United Nations Development Programme

MULTI-COUNTRY PROJECT DOCUMENT

Project Title: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development

Project Number:

Project title	Project ID
REG: Promoting Green Transformation	01000357
PNG: Promoting Green Transformation	01000396
TLS: Promoting Green Transformation	01000417
WSM: Promoting Green Transformation	01000418
VAN: Promoting Green Transformation	01000416

Start Date: 29 June 2023 **End Date:** 21 February 2025 **PAC Meeting date:** 21 March 2023

Countries Participating:

Country	**Implementing Partner**	**Outputs to be delivered by country**
Papua New Guinea	UNDP	**Output 1:** Build resilience of Bougainville through expansion of renewable energy access
Samoa	UNDP	**Output 1:** Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems **Output 2:** Accelerated inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener public transport systems **Output 3:** Accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on fishing vessels
Timor-Leste	UNDP	**Output 1:** Households not connected to the national electricity grid have access to clean and reliable power supply **Output 2:** Health service centres have improved facilities for better service provision **Output 3:** Support select schools to have solar power-based Information, Communication and Technology (ICT) labs to promote digital teaching and learning
Vanuatu	UNDP	**Output 1:** Support to achieve the National Energy Road Map (NERM), i.e. 100% electrification with Renewable Energy by 2030 by installing eight Pico hydro projects
Bangkok Reginal Hub	UNDP	Regional Technical/Management Support • Regional management, reporting and oversight • Regional technical support and operational support • Communication, advocacy and knowledge management

Brief Description

Faced with escalating impacts of climate change compounded by the socioeconomic challenges following the COVID-19 pandemic, Small Island Developing States in the Pacific are taking the initiative in jump starting their green transformation to achieve a clean energy future and increasing resilience to climate pacts. Leveraging the countries' Nationally Determined Contributions (NDCs) that have outline the priorities and targets on clean energy and climate resilience, UNDP's Climate Promise, the world's largest offer of support to developing countries on designing and implementing these national climate commitments, is a uniquely positioned platform to support countries achieve ambitious climate targets under the urgent, necessary, and unpredictable situation faced by the Pacific SIDS. The Climate Promise framework serves as the chapeau for the 4 country-level implementations. The country-level actions and investments have been developed based on country specific needs within this framework to support countries towards realizing their green transformation ambitions for a more inclusive, gender-responsive, climate resilient future.

Direct Beneficiaries: At least 190,000 people

Indirect Beneficiaries: At least 500,000 people

Contributing Outcomes (UNSDCF/CPD or RPD):

Papua New Guinea: By 2025, Papua New Guinea demonstrates improved performance in managing environmental resources and risks emanating from climate change and disasters.

Samoa: By 2027, people, communities and institutions are more empowered and resilient to face diverse shocks and stresses, especially related to climate variability impacts, and ecosystems and biodiversity are better protected, managed, and restored.

Timor-Leste: By 2025, national and sub-national institutions and communities (particularly at-risk populations including women and children) in Timor-Leste are better able to manage natural resources and achieve enhanced resilience to climate change impacts, natural and human induced hazards, and environmental degradation, inclusively and sustainably.

Vanuatu: By 2024 eight additional communities access to green energy that contributes to achieving the National Energy Road Map (NERM) target i.e. 100% electrification with Renewable Energy by 2030

Regional: RPD Output 1.4: Sustainable, scalable and innovative solutions and

Total resources required:		**USD 37,533,970.62***
Total resources allocated:		
	UNDP TRAC:	
	Donor: Government of Japan	USD 37,533,970.62
	Government:	n/a
	In-Kind:	n/a

strategies for nature, climate and energy transformation strengthened through enhanced 'climate promise', nature-based solutions, and transitioning to clean energy and zero-carbon development. Indicative Output(s) with gender marker[1]: GEN2 *Climate Promise Pillar 1:* *1.1 Driving investment in clean energy* *1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions* *1.3 Alignment of energy targets in NDCs with net-zero pathways* *Climate Promise Pillar 2:* *2.1. Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available in fragile settings and to marginalized groups* *2.2. Aligning targets in NDCs with national adaptation strategies and plans*			

* Of which USD 37,162,341.15 is project cost and USD 371,623 is UN coordination levy.

[1] The Gender Marker measures how much a project invests in gender equality and women's empowerment. Select one for each output: GEN3 (Gender equality as a principle objective); GEN2 (Gender equality as a significant objective); GEN1 (Limited contribution to gender equality); GEN0 (No contribution to gender quality)

Agreed by (signatures)[2]:

UNDP RBAP
DocuSigned by: 5D099D7182744AD... Mr. Christophe Bahuet Deputy Regional Director, RBAP Date: 27-Jun-2023
UNDP Papua New Guinea
DocuSigned by: 4CE790FF6C56476... Mr. Dirk Wagener Resident Representative Date: 29-Jun-2023
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DocuSigned by: 91250C1EB4664A7... Ms. Adeline Carrier Resident Representative, Officer-in-Charge Date: 26-juin-2023
UNDP Samoa
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[2] Note: This document, including the signature page, may be customized as needed. Separate signature pages (one per country) can be created and signed if needed to facilitate timely approval and budget revision if multiple countries are participating. Separate signature pages should still reflect all participating partners.

Contents

DEVELOPMENT CHALLENGE

In 2022, the world stood at a critical junction to take necessary actions on climate change to ensure a sustainable world amidst the ongoing COVID-19 pandemic and uncertainty of availability and supply of food, fuel, and other commodities due to the war in Ukraine. In terms of climate change, it is projected that for every 0.1 degree increase in average global temperature, the threats from climate-induced disasters will increase exponentially, particularly on fragile natural systems. In this respect, the impacts of climate change are risk multipliers that contribute to human insecurity that already overstretched the government's capability and capacity and increased constraints for stability and peace. The update from the World Meteorological Organization confirms this. Climate and extreme weather events had significant and diverse impacts on population movement and the vulnerability of people already on the move in the South-West Pacific region. Ocean warming, deoxygenation, and acidification also forces fish to alter their migration patterns pushing fishing communities dependent on coastal and offshore fishing to increased fragility. The impact of climate change is not 'gender neutral". Women commonly face higher risks and more significant burdens from the effects of climate change. Women's unequal participation in the decision-making process and access to climate-related information compound inequalities and often prevent women from fully contributing to climate-related planning, policy-making, and implementation. Gender inequality is a persistent development challenge.

Small Island Developing States (SIDS) are on the frontlines of the climate crisis. As affirmed by SIDS leaders at COP26, climate action is a matter of survival for their nations as they face more frequent and extreme weather events causing devastating damage to environmental, human, and economic dimensions. Therefore, climate mitigation and adaptation actions are paramount, and access to finance is at the heart of climate action. SIDS, particularly those in the Pacific, are also highly vulnerable due to their dependence on imports of goods, services, and energy supply and a lack of diversification of their economies. The COVID-19 pandemic and the war in Ukraine have exacerbated these vulnerabilities; the aftershocks the SIDS feel are expected to persist for years.

In the lead-up to the critical climate change negotiations at COP27, which has often been referred to as the "resilience" COP, the G7, during their meeting in May 2022, pledged to tackle the triple global crisis of climate change, biodiversity loss, and pollution. The G7 endorsed a bold ocean action, the G7 Ocean Deal, recognizing that these challenges are inextricably interlinked and mutually reinforcing. At the 51st Pacific Islands Forum Leaders Meeting in July 2022, the leaders endorsed the 2050 Strategy for the Blue Pacific Continent. They reaffirmed the commitment to fully implement the Paris Agreement, including a collective aim to achieve carbon neutrality in the Pacific by 2050.

Pacific SIDS are submitting and implementing the national pledges on climate change under the Paris Agreement – NDCs – that outline targets for energy transition and increasing resilience to climate impacts. Taken together, these pledges demonstrate the political leadership to keep global temperature rise ideally below 1.5 degrees and work to keep the most vulnerable safe. It supports the inclusive implementation of gender-responsive actions to make women's and men's concerns and experience an integral dimension of climate-related policy and program. However, the pandemic and prolonged war in Ukraine have strained domestic budgets and international support. These essential pledges risk being underfunded and impacting lives, livelihood and human security.

UNDP's Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development (Green Transformation for Pacific SIDS) aims to respond to the direst need to enhance human security through green transformation. This project aims to help Pacific counties address urgent, necessary, unpredictable, and un-substitutable needs to achieve ambitious climate actions. These include both mitigation – primarily focused on clean energy and just transition- and resilience and adaptation – focused on supporting fragile settings on energy security and resilience. Using countries' recent submissions on national climate targets under the Paris Agreement, the project will leverage the unique networks, infrastructure, and expertise of UNDP's Climate Promise portfolio to support countries to transition toward net

zero and climate resilient development pathways - directly in line with the goals of the Paris Agreement and addressing human security for all.

(1) Urgency of the Situation

The stakes for a sustainable future could not be higher. In 2022 alone, the climate crisis has brought unprecedented levels of disasters– leading to humanitarian needs, especially in the fragile Pacific SIDS. The fluctuating commodity prices and food insecurity through production losses and supply chain disruption are pushing the most vulnerable sectors of society further into poverty. These socioeconomic realities are meeting our urgent collective need to take action to reduce emissions before it is too late – with key goals for 2030 and mid-century. Taking steps to shift the trajectory and come closer to these essential temperature goals through a green transformation push is needed now more than ever. It is critical to bolster government capacities to deliver on their national pledges and the Paris Agreement goals before decisions are locked-in that put countries – and the world – on a riskier and more unsustainable path.

(2) Necessity of the Intervention

Currently, most countries have submitted their Nationally Determined Contributions (NDCs) – or national pledges- and are now investing in translating these pledges into actions. The ability to deliver on these pledges can put the world on a pathway toward net-zero and climate resilient development and slow the human insecurity impacts of the climate crisis.

The G7 has recently put climate change at the center of its agenda, endorsed bold ocean action in the G7 Ocean Deal, as mentioned earlier, recommitting to the Glasgow Climate Pact and its 1.5C degrees Paris Agreement goal, and forming a climate club among G7 member states to drive forward the decarbonization efforts in high emitting industries.

Japan took early action back in November 2021, in early preparation for its incoming G7 Presidency in 2023, when Prime Minister Kishida committed to provide approximately USD 60 billion in public and private climate finance to developing countries and announced an additional USD 10 billion in the coming five years for decarbonization efforts in Asia and beyond. Moreover, Prime Minister Kishida has announced in June 2022 that Japan will contribute to strengthening the foundation for Pacific Island Countries' sustainable and resilient economic development, including addressing the existential challenge of climate change as part of a Free and Open Indo-Pacific.

(3) Unpredictability of the Situation

Due to the current multi-faceted crisis, nations are moving to ensure energy security from price fluctuations and supply chain disruptions. Amidst the unpredictable geo-political and economic situation, Pacific SIDS governments have been stretching their limited resources – financial, operational, and technical - to minimize the socioeconomic impacts of the COVID-19 pandemic. These compounding events have slowed down government abilities to address climate change to deal with volatile food/energy prices. As many governments have shifted focus to address the immediate, short-term impacts, many national commitments on climate change are going underfunded at exactly the same time that the stakes for addressing climate change are higher than they have ever been. The inter-connected crises present unpredictable challenges to countries, especially to Pacific Island Countries, as many different pressures begin to feed on each other and cause unforeseen impacts.

(4) Unsubstitutability of the Situation

Japan is a uniquely-trusted partner to many of the Pacific countries, particularly for addressing humanitarian and disaster risk reduction needs. Countries depend on Japan's leadership and the road to the next G7 in Hiroshima in 2023 is a critical opportunity to deliver on the recent G7/G20/COP26 pledges on climate and laying the foundation for just and green transitions. In addition, this project leverages UNDP's Climate Promise networks that have extensive expertise and on-the-ground and knowledge across countries and the region. The continuation of Japan-UNDP partnership, particularly in the current geo-political landscape, could provide urgent and critical support to help Pacific countries tackle the green transformation and climate crisis head on.

STRATEGY

UNDP's Climate Promise, the world's most extensive support to developing countries on national climate pledges, provides a uniquely positioned platform to help countries achieve climate targets amidst global challenges while protecting vulnerable and marginalized people from the insecurity of climate impacts and evolving energy and food crises. The Climate Promise is a flagship initiative by the UNDP Administrator and already supporting over 120 countries and territories to advance their NDC processes. This project to implement priority elements of the Climate Promise will help governments to obtain the most urgent support to advance climate action while addressing key issues of human security and green transformation – through increasing resilience and adaptation to climate impacts through energy security and driving innovation to urgently advance renewable energy, energy efficiency, and energy access for the most vulnerable in response to the evolving energy crisis. Supporting countries to take ambitious climate actions will also have numerous co-benefits, such as sustainable economic growth and job creation.

Countries have identified activities to advance their NDCs, supported by Climate Promise and the vast portfolio of climate programming. Further, gender mainstreaming will be implemented as way to ensure men and women participate in climate-related actions planning, implementation, and policy development, and subsequently, they will enjoy equal benefits from the intervened sector in countries; the project will leverage UNDP's unique Global Policy Network (GPN), which provides integrated sustainable development expertise to advance NDC priorities in the context of the 2030 Agenda. The GPN has fostered unparalleled relationships, partnerships and trust with governments and other stakeholders over decades of work. Specifically, the GPN provides strategic and operational support to countries through expertise in various sectors and thematic areas. This includes extensive resources, good practice, tools, and guidance.

a. Papua New Guinea

The strategy is to unlock economic development by increasing access to more affordable forms of renewable energy. By targeting renewable energy, small and medium-sized enterprises (SMEs), predominantly female entrepreneurs, can provide greener livelihood opportunities, leaping over outdated fossil fuel technologies and accelerating the delivery of Papua New Guinea's NDC. This project is consistent with national policy. PNG aims to achieve 70% electrification by 2030, putting renewable energy technology at the forefront of this approach. This goal is central to achieving Papua New Guinea's NDC. The underdevelopment of PNG's power generation presents an opportunity to lead the region towards a clean, efficient, and sustainable way using the wide availability of renewable resources in the fight against climate change. Renewable energy presents a practical solution to PNG's topography and demographics challenges. Most communities are in rugged, remote and mountainous terrain where primary grid connections would be complicated and expensive. Headline targets for the energy sector under the NDC are:

Non-GHG Quantitative target:

- Enhance the level of renewables in the energy mix from 30% (2015) to 78% by 2030 for on-grid connection.

Non-GHG Action based target:

- Reduce energy demand by adopting and implementing Minimum Energy Performance Standards and Labelling (MEPSL).
- Establish a framework for fossil fuel emission offsetting.
- Enhance data collection capabilities.

Country NDC sector	Country NDC target	Project activity contributing to this target	Expected results towards target (full achievement or partial)
Energy sector	PNG is committing to a headline target of carbon neutrality within the energy industries sub-sector.	All Activities	Increased roll out of renewable energy products including solar panels by the community, Government private sector and other stakeholders.
Energy sector	PNG is committing to a headline target of carbon neutrality within the energy industries sub-sector.	All Activities	Visibility of micro solar farms will provide the necessary regulatory structure, skills and knowledge necessary to drive the wide

			adaptation of renewable energy across Bougainville island.

b. Samoa

While Samoa's contribution to global greenhouse gas (GHG) emissions is negligible, climate change mitigation remains a critical government priority in light of the already felt and predicted increases in the frequency and intensity of extreme weather events. Samoa's road transport sector, entirely dependent on fossil fuels, is the country's largest emitter of CO_2, accounting for 27.4% of GHG emissions (based on Samoa's National GHG inventory, 2020). With vehicle ownership having increased by 69.5% since 2013, along with the subsequent increase of fossil fuel imports to meet the growing demands of this sector, the green transformation of the transport sector is a significant and necessary step towards realizing Samoa's enhanced NDCs. With the transport sub-sector as the main source of GHG emissions within the energy sector (59% is contributed by land transport and 2.2% by maritime transport), Samoa must urgently pivot towards zero-emission economic development across both land and maritime transport systems to realize its Paris Agreement goals. These efforts require adopting a holistic approach addressing existing infrastructure, institutional, and technical limitations for Samoa to build inclusive, climate-resilient transport systems while meeting its sustainable development goals. To this end, the project envisions inclusive and accessible transformational change towards a green and low-carbon transport sector to support the achievement of Samoa's enhanced NDCs, by creating an enabling environment through strengthened and gender-sensitive institutional governance, financial and technical capacities and accelerating the decarbonization of land and maritime transport systems.

In this context, the project's overall objective is **to promote urgent and inclusive transformation of the land and maritime transport sectors towards decarbonization by accelerating the uptake of electric vehicles and outboard motors** to support the achievement of Samoa's enhanced NDCs for the energy and transport sector by 2030.

This programme strategy takes a comprehensive gender-sensitive approach, based on the principles of leaving no one behind, towards green and zero-emission transformational change in the transport sector. Guided by the Samoa NDC Implementation Roadmap and Investment Plan (2021), the strategy identifies critical enablers supporting accelerated nationwide decarbonization of the land and maritime transport sector. Each pathway identified will ensure equal participation, access, and safety of land and maritime transport for all, focusing on marginalized groups such as women, the elderly, youth, children, and PWDs. In doing so, women and other marginalized groups who are too often neglected in the planning and implementation phases will be provided with a platform to ensure all perspectives are considered and factored in throughout project design and implementation.

Country NDC sector	Country NDC target	Project activity contributing to this target	Expected results towards target *(full achievement or partial)*
Relevant Samoa NDC Sector: Energy sector inclusive of the electricity, land transport, maritime transport,	NDC Overall Mitigation Target: Reduce overall GHG emissions by 26 percent in 2030 compared to 2007 levels (or by 91 Gg CO2e compared to the new reference year 4 once Samoa's GHG emissions inventory has been updated). NDC Energy Sector Target: Reduce GHG emissions in the energy sector by 30 percent in 2030 compared to 2007 levels (or by 53 Gg CO2e compared to the new reference year levels once the GHG emissions inventory is updated.	All Activities	Partial achievement towards the energy sector NDC target to reduce overall GHG emissions by 26 percent in 2030 compared to 2007 levels and GHG emissions in the energy sector by 30 percent in 2030 compared to 2007 levels.
		Activity 1.1 – 1.6	Full achievement to create an enabling environment with increased governance, financial and technical capacity for decarbonization of transport sector.
		Activity 1.2 and 1.3	Full achievement to define and endorse sub-sector specific NDC targets for the land and maritime transport sectors upon revision of the GHG emissions inventory.

and tourism sub-sectors.	NDC Energy Sub-Sector: There are currently no sub-sector specific NDC targets for the land and maritime transport sub-sectors, but the NDC Implementation Roadmap and Investment Plan specifies aspired reduction targets by the Government of Samoa of 5.2Gg of Co2 by 2030 for land transport and 3.0Gg of CO2 by 2030 for the maritime transport.	Activity 2.1, 2.2, 2.3, 2.4, 2.5 and 2.7	Partial achievement towards the aspired land transport sub-sector NDC emissions reduction target estimated at 5.2Gg of CO_2e reduction by 2030.
		Activity 3.1 to 3.3	Partial achievement towards the aspired maritime transport sub-sector NDC emissions reduction target estimated at 3.0Gg of CO_2e reduction by 2030.

c. Timor-Leste

Both the Intended NDC (INDC) and draft NDC outline the country's commitment to scale up investment in renewable energy systems to reduce diesel consumption and improve the resilience of rural communities, men and women. The project will contribute to the country's objective under the NDC to prioritize actions to increase energy security and access in rural communities and use of low carbon technologies. The project will support the following:

a) Communities not yet connected to the national grid with solar lighting will enable the household members to engage in productive work even in the evenings and for the children to study. It will also provide improved cooking stoves so that their consumption of firewood will be significantly reduced;

b) The solarization of SAMES (Serviço Autónomo de Medicamentos e Equipamentos de Saúde) so that this critical health facility will have a reliable source of electricity to store medicines in the temperature required, strengthen service operations, strengthen its digital systems for inventory management, and save funds in the long run; and

c) The solarization of SAMES (Armazen Mediku Autonomo) so that this critical health facility will have a reliable source of electricity to store medicines in the temperature required, strengthen its digital systems for inventory management, and save funds in the long run; and

d) Solarization of schools so that the ICT labs can have a reliable energy source to conduct ICT classes uninterruptedly and promote access to digital learning platforms.

The proposed activities will directly contribute to the measures outlined in the INDC, which was submitted to the UNFCCC in 2016, detailing the government's commitments to fulfilling the goals of the Paris Agreement. It includes priorities for mitigation and adaptation, with food security, water resources, natural disasters, forestry, biodiversity, livestock production, infrastructure, and coastal ecosystem resilience identified as priority sectors for adaptation.

This project will add to the following mitigation measures outlined in the INDC:

- Renewable and low carbon energy: achieving higher efficiency and less carbon emissions from power generation by biomass, biogas, solar PV, and wind power at different scales.
- Rural electrification: enhancing rural electrification using renewable energy to support energy in rural communities.

Country NDC sector	Country NDC target	Project activity contributing to this target	Expected results towards target *(full achievement or partial)*
Energy	No specified quantitative targe on renewable energy	All activities	Partial, solar panel installed to 1,000 households, and 15 schools. 1,000 households supported with energy efficient cooking stoves
	No specified quantitative targe on rural electrification	All activities	Partial, solar panel installed to 1,000 households, and 15 schools.

d. Vanuatu

The overall objective of this project is to contribute to the goal of the Government of Vanuatu to achieve the

National Energy Road Map (NERM), i.e., 100% electrification with Renewable Energy by 2030 by the installation of 8 Pico hydro projects.

The rural population in Vanuatu needs more access to renewable energy. Vanuatu has approximately 8 years to realize the targets set in its National Energy Road Map (NERM), i.e., 100% electrification with Renewable Energy by 2030. According to the latest Utilities Regulatory Authority (URA) monthly energy update, 80% of the concession area's energy source is non-renewable or diesel. According to the Post PAM Mini-Census Report, only 30% of the population have access to a reliable energy source, and 70%, including those in remote rural areas, need more access to secure and reliable energy services. Vanuatu's 2017 census indicates that 71% of the nation's roughly 280,000 people lack access to grid electricity. As per the census, over half of those off-grid households have no access to power besides a solar lantern; around 72% have access only at this solar lantern level or somewhat better level of pico-PV systems (usually 10 to 20 W). UNDP supported the Government of Vanuatu by conducting a feasibility study of 13 Pico hydro sites. Out of the 13, UNDP supported installing and commissioning two Pico hydro.

The project support to Vanuatu towards achieving the National Energy Road Map (NERM), i.e., 100% electrification with Renewable Energy by 2030 by adding eight Pico hydro. The achievements are directly linked to the country's NDC target.

Country NDC sector	**Country NDC target**	**Project activity contributing to this target**	**Expected results towards target *(full achievement or partial)***
Energy	By 2030, 100% electricity access by households in off-grid area	Installation of 8 Pico hydro	(partial achievement) 1,200 people benefited by accessing Clean Energy

RESULTS AND PARTNERSHIPS

Expected Results

The project serves as the chapeau for 4 country-level implementations, all aligned with the Climate Promise global framework presented below. According to the local context and demand, national concepts have been developed based on country-specific needs within this framework. They are designed to respond to the current human security needs and are shaped to fit the status and context of the country's NDC process and green transformation.

UNDP, through the Climate Promise, has defined two pillars to frame country-driven interventions:

- Pillar 1: Clean energy and just transition towards net-zero pathways
- Pillar 2: Helping vulnerable and fragile settings to be more resilient to climate impacts

These two pillars address the most common targets for NDCs and urgent development needs – mitigation, primarily through the energy transition, and adaptation and resilience. The initiative can help inform the critical development decisions being undertaken in response to the multiple crises countries face. Understanding how to address the climate crisis and realize NDCs amidst this global context is critical, thus supporting countries to lock in net-zero and climate-resilient pathways. **This project will focus on Pillar 1 while ensuring the resilience of vulnerable and marginalized communities in fragile settings.**

Pillar 1: Clean energy and just transition towards net-zero pathways	**Pillar 2: Helping vulnerable and fragile settings to be more resilient to climate impacts**
Driving investment in clean energy – supporting governments to identify strategic policy areas, often in partnership with the private sector, to increase the availability of, and access to, clean, reliable, gender-responsive and affordable energy as well as other mitigation efforts. This also includes clean energy	**2.1. Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available in fragile settings and to marginalized groups -** strengthening instruments such as early warning systems, finance and insurance mechanisms, agriculture policies to help

infrastructure such as those for electric vehicles, industrial processes, and other energy intensive industries. **1.1. Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions towards just transition** - engaging key government Ministries to reduce barriers and de-risk the clean energy transformation. Supporting Ministries to make the gender-inclusive economic case and identify co-benefits for schools and hospitals, job creation and protection, poverty reduction, and entrepreneurship **1.2. Alignment of energy targets in NDCs with net-zero pathways** - strengthening linkages between national pledges under the Paris Agreement on energy with longer-term (often 2050) net-zero pathways. Support will help governments to address the "just energy transition" of work forces (often from impoverished populations) in traditional fossil fuel industries toward clean energy	communities increase resilience and protect lives and livelihoods in countries that are highly vulnerable to climate impacts such as fragile settings, SIDS and LDCs, and countries in fragile contexts, and marginalized groups such as indigenous peoples, local communities, youth, women, and others **2.2. Aligning targets in NDCs with national adaptation strategies and plans** - integrating adaptation measures from NDCs with ongoing plans and processes, including on COVID-19 recovery and responses to the ongoing energy and food crises, in an effort to strengthen resilience of major sectors impacted by climate shocks and long-term impacts on infrastructure, health systems, forests, coastlines, food systems, nature, and other areas.

a. Papua New Guinea

The lack of access to reliable and clean energy restricts economic development and constrains access to education, health, and other services in rural areas. Development of renewable energy small to medium-sized enterprises (SMEs), such as small-scale solar power, can provide green livelihood alternatives to subsistence agriculture. The project will promote women-led SMEs to have access to renewable energy. Access to affordable renewable energies will improve the livelihoods of women and young people, through decreased workloads, improved cooking, processing of food and Non-Timber Forest Products (NTFPs), increased safety and security from reliable lighting, engaging in home-based businesses and educational activities in the evenings, and reducing air pollution.

The theory of change for this Project proposes that:

IF renewable energy and climate change initiatives are supported through investments in micro solar farms, then it would enable early adoption and development of policies, regulations, and necessary political and community support to sustain renewable energy in the region, and

IF understanding of the renewable energy capabilities is increased in Bougainville through community-led micro solar farms that are inclusive, easy to operate with a particular focus on the participation of women, youth, and marginalized groups;

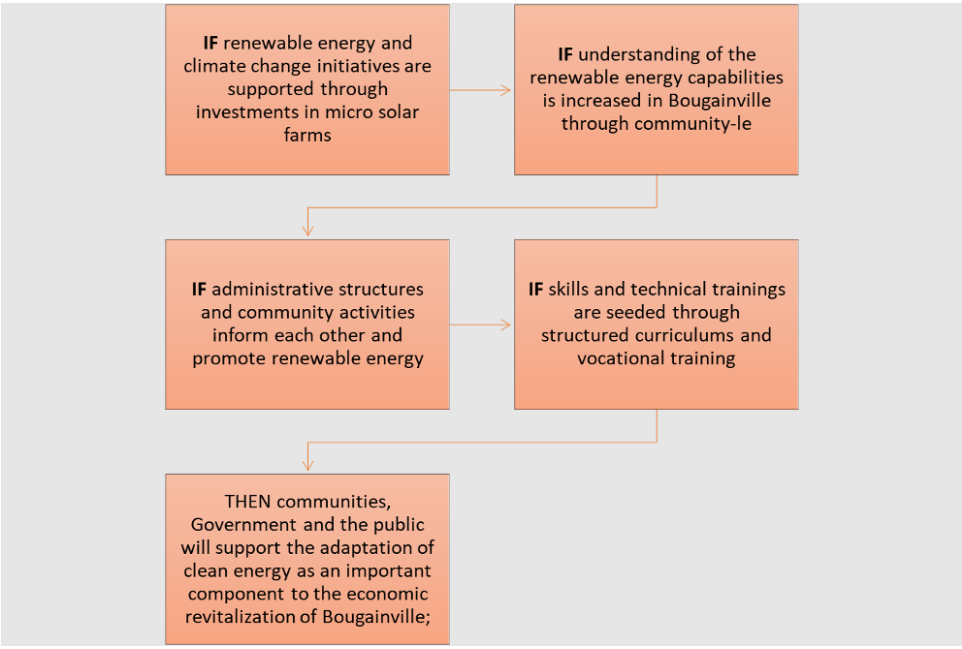
IF Bougainville as crisis affected region within Papua New Guinea, is provided with a new paradigm in renewable energy as a way to sustain peace, and

IF administrative structures and community activities inform each other and promote renewable energy adaptation across communities and regions while enhancing regulatory environment; and

IF skills and technical training are seeded through structured curriculums and vocational training to support the operational, maintenance, and technical capacities aligned to renewable energy needs:

THEN communities, Government and the public will support the adoption of clean energy as an essential component to the economic revitalization of Bougainville;

WHICH will enable Papua New Guinea to drive sustainable, inclusive, and peaceful development for communities while opening private sector opportunity and meeting its NDC.



Project results:

1. Renewable-based stand-alone solar systems for communities in three regions of Bougainville (North, Central, and South). The proposed minimum number of direct beneficiaries is 30,000, with indirect beneficiaries 300,000.
2. Resilient, reliable, and efficient micro-electricity grids in these three regions make measurable and substantial contributions to the NDC.
3. Energy-efficient government buildings in the three target districts and stimulation of private-sector opportunities through more significant 'greening' of local production. Among these will be downstream production and processing of critical commodities.

The project contributes to Pillar 1: Clean energy and transition towards net-zero pathways. The project will support clean energy and transition towards net-zero pathways. It will do this by driving investment in clean energy. It will:

- Support ABG Ministries of Energy, Finance, Environment, and Planning to address critical energy-related decisions.
- Alignment of energy targets in NDCs with net-zero pathway.

<table>
<tr><td colspan="2">Country Output 1 - Build resilience of Bougainville through expansion of renewable energy access.

Global Climate Promise Output:
1.1 Driving investment in clean energy.
1.2 Support to Ministries of Energy, Finance, Environment, and Planning to address critical energy-related decisions.
1.3 Alignment of energy targets in NDCs with net-zero pathways.</td></tr>
<tr><td rowspan="3">Indicators
1.1: Total solar energy generation installed in Bougainville.

1.2: Number of people to benefit from solar energy generation installation in Bougainville. (Sex-disaggregated)</td><td><u>Activity: 1.1.</u> Widen community engagement and consultation during the design phase to ensure inclusivity and on-the-ground needs are reflected.</td></tr>
<tr><td><u>Activity: 1.2.</u> Developed and install mini-solar farms in the three regions of Bougainville.</td></tr>
<tr><td><u>Activity: 1.3.</u> Strengthened regulatory and governance structures to expand renewable energy adoption in Bougainville.</td></tr>
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1.3: Number of recommended legal structures and platforms proposed to ABG Government.	Activity: 1.4. Operations and maintenance of solar farms as a demonstration for expansion of renewable energy policy into the Bougainville.
	Activity: 1.5. Upskill the community to operate and maintain the new renewable energy sources.
1.4: Number of people trained to operate and maintain the solar energy generation systems (sex-disaggregated)	Activity: 1.6. Monitoring, Communication, Coordination (Regional Technical/Management Support)

b. Samoa

Samoa continues to lead climate action in its commitment to accelerate and enhance the implementation of its NDC to global climate change mitigation efforts with a focus on green transformation and zero pathways. In July 2021, the island nation launched its Enhanced NDC with the goal to reduce GHG emissions by 26% in 2030 compared to 2007 levels. As part of the UNDP's Climate Promise, UNDP is committed to accelerate action towards emissions reduction and increase SIDS' resilience to climate change related development priorities. The project contributes to ***Pillar 1: Clean energy and just transition*** towards ***net-zero pathways*** with its aim to accelerate the achievement of Samoa's enhanced NDC by supporting the decarbonization of the land and maritime transport sectors towards zero-emission islands.

In this context, the overall objective of the project is **to promote urgent and inclusive transformation of the land and maritime transport sectors towards decarbonization by accelerating the uptake of electrical vehicles and outboard motors** in support of the achievement of Samoa's enhanced NDCs for the energy and transport sector by 2030. As such, the project follows a three-fold approach comprised of three specific objectives mirroring the three outputs in the table below:

1. Creating an enabling environment through strengthened and gender-sensitive institutional governance, financial, legal and technical capacities for accelerating the decarbonization of both land and maritime transport systems.
2. Accelerating inclusive decarbonization of the land transport sector with a focus on adoption and imports of electric vehicles and accessible electrification service networks targeting public transport and public service delivery vehicles; and
3. Introducing and piloting low-carbon outboard motors for Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operation, and maintenance.

This programme strategy takes a comprehensive gender-sensitive approach, based on the principles of leaving no one behind, towards green and zero-emission transformational change in the transport sector. Guided by the Samoa NDC Implementation Roadmap and Investment Plan (2021), the strategy identifies key enablers that would support accelerated nation-wide decarbonization of both the land and maritime transport sector. Each pathway identified will ensure equal participation, access and safety of land and maritime transport for all with a special focus on marginalized groups such as women, elderly, youth, children, and PWDs. In doing so, women and other marginalized groups who are too often neglected in the planning and implementation phases, will be provided with a platform to ensure all perspectives are considered and factored in throughout project design and implementation.

As such, the strategy is premised on the core **theory of change** that:

IF, zero-emission economic development in the transport sector is enhanced through, (1) strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity; (2) accelerated decarbonization of the land transport sector with a focus on inclusive, accessible, and greener public transport systems and (3) accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on fishing vessels.

THEN, an enabling environment will be created for inclusive and accessible transformational change towards a green and low-carbon transport sector;

THUS, accelerating the achievement of Samoa's enhanced NDC mitigation targets to reduce GHG emissions in the energy sector by 30 percent, and overall GHG emissions by 26% in 2030 compared to 2007 levels while meeting its sustainable development goals through inclusive and climate responsive transport systems.

<table>
<tr><td colspan="2">Country Output 1: Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems.

Pillar 1 Global Outputs:
1.1. Driving investment in clean energy.
1.2. Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions.
1.3. Alignment of energy targets in NDCs with net-zero pathways.</td></tr>
<tr><td rowspan="6">Output 1 Indicators
Indicator 1.1: # of gender-responsive planning and policy instruments developed to support Samoa's transition to low-carbon transport, disaggregated by NDC sub-sector.

Indicator 1.2: # of inclusive finance mechanisms identified feasible to support investments in Samoa's decarbonization of land and maritime transport, disaggregated by type and target revenue potential.

Indicator 1.3: # of upskilling programs enhanced and/or developed.</td><td>Activity 1.1: Review and update Samoa's legislative and policy framework in support of a national transition to low-carbon land and maritime transport.</td></tr>
<tr><td>Activity 1.2: Conduct a transport optimization and energy efficiency review.</td></tr>
<tr><td>Activity 1.3: Develop a gender responsive Decarbonization Strategy in support of the Sector Plan for Land and Maritime Transport, to include sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework.</td></tr>
<tr><td>Activity 1.4: Conduct a scoping and feasibility study on investment shifts away from carbon intensive transport and identify gender-responsive innovative finance mechanisms to support and sustain Samoa's low-carbon transition.</td></tr>
<tr><td>Activity 1.5: Design and roll out an inclusive public awareness campaign promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure.</td></tr>
<tr><td>Activity 1.6: Develop an upskilling programme on electric vehicle automotive electronics, mechanics and engineering.</td></tr>
<tr><td colspan="2">Country Output 2: Accelerated inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener transport systems for public service delivery.

Pillar 1 Global Outputs:
1.1. Driving investment in clean energy.
1.2. Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions.
1.3. Alignment of energy targets in NDCs with net-zero pathways.</td></tr>
<tr><td rowspan="3">Output 2 Indicators
Indicator 2.1: # of electric vehicles procured, disaggregated by type/service.

Indicator 2.2: annual total emissions (tCO_2e) avoided from the land transport sub-sector.

Indicator 2.3: # of solar-charging stations installed, disaggregated by location.</td><td>Activity 2.1: Conduct a baseline assessment of traffic volumes, vehicle registration and imports, vehicle ownership disaggregated by gender and age, EV and hybrid vehicles, and market demand.</td></tr>
<tr><td>Activity 2.2: Enhance land transport monitoring, including the procurement of emissions testing equipment and optimization of the Road Transport Administration System (RTAS) to improve fuel efficiency and optimize emission reduction potential.</td></tr>
<tr><td>Activity 2.3: Design and roll out awareness campaign for inclusive and safe mobility especially for women, PWDs, elderly, youth and children, based on a public survey on perceptions of barriers to low-carbon mobility.</td></tr>
</table>

Indicator 2.4: # of plans developed that promote inclusive and accessible low-carbon mobility.	Activity 2.4: Develop a gender-sensitive Sustainable Land Use and Mobility Plan, to promote green, inclusive, and accessible infrastructure and mobility.
	Activity 2.5: Design and install charging station network for public service delivery electric vehicles (EVs).
	Activity 2.6: Explore technical, policy, infrastructural and technological solutions for safe disposal and recycling of EV batteries.
	Activity 2.7: Support accessible electrification of vehicles targeting public service delivery vehicles based on country needs assessment.
Country Output 3: Explored and accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on fishing vessels. ***Pillar 1 Global Outputs:*** *1.1. Driving investment in clean energy.* *1.2. Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions.* *1.3. Alignment of energy targets in NDCs with net-zero pathways.*	
Output 3 Indicators Indicator 3.1: # of feasible low-carbon maritime transport options identified. Indicator 3.2: % of fisherfolk with electrified and/or energy efficient vessels, disaggregated by gender.	Activity 3.1: Optimize the national registration system for vessels, including private fishing and transport boats for improved emissions tracking and control, and fuel efficiency.
	Activity 3.2: Conduct a feasibility study, gender and cost-benefit analysis of low-carbon maritime transport options, prioritizing fishing vessels.
	Activity 3.3: Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance.
	Activity 3.4 Monitoring, Communication, and Coordination (Regional Technical/Management Support)

c. Timor-Leste

The project contributes to ***Pillar 1: Clean energy and just transition towards net-zero pathways, and Pillar 2: Helping vulnerable and fragile settings more resilient to climate impacts***. This project has 3 outputs, namely:

Output 1: *Households not connected to the national electricity grid can access a clean and reliable power supply.*

Output 2: *Health service centres have improved facilities for better service provision.*

Output 3: *Secondary and vocational/technical schools have ICT labs for better access to ICT education.*

Theory of Change

Both INDC and draft NDC outline the country's commitment to scale up investment in renewable energy systems to reduce diesel consumption and improve the resilience of rural communities. The project will contribute to the country's objective under the NDC to prioritize actions to increase energy security and access in rural communities and the use of low-carbon technologies. The project will, therefore, address the problems identified above.

