☐ Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		☐ Strategic Action Plan Implementation	
		☐ Areas Beyond National Jurisdiction	
		☐ Large Marine Ecosystems	
		☐ Aquaculture	
		☐ Marine Protected Area	
		☐ Biomes	
			☐ Mangrove
			☐ Coral Reefs
			☐ Seagrasses
			☐ Polar Ecosystems
			☐ Constructed Wetlands
	☐ Chemicals and Waste		
		☐ Mercury	
			☐ Artisanal and Scale Gold Mining
			☐ Coal Fired Power Plants
			☐ Coal Fired Industrial Boilers
			☐ Cement
			☐ Non-Ferrous Metals Production

		☐ Ozone	
		☐ Persistent Organic Pollutants	
			☐ Unintentional Persistent Organic Pollutants
			☐ New Persistent Organic Pollutants
			☐ Polychlorinated Biphenyls
		☐ Sound Management of Chemicals and Waste	
		☐ Waste Management	
			☐ Hazardous Waste Management
			☐ Industrial Waste
			☐ e-Waste
		☐ Emissions	
		☐ Disposal	
		☐ Plastics	
		☐ Eco-Efficiency	
		☐ Pesticides	
			☐ DDT-Vector Management
			☐ DDT-Other
		☐ Industrial Emissions	
		☐ Open Burning	
		☐ Best Available Technology/Best Environmental Practices	
		☐ Green Chemistry	
	☒ Climate Change		
		☒ Climate Change Adaptation	
			☒ Climate Finance
			☐ Least Developed Countries
			☐ Small Island Developing States
			☐ Disaster Risk Management
			☐ Sea-level rise
			☒ Climate Resilience
			☐ Climate information
			☐ Ecosystem-based Adaptation
			☐ Adaptation Tech Transfer
			☐ National Adaptation Programme of Action
			☐ National Adaptation Plan
			☐ Mainstreaming Adaptation
			☐ Private Sector
			☐ Innovation
			☐ Complementarity

			☐ Community-based Adaptation
			☐ Livelihoods
		☒ Climate Change Mitigation	
			☐ Agriculture, Forestry, and other Land Use
			☐ Energy Efficiency
			☐ Sustainable Urban Systems and Transport
			☐ Technology Transfer
			☒ Renewable Energy
			☐ Financing
		☐ United Nations Framework on Climate Change	
			☐ Nationally Determined Contribution
			☐ Paris Agreement
			☐ Enabling Activities
			☐ Capacity Building Initiative for Transparency
☐ Fragile and Conflict-Affected Situations			
	☐ Conflict		
	☐ Institutional and Social Fragility		