To address **Problem 1** (*The national electricity grid has not reached 32.7% of the household, and even where the grid has reached, the power supply is not reliable and is interrupted frequently):* the project will support communities that are not yet connected to the national grid with solar lighting that will enable the household members, men, and women, to engage in productive work even in the evenings and for the children to study. It will also provide improved cooking stoves so that their consumption of firewood will be significantly reduced

and could prevent women from being exposed to air pollution from traditional cooking habits, which contributed to deaths from chronic respiratory illnesses, 60% of whom were female.

To address **Problem 2** (*The services of the health facilities—National Hospital and its related institutions, referral hospitals in municipalities, and community health centres and health posts—are limited and quality compromised as the supply of energy is either insufficient or unreliable):* this project will support the solarization of SAMES so that this critical health facility will have a reliable source of electricity to store medicines in the temperature required, strengthen service operations, strengthen its digital systems for inventory management, and save funds in the long run. The project will also aim to solarize 2 community health centres/health posts in rural areas, improving community services, especially for women who often do not have access to better health facilities in the big towns/cities.

To address **Problem 3** (*The secondary and vocational schools where ICT is supposed to be taught do not have a reliable power supply, ICT labs either do not exist or are not functional and hence the access to computers and digital learning is limited)*: this project will support the solarization of schools so that the ICT labs can have a reliable source of energy to conduct ICT classes uninterruptedly and promote access to digital learning platforms.

The theory of change (TOC) that guides the results logic of this project is that *if* households are provided with solar lights and improved cooking stoves, *then* children can study better, men and women can engage in productive work even in the evening, women will have much more leisure time to prevent them from multi burden gender roles, and negative impact on respiratory health of the household members and deforestation will be reduced; *if* health facilities are provided with reliable energy through solar power, *then* their services can be improved and expanded leading to better health outcomes; and *if* schools are supplied with solar power for ICT labs, *then* students can have access to digital learning and ICT education that will expand their knowledge and skills and prepare them better for the job market. These three inter linked pathways of change will lead to better human development outcomes for families and communities while accelerating green transformation in Timor-Leste.

<table>
<tr><td colspan="2">Country Output 1 Households not connected to the national electricity grid have access to clean and reliable power supply.

Global Climate Promise Output
1.1 Driving investment in clean energy
1.3 Alignment of energy targets in NDCs with net-zero pathways</td></tr>
<tr><td rowspan="3">Indicators
1.1 Number of households having access to solar-based electricity.
1.2 Number of individuals (sex-disaggregated) benefiting from solar energy in their households
1.3 Number of households piloted with energy efficient cooking stoves</td><td>Activity: 1.1. Detailed feasibility studies incorporating gender lens conducted in villages that are not yet connected to the national grid</td></tr>
<tr><td>Activity: 1.2. Designs and detailed estimates developed towards procurement and provision of solar lights and energy efficient cooking stoves</td></tr>
<tr><td>Activity: 1.3. Mechanism to establish maintenance support developed including training for local technicians</td></tr>
<tr><td colspan="2">Country Output 2 Health service centres have improved facilities for better service provision.

Global Climate Promise Output
2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to fragile settings and marginalized groups</td></tr>
<tr><td rowspan="3">Indicators
2.1. Number of Solar PV system installed at SAMES.
2.2. Number of Solar PV system installed in community health centers and health posts</td><td>Activity: 2.1. Detailed feasibility studies conducted for SAMES for solarization</td></tr>
<tr><td>Activity: 2.2. Solar systems installed in SAMES</td></tr>
<tr><td>Activity: 2.3. Solar systems installed in two (2) community health centres/health posts</td></tr>
<tr><td colspan="2">Country Output 3 Support select schools to have solar power-based Information, Communication and Technology (ICT) labs to promote digital teaching and learning.</td></tr>
</table>

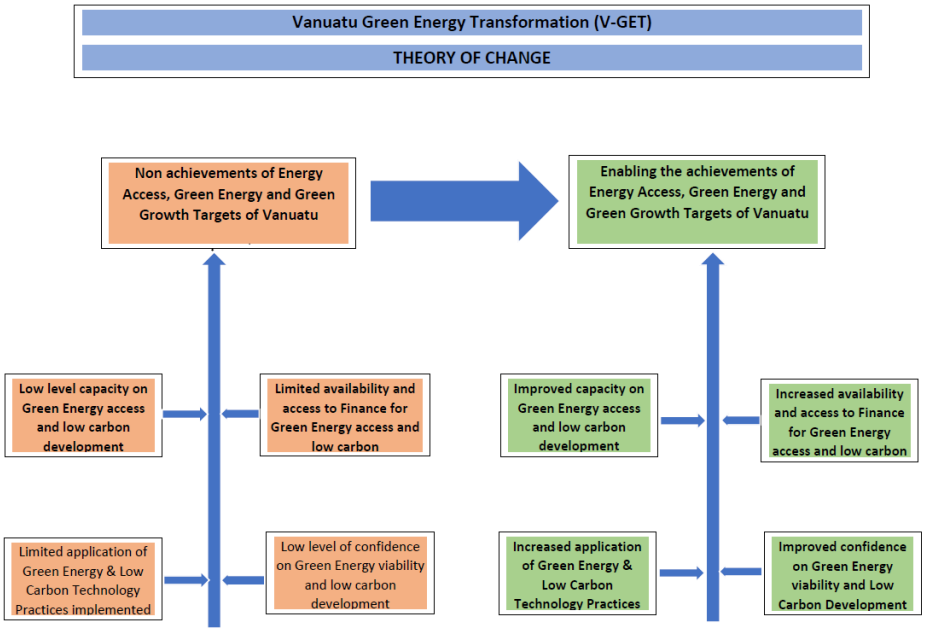
Global Climate Promise Output 2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to fragile settings and marginalized groups	
Indicators 3.1 Number of secondary and vocational/technical schools with new or renovated ICT labs 3.2 Number of ICT labs with functioning computers 3.3 Number of ICT labs supported with solar power	Activity: 3.1. Secondary schools and vocational/technical schools identified for solarization (based on the UNDP's 2022 assessment report) and detailed feasibility studies conducted for renovation of infrastructure and solar system
	Activity 3.2. Cost of implementing solarization plan
	Activity: 3.3. Renovation of facilities in schools conducted to house the ICT labs
	Activity: 3.4. Computers and other accessories procured to make ICT labs functional
	Activity: 3.5. Mechanism to establish maintenance support developed
	Activity: 3.6. Training to teachers conducted on ICT teaching and learning materials and delivering ICT courses
	Activity 3.7. Monitoring, Communication, and Coordination (Regional Technical/Management Support)

d. Vanuatu

As part of the UNDP's Climate Promise, UNDP is committed to supporting the Government of Vanuatu in achieving the National Energy Road Map (NERM), i.e., 100% electrification with Renewable Energy by 2030. The project contributes to ***Pillar 1: Clean energy and just transition towards net-zero pathways***.

UNDP support the Government of Vanuatu from low level capacity on Green Energy access and low carbon development to Improved capacity on Green Energy access and low carbon development. The application of Green Energy increased and the level of confidence on Green E**nergy viability and Low Carbon Development improved.**

Theory of Change



<table>
<tr><td colspan="2">Country Output 1 Support Achieve the National Energy Road Map (NERM), i.e. 100% electrification with Renewable Energy by 2030 by installing eight Pico hydro projects.

Global Output:
1.1 Driving investment in clean energy.
1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions.
1.3 Alignment of energy targets in NDCs with net-zero pathways.</td></tr>
<tr><td rowspan="5">Indicators
1.1 Number of Pico Hydro stations installed in 8 locations, and integrated with national Grid System.
1.2 Number of residents to have access to Clean energy (disaggregated by: male, female, and youth (15-24))
1.3 Number of Government officials and staff trained
1.4 Number of green/sustainable jobs created (disaggregated by: male, female and youth (15-24))</td><td>Activity: 1.1. Finalized feasibility study and detail design estimate for installation of 8 Pico Hydro</td></tr>
<tr><td>Activity: 1.2 Developed detailed technical specifications and procurement of the 8 Pico hydro</td></tr>
<tr><td>Activity: 1.3 Installed Pico Hydro stations and strengthen resilience of rural communities through renewable energy sources</td></tr>
<tr><td>Activity: 1.4 Strengthened capacity of national and local government in operation and maintenance of the newly installed systems</td></tr>
<tr><td>Activity: 1.5 Monitoring, Communication, and Coordination (Regional Technical/Management Support)</td></tr>
</table>

Resources Required to Achieve the Expected Results

In collaboration with the country focal points, BRH will establish an integrated regional Project Board that will provide overall direction to the project, as shown in the Project Implementation Arrangements in section IX. The regional team will support coordination, consolidating work plans, data management, and analysis, and reviewing CO initiatives' implementations. The BRH team will coordinate between BERA and link COs with global/regional procurement. It will also facilitate technical coordination with other regional and relevant development as well as CSOs, INGOs, and academia, as enumerated in the section on Partnerships.

The BRH team will also be accountable for monitoring and consolidating reporting for all four COs and ensuring visibility by communicating progress, significant actions on the ground, interviews with beneficiaries and government officials, including with the government of Japan, and promoting results using different social media and traditional platforms. To facilitate this content the communications specialist will work with CO communications officers as well as colleagues at the Bangkok Regional Hub and BERA global to develop and disseminate content.

Detailed information on specific resources is indicated in the Annexes and the succeeding sections of the project document.

Partnerships

a. Papua New Guinea

- **Japanese Agencies (NGOs, Private Sector, JICA, etc.)**
  - In compliance with UNDP's competitive Procurement Rules and Regulations, the UNDP Papua New Guinea country office will leverage its strong relationship with the Embassy of Japan in Port Moresby as a key liaison partner to widely circulate procurement tenders and recruitment advertisements in support of project interventions through their networks with domestic chambers of commerce, private sector, education, and other organizations in Japan, enabling access to Japanese markets and expertise. UNDP PNG will also reach out to Japanese business councils based in Australia to assist with the circulation of procurement and tender notices to Japanese companies and professionals based in Australia.
  - In compliance with UNDP's Private Sector Partnerships Policy, the UNDP Papua New Guinea country office will leverage its strong relationship with the Embassy of Japan in Port Moresby as a key liaison

partner to engage with Youth Empowerment in Climate Action Platform (YECAP) platform to explore synergy and collaboration for youth-led climate focus entrepreneur in the Asia-Pacific region.

The project will partner with various agencies in designing, operationalizing, and maintaining the micro solar farms. Such partners will include the Autonomous Bougainville Government as a principal partner with whom UNDP has enjoyed an extremely strong partnership since 2005. Other partners will include:

- Government of Papua New Guinea Department of Petroleum and Energy.
- Autonomous Bougainville Government (ABG) Department of Primary Industries.
- ABG Department of Technical Services.
- ABG Department of Education.
- Bougainville Technical College.
- Bougainville Youth Federation.
- Bougainville Womens Federation
- PNG Power Limited
- National Energy Authority.
- Climate Change and Development Authority

b. Samoa

The Samoa MCO will leverage its strong relationship with the Embassy of Japan (EoJ) and ongoing collaboration with the Japanese partner, the Pacific Island Centre (PIC) based in Tokyo under the concluding 2020 Japanese Supplementary Budget (JSB)-funded COVID-19 Preparedness and Recovery: Diversification of the Economic Sector in Samoa project, to facilitate liaison, networking, knowledge exchange and collaboration with market stakeholders, technical experts, and educators within the electric vehicle and low-carbon transport industries in Japan. Timely procurement tenders and recruitment advertisements for all goods, international staff positions, including a Japanese UNV Communications Specialist, and expert consultancy services required will be shared with EoJ and PIC to be widely circulated amongst their networks, including domestic chambers of commerce and the private sector, and academic institutions in Japan, enabling access to Japanese markets and expertise. This will therefore allow potential engagement with Japanese companies and experts in compliance with UNDP's Private Sector Partnerships Policy and competitive Procurement Rules and Regulations.

c. Timor-Leste

This project will seek to coordinate with WHO and UNICEF, which are closely working with the Ministry of Health and Education, Youth, and Sports, respectively. Information relevant to these sister agencies will be shared to strengthen complementarities between the three agencies' efforts to support these ministries.

UNDP will explore the following possibilities of partnership with Japanese agencies:

- It will seek JICA-funded UNVs to work as the international engineer for this project. Also, suppose JICA-funded UNVs can be found for the M&E and Communications officer. In that case, this position will be made international as having a Japanese speaking person will facilitate the communication and liaising with the Japanese Embassy in the country.
- UNDP will also explore partnership with the JICA supported capacity development initiative with the National University of Timor-Leste (UNTL) so that UNTL's relevant engineering departments can be engaged to conduct the various feasibility studies that this project needs and create learning opportunities for students in this process.
- In compliance with UNDP's competitive procurement and recruitment rules and regulations, UNDP in Timor-Leste will leverage its strong relationship with the Embassy of Japan and JICA key liaison partners to widely circulate procurement tenders and recruitment advertisements in support of project interventions through their networks with domestic chambers of commerce, private sector, education and other organizations in Japan and those working in the Asia and the Pacific, enabling access to Japanese markets and expertise.
- In compliance with UNDP's Private Sector Partnerships Policy, the UNDP Timor-Leste Country Office will leverage its strong relationship with the Embassy of Japan and JICA as key liaison partners to engage with Youth Empowerment in Climate Action Platform (YECAP) platform to explore synergy and collaboration for youth-led climate focus entrepreneurs in the Asia-Pacific region.

d. Vanuatu

In compliance with UNDP's competitive Procurement Rules and Regulations, the Fiji MCO will leverage its strong relationship with the Embassy of Japan as key liaison partner to widely circulate procurement tenders and recruitment advertisements in support of project interventions through their networks with domestic chambers of commerce, private sector and other organisations in Japan, enabling access to Japanese markets and expertise.

In compliance with UNDP's Private Sector Partnerships Policy, the Fiji MCO will leverage its strong relationship with the Embassy of Japan as key liaison partner to engage with Youth Empowerment in Climate Action Platform (YECAP) platform to explore synergy and collaboration for youth-led climate focus entrepreneur in the Asia-Pacific region.

Fiji MCO will leverage its ongoing relationship with JICA in the Pacific as well as specifically in Vanuatu to support the project. JICA is provides assistance to Vanuatu with a focus on infrastructures as a base for economic activities, environment and climate change measures, disaster preparedness, and improving the development index. With this project building Pico hydro in different parts of Vanuatu, UNDP through its presence in Vanuatu will seek collaborative support to receive information on economic status of the communities to strengthen the base line. Building on the feasibility studies which has been conducted by UNDP/BRANTV project, information from JICA will support the triangulation of data and capture missing data. Likewise, information regarding the disaster-prone areas and vulnerability add value to take appropriate measures before and after Pico hydro construction. The project will also seek support from Japan's experts on Climate Change and Disaster management based on the need. UNDP intends to also formulate a joint monitoring team headed by Department of Energy and invite JICA as an active member of the team to monitor project activities and also provide suggestions and guidance as per need. In addressing climate change challenges, the project will use mitigation measures, i.e. transitioning and enhancing green energy which also aligns with JICA priorities in Vanuatu. Enhanced future collaboration will also be explored with this project in long-term engagement on climate change intervention with Japan. UNDP would also ensure Japanese visibility for the project jointly work on the visibility activities and information which would be shared on websites and other visibility platform of both organisations.

Risks and Assumptions

The project's management team at the regional and country levels will employ adaptive management techniques to maintain the delivery of the expected outcomes. The significant risk factors in the three countries that could result in the project not producing the expected results are the following:

- **Strategic risks:** Power dynamics and political and economic structures at the regional and sub-national level may undermine the implementation and impact of the project and lead to resources being allocated in a manner that is not consistent with the project objective.
- **Organizational risks:** Successful implementation will depend on careful coordination with various levels of government, across ministries and complementary regional, national, and sub-national initiatives.
- **Human resources risks:** Overworked, overstretched, and overtired essential staff and stakeholders such as solar panel installer and repairperson, making introducing necessary new practices/technologies highly challenging. Personnel, particularly women, face increased workloads due to domestic care responsibilities, so women workers may need to be consulted when introducing new technologies/practices.
- **Implementation capacity risks:** Inadequate and/or non-capacitated human resources to successfully implement the project are a risk. This includes potential insufficient technical capacity to complete the project at a high level of rigor or overworked, overstretched, and overtired stakeholder's staff and other essential staff that will have no bandwidth to absorb additional responsibilities.
- **Project management risks:** A committed project management team with adequate outreach and networking skills are essential for the activities' success. The team will need to have the ability: i) to engage the key stakeholders in constructive discussion about Green Transformation; ii) to guide and supervise the implementation activities and effectively cooperate with the donors iii) to present their findings and recommendations convincingly to key policymakers and opinion leaders; iv) to coordinate capacity building and training activities with a wide variety of stakeholders, and iv) to identify areas of future work. Required technical experts must also support the management team during project implementation.

- **Social and environmental risks:** This project is planned in areas with many indigenous and vulnerable communities. There is a risk that the voices of women, youth, people living with disabilities, and indigenous and/or marginalized communities may not be represented in the project activities and studies that will be carried out. Every effort will be made to include these communities in dynamic ways that will be identified during the development of the stakeholder engagement plans during project inception so that their recommendations are integrated at all levels in a gender-responsive and inclusive manner. There are also risks related to environmental pollution and human health hazard, should there be a malfunction in equipment, guidelines not properly followed, and damage to the facilities constructed. The project involves the installation of solar farms, installation of Pico Hydro stations, design and installation of an accessible public solar-charging station network, and renovations to ICT facilities in schools. If managed improperly, these interventions could result in adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.
- **Logistic risks:** Closed borders, limited commercial/cargo flights, 14-21 days compulsory quarantine for experts and personnel, slowing down the delivery of essential green transformation goods and the provision of technical on-the-ground expertise. Delays in procurement, inflation, and exchange rate losses (3 separate entries), as supply chain issues are ongoing, and inflation is rising.
- **Sustainability of project inputs:** Unplanned, uncoordinated, rushed, and inappropriate procurement can result in duplication and waste of resources, underutilized, or not utilized due to not considering local circumstances, lack of accountability, and unplanned funding for the long-term operations and maintenance of technologies and medical equipment.
- **Disruptions in the global supply chain:** COVID-19 demonstrated that disease outbreaks can impact the procurement supply chain but also result in lockdowns at the country level, paralyze travel to project sites and staff turnover, etc. In addition, political unrest, geopolitical dynamics, economic changes, natural disasters, and climate change can contribute to disruptions in global and regional supply chain management.

Reputational Risks to UNDP: Potential issues that could surface include situations of delay, fraud, or controversies implicating UNDP or the donor's commitment to sustainable green transition could pose reputational risks and potentially impacting the relationship with the donor, and potential future donors and member states.

Stakeholder Engagement

a. **Papua New Guinea**

The project will partner with a range of agencies in the design, operationalization and maintenance of the micro solar farms. Such partners will include the Autonomous Bougainville Government as a principle partner with whom UNDP has enjoyed strong partnership with since 2005. The Autonomous Bougainville Government, as part of Bougainville Peace Agreement, has drawn down a number of national responsibilities related to various sectors including education, mining and local Government. Other partners will include:

- Government of Papua New Guinea Department of Petroleum and Energy.
- ABG Department of Primary Industries.
- ABG Department of Technical Services.
- ABG Department of Education.
- Bougainville Technical College.
- Bougainville Youth Federation.
- Bougainville Womens Federation
- PNG Power limited.
- National Energy Authority.
- Climate Change and Development Authority.

The project will have the following numbers of beneficiaries in Papua New Guinea:

- Total direct beneficiaries of 30,000 people, men & women.
- Total indirect beneficiaries of 300,000 people

b. **Samoa**

UNDP will engage with Government counterparts through existing national institutional frameworks and coordination mechanisms for the implementation of Samoa's NDC, including the National Energy Coordination Committee. Academic institutions will be engaged to embed upskilling and capacity development efforts to strengthen local human capacity for Samoa's transition towards zero-carbon islands. UNDP will collaborate with key Civil Society Organizations (CSOs) to ensure meaningful engagement with community groups especially the most marginalized including, women, youth and persons with disabilities across all stages of project implementation, to ensure that the interventions reflect and respond to the specific needs of all. As an institutional partner to Regional and International Development organisations, UNDP will also leverage technical expertise and research related to on-going low-emission transport projects in the Pacific Islands for both land and maritime transport sectors.

The project will have the following numbers of beneficiaries in Samoa:

- Total direct beneficiaries of 14 Government Ministries/Agencies; 350 employees in the transport sector; 18 boat owners; 1-2 academic institutions; Total indirect beneficiaries of 202,500 people (entire population).

c. Timor-Leste

This project will seek to coordinate with WHO and UNICEF that are closely working with Ministry of Health and Ministry of Education, Youth and Sports, respectively. Information relevant to these sister agencies will be shared so that complementarities could be strengthened between the three agencies' efforts to support these ministries. UNDP will also with Ministry of State Administration, National Authority for Electricity, National Institute for Medicines and Medical Supplies, as well as other relevant institutions and organizations that work in the sector.

The project will have the following numbers of beneficiaries in Timor-Leste:

- Total direct beneficiaries of more than 750,000 people, men & women

d. **Vanuatu**

UNDP Fiji MCO would leverage its ongoing relationship with JICA in the Pacific as well as specifically in Vanuatu to support the project. JICA is provides assistance to Vanuatu with a focus on infrastructures as a base for economic activities, environment and climate change measures, disaster preparedness, and improving the development index. With this project building Pico hydro in different parts of Vanuatu, UNDP through its presence in Vanuatu will seek collaborative support to receive information on economic status of the communities to strengthen the base line. Building on the feasibility studies which has been conducted by UNDP/BRANTV project, information from JICA will support the triangulation of data and capture missing data. Likewise, information regarding the disaster-prone areas and vulnerability add value to take appropriate measures before and after Pico hydro construction. The project will also seek support from Japan's experts on Climate Change and Disaster management based on the need. UNDP intends to also formulate a joint monitoring team headed by Department of Energy and invite JICA as a active member of the team to monitor project activities and also provide suggestions and guidance as per need. In addressing climate change challenges, the project will use mitigation measures, i.e. transitioning and enhancing green energy which also aligns with JICA priorities in Vanuatu. Enhanced future collaboration will also be explored with this project in long-term engagement on climate change intervention with Japan. UNDP would also ensure Japanese visibility for the project jointly work on the visibility activities and information which would be shared on websites and other visibility platform of both the organization.
Other partners will be:

(i) Department of Energy
(ii) Water Resources Department
(iii) Department of Forestry
(iv) Department of Environment
(v) Private sector technical and equipment companies

(vi) Other development agencies working in the area of Energy
(vii) Local villagers and indigenous people including women and youth

The project will have the following numbers of beneficiaries in Samoa:

- Total direct beneficiaries of 2,366 people, (men 1,260 & women 1,106)
- Total indirect beneficiaries of 6,000 people, (men 3,350 & women 2,650)

South-South and Triangular Cooperation (SSC/TrC)

This project will enable South-South and Triangular Cooperation not only between the four countries through capturing of good lessons but also beyond, through regional technical assistance in developing regional work plans/briefs/policy papers/ and organization of webinars and/or South-South Exchange Dialogues for a global audience, to serve as a platform for broader resource mobilization. Some COs have already developed technical guidance notes that will be shared throughout project implementation. In addition, the results of this project will contribute to sharing knowledge, skills and expertise across and beyond the four countries and the project's remit to other projects on Green Transformation.

As the proposed project covers four countries, there is a need for a regional coordination mechanism for better coordination and articulation, as well as to promote effective communication and exchange of experiences between countries. The Regional Project Management team will be responsible for consolidated implementation support services and will be the main liaison with MOFA/GoJ in the project-related matters.

The regional project management team will allow for greater sharing of experiences and good practices among the three programme countries and is best managed at regional level, with potential for replication in other countries in the region and possibly beyond the project scope to other regions. The impact and visibility could be broader if managed regionally, taking advantage of UNDP organizational structure and presence in other regions such as RBLAC, RBEC, RBAS, and RBA to leverage UNDP's Global Policy Network. This project will enable South-South and Triangular Cooperation not only between the three countries through capturing of good lessons, but also beyond, through regional technical assistance in developing regional work plan/briefs/policy papers/ and organization of webinars for a global audience, to serve as a platform for wider resource mobilization, and across similar projects at the Hub.

Digital Solutions[3]

The project will explore integration of digital solutions during the initiation phase for viable technologies that will complement integration and analytical capacity of the technologies being installed across the four countries. The digital solutions may include, but not limited to, sensors, metering, dashboards, smart facility model.

Knowledge

UNDP's communications efforts will generate donor visibility across multiple channels through the most effective and innovative communications methods identified at the country, regional and global levels. UNDP will provide visibility opportunities for the Government of Japan (GoJ) at the country level, working closely with the Japanese Embassies as well as with UNDP's Tokyo regional office to amplify visibility/communications efforts. If project will also develop and apply a visual identity that shall include the logos and other communication input materials to be provided by the GoJ. Workshops, training and other similar activities will be open for the participation of representatives of the GoJ.

The communications specialist will closely with project communications and programme colleagues to develop content that highlights the work, progress, impact and results, in project countries. The content will also highlight the role of Japan and its commitment to Green Transformation in the region.

The communications will also provide a comprehensive vision of the regional impact with regional stories that tie and link the work happening in all four countries, but also how it impacts regionally and globally.

This content will also tie into the environmental work being done by UNDP across the region and world, to provide a cohesive narrative of our work and its impact on green transformation, the climate promise and the

[3] *Please see the Guideline "Embedding Digital in Project Design".*

achievement of the SDGs in countries, and the region.

Content generated will also be highlighted to showcase best practices, serve as material for knowledge management, and promote and disseminate lessons learned.

The project will seek collaboration with the GoJ in various areas of cross-cutting interests, as well as support for technical assistance, technology transfer and other cooperation activities. In Papua New Guinea, UNDP works closely with the Japanese Embassy and Japanese chamber of Commerce and Industry based in Australia to disseminate opportunities and highlighting tender and procurement notices. In Samoa, UNDP works closely with the Japanese Embassy and the Japan-based Pacific Islands Centre (PIC) to facilitate knowledge exchange where possible. Additionally, Samoa's PMU will onboard a Japanese UNV Communications Specialist and to make efforts to ensure knowledge products are bilingual and reach a greater audience. In Timor-Leste, UNDP works closely with the Japanese Embassy, will explore collaboration with JICA, and a current role of a Japanese-funded UNV for communication specialist will be engaged to streamline communication and visibility products. In Vanuatu, UNDP works closely with the Japanese Embassy and will explore collaboration with JICA. At the regional level, a Tokyo-based Partnership Specialist will hold a review session twice a year to understand each country's progress and address any issues each country might be facing during implementation.

UNDP will strategically consult Japanese representatives on visibility surrounding issues related to the Pacific Green Transformation Project. Japan is a leader on these issues, and the activities outlined seek to draw on those experiences and expertise. With prior agreement, UNDP is keen to ensure Japan's contributions, giving them their proper acknowledgment. UNDP will ensure that a communication plan is in place for this project to highlight its progress and results.

Sustainability and Scaling Up

Project sustainability and scale-up will be achieved by deploying green transformation technology and training to relevant stakeholders to maintain installed technology and systems in parallel with policy advisory to government entities to support expansion and scaleability of similar measures. Additionally, lessons learned about green and efficient procurement standards can be adapted and replicated in other areas not supported by the project. Technical assistance for the operation and maintenance of the installed technologies will be provided to support the full and efficient use of the hardware during its lifecycle. The technical assistance will also support the participating governments in sustaining and scaling up their green transformation initiatives. The project will include advocacy to ensure co-financing or operation and maintenance allocations to ensure the sustainability of the equipment, as well as ensure the availability of well-trained technical capacity beyond the project lifetime.

Strengthened national capacities and increased stakeholder awareness will sustain the project results. By building this capacity, the national counterparts will continue maintaining the equipment and facilities so that project sustainability can be maintained. At the regional level, lessons learned will be consolidated and shared to contribute to the global knowledge management tools, data and evidence that will inform policies and programmes on inclusive green transformation practices at the national or sub-national level.

PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

Cost efficiency and effectiveness in the project management will be achieved through adherence to the UNDP Programme and Operations Policies and Procedures (POPP) and reviewed regularly through the governance mechanism. To apply the principle of economy of scale, where possible, corporate LTAs will be used to speed up the procurement process and to get the best market offer. Joint work plans as well as procurement plans will be put in place to maximize results with the available resources, such as explore pooled procurement opportunities, joint monitoring activities, joint evaluation, communications and partnerships.

Cost-effective green transformation technologies and practices will be promoted throughout this project to ensure engagement and awareness of the private sector stakeholders. Lessons learnt will be collected by the regional project management unit, based in BRH and will be duly registered and shared among UNDP COs and governments so to foster south-south exchanges, scale up and replicability in Asia and the Pacific.

This project will leverage existing related activities as well as partnerships to improve cost-effectiveness. The countries and the Regional Hub have identified all procurement items and will develop detailed procurement plans and timelines. The project will engage technical specialists from UNDP and consultants to support the process, in addition to engaging procurement specialists and working with regional advisors. Attention will be paid to ensure that gender-responsive procurement practices are applied and UNDP's PSEA terms and conditions are adhered to by vendors. To this end, the project will explore opportunities under capacity building to include awareness on UNDP's zero tolerance for sexual exploitation and abuse with local procurement vendors.

Project Management

Project Implementation

The project will be implemented following UNDP's Direct Implementation Modality (DIM). The Project will be implemented as multi-country project by UNDP Country Offices (COs) in Papua New Guinea, Samoa, Timor-Leste, and Vanuatu with overall coordination and technical management support from the regional project management unit based in Bangkok Regional Hub.

The COs have capable and professional teams with adequate experience in implementation and compliance with UNDP regulations and policies for Programme and Project Management (PPM). The COs are well structured to address the two complementary areas of project implementation and financial management as well as application of Rules and Regulations on Programme and Operations Policies. Each country will implement the project under the DIM modality, with dedicated project teams in each country. The regional project management unit, housed in BRH NCEW team will provide technical, coordination and communications advisory services.

Project teams in country offices will work closely with operation support team, led by Operations Manager, who is supported by a Head of Finance, a Head of Human Resources and a Head of Procurement. The CO project teams also work closely with programme staff members in different thematic clusters, Partnerships team, Communications team, Innovation teams, Gender teams to seek additional support in cross-cutting areas of the project.

Oversight and assurance

BRH Regional Programme Management Unit provides support on oversight and assurance for regional activities and support the organization of a joint regional Project Board. Country offices' Programme Management Unit/Programme Officers/ M&E officers provide oversight and assurance for their respective country project. Oversight and assurance activities will ensure operational and financial management of the projects are in compliance with UNDP's procedures, rules and regulations.

The CO's HACT focal points oversees HACT compliance of project implementing and responsible partners (Executing Partners). On an annual basis, regular spot checks and project audits are conducted for all projects, in line with UNDP POPP and the Assurance Plan approved by the CO's Resident Representative. The COs

are also bound to comply with UNDP´s PPM Policies and the UNDP´s Financial Regulation 16.02 and Financial Rule 116.02.

a. **Papua New Guinea**

UNDP Papua New Guinea will implement this project under UNDP's Direct Implementation Modality (DIM) in consultation with the project's beneficiaries and other project partners. UNDP will establish a *Project Management Unit (PMU)*. UNDP's Bougainville Programme Team Leader will supervise the Project Manager. This project will form part of UNDP's broader Bougainville programme.

The Project Manager will be responsible for:

- Day-to-day management of the project, including supervision of the PMU staff, consultants and project budget.
- Ensuring that the project produces the outputs and results specified as determined by the Project Board, in compliance with the required standards of quality, and within the specified limits of time and cost.
- Reporting as required on the project's activities and outcomes. An annual narrative report (including a financial report) will be submitted to the National Advisory Group for onward submission to Regional Project Board and the Government of Japan. While quarterly reports will be prepared for the project partners. A final narrative and financial report will be submitted at the end of the project. Adhoc reports will be issued at the request of the Government of Japan.

The project will be delivered from UNDP's office in Buka, Bougainville. A joint terminal project evaluation will be conducted per the UNDP Evaluation Policy. *National Advisory Group*: UNDP Papua New Guinea (project executive); Embassy of Japan (senior supplier) and Autonomous Bougainville Government and PNG Climate Change and Development Authority (beneficiary representative) provide oversight and approve key execution functions as per agreed threshold delegated from the Regional Project Board. UNDP Papua New Guinea through the project management unit represents key implementing body, while ABG Department of Technical Services; PNG Power Limited and ABG Department of Lands, Physical Planning, Environment, and Conservation represent key responsible parties.

b. **Samoa**

The UNDP Samoa MCO will implement this project under UNDP's Direct Implementation Modality (DIM). Where they have a comparative advantage in implementing specific activities, in compliance with PPM Design Select Responsible Party and Grantees.docx (undp.org), UNDP will engage government and non-government entities, leveraging existing national institutional frameworks and coordination mechanisms to implement Samoa's NDC, including the National Energy Coordination Committee as per UNDP. Academic institutions will be engaged to embed upskilling and capacity development efforts to strengthen local human capacity for Samoa's transition towards zero-carbon islands. UNDP will collaborate with key Civil Society Organizations (CSOs) to ensure meaningful engagement with community groups, especially the most marginalized including, women, youth and persons with disabilities across all stages of project implementation, to ensure that the interventions reflect and respond to the specific needs of all. Engagement of government and non-governmental entities will be done following UNDP rules and regulations. As an institutional partner to Regional and International Development organizations, UNDP will also leverage technical expertise and research on ongoing low-emission transport projects in the Pacific Islands for both land and maritime transport sectors.

A dedicated *National Advisory Group (NAG)* comprising of all stakeholders will be established as per the standard UNDP project management arrangements to provide country-level oversight, strategic advice and guidance for the project. The NAG reviews performance based on established monitoring and evaluation metrics and high-level implementation issues to ensure the quality delivery of results. It also serves as a mechanism for leveraging partnerships and will meet at least once a year. The Embassy of Japan in Samoa will be a member of the NSC.

The *Project Management Unit (PMU)* will develop the full Monitoring & Evaluation (M&E) framework in line with relevant SDGs, Pathway for the Development of Samoa (PDS 2021-25), Samoa's NDC, the UNDP Strategic Plan's Integrated Results and Resources Framework 2022-25 and UNDP's Multi-Country

Programme Document (MCPD) for the Pacific Countries and Territories 2023-27 during the project inception phase and submit it to the National Advisory Group for review and approval. The PMU will submit annual narrative and financial progress reports to the Regional Project Board and the Embassy of Japan, and a final project report on the completion of the activities within three months. The final financial report of expenditures will be shared with the Government of Japan as per UNDP's policies on final financial statements within one year of project completion. A joint terminal project evaluation will be conducted in accordance with the UNDP Evaluation Policy. Project site visits will be conducted throughout the duration of the project for verification of the progress of activities and monitoring of results in line with the Annual Work Plan (AWP), with representatives from the Embassy of Japan invited to attend. Site visits will be documented in the standard UNDP Samoa monitoring format. The UNDP Samoa Environment and Climate Change Unit (ECCU) in collaboration with other relevant staff of the Samoa Multi-Country Office will be responsible for Project Assurance and oversight in line with standard UNDP policies and procedures, including Project Quality Assurance, Project Management in UNDP's ERP system (Quantum/Quantum+) and implementation of the Harmonized Approach to Cash Transfers (HACT).

c. Timor-Leste

This project will be implemented by UNDP Timor Leste under UNDP's Direct Implementation Modality (DIM) and continuously monitored through various mechanisms outlined below. In addition to process monitoring and annual result monitoring, this project will also monitor the outcome level results of, for example, having the solar power systems in health facilities and schools particularly in terms of how it has improved the services provided by these facilities and how access to these services have improved. Special monitoring activities (e.g. surveys with beneficiaries) will be conducted to track these outcome level results. A joint terminal project evaluation will be conducted in accordance with the UNDP Evaluation Policy.

The *National Advisory Group* will be composed of the senior beneficiaries including Ministry of Public Works (MoPW), Ministry of State Administration (MSA), Autonomous Service of Medicines and Medical Equipment (SAMES) under the Ministry of Health (MoH), and the Ministry of Education, Youth and Sports (MoEYS). Embassy of Japan in Timor-Leste as the senior supplier will also be involved in the National Avisory Group. The main roles of the National Avisory Group shall include, *inter alia*, overseeing the implementation of the project, providing advice and guidance, and approval of work plan and budget within the threshold delegated from the Regional Project Board.

On the other hand, the *Project Management Unit (PMU*) will be responsible for the day-to-day implementation of the project. The PMU shall comprise of a national Project Manager, international and national Engineers, ICT specialist, Solar PV technician, Electrician, ESIA/ESMP safeguard specialist, Gender Equality and Social Inclusion officer, Communications and Monitoring and Evaluation officer, Admin and Finance officer, and Driver. PMU will also oversee the works undertaken by contractors and Consultants as required.

d. Vanuatu

The project will be implemented as Direct Implementation Modality (DIM). UNDP has the technical and administrative capacity to mobilize and effectively apply the required inputs to reach the expected outputs. UNDP assumes overall management responsibility and accountability for project implementation. UNDP may identify a Responsible Party to carry out activities within a DIM project. A Responsible Party is defined as an entity selected to act on behalf of the UNDP based on a written agreement or contract to provide goods and/or services to the project, carry out project activities and/or produce outputs using the project budget. The Responsible Party may manage these goods and services to carry out project activities and produce outputs. All Responsible Parties are directly accountable to UNDP per the terms of their agreement or contract with UNDP.

The project will be housed within the Environment Portfolio of the CO, with a conscious cross-unit collaboration with the Operations Unit, given the highly cross-sectoral nature of the project. This project will entail close support from the Operations Unit of the CO, with QA ensured by the DRR. A *National Advisory Group*, co-chaired by the respective government agency of each implementing countries, will be set up to guide at the national level and include all development partners and donors involved in green transformation at the national level. This group will ensure the effective use of resources for the Pacific Green Transformation Project at the national and sub-national levels between countries.

A joint terminal project evaluation will be conducted in accordance with the UNDP Evaluation Policy.

e. Bangkok Regional Hub

As the project covers four countries, there is a need for a regional coordination mechanism for better coordination and articulation and to promote effective communication and exchange of experiences between countries. BRH Regional Project Management Team, housed within BRH Nature, Climate, Energy and Waste (NCEW) team, will closely coordinate with the RBAP Climate Strategies and Policies team and the Project Coordinator in consolidated implementation support services and will be the main liaison with MOFA/GoJ in the project-related matters.

Further at the regional level, BRH Regional Project Management Team will facilitate sharing of experiences and good practices among the four programme countries. This is best managed at regional level, with potential for replication in other countries in the region. The impact and visibility may be broader if managed regionally, taking advantage of UNDP organizational structure and presence in other regions such as RBLAC, RBEC, RBAS, and RBA to leverage UNDP's Global Policy Network. This project will enable South-South and Triangular Cooperation not only between the four countries through capturing of good lessons, but also beyond, through regional technical assistance in developing regional work plan/briefs/policy papers/ and organization of webinars and/or South-South Exchange Dialogues for a global audience, to serve as a platform for wider resource mobilization, and across similar projects at the Hub.

RESULTS FRAMEWORK

Refer to Annex 1

MONITORING AND EVALUATION

Refer to Annex 2

MULTI-YEAR WORK PLAN BY PARTNER COUNTRY[45]

Budget Summary (Refers to Annex 4)

Country	Output	Output Description	Amount (USD)
Papua New Guinea	Output 1	Build resilience of Bougainville through expansion of renewable energy access	3,000,000.00
		DPC	450,000.00
		GMS	276,000.00
		UN Levy (1%)	37,260.00
		Sub-Total Papua New Guinea	**3,763,260.00**
Samoa	Output 1	Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems.	775,000.00
	Output 2	Accelerated inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener transport systems for public service delivery.	10,141,473.00
	Output 3	Explored and accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on fishing vessels.	2,155,000.00
		DPC	1,141,027.00
		GMS	1,137,000.00
		UN Levy (1%)	153,495.00
		Sub-Total Samoa	**15,502,995.00**
Timor Leste	Output 1	Households not connected to the national electric grid have access to clean and reliable power supply	717,500.00
	Output 2	Health service centres have improved facilities for better service provision	1,040,310.00
	Output 3	Secondary and vocational/technical schools have functioning ICT labs for better access to ICT education	2,028,400.00
		DPC	1,513,790.00
		GMS	424,000.00
		UN Levy (1%)	57,240.00

[4] Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

[5] Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

Country	Output	Output Description	Amount (USD)
		Sub-Total Timor-Leste	**5,781,240.00**
Vanuatu	Output 1	Achieve the National Energy Road Map (NERM), i.e. 100% electrification with Renewable Energy by 2030 by installing eight Pico hydro projects	3,197,500.00
		DPC	1,040,000.00
		GMS	339,000.00
		1% UN Levy	45,765.00
		Sub-Total Vanuatu	**4,622,265.00**
Regional Technical/Management Support	Output 1	Regional management, reporting and oversight	1,170,885.00
	Output 2	Regional technical and operational support	1,345,833.00
	Output 3	Communication, advocacy, and knowledge management	4,349,547.69
		DPC	343,315.00
		GMS	576,766.46
		1% UN Levy	77,863.47
		Sub-Total Regional Technical/Management Support	**7,864,210.62**
		Total (All Four Countries and Regional Technical/Management Support)	**37,533,970.62**

For details of country-specific and regional technical/management support budget and workplans, please refer to Annex 3 and 4

GOVERNANCE AND MANAGEMENT ARRANGEMENTS

The project will be implemented following DIM modality. The Regional Project Board is the most senior, dedicated oversight body for the project. The two main roles of the project board are as follows:

1) **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the "Provide Oversight" section of UNDP POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board shall be responsible for taking corrective action as needed to ensure the project achieves the desired results.
2) **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor, and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the "Manage Change" section of the POPP).

The Project Board will meet on an annual basis and its responsibilities include:

- The project board provides overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
- Review project performance based on monitoring, evaluation, and reporting, including progress reports, risk logs and the combined delivery report.
- In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency, and effective international competition.
- The project board is responsible for making management decisions by consensus. In case consensus cannot be reached within the Board, the UNDP representative on the Board, who is BRH Manager, will mediate to find consensus, and if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.
- Approve the Annual Work Plans and Budgets, and ensure project manager's tolerances remain within the parameters outlined in the AWP, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor.
- Provide high-level direction and recommendations to the project management units to ensure that deliverables are produced satisfactorily and according to plans.
- Review and advise on the Project Risk Register and risk management plans including SES that have implications on the project implementation.
- Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks
- Address project-level grievances, if any, and follow up actions required.

The **Project Board** will be chaired by the Executive, represented by UNDP Bangkok Regional Hub Manager. Senior Representatives from the Country Offices (Resident Representative or his/her delegate) represent Senior Beneficiaries in the Project Board. A representative of the Donor will serve in the Senior Supplier/Development Partner role.

At the country level, Senior Management of the individual CO will set up a **National Advisory Group** to ensure coordination between various donor and government-funded projects and programmes at the national level, and ensure that community and other relevant stakeholders are consulted and included in the decision making related to the project implementation and coordination at national and sub national levels. The National Advisory Group will include the direct beneficiaries, and the indirect beneficiaries, which include the communities at the sub national level, all of whom will derive benefit from an improved sustainable and climate resilient environment. The Beneficiary representatives' will be engaged in the decision making for the project and to ensure project results bring positive impact for the community and beneficiaries.

Project Assurance: UNDP BRH Regional Programme Management Unit performs quality assurance and supports the Regional Project Board, by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards

of UNDP. This role ensures appropriate project management milestones are completed, and conflict of interest issues are monitored and addressed. The project assurance function is independent of project execution. Each country office will provide project assurance for their respective country project under the direction of their respective Senior Management. A designated Programme/ M&E Officer in each Country Office will play the project assurance role in line with UNDP corporate rules and regulations. Each individual country office will follow similar structures of project QA.

The UNDP BPPS team on Nature, Climate, Energy and Waste (NCEW) provides technical quality assurance and strategic oversight of the project, in partnership with the Country Office Support and Quality Assurance (COSQA) team through the respective country desk officers. The Regional Project Management Team will present key deliverables and documents to the Regional Project Board for review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk logs. BRH Regional Programme Management Unit will perform project assurance role for the regional activities and attend the joint Project Board meetings and support board processes as a non-voting representative.

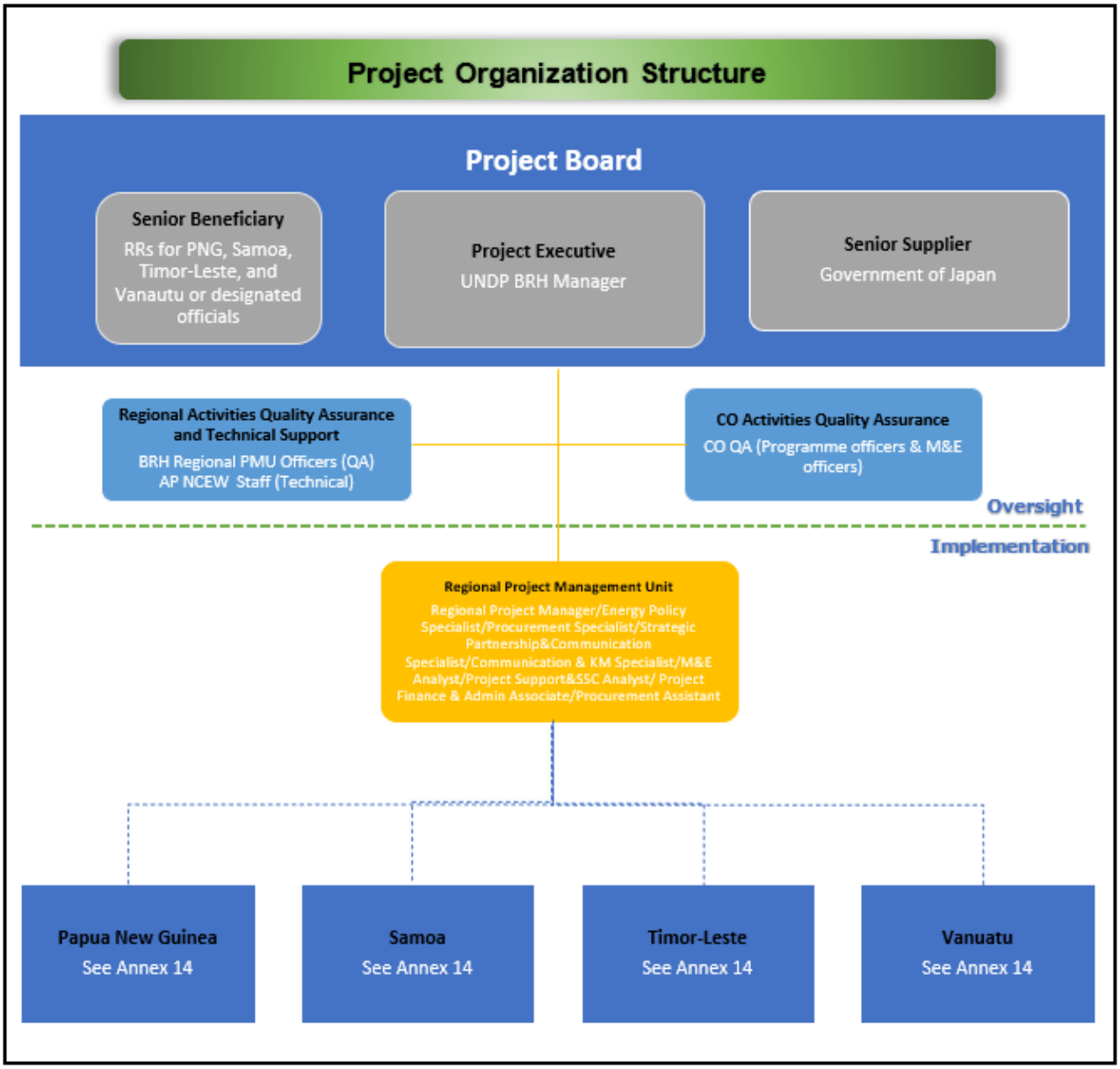
Project Management:

The Regional Project Management Team will consist of:

1) A Regional Project Manager, a Regional Communication and Knowledge Management Specialist, a Monitoring and Evaluation Analyst, and a Project Support and South-South Coordination Analyst, a Project Finance and Administrative Associate, and a Procurement Assistant will based in UNDP Bangkok Regional Hub.
2) A Strategic Partnership and Communication Specialist will be based in UNDP Tokyo to ensure close coordination and timely response to Ministry of Foreign Affairs of Japan.
3) A Regional Procurement Specialist to be based in UNDP Papua New Guinea to ensure coordination for timely delivery of a procurement plan in all four countries
4) An Energy Policy Specialist to be based in UNDP Samoa MCO to further strengthen the green transformation policy in the energy sector in all four countries

The Regional Project Manager will be responsible for the overall day-to-day coordination of the regional component of the project and ensure thematic and sectoral synergies and coordination of programme activities across all four countries. The regional positions that will be running the project with their respective terms of reference are indicated in Annex 11.

Each country will set up its Project Management unit, to be led by Country Project Managers. The Project Managers will be responsible for the day-to-day management of the project, managing all project inputs, supervising project staff, responsible parties, consultants and sub-contractors as well as coordinate the procurement and in country coordination. The project manager will present key deliverables and documents to the National Advisory Group for their review for onward approval by the Regional Project Board, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.



LEGAL CONTEXT

Global and Regional Projects

This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the "Project Document" instrument referred to in: (i) the respective signed SBAAs for the specific countries; or (ii) in the Supplemental Provisions to the Project Document attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by [name of entity] ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply**.**

RISK MANAGEMENT

UNDP (DIM)

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)

2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds][6] [UNDP funds received pursuant to the Project Document][7] are used to provide support to individuals or entities associated with terrorism , that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Consolidated Sanctions List can be accessed via https://www.un.org/securitycouncil/content/un-sc-consolidated-list. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse ("SEA") and sexual harassment ("SH") allegations in accordance with its regulations, rules, policies and procedures.

6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor, and sub-recipient:

   a. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's

[6] To be used where UNDP is the Implementing Partner

[7] To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:

i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.

b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.

c. Each responsible party, subcontractor and sub-recipient (each a "sub-party" and together "sub-parties") acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the sub-parties, and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

(a) In the implementation of the activities under this Project Document, each sub-party shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, each sub-party, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.

d. In the performance of the activities under this Project Document, each sub-party shall (with respect to its own activities), and shall require from its sub-parties (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, sub-parties will and will require that their respective sub-parties will take all appropriate measures to:

(i) Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

(ii) Offer employees and associated personnel training on prevention and response to SH and SEA, where sub-parties have not put in place its own training regarding the prevention of SH and SEA, sub-parties may use the training material available at UNDP;

(iii) Report and monitor allegations of SH and SEA of which any of the sub-parties have been informed or have otherwise become aware, and status thereof;

(iv) Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

(v) Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. Each sub-party shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the relevant sub-party shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

e. Each sub-party shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the relevant sub-party to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

f. Each responsible party, subcontractor and sub-recipient will ensure that any project activities undertaken by them will be implemented in a manner consistent with the UNDP Social and Environmental Standards and shall ensure that any incidents or issues of non-compliance shall be reported to UNDP in accordance with UNDP Social and Environmental Standards.

g. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud, corruption or other financial irregularities, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption, anti-fraud and anti money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.

h. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices (b) UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy; and (c) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

i. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.

j. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud, corruption other financial irregularities with due confidentiality.

   Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

k. UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud corruption, other financial irregularities or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

   Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

l. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.

m. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

n. Each responsible party, subcontractor, and sub-recipient shall ensure that all of its obligations set forth under this section entitled “Risk Management” are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled “Risk Management Standard Clauses” are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

ANNEXES

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ANNEX 1: RESULTS FRAMEWORK[1]

A. Results Framework: Papua New Guinea

Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework: CPD Outcome 3: By 2025, Papua New Guinea demonstrates improved performance in managing environmental resources and risks emanating from climate change and disasters.
Outcome indicators as stated in the Country Programme [or Regional] Results and Resources Framework, including baseline and targets: Legislation, policy and strategic plans for climate-proofing, conservation, sustainable use of natural resources and disaster risk management in place.
Applicable Output(s) from the UNDP Strategic Plan: 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery
Project title and Atlas Project Number: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development

EXPECTED OUTPUTS	OUTPUT INDICATORS[2]	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
Output 1. Build resilience of Bougainville through expansion of renewable energy access.	**1.1** Total solar energy generation installed in Bougainville.	0	2022	Activity: 1.1. Widen community engagement and consultation during the design phase to ensure inclusivity and on-the-ground needs are reflected. Activity: 1.2. Develop and install mini-solar farms in the three regions of Bougainville.	0	1MW	Installed capacity from solar farms commissioned
	1.2 Number of people to benefit from solar energy generation installation in Bougainville. (sex-disaggregated)	0	2022		0	30,000	Surveys of households accessing power generated through solar farms
	1.3 Number of recommended legal structures and platforms proposed to ABG Government.	0	2022		1	2	*Submissions to Bougainville House of Representatives (BHoR) through committees. Acceptances of recommendations and*

[1] UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

[2] UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

EXPECTED OUTPUTS	OUTPUT INDICATORS[2]	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
				Activity: 1.3. Strengthened regulatory and governance structures to expand renewable energy adoption in Bougainville Activity: 1.4. Operations and maintenance of solar farms as demonstration for expansion of renewable energy policy into the Bougainville. Activity 1.5. Upskill the community to operate and maintain the new renewable energy sources			*changes to regulatory processes.*
	1.4: Number of people trained to operate and maintain the solar energy generation systems (sex-disaggregated)	0	2022		20	30	*Certificates of completions of training in solar panel trade*

B. Results Framework: Samoa

Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework: **MCPD/Cooperation Framework Outcome 1:** By 2027, people, communities and institutions are more empowered and resilient to face diverse shocks and stresses, especially related to climate variability impacts, and ecosystems and biodiversity are better protected, managed, and restored.
Outcome indicators as stated in the Country Programme [or Regional] Results and Resources Framework, including baseline and targets: **MCPD/Cooperation Framework Outcome Indicator 1.3:** Number of countries with reduced greenhouse gas emissions per capita. Baseline (2021): 3; Target (2027): 7.
Applicable Output(s) from the UNDP Strategic Plan: 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery
Project title and Atlas Project Number: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
Output 1. Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems	***1.1*** Number of gender-sensitive planning and policy instruments developed to support Samoa's transition to low-carbon transport disaggregated by NDC sub-sector	2	2021	Activity 1.1: Review and update Samoa's legislative and policy framework in support of a national transition to low-carbon land and maritime transport. Activity 1.2: Conduct a transport optimization and energy efficiency review. Activity 1.3: Develop a gender responsive Decarbonization Strategy for the Transport Sector Plan with sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework Activity 1.4: Conduct a scoping and feasibility study on investment shifts away from	2	4	• Transport Sector Plan 2013-2018 • Samoa NDC Implementation Roadmap and Investment Plan • Updated legislative and policy framework in support of Samoa's national transition to low-carbon transport • Decarbonization Strategy and Sector Plan for Land and Maritime Transport
	1.2 Number of inclusive finance mechanisms identified and feasible to support investments in Samoa's decarbonization of land and maritime transport, disaggregated by type and target revenue potential.	1	2020		1	3	• Customs Tariff Amendment Act 2020 • Feasibility Study

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
	1.3 Number of upskilling programs enhanced and/or developed	0	2022	carbon intensive transport and identify gender-responsive innovative finance mechanisms to support and sustain Samoa's low-carbon transition. Activity 1.5: Design and roll out an inclusive public awareness campaign promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure Activity 1.6: Develop an upskilling programme on electric vehicle automotive electronics, mechanics and engineering	0	1	• Outline of upskilling programme
Output 2 Accelerated inclusive decarbonization of the land transport sector with a focus on inclusive,	**2.1** Number of electric vehicles procured disaggregated by type/service a) cars b) vans c) pick-ups d) buses e) utility trucks	10 a) 10	2021	Activity 2.1: Conduct a baseline assessment of traffic volumes, vehicle registration and imports, vehicle ownership disaggregated by gender and age, EV and hybrid vehicles, and market demand.	12[3] a) 12	58[4] a) 31 b) 10 c) 10 d) 5 e) 2	• Specifications • Purchase Orders • Exchanges w/ Samoa's only EV dealership

3 Figure is cumulative and inclusive of 2 EV orders to local dealerships by private purchasers.

4 Figure is cumulative and inclusive of both private EV purchases as well as project-specific targets for the procurement during the project lifetime. Project-specific targets are a) 19, b) 10, c) 10, d) 5 and e) 2 = 46 EVs to be procured by project during its lifetime. Distribution by vehicle type to be confirmed by country needs assessment during project inception.

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
accessible and greener transport systems for public service delivery	**2.2** Annual total emissions (tCO2e) avoided from the land transport subsector	46 tCO_2e/ year	2021	Activity 2.2: Enhance land transport monitoring, including the procurement of emissions testing equipment and optimization of the Road Transport Administration System (RTAS) to improve fuel efficiency and optimize emission reduction potential. Activity 2.3: Design and roll out awareness campaign for inclusive and safe mobility especially for women, PWDs, elderly, youth and children, based on a public survey on perceptions of barriers to low-carbon mobility. Activity 2.4: Develop a gender-sensitive Sustainable Land Use and Mobility Plan, to promote green, inclusive and accessible infrastructure and mobility. Activity 2.5: Design and install charging station network for public service delivery electric vehicles (EVs).	46 tCO_2e/ year	257.6 tCO_2e/ year[5]	• National Vehicle Registration Statistics • GHG Inventory 2021 • Monitoring Reporting and Verification (MRV) System for GHG • Progress reports
	2.3 Number of charging stations installed disaggregated by location and energy source.	10	2021		10[6]	84[7]	• Solar-charging station network design • Meeting minutes and consultation reports
	2.4 Number of plans developed that promote inclusive and accessible low-carbon mobility	0	2022		0	1	• Sustainable Land Use and Mobility Plan

5 To be determined by country needs assessment and based on procurement specifications.
6 Figure is cumulative.
7 Figure is cumulative and inclusive of project-specific targets including 50 x individual charging stations, and 2 x public car park charging stations with at least 12 charging outputs = 74 charging stations.

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
				Activity 2.6: Explore technical, policy, infrastructural and technological solutions for safe disposal and recycling of EV batteries. Activity 2.7: Support accessible electrification of vehicles targeting public service delivery vehicles based on country needs assessment.			
Output 3. Explored and accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on fishing vessels	3.1 Number of feasible low-carbon maritime transport options identified	1	2021	Activity 3.1: Optimize the national registration system for vessels, including private fishing and transport boats for improved emissions tracking and control, and fuel efficiency. Activity 3.2 Conduct a feasibility study, gender and cost-benefit analysis of low-carbon maritime transport options, prioritizing fishing vessels. Activity 3.3: Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance.	2	2	• Samoa NDC Implementation Roadmap and Investment Plan 2021 • Feasibility study
	3.2 Percentage of electrified and/or energy-efficient fishing vessels, disaggregated by gender of grantee.	0	2022		0	20	• Grant agreements signed (i.e., MoU) • Grantee progress reports

C. Results Framework: Timor-Leste

Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework: CPD outcome 2: By 2025, national and sub-national institutions and communities (particularly at-risk populations including women and children) in Timor-Leste are better able to manage natural resources and achieve enhanced resilience to climate change impacts, natural and human induced hazards, and environmental degradation, inclusively and sustainably
Outcome indicators as stated in the Country Programme [or Regional] Results and Resources Framework, including baseline and targets: Number of people benefiting from the construction and retrofitting of sustainable, resilient and resource-efficient infrastructure utilizing local materials (SDG Indicator 11.c.1); Baseline (2019): 103,089 in 6 municipalities; Target: 150,000 (50% female)
Applicable Output(s) from the UNDP Strategic Plan: 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery
Project title and Atlas Project Number: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
Output 1. Households not connected to the national electricity grid have access to clean and reliable power supply	1.1 Number of households having access to solar-based electricity	30,000	2022	Activity: 1.1. Detailed feasibility studies including gender lens conducted in villages that are not yet connected to the national grid Activity: 1.2. Designs and detailed estimates developed towards procurement and provision of solar lights and energy efficient cooking stoves Activity: 1.3. Mechanism to establish maintenance support developed including training for local technicians	30,400	31,000	Timor-Leste National Strategic Development Plan 2011-2030 UNDP's ACCESS project progress report 2022 Feasibility Study report
	1.2 Number of individuals (sex-disaggregated) benefitting from solar energy in their households	150,000 (49% women)	2022		152,000	155,000	Timor-Leste National Strategic Development Plan 2011-2030 UNDP's project ACCESS project progress report 2022 Progress report
	1.3 Number of households piloted with energy-efficient cooking stoves	20,000	2020		20,400	21,000	Timor-Leste National Strategic Development Plan 2011-2030 UNDP's Project BIOMASS Final Report (TE report) Progress report

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
Output 2. Health service centers have improved facilities for better service provision	2.1 Number of solar PV systems installed at SAMES	0	2022	Activity: 2.1. Detailed feasibility studies conducted for SAMES for solarization Activity: 2.2. Solar systems installed in SAMES and two community health centres/health posts	0	1	SAMES Final Report Pre-feasibility Study of Solar PV 2020 Detailed Feasibility Study Report Progress report
	2.2 Number of solar PV systems installed in community health centers and health posts8	0	2022		1	2	Progress reports
Output 3. Support select schools to have solar power-based Information, Communication Technology (ICT) labs to promote digital teaching and learning	3.1 Number of secondary and vocational/technical schools with new or renovated ICT labs	40 schools (Approx. 26,000 students)	2022	Activity: 3.1. Secondary schools and vocational/technical schools identified for solarization (based on the UNDP's 2022 assessment report) and detailed feasibility studies conducted for renovation of infrastructure and solar system Activity: 3.2. Cost of implementing solarization plan Activity: 3.3. Renovation of facilities in schools conducted to house the ICT labs Activity: 3.4. Computers and other accessories procured to make ICT labs functional Activity: 3.5. Mechanism to establish maintenance support developed	47	55 (Approx. 35,000 students)	Final Report: Assessment of ICT Infrastructure and Human Capacity in Secondary Schools and Tvet Facilities Progress report
	3.2 Number of ICT labs with functioning computers	8 (Approx. 5,000 students)	2022		15	23 (Approx. 15,000 students)	Final Report: Assessment of ICT Infrastructure and Human Capacity in Secondary Schools and Tvet Facilities Progress report
	3.3 Number of ICT labs supported with solar power	0	2022		7	15	Final Report: Assessment of ICT Infrastructure and Human Capacity in Secondary Schools and Tvet Facilities Maintenance support guidelines/SOP Progress report

8 There's no data available

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
				Activity: 3.6. Training to teachers conducted on ICT teaching and learning materials and delivering ICT courses			

D. Results Framework: Vanuatu

Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework: By 2024 eight additional communities access to green energy that contributes to achieving the National Energy Road Map (NERM) target i.e. 100% electrification with Renewable Energy by 2030
Outcome indicators as stated in the Country Programme [or Regional] Results and Resources Framework, including baseline and targets: UNDP Strategic Plan and Sub-Regional Programme Document (SRPD, 2018-2022) Outcome: Scale-up action on climate change adaptation and mitigation.
Applicable Output(s) from the UNDP Strategic Plan: 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery
Project title and Atlas Project Number: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
Output 1. Support Achieve the National Energy Road Map (NERM), i.e. 100% electrification with Renewable Energy by 2030 by installing eight Pico hydro projects.	1.1 Number of Pico Hydro stations installed in 8 locations and integrated in the national Grid System	2	2022	Activity: 1.1. Finalized feasibility study and detail design estimate for installation of 8 Pico Hydro Activity: 1.2 Developed detailed technical specifications and procurement of the 8 Pico hydro Activity: 1.3 Installed Pico Hydro stations and strengthen resilience of rural communities through renewable energy sources Activity: 1.4 Strengthened capacity of national and local government in operation and maintenance of the newly installed systems	2	10	Joint Field Visit (DOE, UNDP, JICA) Report, DOE webpage. Final Report of Feasibility Study
	1.2 Number of residents to have access to clean energy (disaggregated by: male, female and youth (15-24))	1250	2022		1250	3616	Joint Field Visit (DOE, UNDP, JICA) Report. Registration Report of Utility Regulatory Authority (URA)
	1.3 Number of government officials and staff trained	2	2022		2	12	Report on DOE Capacity building /Interview with capacitated staff
	1.4 Number of green/sustainable jobs created (disaggregated by: male, female and youth (15-24))	10	2022		10	20	Joint Field Visit (DOE, UNDP, JICA) Report, Market Survey

E. Results Framework: Regional Technical/Management Support

Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework:
Outcome indicators as stated in the Country Programme [or Regional] Results and Resources Framework, including baseline and targets: UNDP Strategic Plan and Sub-Regional Programme Document (SRPD, 2018-2022) Outcome: Scale-up action on climate change adaptation and mitigation.
Applicable Output(s) from the UNDP Strategic Plan: 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery
Project title and Atlas Project Number: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
Output 3. Communication, advocacy, and knowledge management	1.1 Number of visual communication products on green transformation produced	0	2022	Activity: 3.1. Tokyo-based visibility and partnership Activity: 3.2 Advocacy and communications Activity: 3.3 Regional knowledge management and south-south exchanges	1	2	Publications on UNDP website; Report
	1.2 Number of south-south knowledge exchange workshops on green transformation organized	0	2022		1	2	Report and illustration following south-south exchange workshops; Press Releases
	1.3 Number of knowledge publications on green transformation released	0	2022		1	2	Publications on UNDP website; Report
	1.4 Number of government officials, civil society organization representatives, and/or relevant stakeholders participated in knowledge exchange missions (disaggregated	0	2022		10	30	Publications on UNDP website; Report

EXPECTED OUTPUTS	Output Indicators	Baseline		PLANNED ACTIVITIES	Targets		Means of Verification
		Value	Year		Year 1	Year 2	
	by: male, female and youth (15-24))						

ANNEX 2: MONITORING AND EVALUATION

UNDP will undertake monitoring and reporting of project activities in accordance with its Program and Operations Policies and Procedures (POPP) for Project Management.

As required by the Government of Japan, a final narrative of country reports for individual countries will be prepared at the operational completion of the projects. The portfolio level Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development (Green Transformation for Pacific SIDS) regional reports will be periodically shared with the Government of Japan during the project period for updates. Final financial reports for individual countries will be prepared after financial closure of projects following UNDP policy.

Detailed M&E plan will be jointly developed for the Multi-Country and Country Office activities to ensure effective resource allocation. Below is an indicative plan at the level of the UNDP Country Office.

Indicative Monitoring and Evaluation Plan at the Country Office and Regional Levels

Monitoring Activity	Purpose	Frequency	Expected Action	Estimated Budget					
				PNG	Samoa	Timor-Leste	Vanuatu	Regional	Total
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.	20,000	32,986[9]	10,000	20,000		**82,986**
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk. HACT spot checks of the	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.	50,000	94,873[10]	20,000	50,000		**214,873**

[9] PM (10%@25,926), NC (5%@2,973), Finance&admin (10%@4,087)

[10] Micro assessments (10,000), spot-checks (20,000), M&E analyst (5% - 3,000), Gender & Safeguards specialists(6months@30,000), PM (10%@25,926), NC (10%@5,947)

Monitoring Activity	Purpose	Frequency	Expected Action	Estimated Budget					
				PNG	Samoa	Timor-Leste	Vanuatu	Regional	Total
	RPs will be conducted as applies, as per the HACT policy								
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		120,354[11]	5,000	5,000		**130,354**
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.		35,960[12]	5,000	5,000		**45,960**
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	Annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		28,899[13]	5,000	5,000		**38,899**
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation	Annually, and at the end of the project (final report)		10,000	30,943[14]	10,000	5,000		**55,943**

[11] Japan UNV – comms specialist (1 year@95,751), UNDP Comms (10% - 3,667), PM (5%@12,963), NC (5%@2,973), knowledge products (5% of all awareness activities@5,000)

[12] PM (10%@25,926), NC (10%@5,947), Finance & admin (10%@4,087)

[13] PM (10%@25,926), NC (5%@2,973)

[14] PM (10%@25,926), NC (10%@5,947), Finance & admin (5%@2,044)

Monitoring Activity	Purpose	Frequency	Expected Action	Estimated Budget					
				PNG	Samoa	Timor-Leste	Vanuatu	Regional	Total
	measures, and any evaluation or review reports prepared over the period.								
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	At least once a year	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.	15,000	38,373[15]	10,000	5,000		**68,373**
	Joint Final evaluation	Once, three months before project closure						**100,000**	
Total cost				**95,000**	**382,388**	**65,000**	**95,000**	**100,000**	**737,388**

[15] PM (10%@25,926), NC (10%@5,947), PB meetings (5%of all trainings and workshop @6,500)

ANNEX 3: MULTI-YEAR WORK PLAN [16][17]

A. Papua New Guinea

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
Output 1: Build resilience of Bougainville through expansion of renewable energy access	**Activity 1.1.** Widen community engagement and consultation during the design phase to ensure inclusivity and on-the-ground needs are reflected. • Defining local beneficiaries of the micro solar farms in partnership with ABG Government, local communities, landowners and private sector. • Consultation with relevant stakeholders • Communications of benefits of renewable energy to the community, landowners and other stakeholders. Roll out of relevant communication products to the community, private sector, youth, women and other groups. Specific focus on the benefits of renewable energy and quantification and alignment to their livelihoods and green outcomes. • Formal ceremonies and events related to project initiation, ground breaking and completion of construction, Inclusion of Embassy of Japan in PNG in all major events and acknowledgement through regular project announcements and updates.	200,000	50,000	UNDP	Japan Fund	Expert/Consultant; Consultancies; Travel and Workshops; Visibility and Associated Cost	250,000
	Activity 1.2. Developed and installed solar farms in the three regions of Bougainville. • Designing and developing 1 MW solar farms in each of the three regions of Bougainville • Engineering, procurement and construction of three micro solar farms in each region of Bougainville	350,000	1,735,000	UNDP	Japan Fund	Equipment, procurement, construction, and commissioning (EPCC) and Associated Cost	2,085,000
	Activity 1.3. Strengthened regulatory and governance structure to expand renewable energy adoption in Bougainville. • Strengthen Legal structures and platforms to help sustain and deepen the uptake of renewable energy projects in Bougainville	125,000	40,000	UNDP	Japan Fund	Experts/Consultants - Legal; Governance and Oversight; Travel and Workshops;	165,000

[16] Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

[17] Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
	• Permits and development approvals					Visibility and Associated Cost	
	Activity 1.4. Operations and maintenance of solar farms as demonstration for expansion of renewable energy policy into the Bougainville • Maintenance and operationalization for the solar farms.	0	100,000	UNDP	Japan Fund	Equipment and Tests; Operations and Maintenance; Travel and Workshops; Visibility and Associated Cost	100,000
	Activity 1.5 Upskilled the community to operate and maintain the new renewable energy sources • Creating a skilled workforce – project managers, engineers, solar technicians, electricians, welders, pipefitters, crane operators and others • Develop a platform to bring together both education providers and community to enable dissemination of renewable energy knowledge and skills through both formal training (polytechnics) or through short-term programs including seminars, workshops and communities of practice.	150,000	250,000	UNDP	Japan Fund	Expert/Consultant; Education and Training; Travel and Workshops; Visibility and Associated Cost	400,000
	Activity 1.6: Monitoring, Communication and Coordination[18]	-	-	UNDP	Japan Fund	Regional Technical/Management Support	-
						Sub Total	**3,000,000**
Project Management		PMU; Operations and Monitoring; Visibility and Associated Costs					450,000
General Management Support (8%)							276,000
UN Levy (1%)							37,260
TOTAL PAPUA NEW GUINEA							**3,763,260**

[18] Activity 1.6. Monitoring, Communication and Coordination (Regional Technical/Management Support) is the Regional Technical/Management Support which has a separate regional budget in Annex 3 section E for details.

B. Samoa

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
Output 1: Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems.	Activity 1.1: Review and update Samoa's legislative and policy framework in support of a national transition to low-carbon land and maritime transport.	100,000	0	UNDP	Japan Fund	Contractual Services - Firm	100,000
	Activity 1.2: Conduct a transport optimization and energy efficiency review.	100,000	0	UNDP	Japan Fund	Contractual Services - Firm	100,000
	Activity 1.3: Develop a gender responsive Decarbonization Strategy for the Transport Sector Plan with sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework.	0	125,000	UNDP	Japan Fund	Contractual Services - Firm	125,000
	Activity 1.4: Conduct a scoping and feasibility study on investment shifts away from carbon intensive transport and identify gender-responsive innovative finance mechanisms to support and sustain Samoa's low-carbon transition.	100,000	0	UNDP	Japan Fund	Contractual Services - Firm	100,000
	Activity 1.5: Design and roll out an inclusive public awareness campaign promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure.	20,000	0	UNDP	Japan Fund	Contractual Services - Firm	50,000
		20,000	10,000			Audio-visual and Print Prod. Costs	
	Activity 1.6: Develop an up-skilling programme on electric vehicle automotive electronics, mechanics and engineering.	100,000	0	UNDP	Japan Fund	Contractual Services - Firm	300,000
		40,000	10,000			Training and Workshops	
		150,000	0			Goods and Supplies	
						Sub Total Output 1	**775,000**
Output 2: Accelerated	Activity 2.1: Conduct a baseline assessment of traffic volumes, vehicle registration and	100,000	0	UNDP	Japan Fund	Contractual Services - Firm	100,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener transport systems for public service delivery.	imports, vehicle ownership disaggregated by gender and age, EV and hybrid vehicles, and market demand.						
	Activity 2.2: Enhance land transport monitoring, including the procurement of emissions testing equipment and optimization of the Road Transport Administration System (RTAS) to improve fuel efficiency and optimize emission reduction potential.	0	50,000	UNDP	Japan Fund	Training and Workshops	200,000
		0	150,000			Equipment and Furniture	
	Activity 2.3: Design and roll out awareness campaign for inclusive and safe mobility especially for women, PWDs, elderly, youth and children, based on a public survey on perceptions of barriers to low-carbon mobility.	0	20,000	UNDP	Japan Fund	Contractual Services - Individual	50,000
		0	30,000			Audio-visual and Print Prod. Costs	
	Activity 2.4: Develop a gender-sensitive Sustainable Land Use and Mobility Plan, to promote green, inclusive and accessible infrastructure and mobility.	0	125,000	UNDP	Japan Fund	Contractual Services - Firm	125,000
	Activity 2.5: Design and install charging station network for public service delivery electric vehicles (EVs).	50,000	180,000	UNDP	Japan Fund	Contractual Services – Firm	3,117,773
		2,887,773				Equipment and Furniture	
	Activity 2.6: Explore technical, policy, infrastructural and technological solutions for safe disposal and recycling of EV batteries.	150,000	0	UNDP	Japan Fund	Contractual Services – Firm	150,000
	Activity 2.7: Support accessible electrification of vehicles targeting public service delivery vehicles based on country needs assessment.	6,398,700	0	UNDP	Japan Fund	Equipment and Furniture	6,398,700

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
						Sub Total Output 2	**10,141,473**
Output 3: Explored and accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on fishing vessels.	Activity 3.1: Optimize the national registration system for vessels, including private fishing and transport boats for improved emissions tracking and control, and fuel efficiency.	60,000	60,000	UNDP	Japan Fund	IT Equipment	200,000
		30,000	30,000			Trainings and Workshops	
		10,000	10,000			Travel	
	Activity 3.2: Conduct a feasibility study, gender and cost-benefit analysis of low-carbon maritime transport options, prioritizing fishing vessels.	100,000	0	UNDP	Japan Fund	Contractual Services - Firm	100,000
	Activity 3.3: Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance.	1,775,000	0	UNDP	Japan Fund	Equipment and Furniture	1,855,000
		30,000	0			Contractual Services – Individual	
		0	50,000			Trainings and Workshops	
	Activity 3.4: Monitoring, Communication and Coordination[19]	-	-	UNDP	Japan Fund	Regional Technical/Management Support	-
						Sub Total Output 3	**2,155,000**
Project Management		Personnel					749,163
		Operational Costs					237,000
		Direct Project Cost					154,864
General Management Support (8%)							1,137,000
UN Levy (1%)							153,495
TOTAL SAMOA							**15,502,995**

[19] Activity 3.4: Monitoring, Communication and Coordination (Regional Technical/Management Support) is the Regional Technical/Management Support which has a separate regional budget in Annex 3 section E for details.

C. Timor-Leste

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
Output 1 Households not connected to the national electric grid have access to clean and reliable power supply	Activity: 1.1. Detailed feasibility studies conducted in villages that are not yet connected to the national grid	62,500	0	UNDP	Japan Fund	Expert/Consultant; Consultancies; Travel and Workshops; Visibility and Associated Cost	62,500
	Activity: 1.2. Designs and detailed estimates developed towards procurement and provision of solar lights and energy efficient cooking stoves	300,000	161,000	UNDP	Japan Fund	Equipment and Installation (Solar); Vehicle; Grant; Associated Cost	461,000
	Activity: 1.3. Mechanism to establish maintenance support developed including training for local technicians	0	194,000	UNDP	Japan Fund	Expert/Consultant; Governance and Oversight; Travel and Workshops; Visibility and Associated Cost	194,000
						Sub-Total Output 1	**717,500**
Output 2 Health service centres have improved facilities for better service provision	Activity 2.1 Detailed feasibility studies conducted for SAMES for solarization	17,000	0	UNDP	Japan Fund	Expert/Consultant; Governance and Oversight; Travel and Workshops; Visibility and Associated Cost	17,000
	Activity 2.2 Solar systems installed in SAMES	300,000	550,000	UNDP	Japan Fund	Equipment and Installation (Solar)	850,000
	Activity: 2.3. Solar systems installed in two (2) community health centres/health posts	0	173,310	UNDP	Japan Fund	Equipment and Installation (Solar)	173,310
						Sub-Total Output 2	**1,040,310**
Output 3 Secondary and vocational/technical schools have functioning ICT labs for	Activity 3.1 Secondary schools and vocational/technical schools identified for solarization (based on the UNDP's 2022 assessment report) and detailed feasibility studies	28,750	0	UNDP	Japan Fund	Experts/Consultants; Travel and Workshops; Visibility and Associated Cost	28,750

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
better access to ICT education	conducted for renovation of infrastructure and solar system						
	Activity 3.2 Cost of implementing solarization plan	100,000	192,000	UNDP	Japan Fund	Equipment and Installation (Solar PV); Associated Cost	292,000
	Activity 3.3 Renovation of facilities in schools conducted to house the ICT labs	150,000	165,000	UNDP	Japan Fund	Construction/Renovation (ICT); Vehicle; Associated Cost	315,000
	Activity 3.4 Computers and other accessories procured to make ICT labs functional	700,000	440,000	UNDP	Japan Fund	Equipment and Installation (ICT); Associated Cost	1,140,000
	Activity 3.5 Mechanism to establish maintenance support developed	46,400	50,000	UNDP	Japan Fund	Experts/Consultants; Travel and Workshops; Associated cost	96,400
	Activity 3.6 Training to teachers conducted on ICT teaching and learning materials and delivering ICT courses	56,250	100,000	UNDP	Japan Fund	Experts/Consultants; Travel and Workshops; Visibility and Associated Cost	156,250
	Activity 3.7 Monitoring, Communication and Coordination[20]	-	-	UNDP	Japan Fund	Regional Technical/Management Support	-
						Sub-Total Output 3	**2,028,400**
Project Management	PMU Staff; Experts; Meeting/Workshops and Travel; Visibility and Associated Costs						1,513,790
General Management Support (8%)							424,000
UN Levy (1%)							57,240
TOTAL TIMOR-LESTE							**5,781,240**

[20] Activity 3.7 Monitoring, Communication and Coordination (Regional Technical/Management Support) is the Regional Technical/Management Support which has a separate regional budget in Annex 3 section E for details.

D. Vanuatu

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1	Year 2		Funding Source	Budget Description	Amount (USD)
Output 1 Achieve the National Energy Road Map (NERM), i.e. 100% electrification with Renewable Energy by 2030 by installing eight Pico hydro projects.	Activity: 1.1. Finalized feasibility study and detail design estimate for installation of 8 Pico Hydro	120,000	0	UNDP	Japan Fund	Expert/Consultant; Energy Technical Advisor; Travel and Workshops; Visibility and Associated Cost	120,000
	Activity: 1.2 Developed detailed technical specifications and procurement of the 8 Pico hydro	120,000	0	UNDP	Japan Fund	Engineering, Designing, Procurement, and Associated Cost	120,000
	Activity: 1.3 Installed Pico Hydro stations and strengthen resilience of rural communities through renewable energy sources	1,000,000	1,500,000	UNDP	Japan Fund	Equipment and Installation (Pic hydro); Construction and Associated Cost	2,500,000
	Activity: 1.4 Strengthened capacity of national and local government in operation and maintenance of the newly installed systems	200,000	257,500	UNDP	Japan Fund	Equipment and Tests; Operations and Maintenance; Travel and Workshops; Monitoring and Visibility and Associated Cost	457,500
	Activity: 1.5 Monitoring, Communication and Coordination[21]	-	-	UNDP	Japan Fund	Regional Technical/Management Support	-
Sub Total							**3,197,500**
Project Management	Vanuatu based Staff: (I) International Project Manager, (ii) Monitoring and Evaluation and Communication Specialist (IUNV) (iii) National Admin and Finance Associate (iv) Technical Advisor (International Consultant)						1,040,000
General Management Support (8%)							339,000
UN Levy (1%)							45,765
TOTAL VANUATU							**4,622,265**

[21] Activity 1.5 Monitoring, Communication and Coordination (Regional Technical/Management Support) is the Regional Technical/Management Support which has a separate regional budget in Annex 3 section E for details.

E. Regional Technical/Management Support

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		Responsibility Party	Planned Budget		
		Year 1 (USD)	Year 2 (USD)		Funding Source	Budget Description	Amount (USD)
Output 1: Regional management, reporting and oversight	Activity: 1.1. Coordination, reporting, monitoring and oversight	204,177	966,708	UNDP	Japan Fund	Regional Project Manager; M&E Analyst, Coordination, monitoring and oversight by UNDP Personnel; Travel and Personnel Associated Cost	1,170,885.00
Output 2: Regional technical and operational support	Activity: 2.1 Regional technical/procurement support and social and gender safeguards	329,165	1,016,668	UNDP	Japan Fund	Procurement Specialist, Procurement Assistant; Project Finance/Admin Associate; Social and Gender Safeguard Experts and Associated Cost; Travel and Personnel Associated Cost	1,345,833.00
Output 3: Communication, advocacy, and knowledge management	Activity: 3.1 Tokyo-based visibility and partnership	133,766	422,330	UNDP	Japan Fund	Strategic Partnership & Communication Specialist; Travel and Personnel Associated Cost	556,096.00
	Activity: 3.2 Advocacy and communications	685,296.69	698,730	UNDP	Japan Fund	Regional Communication & Knowledge Management Specialist; Youth Empowerment in Climate Action Platform (YECAP); Publications/Video Production/Consultants; Travel and Personnel Associated Cost	1,384,026.69
	Activity: 3.3 Regional knowledge management and south-south exchanges	716,997	1,692,428	UNDP	Japan Fund	Energy Policy Specialist; Project Support & South-South Coordination Analyst; Consultants/Experts; Training/Workshops; Publications and Associated Cost; Travel and Personnel Associated Cost	2,409,425.00
Sub Total							**6,866,265.69**
Direct Project Cost	DPC[22]						343,315.00
General Management Support (8%)							576,766.46
UN Levy (1%)							77,863.47
TOTAL REGIONAL TECHNICAL/MANAGEMENT SUPPORT							**7,864,210.62**

[22] DPC includes Project Finance & Administrative Associate, travel, and associated personnel costs

ANNEX 4: BUDGET SUMMARY

To support national governments and stakeholders involved in Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development in four countries: Papua New Guinea; Samoa; Timor-Leste; Vanuatu, with consistent gender responsive guidance, to put in place appropriate technologies to financially support specific components of their Nationally-Determined Contributions (NDCs), the following summarizes the costs per country and for the overall project.

Country	Output	Output Description	Amount (USD)
Papua New Guinea	Output 1	Build resilience of Bougainville through expansion of renewable energy access	3,000,000.00
		DPC	450,000.00
		GMS	276,000.00
		UN Levy (1%)	37,260.00
		Sub-Total Papua New Guinea	**3,763,260.00**
Samoa	Output 1	Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems.	775,000.00
	Output 2	Accelerated inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener transport systems for public service delivery.	10,141,473.00
	Output 3	Explored and accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on fishing vessels.	2,155,000.00
		DPC	1,141,027.00
		GMS	1,137,000.00
		UN Levy (1%)	153,495.00
		Sub-Total Samoa	**15,502,995.00**
Timor Leste	Output 1	Households not connected to the national electric grid have access to clean and reliable power supply	717,500.00
	Output 2	Health service centres have improved facilities for better service provision	1,040,310.00
	Output 3	Secondary and vocational/technical schools have functioning ICT labs for better access to ICT education	2,028,400.00
		DPC	1,513,790.00
		GMS	424,000.00

Country	Output	Output Description	Amount (USD)
		UN Levy (1%)	57,240.00
		Sub-Total Timor-Leste	**5,781,240.00**
Vanuatu	Output 1	Achieve the National Energy Road Map (NERM), i.e. 100% electrification with Renewable Energy by 2030 by installing eight Pico hydro projects	3,197,500.00
		DPC	1,040,000.00
		GMS	339,000.00
		1% UN Levy	45,765.00
		Sub-Total Vanuatu	**4,622,265.00**
Regional Technical/Management Support	Output 1	Regional management, reporting and oversight	1,170,885.00
	Output 2	Regional technical and operational support	1,345,833.00
	Output 3	Communication, advocacy, and knowledge management	4,349,547.69
		DPC	343,315.00
		GMS	576,766.46
		1% UN Levy	77,863.47
		Sub-Total Regional Technical/Management Support	**7,864,210.62**
		Total (All Four Countries and Regional Technical/Management Support)	**37,533,970.62**

ANNEX 5: RISK MANAGEMENT

Summary of Risks

The identified risks that could affect the implementation and results of the project are described in the risk register in **Annex 8**, along with proposed mitigation measures and recommended risk owners who would be responsible to manage the risks during the project implementation phase. The social and environmental risks that were assessed as part of the *Social and Environmental Screening Procedure* (SESP) are also consolidated into the risk register. The SESP (**Annex 7**) identified ten (10) risks for this project that could have potential negative impacts in the absence of safeguards and adequate assessment and management measures. The overall project risk has been rated "moderate".

Risk Assessment and Management Procedures

The following project procedures will serve as an avenue for SES integration (and shall be conducted during project implementation. The procedures laid out below include both planned project activities that relate directly to the mitigation of risks identified during screening as well as scoped SES documents/management plans that will be completed in accordance with UNDP requirements.

Environmental and Social Management Framework (ESMF)

The ESMF for the project, which will provide a broad framework for the management of the identified environmental and social risks, will include details on the processes and procedures that must be adhered to and/or further developed in targeted management plans (e.g. Gender Action Plan, Indigenous Peoples Plan, Stakeholder Engagement Plan etc.) insofar as such procedures and processes relate to consultation with and accountability to stakeholders.

Given the context in which the project is to take place, there is a significant likelihood that interventions will take place in areas adjacent to/inhabited by indigenous people. The ESMF that has been determined to be necessary for the project during the conduct of this SESP will ensure that sufficient procedures are put in place to ensure that the rights and interests of such indigenous people will be appropriately considered. During the completion of the ESMF, further assessment of the need for targeted management plans (such as an Indigenous Peoples Plan (IPP) or Gender Action Plan (GAP) for example) will be undertaken. This assessment during the conduct of the ESMF (and any targeted management plans resulting from it) will ensure that the human rights of potentially affected people (particularly those from marginalized groups) are embedded in the design and implementation of the project in an appropriately considered and responsive manner.

Furthermore, procedures and requirements to ensure: (i) that women are equitably and appropriately consulted in relation to the project's design and implementation; (ii) that the rights and interests presented in such consultations are afforded sufficient consideration throughout the project's lifecycle; and, (iii) that women provided equal access to benefits of and participation in the project will be provided in the project's ESMF and any resulting management plans deemed necessary during the conduct of the ESMF. Such procedures and requirements will be adhered to throughout the lifecycle of the project.

In addition to these project activities which are designed to promote sustainable development and resilience, environmental risks that could serve to mitigate the success of these activities will be assessed and managed in accordance with part B of this SESP. Most notably, the project's ESMF and any consequent environmental safeguards documentation deemed necessary during the conduct of the ESMF (such as a Strategic Environmental and Social Assessment (SESA) for policy-related project interventions or an Environmental and Social Impact Assessment (ESIA) for infrastructure-related

project interventions) will serve to ensure that the project is designed and implemented with appropriate oversight to ensure that sustainability and resilience are embedded throughout the lifecycle of the project.

Strategic Environmental and Social Assessment (SESA)

The SESA will be carried out by independent experts in accordance with UNDP's SES policy and the UNDP SES Guidance Note on Assessment and Management to identify and assess social and environmental impacts associated with the proposed regulations in a participatory manner with stakeholders as follows:

1. Identify social and environmental priorities to be included in planning and policy processes
2. Assess gaps in the institutional, policy, and legal frameworks to address these priorities
3. Identify potential adverse social and environmental impacts associated with policy options
4. Engage decision makers and stakeholders to ensure a common understanding and broad support for implementation
5. Formulate policy and institutional measures needed to close policy and legal gaps, address institutional weaknesses, and avoid adverse social and environmental impacts.

While the ESMF to be conducted during implementation will assess the necessity for a SESA, it is likely that it will be done for Samoa given the output and relevant activities listed below.

> **Country Output 1:** Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems.
>
> Activity 1.1: Review and update Samoa's legislative and policy framework in support of a national transition to low-carbon land and maritime transport.
>
> Activity 1.3: Develop a gender responsive Decarbonization Strategy and Sector Plan for Land and Maritime Transport with sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework.

The SESA will be comprised of a concise report that summarizes the main findings and results of SESA, including: (i) SESA stakeholder engagement process; (ii) key social and environmental priorities and issues associated with chosen policy/strategy initiative; (iii) institutional arrangements for coordinating integration of social and environmental issues into chosen policy/strategy initiative; (iv) legal, regulatory, policy, institutional and capacity recommendations to address any identified gaps for managing the social and environmental priorities and implementing applicable social and environmental policies; (v) results of assessment of social and environmental risks/impacts associated with the implementation of the proposed regulations; and, (vi) identification of measures (e.g. policies, institutional strengthening, governance reform) to address and manage anticipated adverse social and environmental risks and impacts, including a summary Action Matrix.

Environmental and Social Impact Assessments (ESIA) and Environmental and Social Management Plans (ESMP)

An Environmental and Social Impact Assessment (ESIA) for infrastructure-related project interventions) will serve to ensure that the project is designed and implemented with appropriate oversight to ensure that sustainability and resilience are embedded throughout the lifecycle of the project.

It is likely that an ESIA will need to be developed for project activities involving the installation of solar

farms and pico hydro stations. It is not anticipated that the scope of any required ESIA would cover the renovations to ICT facilities in Timor-Leste under Output 3. However, whether such an ESIA is indeed required and the scope of such an ESIA will be further assessed during the conduct of the ESMF.

As such, the ESMF will include details on the factors to be considered in determining whether an Environmental and Social Impact Assessment (ESIA), site-specific Environmental and Social Management Plans (ESMPs) or targeted Waste Management Plans are required for the following solar/hydro-related activities:

- **Papua New Guinea**: Activity: 1.2. Develop and install mini-solar farms in the three regions of Bougainville
- **Samoa**: Activity 2.5. Design and install an accessible public solar-charging station network.
- **Vanuatu**: Activity 1.3. Installed Pico Hydro stations and strengthen resilience of rural communities through renewable energy sources

During the development of the ESIAs, site-specific ESMPs will be completed and disclosed to stakeholders for consultation. The ESMPs will be designed to ensure compliance with the applicable legal and regulatory frameworks and will define the desired social and environmental management outcomes, indicators and targets to track the implementation and effectiveness of the measures contained within each ESMP. An indicative outline for the ESIAs and ESMPs can be found in Annexes 3 and 4 of the UNDP SES Guidance Note on Assessment and Management[23]. In broad terms, the ESIA reports will include the following major elements: (i) executive summary; (ii) legal and institutional framework; (iii) project description; (iv) baseline data; (v) social and environmental risks and impacts; (vi) analysis of alternatives; (vii) mitigation measures; (viii) stakeholders; and, (ix) conclusions and recommendations. The major elements required to be included in the ESMPs are as follows: (i) mitigation; (ii) monitoring; (iii) capacity development and training; (iv) stakeholder engagement; (v) grievance redress mechanism; and, (vi) implementation action plan (including schedule and cost estimates).

Project activities designed to manage and mitigate social and environmental risks

In addition to the ESIAs, ESMPs and SESA mentioned above, a number of the planned project activities themselves are aimed at mitigating risks that were identified during screening. Risks 3, 4, 8 and 9 all relate to environmental, community health and labour-related impacts are improperly implemented. The following table lists activities that are designed to mitigate the possibility that these impacts will eventuate.

Table: Activities within the Project that will Manage and Mitigate Risks

Country	Activities Designed for E&S Risk Mitigation
Papua New Guinea	Activity: 1.1. Widen community engagement and consultation during the design phase to ensure inclusivity and on-the-ground needs are reflected Activity: 1.3. Strengthened regulatory and governance structures to expand renewable energy adoption in Bougainville

[23]https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/UNDP%20SES%20Assessment%20and%20Management%20GN_rev_July2022.pdf

Country	Activities Designed for E&S Risk Mitigation
Samoa	Activity 1.3. Develop a gender responsive Decarbonization Strategy and Sector Plan for Land and Maritime Transport with sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework. Activity 1.5. Design and roll out an inclusive public awareness campaign promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure. Activity 1.6. Develop an upskilling programme on electric vehicle automotive electronics, mechanics and engineering. Activity 2.3. Design and roll out awareness campaign for inclusive and safe mobility especially for women, PWDs, elderly, youth and children, based on a public survey on perceptions of barriers to low-carbon mobility. Activity 2.4. Develop a gender-sensitive Sustainable Land Use and Mobility Plan, to promote green, inclusive and accessible infrastructure and mobility. Activity 2.6. Explore technical, policy, infrastructural and technological solutions for safe disposal and recycling of EV batteries. Activity 3.3. Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance.
Timor Leste	Activity: 1.3. Mechanism to establish maintenance support developed including training for local technicians
Vanuatu	Activity: 1.4. Strengthened capacity of national and local government in operation and maintenance of the newly installed systems

ANNEX 6: PROJECT QUALITY ASSURANCE REPORT

PROJECT QA ASSESSMENT: DESIGN AND APPRAISAL

OVERALL PROJECT

EXEMPLARY (5) ¥¥¥¥¥	HIGHLY SATISFACTORY (4) ¥¥¥¥¡	SATISFACTORY (3) ¥¥¥¡¡	NEEDS IMPROVEMENT (2) ¥¥¡¡¡	INADEQUATE (1) ¥¡¡¡¡
At least four criteria are rated Exemplary, and all criteria are rated High or Exemplary.	All criteria are rated Satisfactory or higher, and at least four criteria are rated High or Exemplary.	At least six criteria are rated Satisfactory or higher, and only one may be rated Needs Improvement. The Principled criterion must be rated Satisfactory or above.	At least three criteria are rated Satisfactory or higher, and only four criteria may be rated Needs Improvement.	One or more criteria are rated Inadequate, or five or more criteria are rated Needs Improvement.

DECISION

- **APPROVE** – the project is of sufficient quality to be approved in its current form**.** Any management actions must be addressed in a timely manner.
- **APPROVE WITH QUALIFICATIONS** – the project has issues that must be addressed before the project document can be approved. Any management actions must be addressed in a timely manner.
- **DISAPPROVE** – the project has significant issues that should prevent the project from being approved as drafted.

RATING CRITERIA

For all questions, select the option that best reflects the project

STRATEGIC

1. Does the project specify how it will contribute to higher level change through linkage to the programme's Theory of Change? • **3:** The project is clearly linked to the programme's theory of change. It has an explicit change pathway that explains how the project will contribute to outcome level change and why the project's strategy will likely lead to this change. This analysis is backed by credible evidence of what works effectively in this context and includes assumptions and risks. • **2:** The project is clearly linked to the programme's theory of change. It has a change pathway that explains how the project will contribute to outcome-level change and why the project strategy will likely lead to this change.	3	2 1 **Evidence** All four COs have explicitly drafted TOCs, as shown in the Pro-Doc, and the project has shared problem statement and objectives at the multi-country level

• **1:** The project document may describe in generic terms how the project will contribute to development results, without an explicit link to the programme's theory of change. **Note: Projects not contributing to a programme must have a project-specific Theory of Change. See alternative question under the lightbulb for these cases.*		
2. Is the project aligned with the UNDP Strategic Plan? • **3:** The project responds to at least one of the development settings as specified in the Strategic Plan[24] and adapts at least one Signature Solution[25]. The project's RRF includes all the relevant SP output indicators. *(all must be true)* • **2:** The project responds to at least one of the development settings as specified in the Strategic Plan[4]. The project's RRF includes at least one SP output indicator, if relevant. *(both must be true)* • **1:** The project responds to a partner's identified need, but this need falls outside of the UNDP Strategic Plan. Also select this option if none of the relevant SP indicators are included in the RRF.	3	2 1 **Evidence** UNDP SP Output 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery IRRF Indicator 5.2.1 Increase (in megawatt) in installed renewable energy capacity per technology
3. Is the project linked to the programme outputs? (i.e., UNDAF Results Group Workplan/CPD, RPD or Strategic Plan IRRF for global projects/strategic interventions not part of a programme)	**Yes**	**Yes** The project is linked to SP output 5.1 Energy gap closed and 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery.
RELEVANT		
4. Does the project target groups left furthest behind? • **3:** The target groups are clearly specified, prioritising discriminated and marginalized groups left furthest behind, identified through a rigorous process based on evidence. • **2:** The target groups are clearly specified, prioritizing groups left furthest behind. • **1:** The target groups are not clearly specified. **Note: Management Action must be taken for a score of 1. Projects that build institutional capacity should still identify targeted groups to justify support*	3	2 1 **Evidence** The geographical areas are clearly defined in PNG and Samoa while for Timor Leste and Vanuatu, these will be finalized subsequently. For PNG, Timor Leste and Vanuatu, the target areas are marginalized. Management action: Further stakeholder consultations and mapping will be conducted as a priority when the

[24] The three development settings in UNDP's 2018-2021 Strategic Plan are: a) Eradicate poverty in all its forms and dimensions; b) Accelerate structural transformations for sustainable development; and c) Build resilience to shocks and crises

[25] The six Signature Solutions of UNDP's 2018-2021 Strategic Plan are: a) Keeping people out of poverty; b) Strengthen effective, inclusive and accountable governance; c) Enhance national prevention and recovery capacities for resilient societies; d) Promote nature based solutions for a sustainable planet; e) Close the energy gap; and f) Strengthen gender equality and the empowerment of women and girls.

	project starts to ensure the inclusion of the marginalized groups. Gender analysis has been taken for each country and gender action plans are in place.
5. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? • **3:** Knowledge and lessons learned backed by credible evidence from sources such as evaluation, corporate policies/strategies, and/or monitoring have been explicitly used, with appropriate referencing, to justify the approach used by the project. • **2:** The project design mentions knowledge and lessons learned backed by evidence/sources, but have not been used to justify the approach selected. • **1:** There is little or no mention of knowledge and lessons learned informing the project design. Any references made are anecdotal and not backed by evidence. *Note: Management Action or strong management justification must be given for a score of 1	3 | 2 1 **Evidence** All the knowledge from previous projects, with credible evidence has been cited to develop the TOC and is appropriately justified.
6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national/regional/global partners and other actors? • **3:** An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project, including identification of potential funding partners. It is clear how results achieved by partners will complement the project's intended results and a communication strategy is in place to communicate results and raise visibility vis-à-vis key partners. Options for south-south and triangular cooperation have been considered, as appropriate. *(all must be true)* • **2:** Some analysis has been conducted on the role of other partners in the area where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project, with unclear funding and communications strategies or plans. • **1:** No clear analysis has been conducted on the role of other partners in the area that the project intends to work. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance. *Note: Management Action or strong management justification must be given for a score of 1	3 | 2 1 **Evidence** Internal analyses were conducted by COs in identifying partners. The regional technical/management support team will play an active role in developing and implementing a strategy for south-south coordination and exchanges, as seen in Section IV Results and Partnerships in the Pro-Doc.
PRINCIPLED	
7. Does the project apply a human rights-based approach?	3 | 2 1

• **3:** The project is guided by human rights and incorporates the principles of accountability, meaningful participation, and non-discrimination in the project's strategy. The project upholds the relevant international and national laws and standards. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. *(all must be true)* • **2:** The project is guided by human rights by prioritizing accountability, meaningful participation and non-discrimination. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget. *(both must be true)* • **1:** No evidence that the project is guided by human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered. *Note: Management action or strong management justification must be given for a score of 1	**Evidence** All the countries have identified that the project aims to further the realization of human rights, and appropriate mitigation and management measures have also been indicated. This is to ensure that all are taken into consideration throughout each stage in the project to allow them to benefit as well as safeguard them from potential adverse impact.
8. Does the project use gender analysis in the project design? • **3:** A participatory gender analysis has been conducted and results from this gender analysis inform the development challenge, strategy and expected results sections of the project document. Outputs and indicators of the results framework include explicit references to gender equality, and specific indicators measure and monitor results to ensure women are fully benefitting from the project. *(all must be true)* • **2:** A basic gender analysis has been carried out and results from this analysis are scattered (i.e., fragmented and not consistent) across the development challenge and strategy sections of the project document. The results framework may include some gender sensitive outputs and/or activities but gender inequalities are not consistently integrated across each output. *(all must be true)* • **1:** The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the gender inequalities have not been clearly identified and reflected in the project document. *Note: Management Action or strong management justification must be given for a score of 1	3 | 2 | 1 **Evidence** Each country has conducted their gender analysis, which is reflected in the results framework. Gender Action plans have been designed for each of the participating country (please refer to Annex 9: Gender Analysis and Action Plan).
9. Did the project support the resilience and sustainability of societies and/or ecosystems? • **3:** Credible evidence that the project addresses sustainability and resilience dimensions of development challenges, which are integrated in the project strategy and design. The project reflects the interconnections between the social, economic and environmental dimensions of sustainable development. Relevant shocks, hazards and adverse social and environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. *(all must be true)*. • **2:** The project design integrates sustainability and resilience dimensions of development challenges. Relevant shocks, hazards and adverse social and environmental impacts have been identified and assessed, and relevant management and mitigation measures incorporated into project design and budget. *(both must be true)* • **1:** Sustainability and resilience dimensions and impacts were not adequately considered. *Note: Management action or strong management justification must be given for a score of 1	3 | 2 | 1 **Evidence** The main objective of the project includes enhancing environmental sustainability. SESP has been conducted to inform appropriate management and mitigation measures for potential social and environmental risks. Management actions: ESIA/SESA to be conducted and ESMP developed, budgeted and operationalized during project initiation as required based on the SESP

10. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? The SESP is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences and/or communication materials and information dissemination. [if yes, upload the completed checklist. If SESP is not required, provide the reason for the exemption in the evidence section.]	Yes	No
	SESP Not Required	
MANAGEMENT & MONITORING		
11. Does the project have a strong results framework? • **3:** The project's selection of outputs and activities are at an appropriate level. Outputs are accompanied by SMART, results-oriented indicators that measure the key expected development changes, each with credible data sources and populated baselines and targets, including gender sensitive, target group focused, sex-disaggregated indicators where appropriate. *(all must be true)* • **2:** The project's selection of outputs and activities are at an appropriate level. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of target group focused, sex-disaggregated indicators, as appropriate. *(all must be true)* • **1:** The project's selection of outputs and activities are not at an appropriate level; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators. *(if any is true)* *Note: Management Action or strong management justification must be given for a score of 1	3	2
	1	
	Evidence The result framework for each country is available in the Pro-Doc and in Annex 1. Outputs and activities are at appropriate level and are accompanied by SMART and results-oriented indicators e.g. number of beneficiaries from the project's intervention; number of legal structures proposed to the government. RRF for PNG, Timor Leste and Vanuatu, output indicators are gender disaggregated. Numbers of beneficiaries from the project's intervention is missing from Samoa RRF. It would be good to incorporate this.	
12. Is the project's governance mechanism clearly defined in the project document, including composition of the project board? • **3:** The project's governance mechanism is fully defined. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. *(all must be true)*. • **2:** The project's governance mechanism is defined; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The project document lists the most important responsibilities of the project board, project director/manager and quality assurance roles. *(all must be true)* • **1:** The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided. *Note: Management Action or strong management justification must be given for a score of 1	3	2
	1	
	Evidence The project's governance mechanisms are clearly defined in the pro-doc and institutions are also specified. The ToRs for the regional positions have been formulated. Those for national positions will follow. Roles and responsibility will be defined and agreed in the project steering committee meeting.	
	3	2

13. Have the project risks been identified with clear plans stated to manage and mitigate each risk? • **3:** Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the programme's theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis such as funding potential and reputational risk. Risks have been identified through a consultative process with key internal and external stakeholders. Clear and complete plan in place to manage and mitigate each risk, reflected in project budgeting and monitoring plans. *(both must be true)* • **2:** Project risks related to the achievement of results are identified in the initial project risk log based on a minimum level of analysis and consultation, with mitigation measures identified for each risk. • **1:** Some risks may be identified in the initial project risk log, but no evidence of consultation or analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and/or no initial risk log is included with the project document. *Note: Management Action must be taken for a score of 1	1 **Evidence** Risk register, TOC, SESP are in place, as well as mitigation for each risk. Management action: Risk log will be further updated and refined based on the SES assessments and ESMF.	
EFFICIENT		
14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include, for example: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners; iv) sharing resources or coordinating delivery with other projects, v) using innovative approaches and technologies to reduce the cost of service delivery or other types of interventions. *(Note: Evidence of at least one measure must be provided to answer yes for this question)*	Yes (3)	No (1)
15. Is the budget justified and supported with valid estimates? • **3:** The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Realistic resource mobilisation plans are in place to fill unfunded components. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget. Adequate costs for monitoring, evaluation, communications and security have been incorporated. • **2:** The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget, but no funding plan is in place. Costs are supported with valid estimates based on prevailing rates. • **1:** The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget.	3 1 **Evidence** Multi-year work plan is available in Annex 3.	2
16. Is the Country Office/Regional Hub/Global Project fully recovering the costs involved with project implementation? • **3:** The budget fully covers all project costs that are attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality	3 1	2

assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.) • **2:** The budget covers significant project costs that are attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant. • **1:** The budget does not adequately cover project costs that are attributable to the project, and UNDP is cross-subsidizing the project. *Note: Management Action must be given for a score of 1. The budget must be revised to fully reflect the costs of implementation before the project commences.	**Evidence** The budget fully covers all project costs that are attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies. However, adjustments will be required to the budget due to exchange rate loss. Management action: Project to review and revise the budgets based on available resources.	
EFFECTIVE		
17. Have targeted groups been engaged in the design of the project? • 3: Credible evidence that all targeted groups, prioritising discriminated and marginalized populations that will be involved in or affected by the project, have been actively engaged in the design of the project. The project has an explicit strategy to identify, engage and ensure the meaningful participation of target groups as stakeholders throughout the project, including through monitoring and decision-making (e.g., representation on the project board, inclusion in samples for evaluations, etc.) • 2: Some evidence that key targeted groups have been consulted in the design of the project. • 1: No evidence of engagement with targeted groups during project design.	3	2 1 **Evidence** Marginalized groups have been included as a priority, and factored in the TOC, but not been engaged in project design. Management action: Project to ensure inclusion of marginalized groups in stakeholder engagement plan to be formulated at the start of the project.
18. Does the project plan for adaptation and course correction if regular monitoring activities, evaluation, and lesson learned demonstrate there are better approaches to achieve the intended results and/or circumstances change during implementation?	Yes (3)	No (1)
19. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum. *Note: Management Action or strong management justification must be given for a score of "no"	Yes (3)	No (1) However, Gender analysis and action plan are in place and can be found in Annex 9. **Evidence**
SUSTAINABILITY & NATIONAL OWNERSHIP		
20. Have national/regional/global partners led, or proactively engaged in, the design of the project?	3	2 1

• **3:** National partners (or regional/global partners for regional and global projects) have full ownership of the project and led the process of the development of the project jointly with UNDP. • **2:** The project has been developed by UNDP in close consultation with national/regional/global partners. • **1:** The project has been developed by UNDP with limited or no engagement with national partners.	**Evidence** National partners have full ownership of the project and led the process of the development of the project jointly with UNDP	
21. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? • **3:** The project has a strategy for strengthening specific capacities of national institutions and/or actors based on a completed capacity assessment. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly. • **2:** A capacity assessment has been completed. There are plans to develop a strategy to strengthen specific capacities of national institutions and/or actors based on the results of the capacity assessment. • **1:** Capacity assessments have not been carried out.	3	2
	1	
	Evidence National partners have full ownership of the project and led the process of the development of the project jointly with UNDP	
22. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.,) to the extent possible?	Yes (3)	Not applicable (1)
23. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation and communications strategy)?	Yes (3)	No (1) Management action: Project to clarify on transition plan in consultation with national stakeholders

ANNEX 7: SOCIAL AND ENVIRONMENTAL SCREENING TEMPLATE (SESP TEMPLATE, VERSION JULY 2022)

Project Information

Project Information	
1. Project Title	Enhancing Green Transformation in the Pacific towards Net-Zero Emissions and Climate-Resilient Development for Peace
2. Project Number (i.e. Atlas project ID, PIMS+)	
3. Location (Global/Region/Country)	Papua New Guinea, Samoa, Timor-Leste and Vanuatu
4. Project stage (Design or Implementation)	
5. Date	November 2022

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the project mainstreams the human rights-based approach

The Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development is grounded in the rights-based approach, with a main pillar (pillar 2) of the project focusing on the principle of helping vulnerable and fragile settings within Small Island Developing States (SIDS) to be more resilient to climate impacts. Under this overarching principle, the project aims to support the following:

- (i) the scaling-up of adaptation, resilience and disaster risk reduction tools
- (ii) ensuring these tools are available in fragile settings and to marginalized groups, and
- (iii) aligning targets in NDCs with national adaptation strategies and plans (including the integration of adaptation measures in response to energy and food crises to strengthen resilience of sectors impacted by climate shocks and impacts to infrastructure, health systems, forests, coastlines and food systems.

This project recognizes that people experience intersecting forms of marginalization and the consequent erosion of human rights. Several elements of the project's design and the required environmental and social safeguards documentation for the project will ensure that this recognition is sufficiently embedded into the design, implementation, monitoring and evaluation of the project throughout its lifecycle.

Given the context in which the project is to take place, there is a significant likelihood that interventions will take place in areas adjacent to/inhabited by indigenous people. The Environmental and Social Management Framework (ESMF) that has been determined to be necessary for the project during the conduct of this SESP will ensure that sufficient procedures are put in place to ensure that the rights and interests of such indigenous people will be appropriately considered. During the completion of the ESMF, further assessment of the need for targeted management plans (such as an Indigenous Peoples Plan (IPP) or Gender Action Plan (GAP) for example) will be undertaken. This assessment during the conduct of the ESMF (and any targeted management plans resulting from it) will ensure that the human rights of potentially affected people (particularly those from marginalized groups) are embedded in the design and implementation of the project in an appropriately considered and responsive manner.

The indicative activities provided in the project's initial design include the following activities which involve consideration of human rights, most notably the right to equal treatment in respect of traditionally marginalized groups:

Papua New Guinea

- Activity 1.1. Widen community engagement and consultation during the design phase to ensure inclusivity and on-the-ground needs are reflected.

Samoa

- Activity 1.3: Develop a gender responsive Decarbonization Strategy and Sector Plan for Land and Maritime Transport with sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework.
- Activity 2.3: Design and roll out awareness campaign for inclusive and safe mobility especially for women, PWDs, elderly, youth and children, based on a public survey on perceptions of barriers to low-carbon mobility.
- Activity 2.4: Develop a gender-sensitive Sustainable Land Use and Mobility Plan, to promote green, inclusive and accessible infrastructure and mobility.
- Activity 3.3: Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

As mentioned above, the project concept note lists "helping vulnerable and fragile settings [within Small Island Developing States] to be more resilient to climate impacts" as a main pillar of the project (pillar 2). The principle contained in this pillar is embodied through project activities that are targeted to benefit/mitigate challenges faced by marginalized and vulnerable groups within the countries where project interventions are to take place.

The activities which are targeted in this way are generally the same as those listed for the human rights-based approach above, namely: Papua New Guinea Activity 1.1 and Samoa Activities 1.3, 2.3, 2.4 and 3.3. The gender-sensitive and inclusivity-based focuses of these activities should serve to improve gender equality and promote women's empowerment in the countries in which the activities are planned.

Furthermore, procedures and requirements to ensure: (i) that women are equitably and appropriately consulted in relation to the project's design and implementation; (ii) that the rights and interests presented in such consultations are afforded sufficient consideration throughout the project's lifecycle; and, (iii) that women provided equal access to benefits of and participation in the project will be provided in the project's ESMF and any resulting management plans deemed necessary during the conduct of the ESMF. Such procedures and requirements will be adhered to throughout the lifecycle of the project.

Briefly describe in the space below how the project mainstreams sustainability and resilience

The first pillar of the project as described in the concept note is to promote clean energy and just transition towards net-zero pathways. Under this pillar, the project aims to: (i) drive investment in clean energy; (ii) support Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions; and, (iii) alignment of energy targets in NDCs with net-zero pathways.

The majority of project activities are designed with the aim of promoting sustainable development and resilience in a variety of ways. The following indicative activities are designed to achieve the objectives under pillar 1 explained above:

Papua New Guinea

- Activity 1.2. Developed and install solar farms in the three regions of Bougainville.
- Activity 1.3. Strengthened regulatory and governance structure to expand renewable energy adoption in Bougainville.
- Activity 1.4. Operations and maintenance of solar farms as demonstration for expansion of renewable energy policy into the Bougainville.

Samoa

- Activity 1.1: Review and update Samoa's legislative and policy framework in support of a national transition to low-carbon land and maritime transport.
- Activity 1.3: Develop a gender responsive Decarbonization Strategy and Sector Plan for Land and Maritime Transport with sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework.
- Activity 1.5: Design and roll out an inclusive public awareness campaign promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure.
- Activity 2.2: Enhance land transport monitoring, including the procurement of emissions testing equipment and optimization of the Road Transport Administration System (RTAS) to improve fuel efficiency and optimize emission reduction potential.
- Activity 2.4: Develop a gender-sensitive Sustainable Land Use and Mobility Plan, to promote green, inclusive and accessible infrastructure and mobility.
- Activity 2.5: Design and install an accessible public solar-charging station network.
- Activity 2.6: Explore technical, policy, infrastructural and technological solutions for safe disposal and recycling of EV batteries.
- Activity 2.7: Support accessible electrification of vehicles targeting public transport and public service delivery vehicles based on country needs assessment.
- Activity 3.1: Optimize the national registration system for vessels, including private fishing and transport boats for improved emissions tracking and control, and fuel efficiency.
- Activity 3.3: Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance.

Timor-Leste

- Activity 3.3: Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance.
- Activity 2.3 Solar systems installed in SAMES.
- Activity 3.1 Secondary schools and vocational/technical schools identified for solarization (based on the UNDP's 2022 assessment report) and detailed feasibility studies

conducted for renovation of infrastructure and solar system.

Vanuatu

- Activity: 1.3 Installed Pico Hydro stations and strengthen resilience of rural communities through renewable energy sources.
- Activity: 1.4 Strengthened capacity of national and local government in operation and maintenance of the newly installed systems.

In addition to these project activities which are designed to promote sustainable development and resilience, environmental risks that could serve to mitigate the success of these activities will be assessed and managed in accordance with part B of this SESP. Most notably, the project's ESMF and any consequent environmental safeguards documentation deemed necessary during the conduct of the ESMF (such as a Strategic Environmental and Social Assessment (SESA) for policy-related project interventions or an Environmental and Social Impact Assessment (ESIA) for infrastructure-related project interventions) will serve to ensure that the project is designed and implemented with appropriate oversight to ensure that sustainability and resilience are embedded throughout the lifecycle of the project.

Briefly describe in the space below how the project strengthens accountability to stakeholders

The project involves a variety of activities that are aimed at ensuring that the attainment of the objectives of this project are achieved in a way that is inclusive. These activities are listed in response to the questions on the human rights-based approach and gender equality and women's empowerment above. In light of the nature of these activities and the risks identified in part B of this SESP, stakeholder consultation will be an integral part of the project's ongoing design, implementation, monitoring and evaluation. Engagement with stakeholders (and consideration of approaches to engagement with marginalized groups in particular) will be undertaken in adherence with the UNDP SES. The ESMF for the project, which will provide a broad framework for the management of the identified environmental and social risks, will include details on the processes and procedures that must be adhered to and/or further developed in targeted management plans (e.g. Gender Action Plan, Indigenous Peoples Plan, Stakeholder Engagement Plan etc.) insofar as such procedures and processes relate to consultation with and accountability to stakeholders.

In addition, activity 1.1 for Papua New Guinea aims to "widen community engagement and consultation during the design phase to ensure inclusivity and on-the-ground needs are reflected. This activity will serve to ensure that an appropriate level of accountability to stakeholders is maintained for all project activities in Papua New Guinea.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5below before proceeding to Question 5*			**QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High**
Risk Description (broken down by event, cause, impact)	***Impact and Likelihood (1-5)***	***Significance (Low, Moderate Substantial, High)***	***Comments (optional)***	***Description of assessment and management measures for risks rated as Moderate, Substantial or High***
Risk 1: The project involves providing support for ministries responsible for key energy-related decisions and facilitating climate change adaptation tools for	I = 3 L = 3	Moderate		Various project activities (in Papua New Guinea and Samoa particularly) are designed with the purposes of increasing the capacity of duty bearers to facilitate climate change adaptation in an inclusive and gender-sensitive

vulnerable and marginalized groups. Duty-bearers including government agencies and project staff may not have the capacity to meet their obligations under the project. Particularly for activities that are aimed at supporting gender-sensitive governance and policy, there is a risk that duty-bearers may not be adequately equipped sensitively and effectively to design and implement these activities, which may in turn result in inequitable distribution of project benefits. <u>Principles and Standards:</u> • *Human Rights*: P.2, P.5 • *Gender Equality and Women's Empowerment:* P.9, P.10 • *Accountability:* P.13, P.14 <u>Activities:</u> • *Papua New Guinea:* 1.1, 1.3 • *Samoa:* 1.1, 1.3, 1.5, 2.3, 2.4, 3.2, 3.3 • *Timor-Leste:* 3.6				manner. Among these activities are the following: • *Papua New Guinea:* 1.1, 1.3 • *Samoa:* 2.3, 3.2, 3.3 • *Timor-Leste:* 1.3, 3.6 (though there is no express reference to this training including marginalized people-related issues at this stage) Proper design and implementation of these activities (conducted with consideration of the results of appropriately conducted stakeholder consultation with duty-bearers as well as project beneficiaries) will serve to manage the risk that duty-bearers are ill-equipped to fulfill their obligations under the project, thereby mitigating the risk that project benefits will be inequitably distributed. The conduct of the Environmental and Social Management Framework (ESMF) will involve an analysis of the institutional arrangements relevant to the project and an assessment of the need for institutional capacity-building. The ESMF will serve as a broad framework from which procedures and processes will be drawn that will ensure that all project activities which fall within the scope of moderate or higher risks are designed and implemented in accordance with the UNDP SES. The ESMF will also include guidance on the establishment of procedures for engagement/consultation with both duty-bearers and project beneficiaries (particularly marginalized beneficiaries). Provided that this guidance is followed, the results of appropriately conducted consultations will also serve to increase the knowledge and capacity of duty-bearers in relation to the development of gender-sensitive and inclusive policy. The ESMF will include information on the required continual assessment of this risk and the measures to be taken (potentially including development of targeted management plans) should the significance of this risk increase upon further assessment.
<u>Risk 2:</u> Rights-holders may not have the capacity to claim their rights. There is a possibility that project-affected persons and beneficiaries (particularly those from marginalized groups including indigenous, women, youth, disabled, LGBTQI+ and impoverished people) may not have the opportunity to become aware of the potential benefits of the project or may not have the capacity to participate in or claim other	I = 3 L = 3	Moderate		The project is built on the human rights-based approach and a number of activities are designed with the general goal of ensuring that rights holders are aware of project interventions and thereby aware of their ability to claim their rights: <u>*Papua New Guinea* (activities 1.1, 1.5)</u> These activities involve the widening/improvement of community

rights in respect of project activities. Principles and Standards: • *Human Rights*: P.3, P.5 • *Gender Equality and Women's Empowerment:* P.9, P.10 • *Accountability:* P.13, P.14 Activities: • *Papua New Guinea:* 1.1, 1.2, 1.3, 1.5 • *Samoa:* 1.3, 1.6, 2.3, 2.4, 3.1, 3.2, 3.3 • *Timor-Leste:* 1.3 • *Vanuatu:* 1.3, 1.4				engagement to ensure inclusivity and the reflection of on-the-ground needs as well as up-skilling initiatives to allow community-members to operate and maintain renewable energy sources implemented by the project. *Samoa:* 1.5, 1.6, 2.3 These activities involve a public awareness campaign and up-skilling programme in respect of low-emissions vehicles and inclusive and safe mobility for women, people with disabilities and youth. *Timor-Leste:* 1.3, 3.6 These activities involve training for local technicians and teachers to ensure they are able to educate local communities on the renewable energy and ICT systems implemented by the project. The above activities will themselves serve to manage this risk. However, the ESMF developed for the project will provide further detail on the continual assessment and management of this risk. During the conduct of the ESMF, whether there is a need for a targeted management plan (e.g. a detailed Stakeholder Engagement Plan and/or Gender Analysis and Action Plan) to ensure rights-holders are made aware of their rights in respect of the project will be assessed.
Risk 3: The project involves the installation of solar farms, installation of Pico Hydro stations, design and installation of an accessible public solar-charging station network, and renovations to ICT facilities in schools. If managed improperly, these interventions could result in adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas. Principles and Standards: • *Standard 1 - Biodiversity Conservation and Sustainable Natural Resource Management:* 1.1, 1.2 Activities: • *Papua New Guinea:* 1.2 • *Samoa:* 2.5	I = 3 L = 3	Moderate		Considering that the exact sites for the interventions that fall within the scope of this risk are not yet known, the ESMF will provide a broad framework for the assessment and management of this risk as the exact sites become clear. This framework will be provided in the section of the ESMF that defines the required procedures for screening, assessment and management. This section will specify the manner in which the following will be conducted: (i) screening of social and environmental risks and impacts and determining applicable social and environmental standards and requirements; (ii) defining appropriated types of social and environmental assessment to address identified potential social and environmental risks; and, (iii) preparing and approving time-bound action plans for avoiding, and where avoidance is not possible, reducing, mitigating and managing adverse impacts including development of specific management plans according to applicable policies and regulations. It is likely that an ESIA will need to be developed for project activities involving the installation of solar farms and pico hydro stations. It is not

• *Timor-Leste:* 2.3, 3.3, 3.4 • *Vanuatu:* 1.3				anticipated that the scope of any required ESIA would cover the renovations to ICT facilities in Timor-Leste under Output 3. However, whether such an ESIA is indeed required and the scope of such an ESIA will be further assessed during the conduct of the ESMF. As such, the ESMF will include details on the factors to be considered in determining whether an Environmental and Social Impact Assessment (ESIA), site-specific Environmental and Social Management Plans (ESMPs) or targeted Waste Management Plans are required for the following solar/hydro-related activities: • *Papua New Guinea:* 1.2 • *Samoa:* 2.5 • *Vanuatu:* 1.3
Risk 4: Project activities could inadvertently promote climate maladaptive practices. Due to the unprecedented and uncertain nature of climate change and research on best practices for climate adaptation, efforts to drive investment in clean energy, provide support for ministries responsible for energy-related decision-making and the scaling up of adaptation, resilience and disaster risk reduction tools could inadvertently result in the promotion of initiatives that are improperly designed, thus bringing about increased climate vulnerability. This is especially pertinent given that the project will take place in areas that are particularly susceptible to the effects of climate change. Principles and Standards: • *Standard 2 – Climate Change and Disaster Risks*: 2.1, 2.2, 2.3 Activities: • *Papua New Guinea:* 1.3 • *Samoa:* 1.1, 1.3, 2.2, 2.4, 3.1, 3.3 • *Vanuatu:* 1.4	I = 3 L = 3	Moderate		Various project activities (and indeed the overall focuses of the project) involve promotion of the clean energy transition and assisting SIDS to be resilient to climate impacts. Proper design of these activities in adherence to international best practice and with consideration of reliable research on adaptation practices will serve to mitigate the risk that climate maladaptive practices will be produced through project interventions. The relevant activities, the proper design of which will address this risk are as follows: • *Papua New Guinea:* 1.3 • *Samoa:* 1.1, 1.3, 2.2, 2.4, 3.1, 3.3 *Vanuatu:* activity 1.4 During the conduct of the ESMF, the potential need for a Strategic Environmental and Social Assessment (SESA) will be assessed in further detail. Should a SESA be deemed necessary, it would serve to further manage this risk by providing procedures aimed at ensuring the project's policy-related interventions are designed and implemented in the most informed and appropriate manner.

Risk 5: Given that the precise location of all project activities is not yet determined with certainty, there is a possibility that project activities may take place in or adjacent to cultural heritage sites (both tangible and intangible). There is therefore a possibility that the other risks identified may result in adverse impacts to the cultural heritage items, sites and/or practices in the project area should they eventuate. Principles and Standards: • *Standard 4 – Cultural Heritage:* 4.1, 4.3 Activities: • *Papua New Guinea:* 1.2, 1.4 • *Samoa:* 2.5 • *Timor-Leste:* 3.3, 3.4 • *Vanuatu:* 1.3	I = 3 L = 1	Low		As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment.
Risk 6: Should project activities take place in/adjacent to places where indigenous peoples are present, there is a risk that there could be adverse impacts to the human rights, lands, natural resources, territories, and/or traditional livelihoods of such indigenous peoples. Furthermore, there is a possibility that there will be a lack of proper/appropriate consultation with indigenous people in respect of project activities that may affect them. The result of such a lack of appropriate consultation may be that Free, Prior and Informed Consent (FPIC) (as required by UNDP) is not reached and that there will be insufficient consideration or representation of the views of these groups. Principles and Standards: • *Human Rights:* P.3 • *Accountability:* P.13, P.14 • *Standard 6 – Indigenous Peoples:* 6.1, 6.2, 6.3,	I = 4 L = 2	Moderate		Where the exact sites for all project activities and their potential proximity to areas inhabited by indigenous people are not yet known with certainty, a framework approach will be needed for the assessment and management of this risk. The ESMF for the project will provide the basis for this framework approach. The ESMF will also guide the determination of whether an Indigenous Peoples Plan (IPP) and/or Stakeholder Engagement Plan (SEP) are necessary for any given activity. The ESMF will also provide a broad overview of the requirements for engagement with stakeholders, including the processes for reaching Free, Prior and Informed Consent (FPIC) with indigenous people/communities where necessary. More detail on the procedures required to be followed to reach FPIC would be provided in the IPP or SEP if deemed necessary during the conduct of the ESMF. As such, the ESMF will serve as the overarching framework to ensure that UNDP's SES 6 is adhered to for all relevant project activities. Any subsequent management plans that may be developed will designed in compliance with the SES as a result of following the framework provided in the ESMF in respect of engagement with

6.4, 6.7 Activities: • *Papua New Guinea:* 1.1, 1.2, 1.4, 1.5 • *Samoa:* 2.5 • *Timor-Leste:* 3.3, 3.4 • *Vanuatu:* 1.3				indigenous people and the requirement for FPIC.
Risk 7: Project activities that involve the installation of solar farms, installation of Pico Hydro stations, design and installation of an accessible public solar-charging station network, and renovations to ICT facilities in schools may exacerbate the prevalence of the use of child labour (in the form of manual labour and construction) if adequate preventative measures are not implemented. Principles and Standards: • *Standard 7 - Labour and Working Conditions:* 7.1, 7.3 Activities: • *Papua New Guinea:* 1.2, 1.4 • *Timor-Leste:* 2.3, 3.3, 3.4	I = 3 L = 2	Moderate	The US Department of Labor reports on child labor show that in Papua New Guinea and Timor-Leste there is a notable level of child involvement in manual labor and construction[26]. As such, there is a risk that without improper oversight, children may be recruited to take part in project activities involving the installation/renovation of infrastructure.	The ESMF for the project will take into account the potential risks of the project supporting practices that commonly employ child labour in Papua New Guinea and Timor-Leste. This will involve the further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF depending on the results of this assessment. It is likely that an Environmental and Social Impact Assessment (ESIA) will be required for the solar and hydro-related activities under the project. For this risk, the activities that would fall within this ESIA would be Papua New Guinea activity 1.2 and possibly Timor-Leste activity 2.3. However, the final determination of the activities to be included in the scope of any required ESIA will be determined during the conduct of the ESMF. Should it be determined that an ESIA or Environment and Social Management Plans (ESMPs) are indeed required to manage/mitigate this risk, the ESMF will provide details on how these documents are to deal with the risk of exacerbating the prevalence of child labour. The ESMF will prescribe the procedures for the screening, assessment and management of this risk that will be required to be embedded in any ESIA or ESMPs developed for the project in accordance with the SES.
Risk 8: As a result of project interventions that involve the installation of infrastructure, there are occupational health and safety risks posed to workers at installation sites. There is a risk posed to workers involved in the installation of solar panels due to the potentially hazardous chemicals that are part of the composition of the panels. Additionally, there are	I = 3 L = 2	Moderate	Solar panels often contain potentially harmful components including lead, metallurgical-grade silicon and carcinogenic cadmium. Improper	During the conduct of the ESMF, the risks to workers resulting from the potentially harmful materials present in solar panels will be assessed in further detail. This will involve the further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF

[26] https://www.dol.gov/agencies/ilab/resources/reports/child-labor/papua-new-guinea; https://www.dol.gov/agencies/ilab/resources/reports/child-labor/timor-leste

general construction-based occupation health and safety risks that may be relevant if the renovations to ICT facilities are significant in scale. Principles and Standards: • *Standard 3 – Community Health and Safety:* 3.1 • *Standard 7 – Labour and Working Conditions:* 7.6 Activities: • *Papua New Guinea:* 1.2, 1.4 • *Samoa:* 2.5 • *Timor-Leste:* 2.3, 3.3, 3.4 • *Vanuatu:* 1.3			treatment of solar panels combined with a lack of appropriate PPE can potentially lead to respiratory issues and silicosis.	depending on the results of this assessment. It is likely that an Environmental and Social Impact Assessment (ESIA) will be required for the solar and hydro-related activities under the project. For this risk, the activities that would fall within this ESIA would be Papua New Guinea activity 1.2, Vanuatu activity 1.3, Samoa activity 2.5 and possibly Timor-Leste activity 2.3. Should it be determined that any Environmental and Social Impact Assessment (ESIA) or Environment and Social Management Plans (ESMPs) are indeed required to manage/mitigate this risk, the ESMF will provide details on how these documents are to deal with the occupational health and safety risks resulting from interaction with these potentially hazardous materials. Similarly, the ESMF will include an assessment of other general occupational health and safety risks emanating from the renovations to ICT facilities in Timor-Leste. The ESMF will detail how this risk is to be continually assessed and managed as the scope, location and type of renovations are decided.
Risk 9: In the absence of sufficient preventative measures, there is a risk that that the working conditions (for both construction/installation and policy/regulatory activities) may: (i) not meet national labour laws and/or international commitments, (ii) deny freedom of association, (iii) not provide equal opportunity, and (iv) pose safety risks including violence and harassment. Principles and Standards: • *Standard 7 – Labour and Working Conditions:* 7.1, 7.2, 7.5, 7.6 Activities: • *Papua New Guinea:* 1.1, 1.2, 1.3, 1.4, 1.5 • *Samoa:* 1.1, 1.3, 2.4, 2.5, 2.6, 3.3 • *Timor-Leste:* 1.2, 3.3, 3.4, 3.6 • *Vanuatu:* 1.3, 1.4	I = 3 L = 1	Low		As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment.

Risk 10: Several project activities involve the installation of solar farms and the procurement of computers and ICT accessories. For both of these types of activities, if the materials are handled improperly, or (at the end of their lifecycle) disposed of inappropriately, there is a risk that there may be a release of waste (both hazardous and non-hazardous) into the environment and that any such release may have implications for surrounding communities. Principles and Standards: • *Standard 8 – Pollution Prevention and Resource Efficiency:* 8.2, 8.3 • *Standard 3 – Community Health, Safety and Security*: 3.6 Activities: • *Papua New Guinea:* 1.2, 1.4 • *Samoa:* 2.5 • *Timor-Leste:* 2.3, 3.3, 3.4 • *Vanuatu:* 1.3	I = 3 L = 2	Moderate	Solar panels often contain potentially harmful pollutants including lead, metallurgical-grade silicon and carcinogenic cadmium.	During the conduct of the ESMF, a baseline assessment of relevant project areas will be undertaken by qualified professionals. This assessment will provide a detailed description of the size and nature of communities present in the project area and it's sphere of influence. The significance of this risk may need to be reviewed once the exact project sites and findings of the baseline assessments have been clarified. Certain geographical characteristics may make this risk more or less likely to eventuate. The geographical characteristics of general areas in which the relevant activities are expected to take place will be assessed and described in the ESMF. If (as expected) the precise locations for project interventions remain unclear during the conduct of the ESMF, the ESMF will provide guidelines for how this risk is to be assessed and managed once the precise locations are decoded. As part of the development of such guidelines, the geographical relationship between the project sites and communities with the project's sphere of influence will be taken into account in assessing whether the significance of this risk remains appropriate. The ESMF will also provide guidelines for the management of this risk commensurate with the results of the further assessment of its significance. It is likely that an Environmental and Social Impact Assessment (ESIA) will be required for the solar and hydro-related activities (and possibly ICT renovations) under the project. For this risk, the activities that would fall within this ESIA would be Papua New Guinea activity 1.2, Samoa activity 2.5, Vanuatu activity 1.3 and possibly Timor-Leste activities 2.3, 3.3 and 3.4. However, whether such an ESIA is indeed required and if so, the scope of activities assessed therein will be further assessed during the conduct of the ESMF. Should an Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plans (ESMPs) be deemed necessary during the conduct of the ESMF, principles and procedures to be adhered to in the development of these documents will also be provided in the ESMF.	
	QUESTION 4: What is the overall project risk categorization?			

	Low Risk	
	Moderate Risk	This project is of moderate risk as it includes activities with potential adverse social and environmental risks and impacts that are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation. Furthermore, there are no individual risks identified for the project that are of greater than moderate significance.
	Substantial Risk	
	High Risk	

QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)

Question only required for Moderate, Substantial and High Risk projects

Is assessment required? (check if "yes")			***Status? (completed, planned)***
if yes, indicate overall type and status	X	Targeted assessment(s)	Some form of targeted assessment is likely required for this project. However, the type and scope of this targeted assessment will be determined during the conduct of the ESMF.
	X	ESIA (Environmental and Social Impact Assessment)	An ESIA is likely required for project activities that involve the installation of solar farms (Papua New Guinea activity 1.2, Vanuatu activity 1.3, Samoa activity 2.5 and possibly Timor-Leste activity 3.3). However, whether an ESIA is in fact required and if so, the scope of this ESIA will be further assessed during the conduct of the ESMF.
	☐	SESA (Strategic Environmental and Social Assessment)	Potential need for a SESA will be further assessed during the conduct of the ESMF.

	Are management plans required? (check if "yes)			
	If yes, indicate overall type	☐	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	Potential need for targeted management plans (for example Indigenous Peoples Plan, Gender Action Plan and/or Stakeholder Engagement Plan) will be further assessed during the conduct of the ESMF.
		☐	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	
		X	ESMF (Environmental and Social Management Framework)	
	Based on identified <u>risks</u>, which Principles/Project-level Standards triggered?	**Comments (not required)**		
	Overarching Principle: Leave No One Behind			
	Human Rights	See risks 1, 2 and 6		
	Gender Equality and Women's Empowerment	See risks 1 and 2		
	Accountability	See risks 1, 2 and 6		
	1. Biodiversity Conservation and Sustainable Natural Resource Management	See risk 3		
	2. Climate Change and Disaster Risks	See risk 4		
	3. Community Health, Safety and Security	See risks 8 and 10		
	4. Cultural Heritage			
	5. Displacement and Resettlement			

	6. Indigenous Peoples	See risk 6
	7. Labour and Working Conditions	See risks 7 and 8
	8. Pollution Prevention and Resource Efficiency	See risk 10

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	***Date***	***Description***
QA Assessor DocuSigned by: Sirinthorat Wannawong Sirinthorat Wannawong Programme analyst, BRH R-PMU	26-Jun-2023	UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver DocuSigned by: Uguen Dorji Uguen Dorji R-PMU Coordinator, a.i.	26-Jun-2023	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair DocuSigned by: Nicholas Booth Nicholas Booth BRH Manager, a.i.	26-Jun-2023	UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the SES toolkit for further guidance on addressing screening questions.		
Overarching Principle: Leave No One Behind **Human Rights**		**Answer (Yes/No)**
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
P.2	Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	Yes
P.3	Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	Yes
Would the project potentially involve or lead to:		
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? [27]	Yes
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	No
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Gender Equality and Women's Empowerment		
P.8	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
Would the project potentially involve or lead to:		
P.9	adverse impacts on gender equality and/or the situation of women and girls?	Yes
P.10	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Yes
P.11	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	No
P.12	exacerbation of risks of gender-based violence? *For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc*.	No
Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below		
Accountability		
Would the project potentially involve or lead to:		

[27] Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

P.13	exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	Yes
P.14	grievances or objections from potentially affected stakeholders?	Yes
P.15	risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	No
Project-Level Standards		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
Would the project potentially involve or lead to:		
1.1	adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes*	Yes
1.2	activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes
1.3	changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	risks to endangered species (e.g. reduction, encroachment on habitat)?	No
1.5	exacerbation of illegal wildlife trade?	No
1.6	introduction of invasive alien species?	No
1.7	adverse impacts on soils?	No
1.8	harvesting of natural forests, plantation development, or reforestation?	No
1.9	significant agricultural production?	No
1.10	animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11	significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	No
1.12	handling or utilization of genetically modified organisms/living modified organisms?[28][17]	No
1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)[29][18]	No
1.14	adverse transboundary or global environmental concerns?	No
Standard 2: Climate Change and Disaster Risks		
Would the project potentially involve or lead to:		
2.1	areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	Yes
2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? *For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes*	Yes
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	Yes
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	No
Standard 3: Community Health, Safety and Security		

[28] See the Convention on Biological Diversity and its Cartagena Protocol on Biosafety.

[29] See the Convention on Biological Diversity and its Nagoya Protocol on access and benefit sharing from use of genetic resources.

Would the project potentially involve or lead to:		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	Yes
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	No
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	Yes
3.7	influx of project workers to project areas?	No
3.8	engagement of security personnel to protect facilities and property or to support project activities?	No
Standard 4: Cultural Heritage		
Would the project potentially involve or lead to:		
4.1	activities adjacent to or within a Cultural Heritage site?	Yes
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	Yes
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
Would the project potentially involve or lead to:		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No
5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	risk of forced evictions?[30]	No
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
Would the project potentially involve or lead to:		
6.1	areas where indigenous peoples are present (including project area of influence)?	Yes
6.2	activities located on lands and territories claimed by indigenous peoples?	Yes

[30] Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to screening question 6.3 is "yes", then Standard 6 requirements apply, and the potential significance of risks related to impacts on indigenous peoples must be Moderate or above.* *	Yes
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	Yes
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? *Consider, and where appropriate ensure, consistency with the answers under Standard 5 above*	No
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	Yes
6.8	risks to the physical and cultural survival of indigenous peoples?	No
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? *Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.*	No
Standard 7: Labour and Working Conditions		
Would the project potentially involve or lead to: (note: applies to project and contractor workers)		
7.1	working conditions that do not meet national labour laws and international commitments?	Yes
7.2	working conditions that may deny freedom of association and collective bargaining?	Yes
7.3	use of child labour?	Yes
7.4	use of forced labour?	No
7.5	discriminatory working conditions and/or lack of equal opportunity?	Yes
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	Yes
Standard 8: Pollution Prevention and Resource Efficiency		
Would the project potentially involve or lead to:		
8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
8.2	the generation of waste (both hazardous and non-hazardous)?	Yes
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	Yes
8.4	the use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention*	No
8.5	the application of pesticides that may have a negative effect on the environment or human health?	No
8.6	significant consumption of raw materials, energy, and/or water?	No

* Note: revised July 2022 modifying presumption of risk significance from Substantial or higher to Moderate or higher.

ANNEX 8: PROJECT RISK ANALYSIS

Project Title: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development	**Project Number:**	**Date: 01-Apr-23**

A. Risk Register: Papua New Guinea

#	Event	Cause	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
Risk identified as part of SESP								
1	SESP Risk 1: Duty-bearers may not be adequately equipped sensitively and effectively to design and implement these activities	Duty-bearers including government agencies and project staff may not have the capacity to meet their obligations under the project. Particularly for activities that are aimed at supporting gender-sensitive governance and policy	Inequitable distribution of project benefits.	**4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Proper design and implementation of these activities (conducted with consideration of the results of appropriately conducted stakeholder consultation with duty-bearers as well as project beneficiaries) will serve to manage the risk that duty-bearers are ill-equipped to fulfill their obligations under the project, thereby mitigating the risk that project benefits will be inequitably distributed. Risk Treatment Owner: Project Manager
2	SESP Risk 2: Project-affected persons and beneficiaries (particularly those from marginalized groups including	Rights-holders may not have the capacity to claim their rights.	Benefits may not accrue to intended beneficiaries.	**1. SOCIAL AND ENVIRONMENTAL (1.1. Human rights) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The project is built on the human rights-based approach and a number of activities are designed with the general goal of ensuring that rights holders are aware of project

	indigenous, women, youth, disabled, LGBTQI+ and impoverished people) may not have the opportunity to become aware of the potential benefits of the project or may not have the capacity to participate in or claim other rights in respect of project activities.			**1. SOCIAL AND ENVIRONMENTAL (1.2. Gender equality and women's empowerment) - UNDP Risk Appetite: CAUTIOUS** **4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**			interventions and thereby aware of their ability to claim their rights. These activities will themselves serve to manage this risk. However, the ESMF to be developed for the project will provide further detail on the continual assessment and management of this risk. During the conduct of the ESMF, whether there is a need for a targeted management plan (e.g. a detailed Stakeholder Engagement Plan and/or Gender Analysis and Action Plan) to ensure rights-holders are made aware of their rights in respect of the project will be assessed. Risk Treatment Owner: Project Manager
3	SESP Risk 3: Project interventions could result in adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	Improper management	Adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	**1. SOCIAL AND ENVIRONMENTAL (1.4. Biodiversity conservation and sustainable natural resource management) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The ESMF will provide a broad framework for the assessment and management of this risk. This framework will be provided in the section of the ESMF that defines the required procedures for screening, assessment and management. The ESMF will include details on the factors to be considered in determining whether an Environmental and Social Impact Assessment (ESIA), site-specific Environmental and Social Management Plans (ESMPs) or targeted Waste Management Plans are required for the following solar-related activities. Risk Treatment Owner: Project

								Manager
4	SESP risk 4: Project activities could inadvertently promote climate maladaptive practices.	Efforts to drive investment in clean energy, provide support for ministries responsible for energy-related decision-making and the scaling up of adaptation, resilience and disaster risk reduction tools could inadvertently result in the promotion of initiatives that are improperly designed	Increased climate vulnerability, especially as the project will take place in areas that are particularly susceptible to the effects of climate change.	**1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Various project activities (and indeed the overall focuses of the project) involve promotion of the clean energy transition and assisting SIDS to be resilient to climate impacts. Proper design of these activities in adherence to international best practice and with consideration of reliable research on adaptation practices will serve to mitigate the risk that climate maladaptive practices will be produced through project interventions. During the conduct of the ESMF, the potential need for a Strategic Environmental and Social Assessment (SESA) will be assessed in further detail. Should a SESA be deemed necessary, it would serve to further manage this risk by providing procedures aimed at ensuring the project's policy-related interventions are designed and implemented in the most informed and appropriate manner.
5	SESP risk 5: Given that the precise location of all project activities is not yet determined with certainty, there is a possibility that project activities may take place in or adjacent to cultural heritage sites (both	Location of the project is not yet pre-determined	There is therefore a possibility that the other risks identified may result in adverse impacts to the cultural heritage items, sites and/or practices in the	**1. SOCIAL AND ENVIRONMENTAL (1.7. Cultural heritage) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **1 - Negligible** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment. Risk Treatment Owner: Project Manager

	tangible and intangible).		project area should they eventuate.					
6	SESP risk 6: Adverse impacts to the human rights, lands, natural resources, territories, and/or traditional livelihoods of such indigenous peoples. Furthermore, there is a possibility that there will be a lack of proper/appropriate consultation with indigenous people in respect of project activities that may affect them.	Should project activities take place in/adjacent to places where indigenous peoples are present	The result of such a lack of appropriate consultation may be that Free, Prior and Informed Consent (FPIC) (as required by UNDP) is not reached and that there will be insufficient consideration or representation of the views of these groups.	**1. SOCIAL AND ENVIRONMENTAL (1.9. Indigenous peoples) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **4 - Extensive** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The ESMF will serve as the overarching framework to ensure that UNDP's SES 6 is adhered to for all relevant project activities. Any subsequent management plans (IPP and SEP) that may be developed will be designed in compliance with the SES as a result of following the framework provided in the ESMF in respect of engagement with indigenous people and the requirement for FPIC Risk Treatment Owner: Project Manager
7	SESP risk 7: Without proper oversight, children may be recruited to take part in project activities involving the installation/renovation of infrastructure.	Project activities may exacerbate the prevalence of the use of child labour (in the form of manual labour and construction) if adequate preventative measures are not implemented.	Involvement of children in activities that are inappropriate.	**1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The ESMF for the project will take into account the potential risks of the project supporting practices that commonly employ child labour in Papua New Guinea. This will involve the further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF depending on the results of this assessment. Risk Treatment Owner: Project Manager
8	SESP risk 8: Workers involved in the	Improper handling and	Negative health impacts	**1. SOCIAL AND ENVIRONMENTA**	Likelihood: **2 - Low likelihood**	From: 01-Apr-23	Project Manager	During the conduct of the ESMF, the risks to workers resulting from the

	installation of solar panels may be exposed to potentially hazardous chemicals that are part of the composition of the panels.	installation of solar panels	that may have both short-term and long-term effects.	**L (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	To: 28-Feb-25		potentially harmful materials present in solar panels will be assessed in further detail. This will involve the further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF depending on the results of this assessment. Should it be determined that any Environmental and Social Impact Assessment (ESIA) or Environment and Social Management Plans (ESMPs) are indeed required to manage/mitigate this risk, the ESMF will provide details on how these documents are to deal with the occupational health and safety risks. Risk Treatment Owner: Project Manager
9	SESP risk 9: Working conditions (for both construction/installation and policy/regulatory activities) may: (i) not meet national labour laws and/or international commitments, (ii) deny freedom of association, (iii) not provide equal opportunity, and (iv) pose safety risks	In the absence of sufficient preventative measures	Unfavorable working conditions	**1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **1 - Not likely** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment. Risk Treatment Owner: Project Manager

	including violence and harassment.							
10	SEP risk 10: Release of waste (both hazardous and non-hazardous) into the environment	Materials are handled improperly, or (at the end of their lifecycle) disposed of inappropriately	Release may have implications for surrounding communities	**1. SOCIAL AND ENVIRONMENTAL (1.11. Pollution prevention and resource efficiency) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The significance of this risk may need to be reviewed once the exact project sites and findings of the baseline assessments have been clarified. If the precise locations for project interventions remain unclear during the conduct of the ESMF, the ESMF will provide guidelines for how this risk is to be assessed and managed once the precise locations are finalized. Should an Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plans (ESMPs) be deemed necessary during the conduct of the ESMF, principles and procedures to be adhered to in the development of these documents will also be provided in the ESMF. Risk Treatment Owner: Project Manager
11	Contractors and vendors might not be following strictly the project safety, occupational and heath processes	Negligence and inattention, project gets delayed	Negative reputation and financial risk to the project and UNDP	**3. OPERATIONAL (3.7. Occupational safety, health and well-being) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Increase surveillance and site management practices. Develop periodic engagement with workers, contractors and others. Risk Treatment Owner: Project Manager

12	Project might be delayed due to cumbersome regulatory approval process	As a result of the delay, there will possibly be cost impact on the project	Which will impact in the meteing of the renewable energy needs of the community	**7. STRATEGIC (7.5. Government commitment) - UNDP Risk Appetite: OPEN TO SEEKING**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 03-Apr-23 To: 28-Feb-25	Project Manager	Early engagement with PNG Power Limited, ABG, CCDA and other agencies. Clearly outline the approvals required and put in place sufficient contingencies to overcome any delays. Risk Treatment Owner: Project Manager Provide regular feedback to the project board and have a monthly review of the relevant approvals and their status. Risk Treatment Owner: Project Manager

Choose an item.

B. Risk Register: Samoa

#	Event	Cause	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
Risk identified as part of SESP								
1	SESP Risk 1: Duty-bearers may not be adequately equipped sensitively and effectively to design and implement these activities	Duty-bearers including government agencies and project staff may not have the capacity to meet their obligations under the project. Particularly for activities that are aimed at supporting gender-sensitive	Inequitable distribution of project benefits.	**4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Proper design and implementation of these activities (conducted with consideration of the results of appropriately conducted stakeholder consultation with duty-bearers as well as project beneficiaries) will serve to manage the risk that duty-bearers are ill-equipped to fulfill their obligations under the project, thereby mitigating the risk that project benefits will be inequitably distributed.

		governance and policy						The conduct of the Environmental and Social Management Framework (ESMF) will involve an analysis of the institutional arrangements relevant to the project and an assessment of the need for institutional capacity-building. The ESMF will serve as a broad framework from which procedures and processes will be drawn that will ensure that all project activities which fall within the scope of moderate or higher risks are designed and implemented in accordance with the UNDP SES. Risk Treatment Owner: Project Manager
2	SESP Risk 2: Project-affected persons and beneficiaries (particularly those from marginalized groups including indigenous, women, youth, disabled, LGBTQI+ and impoverished people) may not have the opportunity to become aware of the potential benefits of the project or may not have the capacity to participate in or claim other rights	Rights-holders may not have the capacity to claim their rights.	Benefits may not accrue to intended beneficiaries	**1. SOCIAL AND ENVIRONMENTAL (1.1. Human rights) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.2. Gender equality and women's empowerment) - UNDP Risk Appetite: CAUTIOUS** **4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The project is built on the human rights-based approach and a number of activities are designed with the general goal of ensuring that rights holders are aware of project interventions and thereby aware of their ability to claim their rights. These activities will themselves serve to manage this risk. However, the ESMF to be developed for the project will provide further detail on the continual assessment and management of this risk. During the conduct of the ESMF, whether there is a need for a targeted management plan (e.g. a detailed Stakeholder Engagement Plan and/or Gender Analysis and Action Plan) to ensure rights-holders are

	in respect of project activities.			**Appetite: EXPLORATORY TO OPEN**				made aware of their rights in respect of the project will be assessed. Risk Treatment Owner: Project Manager
3	SESP Risk 3: Adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	Improper management	Adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	**1. SOCIAL AND ENVIRONMENTAL (1.4. Biodiversity conservation and sustainable natural resource management) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The ESMF will provide a broad framework for the assessment and management of this risk as the exact sites become clear. This framework will be provided in the section of the ESMF that defines the required procedures for screening, assessment and management. The ESMF will include details on the factors to be considered in determining whether an Environmental and Social Impact Assessment (ESIA), site-specific Environmental and Social Management Plans (ESMPs) or targeted Waste Management Plans are required for the following solar-related activities. Risk Treatment Owner: Project Manager
4	SESP Risk 4: Inadvertent promotion of climate maladaptive practices.	Due to the unprecedented and uncertain nature of climate change and research on best practices for climate adaptation, efforts to drive investment in	Increased climate vulnerability. This is especially pertinent given that the project will take place in areas that are particularly	**1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Proper design of these activities in adherence to international best practice and with consideration of reliable research on adaptation practices will serve to mitigate the risk that climate maladaptive practices will be produced through project interventions. During the conduct of the ESMF, the potential need for a Strategic Environmental and Social

		clean energy, provide support for ministries responsible for energy-related decision-making and the scaling up of adaptation, resilience and disaster risk reduction tools could inadvertently result in the promotion of initiatives that are improperly designed,	susceptible to the effects of climate change.		**appetite of EXPLORATORY)**			Assessment (SESA) will be assessed in further detail. Should a SESA be deemed necessary, it would serve to further manage this risk by providing procedures aimed at ensuring the project's policy-related interventions are designed and implemented in the most informed and appropriate manner. Risk Treatment Owner: Project Manager
5	SESP risk 5: Given that the precise location of all project activities is not yet determined with certainty, there is a possibility that project activities may take place in or adjacent to cultural heritage sites (both tangible and intangible).	Location of the project is not yet pre-determined	There is therefore a possibility that the other risks identified may result in adverse impacts to the cultural heritage items, sites and/or practices in the project area should they eventuate.	**1. SOCIAL AND ENVIRONMENTAL (1.7. Cultural heritage) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **1 - Negligible** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment. Risk Treatment Owner: Project Manager
6	SESP Risk 6: Adverse impacts to the human rights, lands,	Should project activities take place in/adjacent to places where	The result of such a lack of appropriate consultation	**1. SOCIAL AND ENVIRONMENTAL (1.9. Indigenous peoples) - UNDP**	Likelihood: **2 - Low likelihood** Impact:	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The ESMF will serve as the overarching framework to ensure that UNDP's SES 6 is adhered to for all relevant project activities.

	natural resources, territories, and/or traditional livelihoods of such indigenous peoples. Furthermore, there is a possibility that there will be a lack of proper/appropriate consultation with indigenous people in respect of project activities that may affect them.	indigenous peoples are present	may be that Free, Prior and Informed Consent (FPIC) (as required by UNDP) is not reached and that there will be insufficient consideration or representation of the views of these groups.	**Risk Appetite: CAUTIOUS**	**4 - Extensive** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**			Any subsequent management plans (IPP and SEP) that may be developed will be designed in compliance with the SES as a result of following the framework provided in the ESMF in respect of engagement with indigenous people and the requirement for FPIC Risk Treatment Owner: Project Manager
7	SESP Risk 8: Workers involved in the installation of solar panels due to the potentially hazardous chemicals that are part of the composition of the panels. Additionally, there are general construction-based occupation health and safety risks that may be relevant if the renovations to ICT facilities are significant in scale.	Improper handling and installation of solar panels		**1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	During the conduct of the ESMF, the risks to workers resulting from the potentially harmful materials present in solar panels will be assessed in further detail. This will involve the further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF depending on the results of this assessment. Should it be determined that any Environmental and Social Impact Assessment (ESIA) or Environment and Social Management Plans (ESMPs) are indeed required to manage/mitigate this risk, the ESMF will provide details on how these documents are to deal with the occupational health and safety

								risks. Risk Treatment Owner: Project Manager
8	SESP Risk 9: Working conditions (for both construction/installation and policy/regulatory activities) may: (i) not meet national labour laws and/or international commitments, (ii) deny freedom of association, (iii) not provide equal opportunity, and (iv) pose safety risks including violence and harassment.	In the absence of sufficient preventative measures	Unfavorable working conditions	**1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **1 - Not likely** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment. Risk Treatment Owner: Project Manager
9	SESP Risk 10: Release of waste (both hazardous and non-hazardous) into the environment	Materials are handled improperly, or (at the end of their lifecycle) disposed of inappropriately	Release may have implications for surrounding communities	**1. SOCIAL AND ENVIRONMENTAL (1.11. Pollution prevention and resource efficiency) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	During the conduct of the ESMF, a baseline assessment of relevant project areas will be undertaken by qualified professionals. The significance of this risk may need to be reviewed once the exact project sites and findings of the baseline assessments have been clarified. If the precise locations for project interventions remain unclear during the conduct of the ESMF, the ESMF will provide guidelines for how this risk is to be assessed

				Risk Appetite: CAUTIOUS				and managed once the precise locations are decoded. Should an Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plans (ESMPs) be deemed necessary during the conduct of the ESMF, principles and procedures to be adhered to in the development of these documents will also be provided in the ESMF. Risk Treatment Owner: Project Manager
10	No vendor complies with the type and/or timeframe for the delivery of specified electric vehicles.	As a result of market availability, appropriate aftersales services and replacement parts, manufacturing and/or shipping delays of approximately 12 months.	Delay in the delivery schedule of imported EVs and in turn, the expected GHG emission reduction potential.	**4. ORGANIZATIONAL (4.9. Procurement) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **3 - Moderately likely** Impact: **4 - Extensive** Risk level: **SUBSTANTIAL (equates to a risk appetite of OPEN)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Explore LTAs and local vendors for EVs and conduct market analysis for different EV types. Develop specifications and commence procurement process within the first quarter of the project. Risk Treatment Owner: PMU Procurement Officer
								Under the project, an upskilling programme on automotive electronics, mechanics and engineering will be developed (Activity 1.6). Risk Treatment Owner: Project Manager
11	National electricity grid cannot meet the	Possible sudden increase in EV importation	Inoperability of EVs in Samoa.	**4. ORGANIZATIONAL (4.2. Execution capacity) - UNDP**	Likelihood: **3 - Moderately likely**	From: 01-Jan-24 To: 28-Feb-25	Project Manager	Consultations with, and data provision to, the Electric Power Corporation (EPC) who manage the grid and have piloted 10 EVs in

	energy demand to charge EVs.	within a 2-year timeframe.		**Risk Appetite: EXPLORATORY TO OPEN**	Impact: **4 - Extensive** Risk level: **SUBSTANTIAL (equates to a risk appetite of OPEN)**			Samoa, to ensure the grid capacity is stable to charge import EVs and consider off-peak charging system. Risk Treatment Owner: Project Manager
12	No electric outboard motors for fishing vessels are feasible for this context.	Limited market availability, appropriate aftersales services and replacement parts, and unsuitability to the geography/climatic conditions.	Delay or inability to electrify Samoa's fishing fleet.	**7. STRATEGIC (7.8. Innovating, piloting, experimenting) - UNDP Risk Appetite: OPEN TO SEEKING**	Likelihood: **3 - Moderately likely** Impact: **4 - Extensive** Risk level: **SUBSTANTIAL (equates to a risk appetite of OPEN)**	From: 01-Mar-23 To: 28-Feb-25	Project Manager	A feasibility study, gender and cost-benefit analysis of low-carbon maritime transport options, prioritizing inter-island ferries and fishing vessels, will be conducted within the first three quarters of the project (Activity 3.2). Risk Treatment Owner: Project Manager
13	No systems are in place for the safe disposal of EV batteries.	Lack of policy, infrastructural and technological solutions in-country.	Reduction in national demand of EVs.	**1. SOCIAL AND ENVIRONMENTAL (1.11. Pollution prevention and resource efficiency) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **4 - Highly likely** Impact: **4 - Extensive** Risk level: **SUBSTANTIAL (equates to a risk appetite of OPEN)**	From: 01-Mar-23 To: 28-Feb-25	Project Manager	An exploratory study will be conducted to identify technical, policy, infrastructural and technological solutions for safe disposal and recycling of EV batteries (Activity 2.6). Risk Treatment Owner: Project Manager

Choose an item.

C. Risk Register: Timor-Leste

#	Event	Cause	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
Risks identified as part of SESP								
1	SESP Risk 1: Duty - bearers may not be adequately equipped sensitively and effectively to design and implement these activities	Duty-bearers including government agencies and project staff may not have the capacity to meet their obligations under the project. Particularly for activities that are aimed at supporting gender-sensitive governance and policy	Inequitable distribution of project benefits.	**4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Country Office	Proper design and implementation of these activities (conducted with consideration of the results of appropriately conducted stakeholder consultation with duty-bearers as well as project beneficiaries) will serve to manage the risk that duty-bearers are ill-equipped to fulfill their obligations under the project, thereby mitigating the risk that project benefits will be inequitably distributed. The conduct of the Environmental and Social Management Framework (ESMF) will involve an analysis of the institutional arrangements relevant to the project and an assessment of the need for institutional capacity-building. The ESMF will serve as a broad framework from which procedures and processes will be drawn that will ensure that all project activities which fall within the scope of moderate or higher risks are designed and implemented in accordance with the UNDP SES. Risk Treatment Owner: Project Team and Senior Management
2	SESP Risk 2: Project-affected persons and beneficiaries (particularly those	Rights-holders may not have the capacity to	Benefits may not accrue to intended beneficiaries	**1. SOCIAL AND ENVIRONMENTAL (1.1. Human rights) - UNDP**	Likelihood: **3 - Moderately likely**	From: 01-Apr-23 To: 28-Feb-25	Country Office	The project is built on the human rights-based approach and a number of activities are designed with the general goal of ensuring that rights holders are

	from marginalized groups including indigenous, women, youth, disabled, LGBTQI+ and impoverished people) may not have the opportunity to become aware of the potential benefits of the project or may not have the capacity to participate in or claim other rights in respect of project activities.	claim their rights.		**Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.2. Gender equality and women's empowerment) - UNDP Risk Appetite: CAUTIOUS** **4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**			aware of project interventions and thereby aware of their ability to claim their rights. These activities will themselves serve to manage this risk. However, the ESMF to be developed for the project will provide further detail on the continual assessment and management of this risk. During the conduct of the ESMF, whether there is a need for a targeted management plan (e.g. a detailed Stakeholder Engagement Plan and/or Gender Analysis and Action Plan) to ensure rights-holders are made aware of their rights in respect of the project will be assessed. Risk Treatment Owner: Project Team and Senior Management
3	SESP Risk 3: Project interventions could result in adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	Improper management	Adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	**1. SOCIAL AND ENVIRONMENTAL (1.4. Biodiversity conservation and sustainable natural resource management) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Country Office	The ESMF will provide a broad framework for the assessment and management of this risk as the exact sites become clear. This framework will be provided in the section of the ESMF that defines the required procedures for screening, assessment and management. The ESMF will include details on the factors to be considered in determining whether an Environmental and Social Impact Assessment (ESIA), site-specific Environmental and Social Management Plans (ESMPs) or targeted Waste Management Plans are required for the following solar/hydro-related activities. Risk Treatment Owner: Project Team

								and Senior Management
	SESP risk 5: Given that the precise location of all project activities is not yet determined with certainty, there is a possibility that project activities may take place in or adjacent to cultural heritage sites (both tangible and intangible).	Location of the project is not yet pre-determined	There is therefore a possibility that the other risks identified may result in adverse impacts to the cultural heritage items, sites and/or practices in the project area should they eventuate.	**1. SOCIAL AND ENVIRONMENTAL (1.7. Cultural heritage) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **1 - Negligible** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment. Risk Treatment Owner: Project Manager
4	SESP Risk 6: Adverse impacts to the human rights, lands, natural resources, territories, and/or traditional livelihoods of such indigenous peoples. Furthermore, there is a possibility that there will be a lack of proper/appropriate consultation with indigenous people in respect of project activities that may affect them.	Should project activities take place in/adjacent to places where indigenous peoples are present	The result of such a lack of appropriate consultation may be that Free, Prior and Informed Consent (FPIC) (as required by UNDP) is not reached and that there will be insufficient consideration or representation of the views of these groups.	**1. SOCIAL AND ENVIRONMENTAL (1.9. Indigenous peoples) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **4 - Extensive** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Country Office	The ESMF will serve as the overarching framework to ensure that UNDP's SES 6 is adhered to for all relevant project activities. Any subsequent management plans (IPP and SEP) that may be developed will designed in compliance with the SES as a result of following the framework provided in the ESMF in respect of engagement with indigenous people and the requirement for FPIC Risk Treatment Owner: Project Team and Senior Management
5	SESP Risk 7: Without improper oversight, children may be recruited to take part in project activities involving	Project activities may exacerbate the prevalence of the use of child labour (in the form of	Involvement of children in activities that are inappropriate.	**1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate**	From: 01-Apr-23 To: 28-Feb-25	Country Office	Risk Treatment 6.1: The ESMF for the project will take into account the potential risks of the project supporting practices that commonly employ child labour in Timor-Leste. This will involve the

	the installation/renovation of infrastructure.	manual labour and construction) if adequate preventative measures are not implemented.		**Appetite: CAUTIOUS**	Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**			further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF depending on the results of this assessment. It is likely that an Environmental and Social Impact Assessment (ESIA) will be required for the solar-related activities under the project. Risk Treatment Owner: Project Team and Senior Management
6	SESP Risk 8: Workers involved in the installation of solar panels due to the potentially hazardous chemicals that are part of the composition of the panels. Additionally, there are general construction-based occupation health and safety risks that may be relevant if the renovations to ICT facilities are significant in scale.	Project interventions that involve the installation of infrastructure, there are occupational health and safety risks posed to workers at installation sites.	Negative health impacts that may have both short-term and long-term effects.	**1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Country Office	Risk Treatment 7.1: During the conduct of the ESMF, the risks to workers resulting from the potentially harmful materials present in solar panels will be assessed in further detail. This will involve the further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF depending on the results of this assessment. Should it be determined that any Environmental and Social Impact Assessment (ESIA) or Environment and Social Management Plans (ESMPs) are indeed required to manage/mitigate this risk, the ESMF will provide details on how these documents are to deal with the occupational health and safety risks. Risk Treatment Owner: Project Team and Senior Management

7	SESP Risk 9: Working conditions (for both construction/installation and policy/regulatory activities) may: (i) not meet national labour laws and/or international commitments, (ii) deny freedom of association, (iii) not provide equal opportunity, and (iv) pose safety risks including violence and harassment.	In the absence of sufficient preventative measures	Unfavorable working conditions	**1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **1 - Not likely** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Apr-23 To: 28-Feb-25	Country Office	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment. Risk Treatment Owner: Project Team and Senior Management
8	SESP Risk 10: Release of waste (both hazardous and non-hazardous) into the environment	Materials are handled improperly, or (at the end of their lifecycle) disposed of inappropriately	Release may have implications for surrounding communities	**1. SOCIAL AND ENVIRONMENTAL (1.11. Pollution prevention and resource efficiency) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Country Office	The significance of this risk may need to be reviewed once the exact project sites and findings of the baseline assessments have been clarified. If the precise locations for project interventions remain unclear during the conduct of the ESMF, the ESMF will provide guidelines for how this risk is to be assessed and managed once the precise locations are decoded. Should an Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plans (ESMPs) be deemed necessary during the conduct of the ESMF, principles and procedures to be adhered to in the development of these documents will also be provided in the ESMF. Risk Treatment Owner: Project Team and Senior Management

9	Social and political instability due to campaign leading towards parliamentarian election to be held mid 2023 delays activities on the ground	Early political campaign (early parliamentarian election) and rallies leading to the incoming parliamentarian election in 2023	Delay in the implementation of activities (difficulties in accessing the targeted municipalities), delay in turn-over to public stakeholders (i.e. Ministry of Public Works)	**8. SAFETY AND SECURITY (8.2. Political instability) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Jan-23 To: 31-Dec-23	Country Office	implement the recommendations / guidelines from the SRSS (UNDP Sub Regional Security Specialist) on elections pre assessment (mission to be conducted in February 2023) Risk Treatment Owner: project team and senior management Risk Treatment 10.2: The project team to be well prepared for briefing/engaging new appointed public counterparts for this project to ensure smooth transition Risk Treatment Owner: Project Team and Senior Management
10	Natural disasters particularly floods and landslides as a result of forecasted La Nina reduces accessibility to targeted project sites.	Natural Disasters may hamper speed in the project implementation	Slow implementation of the project activities (difficulties to access to remote aera, change in country office priorities to respond to the humanitarian emergency)	**1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **5 - Expected** Impact: **4 - Extensive** Risk level: **HIGH RISK (equates to a risk appetite of SEEK)**	From: 01-Jan-23 To: 31-Dec-23	Country Office	CO to implement the UNDP's Business Continuity Plan. Risk Treatment Owner: Project Team, DRR focal point and Senior Management

D. **Risk Register: Vanuatu**

#	Event	Cause	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
Risks identified as part of SESP								
1	SESP Risk 1: Duty-bearers may not be adequately equipped sensitively and effectively to design and implement these activities	Duty-bearers including government agencies and project staff may not have the capacity to meet their obligations under the project. Particularly for activities that are aimed at supporting gender-sensitive governance and policy	which may in turn result in inequitable distribution of project benefits.	**4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Proper design and implementation of these activities (conducted with consideration of the results of appropriately conducted stakeholder consultation with duty-bearers as well as project beneficiaries) will serve to manage the risk that duty-bearers are ill-equipped to fulfill their obligations under the project, thereby mitigating the risk that project benefits will be inequitably distributed. The conduct of the Environmental and Social Management Framework (ESMF) will involve an analysis of the institutional arrangements relevant to the project and an assessment of the need for institutional capacity-building. The ESMF will serve as a broad framework from which procedures and processes will be drawn that will ensure that all project activities which fall within the scope of moderate or higher risks are designed and implemented in accordance with the UNDP SES. Risk Treatment Owner: Project Manager
2	SESP Risk 2: Project-affected persons and	Rights-holders may not have	Benefits may not accrue to	**1. SOCIAL AND ENVIRONMENTA**	Likelihood:	From: 01-Apr-23	Project Manager	The project is built on the human rights-based approach and a number

	beneficiaries (particularly those from marginalized groups including indigenous, women, youth, disabled, LGBTQI+ and impoverished people) may not have the opportunity to become aware of the potential benefits of the project or may not have the capacity to participate in or claim other rights in respect of project activities.	the capacity to claim their rights.	intended beneficiaries.	**L (1.1. Human rights) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.2. Gender equality and women's empowerment) - UNDP Risk Appetite: CAUTIOUS** **4. ORGANIZATIONAL (4.4. Accountability) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	**3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	To: 28-Feb-25		of activities are designed with the general goal of ensuring that rights holders are aware of project interventions and thereby aware of their ability to claim their rights. These activities will themselves serve to manage this risk. However, the ESMF developed for the project will provide further detail on the continual assessment and management of this risk. During the conduct of the ESMF, whether there is a need for a targeted management plan (e.g. a detailed Stakeholder Engagement Plan and/or Gender Analysis and Action Plan) to ensure rights-holders are made aware of their rights in respect of the project will be assessed. Risk Treatment Owner: Project Manager
3	SESP Risk 3: Project interventions could result in adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	Improper management	Adverse impacts to the ecosystems in which they take place, potentially including critical habitats and/or environmentally sensitive areas.	**1. SOCIAL AND ENVIRONMENTAL (1.4. Biodiversity conservation and sustainable natural resource management) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The ESMF will provide a broad framework for the assessment and management of this risk as the exact sites become clear. This framework will be provided in the section of the ESMF that defines the required procedures for screening, assessment and management. The ESMF will include details on the factors to be considered in determining whether an Environmental and Social Impact Assessment (ESIA), site-specific Environmental and Social Management Plans (ESMPs) or

								targeted Waste Management Plans are required for the following hydro-related activities. Risk Treatment Owner: Project Manager
4	SESP risk 4: Project activities could inadvertently promote climate maladaptive practices.	Efforts to drive investment in clean energy, provide support for ministries responsible for energy-related decision-making and the scaling up of adaptation, resilience and disaster risk reduction tools could inadvertently result in the promotion of initiatives that are improperly designed	Increased climate vulnerability, especially as the project will take place in areas that are particularly susceptible to the effects of climate change.	**1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	Various project activities (and indeed the overall focuses of the project) involve promotion of the clean energy transition and assisting SIDS to be resilient to climate impacts. Proper design of these activities in adherence to international best practice and with consideration of reliable research on adaptation practices will serve to mitigate the risk that climate maladaptive practices will be produced through project interventions. During the conduct of the ESMF, the potential need for a Strategic Environmental and Social Assessment (SESA) will be assessed in further detail. Should a SESA be deemed necessary, it would serve to further manage this risk by providing procedures aimed at ensuring the project's policy-related interventions are designed and implemented in the most informed and appropriate manner.
5	SESP Risk 5: Project activities may take place in or adjacent to cultural heritage sites (both tangible and intangible).	Given that the precise location of all project activities is not yet determined with certainty	There is therefore a possibility that the other risks identified may result in adverse impacts to the	**1. SOCIAL AND ENVIRONMENTAL (1.7. Cultural heritage) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **1 - Not likely** Impact: **3 - Intermediate** Risk level:	From: 01-Apr-23 To: 28-Feb-25	Project Manager	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment.

			cultural heritage items, sites and/or practices in the project area should they eventuate.		**LOW (equates to a risk appetite of CAUTIOUS)**			Risk Treatment Owner: Project Manager
6	SESP Risk 6: Adverse impacts to the human rights, lands, natural resources, territories, and/or traditional livelihoods of such indigenous peoples. Furthermore, there is a possibility that there will be a lack of proper/appropriate consultation with indigenous people in respect of project activities that may affect them.	Should project activities take place in/adjacent to places where indigenous peoples are present	Free, Prior and Informed Consent (FPIC) (as required by UNDP) may not be secured and that there will be insufficient consideration or representation of the views of these groups.	**1. SOCIAL AND ENVIRONMENTAL (1.9. Indigenous peoples) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **4 - Extensive** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	The ESMF will serve as the overarching framework to ensure that UNDP's SES 6 is adhered to for all relevant project activities. Any subsequent management plans (IPP and SEP) that may be developed will designed in compliance with the SES as a result of following the framework provided in the ESMF in respect of engagement with indigenous people and the requirement for FPIC Risk Treatment Owner: Project Manager
7	SESP Risk 8: Risk posed to workers involved in the installation of solar panels due to the potentially hazardous chemicals that are part of the composition of the panels. Additionally, there are general construction-based occupation health and safety risks that may be relevant if the renovations to	As a result of project interventions that involve the installation of infrastructure, there are occupational health and safety risks posed to workers at installation sites.	Negative health impacts that may have both short-term and long-term effects.	**1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	During the conduct of the ESMF, the risks to workers resulting from the potentially harmful materials present in solar panels will be assessed in further detail. This will involve the further assessment of the likelihood that this risk will eventuate and the impact that it may have should it eventuate. The requirements for managing this risk will be detailed in the ESMF depending on the results of this assessment. Should it be determined that any Environmental and Social Impact Assessment (ESIA) or Environment

	ICT facilities are significant in scale.			**Appetite: CAUTIOUS**				and Social Management Plans (ESMPs) are indeed required to manage/mitigate this risk, the ESMF will provide details on how these documents are to deal with the occupational health and safety risks. Risk Treatment Owner: Project Manager
8	SESP Risk 9: Working conditions (for both construction/installation and policy/regulatory activities) may: (i) not meet national labour laws and/or international commitments, (ii) deny freedom of association, (iii) not provide equal opportunity, and (iv) pose safety risks including violence and harassment.	In the absence of sufficient preventative measures	Unfavorable working conditions	**1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **1 - Not likely** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	As stated in the Guidance Note on the UNDP's Social and Environmental Screening Procedure (SESP), projects categorized as low risk (and the risks of low significance under such projects) require no further social and environmental assessment. Risk Treatment Owner: Project Manager
9	SESP Risk 10: Release of waste (both hazardous and non-hazardous) into the environment	Improper handling of materials (at the end of their lifecycle) disposed of inappropriately	Release may have implications for surrounding communities	**1. SOCIAL AND ENVIRONMENTAL (1.11. Pollution prevention and resource efficiency) - UNDP Risk Appetite: CAUTIOUS** **1. SOCIAL AND ENVIRONMENTAL (1.6. Community**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 28-Feb-25	Project Manager	During the conduct of the ESMF, a baseline assessment of relevant project areas will be undertaken by qualified professionals. The significance of this risk may need to be reviewed once the exact project sites and findings of the baseline assessments have been clarified. If (as expected) the precise locations for project interventions remain unclear during the conduct of the ESMF, the ESMF will provide

				health, safety and security) - UNDP Risk Appetite: CAUTIOUS				guidelines for how this risk is to be assessed and managed once the precise locations are decoded. Should an Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plans (ESMPs) be deemed necessary during the conduct of the ESMF, principles and procedures to be adhered to in the development of these documents will also be provided in the ESMF. Risk Treatment Owner: Project Manager
10	There is a risk that given the tight timeframe, an effective implementation arrangement at the regional and national levels that could affect the project could not be put in place immediately	This would be caused by include lack of coordination and communication among different stakeholders and other similar initiatives.	Delayed implementation	**4. ORGANIZATIONAL (4.3. Implementation arrangements) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **2 - Low likelihood** Impact: **2 - Minor** Risk level: **LOW (equates to a risk appetite of MINIMAL)**	From: 01-Mar-23 To: 28-Feb-25	*Project Manager*	A proper coordination plan will be developed and implemented Risk Treatment Owner: Project Manager Quarterly Coordination meeting will be organised Risk Treatment Owner: Project Manager …
11	There is a risk that some contracting and or procurement will take longer than expected.	This would be attributed to the dearth of suppliers serving many of the Pacific Island countries due to small market and geographic isolation	Delayed completion of the project	**4. ORGANIZATIONAL (4.9. Procurement) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Mar-23 To: 28-Feb-25	Project Manager	The procurement will be started as early as possible. As much as possible LTA service providers will be hired … Risk Treatment Owner: Project Manager

12	Natural disasters particularly cyclones and landslides as a result of forecasted La Nina would impede progress if not totally preclude work in the project sites which are in river systems	Natural disasters	Delayed completion of the Project	**1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Mar-23 To: 28-Feb-25	Project Manager	CO will implement Business continuity Plan Risk Treatment Owner: Project manager

E. Regional Risk Register Template

Project Title: Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development	**Project Number:**	**Date: 01-Apr-23**

#	Event	Cause	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
1	Risk that a strong or effective coordination mechanism may not be in place at the regional, national and sub-national levels	This would be caused by the relatively short duration of the project that covers both governance and on-the-ground interventions that may in lack of coordination and communication among different stakeholders and other similar initiatives.	If there is lack of coordination among regional and national levels there will be three impacts: (i) There will be delays in the implementation of the project. (ii) There will be a lack of sustainability for the future if there are no complementary initiatives and an effect on future resource mobilization. (iii) The knowledge sharing and lessons learnt component	**4. ORGANIZATIONAL (4.2. Execution capacity) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 01-Mar-25	Regional Project Manager and	There will be strict monitoring on coordination with different levels of government, from the regional team there will be implementation support and oversight, and if needed, country missions to provide that support. Risk Treatment Owner: Regional Project Manager, BRH The project will create synergies with similar initiatives within UNDP and elsewhere. The project's alignment with UNDP's Climate Promise will ensure that there will be significant oversight from the NCE team and substantive technical inputs will be provided as needed. Risk Treatment Owner: Regional Project Manager, BRH

2	Implementation capacity risks, where the capacity is weak, or that the technical skills are missing.	This could be a result of poor planning, identifying the wrong talent, a lack of strategic thinking, lack of resources and the capacity of COs to mobilize national project teams within a relatively short time.	This will affect objective of the project to address the development challenges of green transformation along with introduction of new technology into remote communities and thereby to increase the capacity of the national and local government institutions in the four countries	**4. ORGANIZATIONAL (4.3. Implementation arrangements) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 01-Mar-25	Regional Project Manager	There has been budget set aside for a dedicated project coordinating mechanism at BRH comprising of a Regional Project Manager (RPM), a Energy Policy Specialist, a Procurement Specialist and a Project Finance and Administrative Associate and a Procurement Assistant to provide finance and admin support. In addition, short-term project staff including M&E analyst and Regional Communication and Knowledge Management Specialist will complement the regional team. Apart from these five fixed posts the project will also leverage on the expertise of the NCE team as mentioned above. There will not only be an oversight role, but capacity will be extended towards the COs to ensure that implementation is smooth and meets global standards. There will be efforts to recruit a communications officer, as well as an M&E officer Risk Treatment Owner: Regional Project Manager and BRH
3	Exchange rate loss on the Japan accounts receivables results	Economic/financial uncertainty globally and political developments.	The scope of project outcomes being narrowed, and activities shrinking. Overall project	**2. FINANCIAL (2.4. Fluctuation in credit rate, market, currency) - UNDP**	Likelihood: **4 - Highly likely** Impact:	From: 01-Apr-23 To: 01-Mar-25	Regional Project Manager	Exchange rate movements will be monitored and significant appreciation of the Japanese yen will be brought

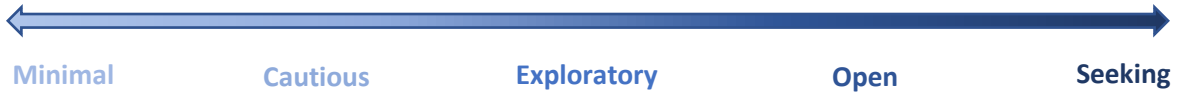
	in less budget to the projects and affect planned activities		objectives may not be achieved.	**Risk Appetite: MINIMAL TO CAUTIOUS**	**4 - Extensive** Risk level: **SUBSTANTIAL (equates to a risk appetite of OPEN)**			up in regular coordination meetings with JSB. The costs will be absorbed so that the communications officer and the M&E officer roles are at a JPO or UNV level. Travel costs may also be cut. Risk Treatment Owner: Regional Project Manager, BRH
								At the CO level, the costs will be discussed and the scale of ambition for the project may be reduced. The loss will be absorbed by all countries equally, and clinics will be held with each country to assess the situation, and revise AWPs and activities accordingly. Risk Treatment Owner: Regional Project Manager and BRH

4	There is a possibility that social and environmental risks of project interventions, e.g., installation of solar panels, building of pico dams, among others are not fully considered	A project of this nature, which comes with risks such as handling of electronic materials, transportation, and construction materials, can cause harm to environmental and human health.	This will cause human and environmental damage.	**1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **4 - Extensive** Risk level: **SUBSTANTIAL (equates to a risk appetite of OPEN)**	From: 01-Apr-23 To: 01-Mar-25	Regional Project Manager	The SESP has been conducted and the mitigation measures have been identified at the country level. These would include the preparation of ESMF/ESMP, ESIA, etc. Country-level compliance will be monitored at the regional level. Risk Treatment Owner: Regional Project Manager, BRH
5	There is a risk that due to construction activities, there may be some harm or loss caused if structural elements constructed under the project fail. This is a risk both to individuals working with these structural elements as well as the community at large.	As a result of inadequate preventative measures that are not implemented.	This will impact on the beneficiaries of the project and users of the health facilities	**1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 01-Mar-25	Regional Project Manager	Risk Treatment 5.1: National standards and building codes will be followed for all project activities involving construction or installation of significant hardware. At present, this risk is of low significance. However, should material information arise during the conduct of the ESIAs which indicates that this risk is more likely to eventuate, the need for targeted assessment and management measures will be re-examined. Risk Treatment Owner: The COs will flag this to BRH, for monitoring and mitigation.
6	There is a risk that the procurement of equipment is delayed.	As a result of inadequate procurement planning, complex	This will impact the outcome and outputs, installation of procured equipment and delay the	**2. FINANCIAL (2.5. Delivery) - UNDP Risk Appetite:**	Likelihood: **3 - Moderately likely**	From: 01-Apr-23 To: 01-Mar-25	Regional Project Manager	Close monitoring of procurement plan and ensure course corrections or alerting for alternative planning early

		international bidding processes, complex procurement processes, inadequate proposals, shipping and transport and delays in the global supply chain.	remaining components including training and capacity building of duty bearers.	**MINIMAL TO CAUTIOUS**	Impact: **4 - Extensive** Risk level: **SUBSTANTIAL (equates to a risk appetite of OPEN)**			on in consultation with TWG. Coordinator with GPU at Copenhagen, and plans in place for mitigation Risk Treatment Owner: Regional Project Manager, BRH
7	Project activities involving employment/training may be disproportionately beneficial for males when compared to females (and other marginalized groups), thereby reproducing and exacerbating pre-existing discriminations against women.	As a result of project activities take place in/adjacent to places where indigenous peoples are present, the indigenous people may not benefit proportionately from the opportunities/benefits provided by the project. Furthermore, indigenous people (especially women, youth, people with disabilities and other marginalized groups) may not be appropriately consulted.	This may impact in a lack of consideration, representation, and consultation with these groups	**1. SOCIAL AND ENVIRONMENTAL (1.2. Gender equality and women's empowerment) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **3 - Moderately likely** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Apr-23 To: 01-Mar-25	Regional Project Manager	The ESIAs (and site-specific ESMPs) will set quantitative targets for the participation of marginalized groups and will include measures to ensure that the participation of/consultation with stakeholders who fall within these marginalized groups is meaningful and inclusive. Risk Treatment Owner: Regional Project Manager, BRH.

ALIGNING THE RISK APPETITE TO RISK SIGNIFICANCE IN THE RISK MATRIX

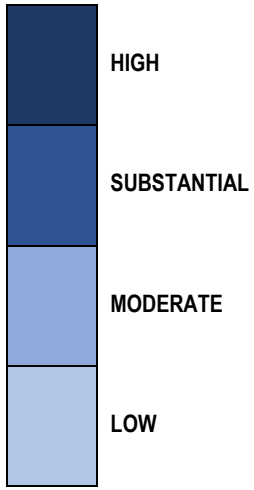
Risk Appetite scale:



- **Minimal risk appetite**: Areas where UNDP will apply a strong control environment to reduce or minimize the likelihood that a risk will occur and/or reduce the impact of any risk.
- **Cautious risk appetite**: Areas where UNDP seeks low-risk delivery options and will pilot innovation only in a controlled environment.
- **Exploratory risk appetite**: Areas where UNDP strikes a balance between the potential upside benefits and downside risks of a decision and explores new solutions and options for delivery.
- **Open risk appetite**: Areas where UNDP has determined that the potential upside benefits outweigh the risks and will take informed risks. All potential options are considered.
- **Seeking risk appetite**: Areas where UNDP takes risks by working with new ideas and approaches, looking for innovation and recognizing that failures are an opportunity for learning and improving.

Risk Matrix:

Impact	1	2	3	4	5
5	Exploratory	Open	Open	Seek	Seek
4	Cautious	Exploratory	Open	Open	Seek
3	Cautious	Exploratory	Exploratory	Exploratory	Open
2	Minimal	Minimal	Cautious	Exploratory	Exploratory
1	Minimal	Minimal	Cautious	Cautious	Cautious
	Likelihood				



ANNEX 9: GENDER ANALYSIS AND ACTION PLAN

A. Papua New Guinea

Overview of Gender Issues

Papua New Guinea is classified as a lower middle-income country with a gross national per capita income of USD 2,386 in 2021. The country's population stands at 8.8 million, with 49 percent women. Rural women, children and people living with disabilities are the most vulnerable to intersectional and intergenerational poverty, insecurity, and violence. The Progress towards gender equality in PNG is slow, with the country ranking 160th out of 161 countries on the Gender Inequality. While the 2021 Global Gender Gap Index ranked Papua New Guinea at 135 out of 156 countries31.

Women's participation in decision-making low: The number of women in key leadership and decision-making roles remains low as women face cultural and systemic obstacles to participating in political life. In October 2021 there was not a single woman among the 111 members of the National Parliament nor among the Cabinet Ministers. Of the 6,190 ward seats and 319 local-level government seats, only 120 were held by women. In 2022 elections while there is some progress made in women's political participation, they are now 2 Women Members of Parliament out of 114 Members of Parliament in PNG and 5 Women Members of Parliament out of 41 Members of Bougainville House of Representatives. Three out of the five women MPs in Bougainville are ministers, with the fourth, is the deputy speaker.

High rates of violence against women and girls: Gender-based violence remains a challenge for Papua New Guinea. At least 60 per cent of the country's women have experienced physical and/or sexual violence from an intimate partner at some point in their lives. This is double the global average. Violence stemming from accusations of sorcery against older women appears to be on the rise32. A report by the International Finance Corporation in 2021 said that Papua New Guinea firms lose an average of 10 days for every staff member every year due to the impact of family and sexual violence.

Civil conflicts: The country's history is marked by political and civil conflicts. The Highlands region has suffered from inter-clan rivalries and armed conflict which has impacted negatively on the population especially for women and girls who bore the brunt of civil unrest that often leaded to very high cases of GBV, Hunger and poverty among others.

Economic participation: The 2009–2010 Household Income and Expenditure Survey shows that a similar proportion of women (62%) and men (61%) are employed among the population aged 15 and older. Yet men are much more likely than women to hold a wage job in the formal sector (66% of men versus 38% of women), while women are three times more likely than men to work in the informal sector (46% of women versus 15% of men)33. This implies that women are less likely to have access to incomes and other employment opportunities for economic empowerment. Women's participation in the labor force through employment and entrepreneurship lies at about 70% - slightly less than men at 71% (UNDP, 2016). More than 50% of the female labour force is engaged in agriculture and women comprise nearly 35 percent of the economically active population in agriculture (FAO, 2019). Although participation rates in the labor force are relatively even, men are almost twice more likely than women to hold a wage job in the formal sector, while women are three times more likely than men to work in the informal sector (ILO, 2018). Men tend to work longer hours in economically profitable activities (almost triple in cocoa, copra and coffee related activities), whereas women are mainly responsible for domestic activities (World Bank, 2012).

Access and control of resources: There are still persistent gender disparities in access to and control over productive resources in agriculture, energy, markets, forestry, fisheries and other sectors, yet women are the

[31] https://asiapacific.unwomen.org/en/countries/png

[32] https://asiapacific.unwomen.org/en/countries/png/about-un-women-png

[33] https://www.adb.org/sites/default/files/linked-documents/cps-png-2016-2020-ga.pdf

major contributors to the economy (on farms, at home and in the community). Women are systematically excluded from access to and control over resources, essential services and decision making despite a conducive legal and policy framework34.

Gender gap in education: There is clear gender gap in education from primary to secondary, however, gender inequalities is more pronounced in tertiary and technical and vocational education and training: university enrollments comprise 61% men and 39% women35.

Infrastructure services: Poor transport infrastructure and services is one of the factors contributing to limited accessibility to education, health services, and market opportunities and energy access. This has impact on access to services especially for women and girls and other vulnerable groups leading to poor health, education, livelihood outcomes. Yet access to energy would be used to unlock women's economic opportunities and at the same time saving time on unpaid care work, they would use energy for cooking and washing clothes that would relieve time of unpaid care work for paid work to increase women's access to economic opportunities.

Gender and Climate Change

Traditionally in Papua New Guinea, women and men have collaborated successfully as custodians of the environment. Climate change impacts are changing the traditional way of life and the impacts are very clear on affecting the environment, livelihoods, economy, health and gender relations in the communities. climate change impacts everyone, but there are differentiated impacts based on gender, age, ethnicity and other socio-economic factors. The majority of women and girls walk further distances to access productive resources including clean water and have limited access and ownership to land compared with men which continues to exacerbate social and economic inequality36.

Globally, evidence has shown there is likelihood of violence from intimate partners and male family members can escalate during emergencies. This tends to increase as the crisis worsens, and men have lost their jobs and status – particularly in communities with traditional gender roles, and where family violence is normalized. Cultural stigmas in some places can mean that women are not taught lifesaving skills like how to swim and climb trees. This can leave women more vulnerable during a flood as these survival skills are traditionally only taught to men. More floods due to climate change may mean even higher fatalities of women and girls unless this gender sensitive vulnerability is addressed. Limited access to and understanding of information and influence on decision making processes limit the capacity of women to prepare and respond to adverse impacts of climate change. Women and girls are at risk for sexually transmitted diseases and unwanted pregnancies due to sexual assault in times of emergency37. Lack of health infrastructure can mean they can't access adequate medical treatment or reproductive health options which impacts negatively on women's reproductive health especially lack of access to family planning leads to unplanned or unwanted pregnancies during such disasters.

Gender and Renewable Energy and energy efficiency

In PNG, the proportion of the population with access to electricity in 2017 was at 54.4% (ADB, 2020) yet energy plays an essential role in both women's and men's lives, therefore, achieving gender equality, social inclusion and poverty alleviation in the area of renewable energy can be linked with human rights and social, environmental and economic development. In many countries including PNG Women and girls take on the primary responsibility to ensure energy needs are met especially at household level and given their multiple roles and duties, they lack time to participate in other opportunities that could potentially help to enhance their knowledge, skills, income and self-esteem38.

Country Progress on Gender Equality

[34] https://gggi.org/wp-content/uploads/2021/03/GESI-Assessment-Report-PNG-Final.pdf

[35] Ibid . adb.2016

[36] https://gggi.org/wp-content/uploads/2020/09/07.-GCF-Gender-Mainstreaming-Guideline.pdf

[37] https://www.climatecentre.org/wp-content/uploads/Gender-and-Climate-Change.pdf

[38] https://gggi.org/wp-content/uploads/2021/03/GESI-Assessment-Report-PNG-Final.pdf

PNG ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1995 and domesticated some of the provisions of CEDAW including the Child Protection Act of 2009, which has a range of provisions to protect girls from discrimination. In 2002, The Government enacted the Sexual Offences and Crimes against Children Act under the revised Criminal Code, providing legislation that covered a series of previously excluded offences including marital rape, with punishment graded according to the severity of the harm involved and defining the forms of sexual violation of women. In addition, the country has further adopted a number of policies, plans and programmes on women and gender development such as the National Strategic Plan 2010-2050 (Papua New Guinea Vision 2050) which includes human capital development and gender, youth and people empowerment as major pillars that promote gender equality. The National Constitution on the other hand has included commitments towards gender equity and equality: with one out of five goals on equality and participation. "We declare our second goal to be for all citizens to have equal opportunity to participate in, and benefit from, the development of our country."

The National Policy for Women and Gender Equality, 2011–2015 describes the government's mission to promote improved equality, participation, and empowerment of women. It refers to objectives for women's empowerment and the establishment of a policy environment that translates government commitments to gender equality into reality, along with the required policies and mechanisms. Specific strategic actions are prioritized under 10 priority action areas drawn from the Beijing Platform for Action and National Platform for Action, and from extensive stakeholder consultations.

Despite the progress made so far, gender inequalities still persist including in access to energy, women and girls do not have equal access to energy sources and there is a need to strengthen efforts on gender equality and women's empowerment.

Recommendation.

The gender analysis has made recommendations and specific actions for filling in some of the gender gap in RE to ensure an action plan for the project with concrete outputs to facilitate the implementation of activities that promote gender equality and women's empowerment in order to deliver on the gender equality results for the project.

This programme strategy should take comprehensive gender-sensitive approach, based on the principles of leaving no one behind in the implementation. The energy access should be promoted particularly for women and youth to venture into alternative livelihoods for enhancing economic opportunities for example value addition of their agricultural products, use the energy to manage businesses and use energy for cooking to save time and unlock economic empowerment for women and youths.

Build capacity of women through skilling and on job training in management of Solar firms and encourage women to take leadership in Operation and Maintenance of the Solar systems on firms.

GENDER ACTION PLAN

Objective: unlock economic development by increasing access to more affordable forms of renewable energy. By targeting renewable energy, small to medium-sized enterprises (SME) can provide greener livelihood opportunities, leaping over outdated fossil fuel technologies and accelerating the delivery of Papua New Guinea's NDC.			
Outputs as per the project concept note	**Proposed gender equality activities to fill the gender gap**	**Gender specific actions**	**Indicators**
Country Output 1 -Build resilience of Bougainville through expansion of	Activity: 1.1. community engagement and consultation with women and youths' groups in design phase to ensure needs of women and other vulnerable population are	Conduct community engagement including women and youth groups to identify the needs of women, youths and other vulnerable group for project	The project design incorporates input from community members including women and youth.

renewable energy access.	reflected in the project design and implementation.	Ensure the project design and implementation reflects the needs of the whole population including females and males including other vulnerable population like PWD, Elderly and children.	% Of females and males' participation in community consultations disaggregated by age
	Activity: 1.2. Developed and install mini-solar farms in in three regions of Bougainville and at least one female owned farm installed with Mini- Solar	Identify women technicians or skilled craftsmen are provided with opportunities to participate in the supply chain for the EPCC for the micro solar farm. Ensure at least one female owned firm accesses and benefits from Mini-Solar installation. The women owned businesses will be informed of opportunities and will compete with other businesses within UNDP procurement policies.	Number of female technicians, skilled craftsmen participating in the supply chain
	Activity: 1.3. Strengthened gender responsive regulatory and governance structures to expand equal access to renewable energy adoption in Bougainville.	Provide input for community members into the regulatory structures with opportunity for women and youth in the community to provide their input.	Regulatory and governance systems for renewable energy adoption incorporate input from women and youth.
	Activity: 1.4. female engineers in Operations and maintenance of solar farms as demonstration for expansion of renewable energy policy into the Bougainville.	Identify Female engineers/technicians as part of O&M Team for the Solar demonstration farms Train or mentor Female staff as solar farm operators and maintenance	Number of females engineers/technicians in the O&M of solar farms
	Activity: 1.5. Train and skill women at the community to operate and maintain the new renewable energy sources.	Provide training opportunities for the community including women. Communicate widely on the available training sessions Identify women at the community to undertake the skilling/training of O&M.	Number of women in O&M for the new renewable energy sources.
	Activity: 1.6 Develop gender specific change stories on access to solar energy	Develop gender change stories on women's access to and benefit from solar energy in farms and at community level.	Number of gender change stories developed.

B. **Samoa**

Overview of Gender Issues

Pacific Island countries (PICs) include some of the world's most remote countries that share a similar set of challenges, including susceptibility to natural disasters, limited resources and dependence on international trade. The Gender Inequality Index for 2019 ranked most PICs better than the world average. The ranking of some of the PICs in the Human Development Index for 2020 included Palau (50th), Fiji (93rd), Tonga (104th) and Samoa (111th) in the high category. Kiribati, the Federated States of Micronesia, the Solomon Islands and Vanuatu are classified as least-developed countries.

On average, two in three people work in services in the island economies, half of them are men and three in four are women, often in jobs related to tourism. This landscape has changed for many PICs from 2016 to 2020, as they ran large current deficits and the situation worsened due to the negative impact of COVID-19. The COVID 19 pandemic exposed in equalities in our economies, especially gender inequalities, women and girls have more impacted both socially and economically, GBV prevalence increased during COVID 19 for example in Samoa the number of cases that came through the Samoa Victims Support Group (SVSG those helplines were alarming. The imposition of the State of Emergency on March 22, 2020, case management data from SVSG shows that between March and May this year reported domestic violence cases increased by 48 percent in comparison to the same months in 2019. Cases reported include sexual, emotional, physical, and verbal abuse[39].

In addition, women are overrepresented in sectors that are vulnerable to the pandemic, agriculture, tourism, health and in the informal sector where is this no social protection that have made women and girls more vulnerable at are at risk of being in extreme poverty.

In the agriculture sector, women represent 52% of the labour force in PICs and contribute to climate change mitigation and adaptation as agents of change for climate-resilient food systems. However, women are more likely to be unemployed than men, and women's labour force participation is significantly lower. In Cook Islands, for instance, 96.6% of the jobs in the fisheries and agriculture sector are occupied by men; in Samoa, this share is 89.5%.

Social, cultural and economic barriers are embedded in the Pacific patriarchal culture. These barriers include harmful social norms and discriminatory practices against women and diverse gender identities. According to UNFPA[40], the prevalence of partner and non-partner violence is high in Pacific Island countries with lifetime prevalence rates for physical and sexual violence by partner and non-partner among Pacific Island women falling between 60 to 80 percent.

Women's overall representation in national parliaments across the region is low. The Inter-Parliamentary Union state that, as of 1 November 2021, the average proportion of women in national parliaments in the Pacific Islands was 6.3%. This was the lowest of any global region and was significantly below the global average of 25.8%[41]. Samoa has 7.5% of women in parliament, The proportion of women in the national legislature is highest in the Cook Islands, where women hold 6 of the 24 (25.0%) parliamentary seats.[42]

In Samoa the local government consist of village councils (fono) made up of chiefs (matai) in 2020 only 22% of women are registered matai according to Samoa Voluntary National Review (VNR).

There are numerous reasons why the under-representation of women in politics is concerned and one of the reasons for under representation of women in the Small Island Developing States (SIDS) is the social norms and cultural barriers that limits women's participation in leadership positions from the village level to national level. Across the Pacific there is gender disparities in labour participation, occupation and wage. Labour force participation is consistently higher for men than women in the Pacific region[43], for example in Samoa labour force participation for women is 23% as compared to 58% for men.

[39] https://www.undp.org/samoa/press-releases/shining-light-shadow-pandemic-violence-against-women-girls-during-covid-19

[40] UNFPA, 'Population and Development Profiles: Pacific Island Countries' page 8

[41] Inter-Parliamentary Union, 2021

[42] Pacific Women in Politics, 2021 [Regional]

[43] Fiji Bureau of Statistics, 2021, p.56; Tuvalu Statistics Division, 2017, p.4; Tokelau National Statistics Office and Stats NZ, 2017, p.51; Cook Islands Government,

Occupation type varies considerably by gender across the Pacific region. While men tend to dominate the fishing[44], agriculture, and forestry[45] industries, women are more engaged in shore-based harvesting and processing[46] and in manufacturing roles, such as making handcrafts, garments, and cigarettes[47]. Women are more likely than men across the region to be employed in care-based sectors, such as health[48]. Women hold 36% of managerial roles in the Pacific region, on average, according to the latest data from the Pacific Community[49]. The countries in which women are most represented among managers are the Cook Islands (56% in 2019), Palau (49% in 2018), Samoa (43% in 2017), and Tonga (40% in 2018).

The main barriers to entering the labour force in the Pacific region include family and domestic responsibilities and studies. Women do substantially more unpaid domestic and care work than men across the Pacific region[50].

Violence against women and girls is high in the region for example in Samoa recent data on domestic violence/IPV DHS-MICS 2021 high prevalence rate of 32% of experienced physical, sexual and emotional violence especially IPV.

Gender and Climate change

Pacific Island countries are some of the most vulnerable in the world to the impacts of climate change, which include resource depletion, rising sea levels, extreme weather events, and natural disasters[51]. The economic consequences of climate change and crises like COVID-19 disproportionately impact women and other marginalized groups, whose livelihoods heavily rely on natural resources and who face the greatest barriers to accessing the resources needed to cope with crisis events[52]. Gendered barriers to participating in the paid workforce make it more difficult for women to diversify their livelihoods in response to natural disasters and climate change, contributing to gender inequity in climate resilience[53].

Existent barriers to women's economic decision-making and women's lack of control over household and community financial resources have been also exacerbated by the pandemic, threatening women's economic livelihoods and increasing inequities between women and men.[54]

The climate crisis intersects with structural inequalities such as SBGV especially during disasters. Global evidence shows that SGBV increases during and after disasters. The Pacific region, where SGBV rates are already high by global standards, is no exception to this trend.

GBV in Disasters: Samoa was chosen as one of the case studies for the global study on GBV in disasters in 2015, by IFRC[55]. The study examined the data from the tsunami of 2009 and Cyclone Evan of 2012 and concluded that given the relatively high background level of GBV in Samoa, it was not possible to determine whether GBV generally increased in the aftermath of these disasters. However, the IFRC research indicated that persons

2019, p.35; Federated States of Micronesia Office of Statistics, Budget, Overseas Development Assistance and Compact Management, 2010, p.5; United Nations Conference for Trade and Development, 2020, p.14; Kingdom of Tonga, 2019, p.38; Government of Tonga, 2019, p.1; Palau Office of Planning & Statistics, 2017, p.29

[44] Graham and D'Andrea, 2021, p.27

[45] e.g.: Graham and D'Andrea, 2021, p.27; Samoa Bureau of Statistics and United Nations Population Fund, 2020, p.76; United Nations Conference for Trade and Development, 2020, p.16

[46] Graham and D'Andrea, 2021, p.27

[47] e.g.: United Nations Conference for Trade and Development, 2020, p.16; Republic of the Marshall Islands, 2012, p.42; Samoa Bureau of Statistics and United Nations Population Fund, 2020, p.76; Government of Tonga, 2019, p.22

[48] Boccuzzi, 2021, p.8. For example, see: Republic of the Marshall Islands, 2012, p.45; Tokelau National Statistics Office and Stats NZ, 2017, p.53; Temengil-Chilton and Hillmann Kitalong, 2019, p.32; United Nations Conference for Trade and Development, 2020, p.16; Government of Tonga, 2019, p.22

[49] Pacific Community, 2021c. These averages exclude Niue and Tokelau, for which no data are available.

[50] Pacific Women, 2021, p.4–5; Boccuzzi, 2021, p.14

[51] United Nations in the Pacific, 2017, p.23

[52] United Nations in the Pacific, 2017, p.23

[53] United Nations Capital Development Fund, 2020, p.14

[54] Care, 2020: 6. [Regional]

[55] https://www.ifrc.org/sites/default/files/2021-11/GBV-in-disasters-AP-case-studies.pdf

displaced by the disasters in Samoa are at higher risk of GBV than those who manage to stay in their communities. Relocation of rural Samoan communities seems to be one of the root causes of the increase in post-disaster GBV risk and prevalence.

Gender and Transport sector in Samoa

Across the Pacific, women employed in the maritime sector do not fare any differently from those in other sectors: aviation, agriculture, commerce and health care among others. The challenges and obstacles are the same across the sectors: restrictions to the labour market; violence against women; and legislation that is gender-sensitive that does not discriminate56

Gender equality gap in the transport sector is wide for example in 2017 only 12.5 per cent of the 2,400 people employed in the sector were women[57] . Gender inequalities continues to exist in the transport sector due to some social norms which has impact on women's participation in the sector for instance, a lack of construction and engineering skills, occupational segregation by gender, and employer stereotyping are factors contributing to women's constrained ability to take advantage of new labor market opportunities in infrastructure, including in the transport sector. Yet not only are jobs in the transport sector highly gendered, so too is the access to transport services. Women in leadership roles are rare in the maritime industry because it has traditionally been a male-dominated industry, but the tide is changing and now there are women who are leaders in their own capacity serving at different levels. The gap is slowly closing but the challenges and obstacles, both physiological and psychological, remain prevalent. As the shipping industry continues to evolve because of the nature of its complex and dynamic operations, emerging issues run parallel to its existence. These include climate change mitigation in the maritime industry, behavior change, and gender implications in Green Shipping[58].

The lack of safe and inclusive transport systems in Samoa denies marginalised groups such as people with disabilities (PWDs), children and the elderly from accessing existing services. As a result, there is widening inequality in the transport sector which is exacerbated by the continued exclusion of the voices of marginalized groups including women in transport planning and the pursuit of decent work.

Progress on Gender Equality in Environment Sector

The government of Samoa is committed to promote gender equality and women's economic empowerment through ratification and domestication of legal frameworks on gender equality. Samoa is the first Pacific Island nation to have ratified the Convention for the Elimination of Discrimination Against Women (CEDAW) in 1992 and is party to CEDAW without reservations. In addition to CEDAW, the commitment of the Government of Samoa to gender equality is reflected in a number of other international and regional commitments. These include: the Convention on the Rights of the Child (CRC), acceded to in 1990, the Beijing Platform for Action and the Revised Pacific Regional Platform for Action (1995), the Pacific Leaders Gender Equality Declaration (PLGED) (2012), the Sustainable Development Goals (2016).

The Government has committed to gender equality across the environmental sector as well for example increased participation of women and girls in climate change and disaster preparedness and response, as evidenced by the National Policy on Gender Equality and Rights of Women and Girls 2021-2031. Accordingly, provisions for integration of gender and social inclusion are made in Samoa's 2nd NDC, Implementation Roadmap and Investment Plan 2021 including capacity building, mentorship and coaching of women to fill the gender gap in male-dominate sectors and training and sensitization human-resource managers to eliminate gender bias (particularly for construction, operations, and management roles) among other actions. However, more targeted efforts are required to ensure greater gender equality in light of pre-existing gender roles and social norms in the transport sector.

Samoa Energy Sector Plan 2017-2022 has a section (f) on gender equity highlighting that ´energy is a vital contribution in the daily lives of women and girls. women need energy for their household tasks, such as cooking;

[56] Regional Strategy for Pacific Women in Maritime 2020-2024

[57] https://www.worldbank.org/en/news/press-release/2022/06/02/safer-more-resilient-and-reliable-transport-for-samoa

[58] https://prdrse4all.spc.int/sites/default/files/t8_-_annex_a_regional_strategy_for_pwm_2020-2024_0.pdf

for productive use to enhance their contribution to household income; and for rural industry development. It highlights importance of gender equality and needs to identify the gender energy needs, especially linking affordable, accessible, reliable and sustainable modern energy services can considerably to unlock unpaid care work for especially for women and girls as improving the health conditions.

Recommendations

The gender analysis has made recommendations and actions for filling in some of the gender gap in the land and maritime transport sector and ensure action plan for the project with concrete outputs to facilitate implementation of activities that promote gender equality and women's empowerment in order to deliver on the gender equality results for the project.

This programme strategy should take comprehensive gender-sensitive approach, based on the principles of leaving no one behind, towards green and zero-emission transformational change in the transport sector. Guided by the Samoa NDC Implementation Roadmap and Investment Plan (2021), the strategy identifies key enablers that would support accelerated nation-wide decarbonization of both the land and maritime transport sector. Each pathway identified will ensure equal participation, access and safety of land and maritime transport for all with a special focus on marginalised groups such as women, elderly, youth, children, and PWDs. In doing so, women and other marginalised groups who are too often neglected in the planning and implementation phases, will be provided with a platform to ensure all perspectives are considered and factored in throughout project design and implementation. Skilling and capacity building of women is very important for reducing the gender gap in land and maritime transport in Samoa.

Influence and cause transformative change for women and girls in the renewable energy sector for Land and Maritime Transport by building capacity of women, increase number of women in management of electrical cars and boats and management of the solar power stations in Samoa. This will transform gender equality in the Transport and Maritime Sector.

GENDER ACTION PLAN

Outcomes: Inclusive and accessible transformational change towards a green and low-carbon transport sector to support the achievement of Samoa's enhanced NDCs			
Outputs as per the project concept note	**Proposed gender equality activities to fill the gender gap**	**Gender-specific actions**	**Indicators**
Project Output 1: Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of transport sector for zero-emission economic development across both land and maritime transport systems.	Activity: 1.1. Review and update Samoa's legislative and policy framework to include gender responsiveness for the support of a national transition to low-carbon land and maritime transport.	Identify gender gaps in the existing legislation and policy frameworks for low-carbon land and maritime transport. Propose entry points to strengthen gender equality in the policy frameworks Ensure gender is reflected in the revised and updated legislative and policy frameworks on low-carbon land and maritime transport.	Number of gender responsive legislative and policy framework on National transition to low-carbon land and maritime transport
	Activity: 1.2. Conduct a transport optimization and energy efficiency review. Include gender analysis in the review	Identify gender issues in transport and energy efficiency Conduct gender analysis of transport and energy efficiency review	Gender analysis reflected in the transport and energy review
	Activity: 1.3. Develop a gender responsive Decarbonization Strategy and Sector Plan for Land and Maritime Transport with sub-sector specific NDC	Identify gender issues to inform development of decarbonization strategy and	Gender responsive decarbonization strategy and Sector Plan for Land and Maritime Transport

	emission target reductions and abatement measures, including a monitoring framework.	Sector Plan for Land and Maritime Transport Ensure the Decarbonization strategy and Sector Plan for Land and Maritime transport reflects needs of females and males including other vulnerable populations like PWD and the elderly. Develop gender responsive policy and plan for Land and Maritime Transport	
	Activity 1.4: Conduct a scoping and feasibility study on investment shifts away from carbon intensive transport and identify gender-responsive innovative finance mechanisms to support and sustain Samoa's low-carbon transition.	Conduct gender analysis of the investments for green transport Identify innovative financing mechanisms for women and other vulnerable for easy financial accessibility to sustain green energy transition	Gender responsive innovative financing mechanisms
	Activity: 1.5. Design and roll-out an inclusive public awareness and behaviour change campaign promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure.	Design public awareness capacity targeting women and other vulnerable groups on behavior change for green energy transition. Increase participation of women, youth, children and the elderly in the public awareness campaigns Organize community dialogues that can cause transformative change for green energy.	% Of female and male transformative behavioral change on low-carbon transition
Project Output 2 Accelerated inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener public transport systems.	Activity 2.1: Conduct a baseline assessment of traffic volumes, vehicle registration and imports, vehicle ownership disaggregated by gender and age, EV and hybrid vehicles, and market demand.	Generate gender disaggregated data on traffic volume, vehicle registration, imports and vehicle ownership.	% Of vehicle registration, imports and ownership by females and males/ age
	Activity 2.3. Design and roll out of awareness and behaviour change campaign for inclusive and safe mobility especially for women, PWDs, elderly, youth	Affirmative to increase behavioral change for safe mobility	perception/change of attitude for safe mobility for women, PWD, Elderly, youth and children

	and children, based on a public survey on perceptions of barriers to low-carbon mobility.	Male engagement in the behavioral change campaigns for safe mobility for women, PWDs, elderly, youth and children Generate gender-specific stories of change on green transport.	
	Activity 2.4. Develop and support the implementation of a gender-sensitive Sustainable Land Use and Mobility Plan7, to promote green, inclusive and accessible infrastructure and mobility.	Ensure gender needs are reflected in the land use and mobility plan for green infrastructure. Develop gender responsive Land use and mobility plan for green infrastructure	Gender sensitive sustainable land use and mobility plan.
Project Output 3 Accelerated decarbonization of the maritime sector to optimize energy efficiency with a specific focus on inter-island ferries and fishing vessels.	Activity 3.1. Optimize the national registration system for vessels by sex, age and including private fishing and transports boats for improved emissions tracking and control and fuel efficiency.	Generate gender disaggregated date for vessels including private fishing and transport boats	% Of private fishing and transport boats owned by females, males disaggregated by age.
	Activity 3.2. Conduct a feasibility study, gender and cost-benefit analysis of low-carbon maritime transport options, prioritising inter-island ferries and fishing vessels.	Include gender analysis in the feasibility and cost benefit analysis of low-carbon Maritime transport options especially for island ferries and fishing vessels	Gender responsive feasibility and cost-benefit analysis of low carbon maritime.
	Activity 3.3 Assess and pilot low-carbon propulsion systems of Samoa's fishing fleet through a gender sensitive grant mechanism for local fisherfolk and training scheme on installation, operations and maintenance	Design grant systems that meet the needs of local female and male fisherfolk. Ensure Female fisherfolk access the grants by making the criteria for selection of beneficiaries simple and easily accessible by female fisherfolks. Train female and male fisherfolk in O&M of low-carbon propulsion systems.	% Of females and males fisherfolks accessing grants and skilled in O&M of low-carbon propulsion systems. No of gender-specific stories of change developed.
		Generate gender-specific stories of change on green transport OR low-carbon land/maritime transport.	

C. Timor-Leste

Gender Analysis

Gender equality is ingrained in government policy in Timor-Leste. Article 6 and Article 17 of the Constitution state that women and men "have the same rights and duties in all areas of political, family, economic, social, and cultural life," and a fundamental objective of the state is "to create, promote and guarantee the effective equality of opportunities between women and men" (Constitution of the Democratic Republic of Timor-Leste, Section 6 and 17, 2002). Timor-Leste has signed and ratified major gender-related conventions, including The Convention on the Elimination of All Forms of Discrimination against Women, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social, and Cultural Rights, and has undertaken legal obligations to respect, protect, and fulfill the human rights of women in Timor-Leste. GoTL also committed to achieving SDG 5, and Timor-Leste submitted a Voluntary National Review on progress toward the SDGs.[59]

Timor-Leste is a patriarchal society with traditions and customs that favour men. Timorese society reinforces male authority over women and limit the choice of women. Women spend more time on household tasks fetching water, cooking, cleaning, washing clothes and child-care.[60] These activities place considerable constraints on women's ability to engage in economic activities outside the home. Among the poor, women-headed households are considered more vulnerable because they have fewer income earners and lack access to resources. The patriarchal culture hinders equal access to modern energy services in many aspects of lives; economics, education, health, welfare, etc.

The World Bank reports that globally, 733 million people still have no access to electricity, and close to 3 billion people still cook with traditional cooking fuels and technology.61 While energy poverty affects almost half of the world's population, women and girls disproportionately bear the burden of energy poverty because of gender norms and traditions At the household level, women are typically responsible for cooking. Women carry the heaviest load since they supply and use biomass energy to cook. Wood biomass is mostly used for heating and cooking purposes in a household. Overall, it is estimated that up to 90% of the energy needs of TL citizens are provided by biomass as electricity consumption is very low.62 The burning of biomass releases harmful pollutants and it increases women's risks of health diseases due to spending hours over a biomass stove. In addition, in the absence of electricity, the responsibility for water and fuel collection also exposes risks for women to violence when walking in remote and isolated areas.

The absence of electricity-powered appliances such as fans for cooling, phone charging for communication, sewing machine, television, etc., may increase the risk of women's drudgery and less time saving for men and women to do productive activities and leisure times. Furthermore, the research by Energia63 found that the affordability of modern energy as a bottleneck in access to and use of energy services, especially for low-income households. Poor electricity supply is also pinpointed as one of the obstacles for the household to improve economic livelihood options.

Particularly in gender participation in the renewable technology sector, women are still underrepresented. The number of women as technical operators is still small. The number is even lower in rural areas.

Despite some progress in recent years, shortcomings continue to be evident, especially in health and education. Access to energy is critical when it comes to the functionality of healthcare facilities and the quality, accessibility,

[59] Timor Leste GESI Analysis and Action Plan – USAID Health System Sustainability Activity: https://banyanglobal.com/wp-content/uploads/2022/03/LHSS_TIMOR-LESTE_GESI-Analysis-and-Action-Plan_508c.pdf

[60] Gender Dimensions in Vocational Training in Timor Leste: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/publication/wcms_116935.pdf

[61] REPORT: COVID-19 SLOWS PROGRESS TOWARD UNIVERSAL ENERGY ACCESS https://www.worldbank.org/en/news/press-release/2022/06/01/report-covid-19-slows-progress-towards-universal-energy-access

[62] LIGHTING UP THE STUDENTS: REALIZING RIGHTS TO QUALITY EDUCATION FOR ALL CHILDREN: HTTPS://MDPI-RES.COM/D_ATTACHMENT/ENERGIES/ENERGIES 12-01441/ARTICLE_DEPLOY/ENERGIES-12-01441.PDF?VERSION=1555323457

[63] GENDER IN THE TRANSITION TO ENERGY FOR ALL: FROM EVIDENCE TO INCLUSIVE POLICIES - ENERGIA | ENERGIA

and reliability of health services delivered. Challenges occur in implementing quality maternal, newborn, and child health services due to poor health infrastructure and its essential supporting resources, including power supply for electricity. Electricity is necessary for the services operation, medical devices, and basic amenities such as lighting, communications, etc. Inadequate and unreliable access to electricity at health care facilities in TL impacts influence the limitation of opening hours of services.64 It contributes, however, to the problems of maternal mortality rate. UNFPA estimates that the maternal mortality ratio ranges from 270 to 570 deaths per 100,000 live births. Among young women aged 15 to 19, the maternal mortality ratio is 1,037 per 100,000 live births. The number could be higher as many pregnant women prefer traditional birth attendants. Skilled health personnel assist only 30 percent of current deliveries, and facility delivery is low, at 20 percent.65 Timor-Leste has progressed significantly in rebuilding its health infrastructure nowadays, but more development is needed.

In the short period since the restoration of independence in 2002, Timor-Leste has made significant progress by completely rebuilding its education system. More and more children and young people are now going to school. Quality education for all is a key government priority. But ageing facilities, repetition, and dropout, language diversity, weakened child-friendly teaching methods, and limited facilities in rural areas hinder progress.66 Education related to ICT is limited as many schools in rural areas have inadequate supporting electrical power supply. Aside from the gender stereotypes issues, poor electricity supply also affects schools' investments in computers and other educational appliances,67 indicating the limited enabling environment to support transformative changes for gender equality. Several reports also highlight that women's access to information comes primarily from their husbands and families.[68] If it continues, Timor Leste will face multiple human capital challenges.

Gender Action Plan

Outcome: Enhancing Green Transformation in the Pacific Towards Net-Zero Emissions and Climate-Resilient Development for Peace			
Expected Outputs	**Proposed gender equality activities to fill the gender gap**	**Gender specific actions**	**Indicators**
Output 1: Households not connected to the national electricity grid have access to clean and reliable power supply	1.1 Gender dimension in Feasibility Studies conducted by project	The feasibility studies conducted by project will not limited to technical aspects of solar project. It will cover the analysis using gender dimension, particularly on community, socio and economic projected impacts to men and women.	1.1 Gender-sensitive Feasibility study is conducted
	1.2 Engaging women in the planning mechanism and socialization process,	The local forum at project location for the preparation of infrastructure building and will engage women. At design stage, it will consult with women to ensure the best benefit from clean and reliable power supply for men and women equally.	1.2 # men and women engaged in planning mechanism and socialization process (50:50)
	1.3 Engaging women in the technology maintenance mechanism.	Project will promote women participation in technology maintenance, along together to increase capacity of women at this sector.	1.3 # men and women engage in maintenance mechanism of the electricity grid, that is established at project location.

[64] FACTORS AFFECTING QUALITY OF CARE IN MATERNAL AND CHILD HEALTH IN TIMOR-LESTE: A SCOPING REVIEW: HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC9260585/
[65] ACCELERATING ACCESS TO ELECTRICITY IN HEALTHCARE FACILITIES: HTTPS://WWW.WHO.INT/ACTIVITIES/ACCELERATING-ACCESS-TO-ELECTRICITY-IN-HEALTH-CARE-FACILITIES
[66] Lighting Up the Students: Realizing Rights to Quality Education for All Children (accesstoenergy.org)
[67] Gender in the transition to energy for all: From evidence to inclusive policies - Energia | Energia
[68] Gender Dimensions in Vocational Training in Timor Leste: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/publication/wcms_116935.pdf

	1.4 Awareness raising on the benefits of clean energy technology for men & women	The awareness raising includes workshops, creating gender-sensitive information and communication materials, etc. The awareness raising will also promote gender equal roles in applying and equality in benefiting clean energy technology.	1.4 # gender-responsive awareness raising is conducted
	1.5 1.5 Training for women and men to introduce energy-efficient cooking stoves	The training aims to introduce skills in using energy-efficient cooking stoves to men and women. The training will address the gender stereotypes in using cooking technology. Both men and women will be engaged in the training.	1.5 # men and #women are trained for the new technology
	1.6 Gender-Sensitive procurement and provision of solar lights and energy-efficient cooking stoves	Although limited, the project can promote gender equality in the energy sector during the procurement process of a contractor by considering the involvement women expertise in the potential candidates	1.6 Gender-sensitive procurement is held
	1.7 Conduct a Study on the Impact of the acceleration of RR/EE to Gender Equality in Timor Leste.	The Study will document the contribution of RE/EE to gender equality. The study will cover the gender dimension in the acceleration of the provision of clean and energy efficiency in the household, health, and education sectors. At the household, for instance, the study will measure the impact of the use of electricity-powered appliances to gender transformative outcomes.	1.7 The study on Gender and Energy is published.
Output 2 Health service centers have improved facilities for better service provision.	2.1 Gender dimension in Feasibility Study conducted by the project	The feasibility studies will cover the analysis using gender dimension, particularly on community, socio and health projected impacts, especially for women and children. The feasibility study will answer the project's contribution to better health services for women and children in critical situations such as pregnancy and delivery, vaccination, etc.	2.1 Gender-sensitive feasibility study is conducted
	2.2 Developing Information and Communication materials to promote reliable health facilities after the power supply is installed	The project will support the promotion of reliable health facilities with adequate electricity supply to men and women at the project location	2.2 gender-sensitive Information and communication materials delivered to women and men at project locations.
	2.3 Conduct a gender survey to gather men's and women's perceptions on the confidence level to use health facilities installed by power/electricity.	The project will help create the community's confidence, especially among pregnant mothers to use the health services. Men and women, to use health facilities. The results from the survey can inform the study on the acceleration of RE/EE to Gender Equality in Timor Leste (act.1.7)	2.3 % perception of men and women's confidence to use the health facilities equipped with electricity.

Output 3 Support selects schools to have solar power-based Information, Communication Technology (ICT) labs to promote digital teaching and learning	3.1 Training to teachers, men, and women, on ICT module	The project will promote women teaching skills in ICT.	3.1 #women teachers are trained in ICT teaching modules at pilot schools.
	3.2 Support the development of inclusive teacher training to deliver ICT learning to the student with disabilities	The project will support teacher training include a gender &disabilities-inclusive approach learning.	3.2 Gender & disability-inclusive approach on ICT module for teacher training, is available

D. Vanuatu

Gender Analysis

Vanuatu, comprising 83 islands in the South Pacific Ocean, has a population of 316,464 (49% female; 51% male) (World Bank). The proportion of women aged over 70 is expected to grow in the coming decades compared to the proportion of men aged over 70 (Pacific Community). The majority of the population is rural, and their main sources of livelihood include subsistence farming, fishing, and the production of cash crops, including coconut, copra, cocoa, and kava. Other major sectors of the economy are tourism, which accounts for about 40% of GDP, and financial services.

Vanuatu enjoys relatively high GDP per capita (USD3,223) and life expectancy, and its institutions and human capital are strong, and levels of well-being are high. However, Vanuatu is highly vulnerable to natural hazards, including cyclones and volcanic activity which cause significant external shocks to the country's society and economy and present a critical challenge to development. In 2021, Vanuatu was affected by a series of calamities including TC Harold, volcanic ashfall, acid rains, flooding, and COVID-19. These factors had a significant compounding impact on livelihood, including increase in food prices, food shortage and lack of work, exacerbating existing inequalities, and disproportionally impacting women, girls, and at-risk communities. The closing of schools and the return to rural areas, also increased women's domestic responsibilities and unpaid labour, while damage to key infrastructures led to limited access to healthcare services and disruption in supplies. Internal changes, such as the abolishment of the Ministry of Justice and Community services and the restructuring of other services, also impacted the lives of women and girls disproportionately.

As in many countries across the globe including the Pacific, gender inequality is a persistent development challenge in Vanuatu. Vanuatu was ranked 111th out of 146 countries in the World Economic Forum Gender Gap Report 2022. While the country has almost closed the gender gap in Education Attainment although with a noticeable disparity between the generations, the country is ranked the last in terms of gender equality in political leadership. A 2009 census found that the proportion of elected officials, senior officials, and managers who were women was less than one-third (29%). According to 2019 IPU data, women accounted for only 7 out of the 48 director and director-general positions in the government, and this is the record number for the country. The snap election held in October 2022 in which eight female candidates contested, gave Vanuatu its first female MP since 2008.

According to the World Bank data (2022), the ratio of female to male labour force participation rate (%) in Vanuatu was 76.56% in 2021. Lack of sex-disaggregated data makes it difficult to understand possible gender disparities. As of December 2020, 24.6% of indicators needed to monitor the SDGs from a gender equality perspective were available, with gaps in key areas, in particular: unpaid care and domestic work, key labour market indicators, such as the gender pay gap and information and communications technology skills. A number of national surveys are being planned in 2022-2023, including the Agricultural Census, Business Survey, Demographic and Health Survey, and Household Income and Expenditure Survey. Some studies are available that indicate women's lack of engagement in decision-making in the agriculture sector despite their active participation in the sector.

Despite the introduction of the Family Protection Act in 2008 which was expected to contribute to the reduction in gender-based violence (GBV), GBV remains a critical development challenge in Vanuatu. A 2011 report by the Vanuatu Women's Centre, which surveyed 3,750 women across Vanuatu, found that 60% of women who had ever been in a relationship had experienced either physical or sexual abuse by a partner, and more than two in three had experienced emotional abuse. In 2018, 29.4% of women aged 15-49 years reported that they had been subject to physical and/or sexual violence by a current or former intimate partner in the previous 12 months. The number of GBV cases is expected to be increased as a result of the multiple crisis although updated data has not been found online.

In 2016 the government introduced the National Gender Equality Policy (NGEP) to "promote equal rights, opportunities and responsibilities among men and women and to eliminate all forms of discrimination and violence against women and girls". This first National Policy on Gender Equality affirmed the Vanuatu Government's commitment towards gender equality across all sectors and at all levels of society and the elimination of discrimination and violence against women and girls. The new phase of the policy, i.e., The National Gender Equality Policy 2020-2030 (NGEP2), was launched in August 2021 under the leadership of the Department of Women's Affairs (DWA). Provincial Governments and Municipal and Area Councils are key to implementing NGEP2 within their areas of jurisdiction. A four-year Gender Equality Action Plan has also been developed for all provinces to enable the policy objectives and priority actions to be applied and adapted to support policy implementation at provincial level, municipal and community levels. DWA's gender officers are expected to work closely with their respective stakeholders, including local communities, to coordinate the implementation and monitoring of the Provincial Gender Equality Action Plan.

Vanuatu is a State party to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). The country submitted two reports so far, with the latter one being reviewed by the Committee in 2016.

Gender Action Plan

UNDP and the Department of Energy of the Ministry of Climate Change and Natural Disaster of the Vanuatu Government conducted an in-country gender assessment in 2016/17 as part of GEF project development process. The assessment found that women played an important productive and reproductive role ranging from collecting firewood for cooking, tending to the family garden, household chores, caring for the young and elderly, assisting in the construction of local houses, and harvesting copra. Nevertheless, the prevailing culture of male domination where women become inferior meant the absence of women in decision-making. Without voices, women were performing daily tasks similar to those performed by men, in addition to care and domestic work which is expected to be carried out by women only. The assessment provides useful insights when considering the possible benefits for women of village-wide improved energy access, ranging from time benefits, health benefits, and economic benefits. It will also be beneficial for the entire communities to make women part of the decision-making on systems and the trainings when installing the systems or repairing systems. A similar scale of a gender assessment needs to be conducted in the project sites, as part of the feasibility study for the installation of 8 Pico Hydro (Activity 1.1). This study will also contribute to setting the baseline and targets for Indicator 1.2 'Number of residents to have access to clean energy (disaggregated by male, female and youth 15-24), since the study will include a time use survey to establish the intra-household (i.e., at the individual level as opposed to the household level) energy needs.

To help advance women's more equitable engagement in decision-making, the project will facilitate community-based committees with 40-50% female members. This will require gender equality advocacy capacity building for the national and local government officials as well as community leaders and community members, in line with Indicator 1.3 Number of Government officials and staff trained. Additional tailored awareness-raising activities will be implemented at the community level.

The study will also contribute to the intention of the project to create green/sustainable jobs. The study will identify the types of jobs with green/sustainable potential that are being performed by women and men. The data and information will help determine the types of jobs to be supported by the project to ensure women, men and youth 15-24 will equitably benefit from the project.

Accordingly, the gender action plan for the project will include the following:

1.	A gender study to establish the energy needs of women and men, taking into consideration the gendered division of roles within the household and community.
2.	Support to women's leadership development
3.	Gender-awareness raising and gender equality advocacy at the national and local governments and community levels
4.	Green job training tailored for women and men, with attention to the domestic and care work mostly performed by women.

ANNEX 10: PROCUREMENT PLAN WITH TIMELINE

	Procurement Step	Focal point and Action	Estimated Timeline
1	**Procurement plan/PROMPT and e-requisition**	BRH Regional Project Management Unit, led by a Procurement Specialist liaises with all CO focal points to finalize their procurement list	2 weeks
2	**Develop procurement strategy**	BRH Regional Project Management Unit, led by a Procurement Specialist, in close consultation with RBAP Regional Procurement Advisor and Global Procurement Unit, reviews the list of goods/services and develop a detailed procurement strategy	1 week
3	**Market research or Expression of Interest**	In consultation with GPU and RBAP Regional Procurement Advisor, Project Management Unit in each country, in consultation with UNDP CO procurement team will identify some potential local suppliers in country and potential suppliers in international markets that will be invited to join the bidding procuress or invited to expression of interest.	2 weeks
		Collect market information/practices on the availability of requested products, after-sales services and available logistics services	
		CO and local stakeholders (especially on qualifications, import policy and aftersales service)	
4	**Finalize requirements (technical specifications, after-sales services, volume etc.)**	Confirmation from the Implementing Partners on the final requirements and specifications, timeline and delivery etc	4 weeks
		UNDP's QA requirements will be stated in the ITB/RFQ/RFP	
		Project Management Unit in each country will finalize the Procurement Documents and share it with Procurement Advisor in BRH/ GPU for review and submit to Regional Procurement Advisor for clearance. GPU will advise if there are existing LTAs and/or items can benefit from pooled procurement process.	
5	**Finalize Invitation to bid (ITB)/RFQ/RFP**	UNDP CO procurement team to launch ITB in Quantum and organize pre-bidding meeting - if needed	2 weeks
6	**Launch ITB in eTendering (and wider circulation of procurement notice) by destination COs**	Evaluation team set up: Technical and Financial panels there will be subject matter experts involved in preparation of specifications and evaluation of bids that would be relevant for the subject procurement (engineers, renewable energy experts, etc.	3 weeks

	Procurement Step	Focal point and Action	Estimated Timeline
7	**Bid Evaluation: Technical and Financial Evaluation**	Technical evaluation: Eligibility, qualification, technical specifications of equipment and related services	4-6 weeks
		Financial evaluation: Review and rank the technical responsive bids by financial offer, from lowest to highest	
		The offeror who presented the first-ranked offer in accordance with the evaluation methodology and criteria stated in the tender documents will be recommended for contract option, based on overall technical and financial evaluation results	
		Finalize the evaluation report and conduct supplier reference check and due diligence	
		Each CO to submit toCAP/ RACP and respond to questions (if any).	
8	**CAP/RACP submission**	CAP/RACP	3 weeks
9	**CAP/RACP review**	CO Procurement team [PO will be created under each BU]	2 weeks
10	**Contract award/PO**	Each CO will manage and monitor their contract implementation (shipping, handling, customs clearance, local transportation, logistics and on-site services etc.)	1-2 weeks
11	**Contract management**	Each CO will process payments according to contract managed	TBC (depends on total delivery time and completion of on-site services)
12	**Payment**		TBC

Procurement Plan by Country

Activity	Description of goods, services or works	Estimated Unit Price in USD	Quantity	Unit	Estimated Total Price in USD	Available budget USD
Papua New Guinea						

Activity	Description of goods, services or works	Estimated Unit Price in USD	Quantity	Unit	Estimated Total Price in USD	Available budget USD
1.1	Engagement of consultants to manage the consultation with community and development of communications medium in relation to micro solar farms in Bougainville	80,000	1	1	80,000	250,000
1.2	Engineering, Procurement, Construction and Commissioning of three micro solar farms. This will include the preliminary works – site selection, local development approvals, ground works and other related activities	2,085,000	1	1	2,085,000	2,085,000
1.3	External consultant to assist with the drafting of legal and regulatory activities aligned to the roll out of micro solar farms and the development of renewable energy friendly legal statues in Bougainville.	165,000	1	1	165,000	165,000
1.4	Engagement of an external vendor to manage the maintenance and operations related to the micro solar farms after the handover from the vendor.	100,000	1	1	100,000	100,000
1.5	Education and training programs delivered across Bougainville with focus on renewal energy and community skilling focused on the solar and hydro installation and maintenance. The community training programs will be delivered through an extensive outreach.	400,000	1	1	400,000	400,000
PM	Technical and Management Staff	150,000	1	1	150,000	150,000
					Total Papua New Guinea	**3,150,000**
Samoa						
1.1	Consultancy services to review and update Samoa's legislative and policy framework in support of a national transition to low-carbon land and maritime transport (Contractual Services - Firm)	100,000	1	1	100,000	100,000
1.2	Consultancy services to conduct a transport optimization and energy efficiency review (Contractual Services - Firm)	100,000	1	1	100,000	100,000
1.3	Consultancy services to develop a gender responsive Decarbonization Strategy for the Transport Sector Plan with sub-sector specific NDC emission target reductions and abatement measures, including a monitoring framework (Contractual Services - Firm)	125,000	1	1	125,000	125,000
1.4	Consultancy services to conduct a scoping and feasibility study on investment shifts away from carbon intensive transport and identify	100,000	1	1	100,000	100,000

Activity	Description of goods, services or works	Estimated Unit Price in USD	Quantity	Unit	Estimated Total Price in USD	Available budget USD
	gender-responsive innovative finance mechanisms to support and sustain Samoa's low-carbon transition. (Contractual Services - Firm)					
1.5	Consultancy services to design an inclusive public awareness campaign promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure. (Contractual Services - Firm)	20,000	1	1	20,000	20,000
	Procurement of inclusive public awareness campaign materials promoting the environmental benefits and co-benefits of a transition to low-emissions vehicles and infrastructure. (Audio-visual and Print Prod. Costs)	30,000	1	1	30,000	30,000
1.6	Consultancy services to develop an up-skilling programme on electric vehicle automotive electronics, mechanics and engineering (Contractual Services - Firm)	100,000	1	1	100,000	100,000
	Consultations (4), trainings (8) and workshops (4) to develop an up-skilling programme on electric vehicle automotive electronics, mechanics and engineering (Trainings and Workshops)	3,125	16	16	50,000	50,000
	Procurement of goods and supplies for the up-skilling programme on electric vehicle automotive electronics, mechanics and engineering (Goods and Supplies)	150,000	1	1	150,000	150,000
2.1	Consultancy services to conduct a baseline assessment of traffic volumes, vehicle registration and imports, vehicle ownership disaggregated by gender and age, EV and hybrid vehicles, and market demand. (Contractual Services - Firm)	100,000	1	1	100,000	100,000
2.2	Procurement of emissions testing equipment and optimization of the Road Transport Administration System (RTAS) to improve fuel efficiency and optimize emission reduction potential. (Equipment and Furniture)	150,000	1	1	150,000	150,000
	Consultations, trainings and workshops to enhance land transport monitoring, including the optimization of the Road Transport Administration System (RTAS) to improve fuel efficiency and optimize emission reduction potential. (Trainings and Workshops)	50,000	1	1	50,000	50,000
2.3	Consultancy services to conduct a public survey on perceptions of barriers to low-carbon mobility and design materials for a targeted awareness campaign on inclusive and safe mobility, especially for	20,000	1	1	20,000	20,000

Activity	Description of goods, services or works	Estimated Unit Price in USD	Quantity	Unit	Estimated Total Price in USD	Available budget USD
	women, PWDs, elderly, youth and children. (Contractual Services – Individual)					
	Procurement of awareness campaign materials for inclusive and safe mobility especially for women, PWDs, elderly, youth and children. (Audio-visual and Print Prod. Costs)	30,000	1	1	30,000	30,000
2.4	Consultancy services to develop a gender-sensitive Sustainable Land Use and Mobility Plan to promote green, inclusive and accessible infrastructure and mobility.	125,000	1	1	125,000	125,000
2.5	Consultancy services to design and install an accessible public solar-charging station network (Contractual Service – Firm)	230,000	1	1	230,000	230,000
	Procurement of solar-charging stations (Equipment and Furniture)	55,534	52	52	2,887,773	2,887,773
2.6	Consultancy services to explore technical, policy, infrastructural and technological solutions for safe disposal and recycling of EV batteries (Contractual Service – Firm)	150,000	1	1	150,000	150,000
2.7	Procurement of electric vehicles (EVs) to support accessible electrification of public land transport based on country needs assessment. (Equipment and furniture)	134,131	46	46	6,170,026	6,398,700
3.1	Procurement of equipment to optimize the national registration system for vessels, including for emissions tracking and control and fuel efficiency (Equipment and Furniture)	120,000	1	1	120,000	120,000
	Trainings and workshops to optimize the national registration system for vessels, including private fishing and transport boats for improved emissions tracking and control, and fuel efficiency (Trainings and Workshops)	60,000	1	1	60,000	60,000
	Travel related to optimizing the national registration system for vessels, including private fishing and transport boats for improved emissions tracking and control, and fuel efficiency (Travel)	20,000	1	1	20,000	20,000
3.2	Consultancy services to conduct a feasibility study, gender and cost-benefit analysis of low-carbon maritime transport options, prioritizing fishing vessels. (Contractual Services – Firm)	100,000	1	1	100,000	100,000
3.3	Consultancy services to assess and pilot low-carbon propulsion systems of Samoa's fishing fleet and design and deliver training on installation, operations and maintenance (Contractual Services – Individual)	30,000	1	1	30,000	30,000

Activity	Description of goods, services or works	Estimated Unit Price in USD	Quantity	Unit	Estimated Total Price in USD	Available budget USD
	Procurement of low-carbon propulsion systems for Samoa's fishing fleet (Equipment and Furniture)	95,000	18	18	1,775,000	1,775,000
	Delivery of trainings (6) and grantee information and awarding workshops (4) on installation, operations and maintenance low-carbon propulsion systems (Trainings and Workshops)	5,000	10	10	50,000	50,000
DPC	Technical and Project Staff: IC Gender & Safeguards Specialist (6 months)	30,000	1	1	30,000	30,000
	Procurement of laptops for PMU (IT Equipment)	5,000	5	5	25,000	25,000
	Stationery and other office supplies for PMU (Equipment and Furniture)	4,000	1	1	4,000	4,000
					Total Samoa	**12,530,473**
Timor-Leste						
1.1	Engagement of consultants to conduct detailed feasibility studies in villages that are not yet connected to the national grid	15,000	1	1	15,000	15,000
1.2	Engineering, Procurement and Installation of solar, cooking stoves, and associated tools/items	461,000	1	1	461,000	461,000
1.3	External Expert/Consultant to establish/develop maintenance support including training for local technicians	75,000	1	1	75,000	194,000
2.1	External consult to conduct detailed feasibility studies for SAMES for solarization	15,000	1	1	15,000	17,000
2.2	Procurement and installation of solar systems in SAMES	700,000	1	1	700,000	850,000
2.3	Procurement and installation of solar systems for two (2) community health centres/health posts	173,310	1	1	173,310	173,310
3.1	Engagement of consultant to identify secondary schools and vocational/technical schools	25,000	1	1	25,000	28,750
3.2	Engineering and procurement of solar systems for target/selected schools	250,000	1	1	250,000	292,000
3.3	Engagement of contractors to undertake renovation of facilities in schools to house the ICT labs	300,000	1	1	300,000	315,000
3.4	Procurement and installations of computers and other accessories procured to make ICT labs functional	1,100,000	1	1	1,100,000	1,140,000
3.5	Engagement of consultant to conduct mechanism to establish maintenance support developed	50,000	1	1	50,000	96,400

Activity	Description of goods, services or works	Estimated Unit Price in USD	Quantity	Unit	Estimated Total Price in USD	Available budget USD
3.6	Engagement of consultant to deliver training to teachers on ICT teaching and learning materials and delivering ICT courses	100,000	1	1	100,000	156,200
PM	Recruitment of PMU Staff; Experts; Meeting/Workshops and Travel; Visibility and Associated Costs	1,400,000	1	1	1,400,000	1,513,790
					Total Timor-Leste	**5,252,450**
Vanuatu						
1.1	Consultant/Company to conduct Detail Feasibility study	15,000	8	1	120,000	120,000
1.2	Detail Design, estimate and specification of the Pico Hydro	15,000	8	1	120,000	120,000
1.3	Procurement and installation of Pico hydro	312,500	8	1	2,500,000	2,500,000
1.4	Capacity Development of Government Staff	20,000	10		200,000	200,000
PM	Contracting and Recruitment of Technical Advisor	72,000	1	1	72,000	72,000
					Total Vanuatu	**3,012,000**
Bangkok Regional Hub						
PMU	Technical Experts on Subject Matter for Knowledge Products	30,000	3	1	90,000	90,000
	Video Documentary/Townhall Production	300,000	1	1	300,000	300,000
	Visual Communication Production	120,000	1	1	120,000	120,000
	Gender Expert/Consultant	100,000	1	1	100,000	100,000
	Safeguard Expert/Consultant	120,000	1	1	120,000	120,000
					Total BRH	**730,000**
					Project Total	**24,674,923**

ANNEX 11: DESCRIPTION OF REGIONAL POSITIONS

Name of Position	Type	Brief Description of Roles and Responsibilities
Regional Project Manager (RPM)	P4 FTA/TA or IPSA 11, Bangkok, Thailand	• Promote thematic and sectoral synergies and coordination of programme activities, ensuring their focus on good practices in the Pacific Green Transformation Project; • Compile joint project reports, with specific inputs from each partner country, following UNDP guidelines while taking into account Japan Fund requirements; • Support the management of the CO-led projects; supervise and manage project staff and external short-term consultants/IPSAs; • Facilitate communication and coordination among partners; preparing for and convening Regional Project Board and national coordination meetings; facilitating joint activities, as needed; • Liaise with Japan Fund, as appropriate; • Coordinate and commission project evaluations; and • Strengthen the knowledge management and communication, including with donors, in collaboration with the Communications consultant; and. • Monitors overall project risk.
Energy Policy Specialist	P4 FTA/TA or IPSA11, Apia, Samoa	• Contribute to a strategic engagement on the substantive technical issues with government agencies, international development partners, civil society organizations, institutions, and processes relevant to the implementation of the Project for Promoting Green Transformation in the Pacific Region towards Net-zero and Climate-resilient Development; • Provide technical supervision, backstopping and oversight of project activities in the four countries – Papua New Guinea, Samoa, Timor-Leste and Vanuatu; • Assess project risks (existing and upcoming), implement and monitor all risk mitigation measures during all project phases such as inception; implementation/procurement/construction and operation of technical interventions; • Monitor environmental and social safeguards policy provisions and management plan and system in place; • Support the RPM in liaising with the stakeholders and COs by providing high quality technical inputs related to Green Transformation in the Pacific in the sectors identified in each country; • Support procurement officer for procurement (including the technical specification of materials and equipment) and logistical arrangements of goods and services; and • Support the RPM in preparing/organizing the technical materials used in Regional Project Board Meetings and national coordination meetings.
Procurement Specialist	P4 FTA/TA, Port Moresby, Papua New	• Support to the development and implementation of operational strategies with the following key responsibilities; • Efficient management of procurement processes by the Regional Hub and regional COs with the following key responsibilities;

Name of Position	Type	Brief Description of Roles and Responsibilities
		• Carry out regional complex procurement processes where: the goods and/or services are required by several or more UNDP business units; the nature of the goods and/or services are considered highly specialized; and/or where the procurement process is considered to have high risk elements with the following key responsibilities; • Act as regional procurement focal point for UNDP Country Offices, PMOs and the Regional Hub, with the following key responsibilities; • Relationship management with internal and external stakeholders with the following key responsibilities; and • Facilitation of knowledge building and knowledge sharing with the following key responsibilities.
Procurement Assistant	GS6 FTA/TA or NPSA6, Bangkok, Thailand	• Monitor and analyse procurement aspects of the activity development and implementation, review relevant documents and reports, identify problems and issues and brings the attention of the RPM with proposed actions, liaise with relevant parties, identify and tracks follow-up actions; • Participate in the project work plan preparation with particular emphasis on the procurement functions, as appropriate; • Liaise, monitor and follow-up with the COs in regard to procurement aspects of the Pacific Green Transformation project; and draft correspondence as appropriate to ensure smooth implementation of projects; and • Assist in the overall coordination of the project on procurement issues, and manage information between the COs.
Project Finance and Administrative Associate	GS7 FTA/TA/NPSA7, Bangkok, Thailand	• Financial Reconciliation and Control. Conduct the unit's monthly financial reconciliation process, involving the review, comparison, and reconciliation of donor and payment data. Submit final product for application to the Chart of Accounts (COA) for overall control in Quantum. Maintain an internal expenditures control system ensuring that payments processed are matched and completed, transactions are correctly recorded and posted in Atlas. • Financial Coordination. Coordinate as necessary with country office / unit focal points, GSSC Treasury, OFRM, and/or MSU personnel. • Tracking and Reporting. Ensure the proper recognition of financial flows in Quantum by supporting high level reporting for unit revenue and expenses on a monthly and ad hoc basis. • Program Support. On an as needed basis, support the planning, execution and delivery of fundraising campaigns by joining calls and fielding requests with various stakeholders including BERA staff, consultants, financial operations personnel, UNDP shared services, regional and country office liaisons, and UN agency teams. • Procurement and payments. He/she will also develop and deliver essential functions related to UNDP's procurement and payment processes, including preparation of Terms of Reference and preparations of payment requests. • Administrative support. Support the day-to-day financial and administrative management of unit operations including assistance

Name of Position	Type	Brief Description of Roles and Responsibilities
		(provision of inputs) in the preparation of the unit budget in ATLAS; maintenance of control records on expenditures; monitoring the unit budget; organization of meetings, workshops, conferences, retreats; organization of travel/logistical arrangements for unit staff, and assistance in establishing the systems and internal procedures and carry out various administrative activities.
Strategic Partnership and Communication Specialist	IPSA 11/IC, Tokyo, Japan	• Oversee the development of UNDP's strategic partnership in the Pacific Green Transformation Project; • Oversee regional resource mobilization strategies and initiatives related to the Pacific Green Transformation Project including the Climate Promise JSB within the Asia-Pacific region; • Build trust and maintain effective relationships with donors with ability to effectively communicate in both English and Japanese; • Promote the submission of high quality and timely reports to donors; • Strengthen internal resource mobilization capacity; and • Oversee knowledge building and sharing and advocacy efforts.
Regional Communication and Knowledge Management Specialist	P4 FTA/TA, Bangkok, Thailand	• Propose and implement a regional communication strategy for the Pacific Green Transformation Project, aligned with the Climate Promise, Climate Strategies and Policies Team global communication strategy and regional NCE communication strategy; • Provide technical advice on communication activities on the regional and CO levels; • Initiating, gathering, editing, finalizing multimedia stories (text-based, photo essay, video) from countries (in collaboration with RBAP and COs) to be shared on various dissemination channels at the country, regional and global levels (e.g. UNDP websites, partner websites, and social media campaigns) in English as well as Japanese; • Supporting capacity building efforts (in the form of trainings, webinars, sharing resources) to develop internal communications capacities of CO teams (eg. Social media, storytelling, visual communications, etc.); • Support donor-related reporting at the regional and global levels, as needed; • Work in collaboration with relevant Regional Office Communications Team to ensure web visibility of the Project at the regional level; and • Liaise with NCE Regional Team Leader for Asia and the Pacific to share information, identify synergies in the communication of the NCE portfolio and support her/him to communicate climate-related work, as needed.
Monitoring & Evaluation Analyst	P-2/NO-B FTA/TA or NPSA10 Bangkok, Thailand	• Ensures the implementation of monitoring policies and strategies; • Ensures overall coordination of evaluation processes in the Country Office; • Facilitates knowledge building and knowledge sharing in the area of monitoring and evaluation; and • Contributes to all relevant UNDP Country Office corporate exercises.

Name of Position	Type	Brief Description of Roles and Responsibilities
Project Support and South-South Coordination Analyst	P2 FTA/TA or IPSA9, Bangkok, Thailand	• Lead formulation and coordination of the South-South Exchange workshops and events • Provide other key strategic support to country as well as cross-country, regional priorities that emerges during implementation

ANNEX 12: CLIMATE PROMISE COUNTRY INDICATORS

A. Climate Promise Country Indicator – Papua New Guinea

CORE INDICATORS[69]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
1.1 Tonnes of CO2 emissions avoided or reduced	*See below*[70]	0	2022	*30,500 tonnes*				
1.2 Megawatts of renewable or low-emission energy capacity installed, generated or rehabilitated	*Reports of installed capacity from solar farm commissioned*	*0*	*2022*	*X* *0 by Year 1* *1 MW by Year 2*				
1.3 Number of beneficiaries with new access to green/sustainable energy *(disaggregated by: male, female, youth (15-24) and indigenous people)*	*Surveys of households accessing power generated through solar farms*	*0*	*2022*	*X* *0 by Year 1* *30,000 by Year 2*				
2.0 Number of direct beneficiaries with increased resilience to climate change (i.e more resilient physical and natural assets, diversified and strengthened livelihoods and sources of income, new/improved climate information systems)							*30,000* *15,000 (female)* *6,000 (youth)* *All are indigenous*	

[69] It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

[70] https://gridalternatives.org/regions/ie/news/1-megawatt-solar-power

CORE INDICATORS[69]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
(disaggregated by: male, female, youth (15-24) and indigenous people)								
3.0 Number of green/sustainable jobs created *(disaggregated by: male, female, youth (15-24) and indigenous people)*				*500* *400 (male)* *100 (female)* *300 (youth)* *All are indigenous*				
4.0 Number of people trained/educated/informed through technical transfers, dialogues, workshops, campaigns, and other efforts *(disaggregated by: male, female, youth (15-24) and indigenous people)*	*Certificates of completions of training in solar panel trade*	*0*	*2022*	*X* *20 by Year 1* *30 by Year 2*				
5.0 Number of development or sectoral policies/plans/budgets that integrate NDC targets or net-zero goals								
Legislation	*Submissions to Bougainville House of Representatives (BHoR) through committees. Acceptances of recommendations and changes to*	*0*	*2022*			X 1 by Year 1 2 by Year 2		

CORE INDICATORS[69]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
	regulatory processes							
Covid-19 response measures or assessments								
Development plans or roadmaps								
Sectoral policies and plans						X 1 by Year 2		
National or sectoral budgets								
Financial instruments or models								
Subsidy reforms								
Others (specify)								
6.0 Number of partnerships with Japanese organizations								
Private Sector		0	2022	X 1 partnership (solar and renewables focused)				
JICA/University/technical experts		0	2022		X 1 partnership (technical and operational management)			
Other – volunteers for short term placements		0	2022	X 1 volunteer				

B. Climate Promise Country Indicator – Samoa

CORE INDICATORS[71]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
1.1 Tonnes of CO2 emissions avoided or reduced	*1: National Vehicle Registration Statistics* *2: GHG Inventory 2021* *3: Monitoring Reporting and Verification (MRV) System for GHG* *4: Progress reports*	46 tCO2e/year	2021	*X* *257.6 tCO2e/ year by Year 2* *Through procurement of 49 EVs and other initiatives within the project*				
1.2 Megawatts of renewable or low-emission energy capacity installed, generated or rehabilitated	*1: Solar charging station network design* *2: Meeting minutes and consultation reports*	*10*	*2021*	*X* *84 by Year 2*				
1.3 Number of beneficiaries with new access to green/sustainable energy *(disaggregated by: male, female, youth (15-24) and indigenous people)*		*10*	*2021*			*X* *360*		
2.0 Number of direct beneficiaries with increased resilience to climate change (i.e more resilient physical and natural assets,								

[71] It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

CORE INDICATORS[71]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
diversified and strengthened livelihoods and sources of income, new/improved climate information systems) *(disaggregated by: male, female, youth (15-24) and indigenous people)*								
3.0 Number of green/sustainable jobs created *(disaggregated by: male, female, youth (15-24) and indigenous people)*								
4.0 Number of people trained/educated/informed through technical transfers, dialogues, workshops, campaigns, and other efforts *(disaggregated by: male, female, youth (15-24) and indigenous people)*								
5.0 Number of development or sectoral policies/plans/budgets that integrate NDC targets or net-zero goals	*AS PER BELOW*	*5*			6	*5*		
Legislation	*1: Land Transport Authority Act 2007*	*2*	*2007* *2016*		X 3			

CORE INDICATORS[71]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
	2: Fisheries Management Act 2016 *3: Updated legislative and policy framework for low-carbon transport.*							
Covid-19 response measures or assessments								
Development plans or roadmaps (gender-sensitive planning and policy instruments for transport sector)	*1: Transport Sector Plan 2013-2018* *2: Samoa NDC Implementation Roadmap and Investment Plan* *3: Updated legislative and policy framework in support of Samoa's national transition to low-carbon transport* *4: Decarbonization Strategy for the Sector Plan for Land and Maritime Transport*	*1*	*2021*			*X* *2 by Year 2*		
Sectoral policies and plans •	*Sustainable Land Use and Mobility Plan* *Samoa NDC Implementation Roadmap and Investment Plan 2021*	*1*	*2013*		X 3 by Year 2			

CORE INDICATORS[71]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
	Feasibility Study							
National or sectoral budgets								
Financial instruments or models	*1: Customs Tariff Amendment Act 2020* *2: Feasibility Study*	*1*	*2020*			X 2 by Year 2		
Subsidy reforms								
Others (specify) • Upskilling programmes	*Outline of upskilling programme*	*0*	*2022*			*X* *0 by Year 1* *1 by Year 2*		
6.0 Number of collaboration/partnerships with Japanese organizations		*1*		5	2			
Private Sector	**1: Procurement bins, LTAs and contracts/POs**	0	2022	3	2			
JICA/University/technical experts	**1: MoU or contract**	0	2022	1				
Other	**1: JSB-funded CPRDESS correspondence**	1	2022	1				

C. Climate Promise Country Indicator – Timor-Leste

CORE INDICATORS[72]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
1.1 Tonnes of CO2 emissions avoided or reduced	*Progress Report*	Not Availabl e	2022	*X (Approx. 310 tonnes of CO2 emissions reduced/avoided) 73*				
1.2 Megawatts of renewable or low-emission energy capacity installed, generated or rehabilitated	*Pre-Feasibility Study of Solar PV for SAMES Project Progress Report*	*0*	*2021*	*X 391 MWh generated by Year 2*				
1.3 Number of beneficiaries with new access to green/sustainable energy *(disaggregated by: male, female, youth (15-24) and indigenous people)*	*National Strategic Development Plan 2011-2030 ACCESS project report Progress Report*	*30,000 Househo (Appr. 150,00 people; 4 women*	*2022*	*X 155,000 people (40% women) by Year 2*				
2.0 Number of direct beneficiaries with increased resilience to climate change (i.e more resilient physical and natural assets, diversified and							*X (1,000 households to directly benefit from solar power lighting)*	

[72] It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

73 Estimated energy to be produced from SAMES solar plant is 391 MWh per year. Assuming 1 MW power generated by diesel produces 0.79 tonnes CO2, therefore total CO2 emissions reduced is approximately 310 tonnes.

CORE INDICATORS[72]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
strengthened livelihoods and sources of income, new/improved climate information systems) *(disaggregated by: male, female, youth (15-24) and indigenous people)*								
3.0 Number of green/sustainable jobs created *(disaggregated by: male, female, youth (15-24) and indigenous people)*				*X (At least 100 local labours to be involved in the installation of solar lights and rehabilitation of ICT labs)*			*X (At least 100 local labours to be involved in the installation of solar lights and rehabilitation of ICT labs)*	
4.0 Number of people trained/educated/informed through technical transfers, dialogues, workshops, campaigns, and other efforts *(disaggregated by: male, female, youth (15-24) and indigenous people)*	*Progress reports*	*Not available*	*2022*	*X (Approx. 100 teachers/technicians trained to operate the ICT labs)*			*X (Approx. 1,000 people from community are informed and/or trained on the benefits of solar lights; at least 40% target women)*	
5.0 Number of development or sectoral policies/plans/budgets								

CORE INDICATORS[72]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
that integrate NDC targets or net-zero goals								
Legislation								
Covid-19 response measures or assessments								
Development plans or roadmaps								
Sectoral policies and plans								
National or sectoral budgets								
Financial instruments or models								
Subsidy reforms								
Others (specify)								
6.0 Number of partnerships with Japanese organizations	*Progress report*	*2*	*2022*	3				
Private Sector		*Not available*	2022					
JICA/University/technical experts	**Progress report**	2 (Japanese UNVs)	2022	3 (cooperation with JICA and/or relevant Japanese institutions)				
Other								

D. Climate Promise Country Indicator - Vanuatu

CORE INDICATORS[74]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
1.1 Tonnes of CO2 emissions avoided or reduced				*X*				
1.2 Megawatts of renewable or low-emission energy capacity installed, generated or rehabilitated	*XProgress Report /DOE Registration Book*	*2*	*2022*	*X* *8 pico hydro by Year 2*				
1.3 Number of beneficiaries with new access to green/sustainable energy *(disaggregated by: male, female, youth (15-24) and indigenous people)*	*Progress Report /DOE Record Book*	*1250*	*2022*	*2366 by year 2 (45% female)*				
2.0 Number of direct beneficiaries with increased resilience to climate change (i.e more resilient physical and natural assets, diversified and strengthened livelihoods and sources of income, new/improved climate information systems) *(disaggregated by: male, female,*								

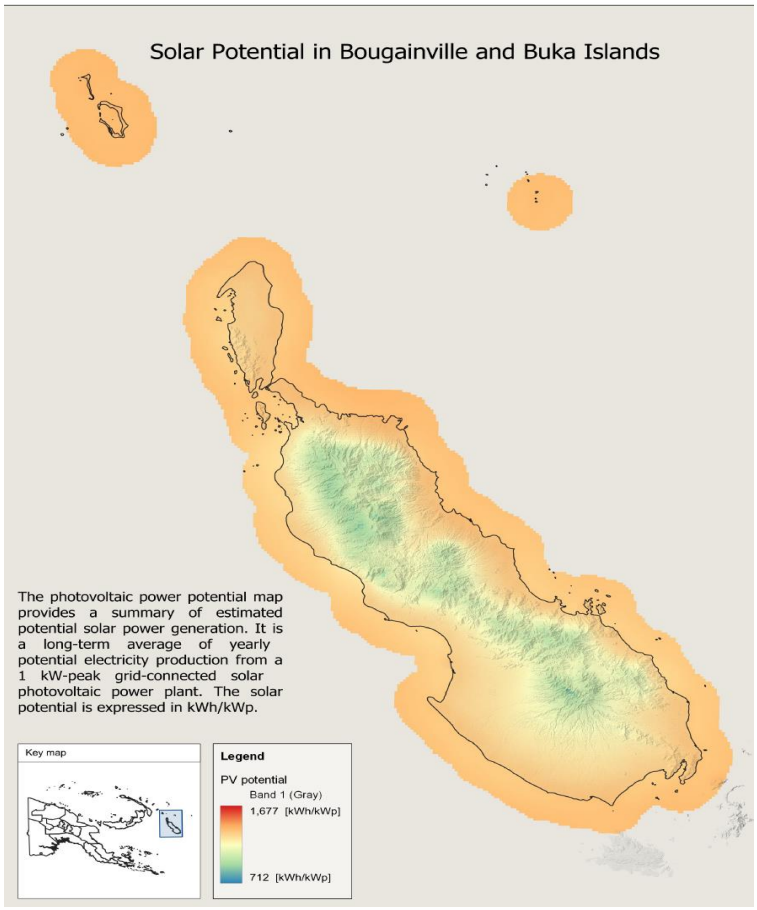
[74] It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

CORE INDICATORS[74]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
youth (15-24) and indigenous people)								
3.0 Number of green/sustainable jobs created *(disaggregated by: male, female, youth (15-24) and indigenous people)*	*XProgress Report*	*10*	*2022*	*10 by year 2*	*X* *X by Year 2*			
4.0 Number of people trained/educated/informed through technical transfers, dialogues, workshops, campaigns, and other efforts *(disaggregated by: male, female, youth (15-24) and indigenous people)*	*XProgress Report*	*2*	*2022*	*10 by year 2*	*X* *X by Year 2*			
5.0 Number of development or sectoral policies/plans/budgets that integrate NDC targets or net-zero goals								
Legislation								
Covid-19 response measures or assessments								
Development plans or roadmaps								
Sectoral policies and plans								
National or sectoral budgets								
Financial instruments or models								

CORE INDICATORS[74]	DATA SOURCE	BASELINE		Pillar 1			Pillar 2	
		Value	Year	1.1 Driving investment in clean energy sectors and infrastructure	1.2 Support to Ministries of Energy, Finance, Environment and Planning to address key energy-related decisions on COVID-19 recovery	1.3 Alignment of energy targets in NDCs with net-zero pathways	2.1 Scaling-up adaptation, resilience, and disaster risk reduction tools and ensuring they are available to marginalized groups	2.2 Aligning targets in NDCs with national adaptation strategies and plans, including COVID-19 recovery
Subsidy reforms								
Others (specify)								
6.0 Number of partnerships with Japanese organizations								
Private Sector								
JICA/University/technical experts								
Other								

ANNEX 13: MAPS OF TARGETED AREAS

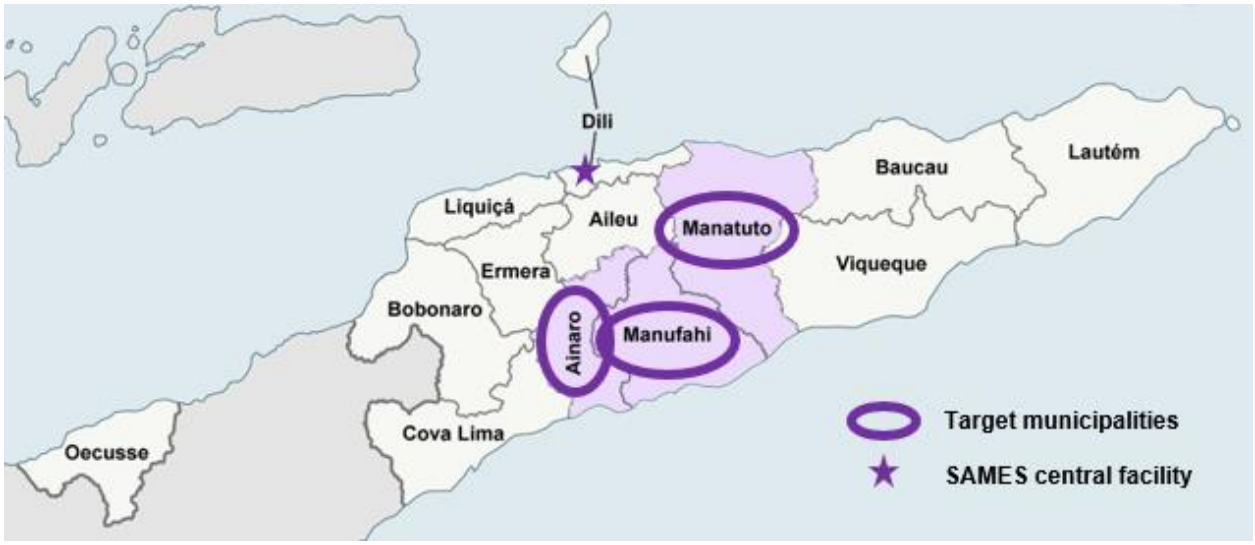
A. Map of Targeted Areas in Papua New Guinea



B. Map of Targeted Areas in Samoa

The project will adopt a whole-of-island approach

C. Map of Targeted Areas in Timor-Leste



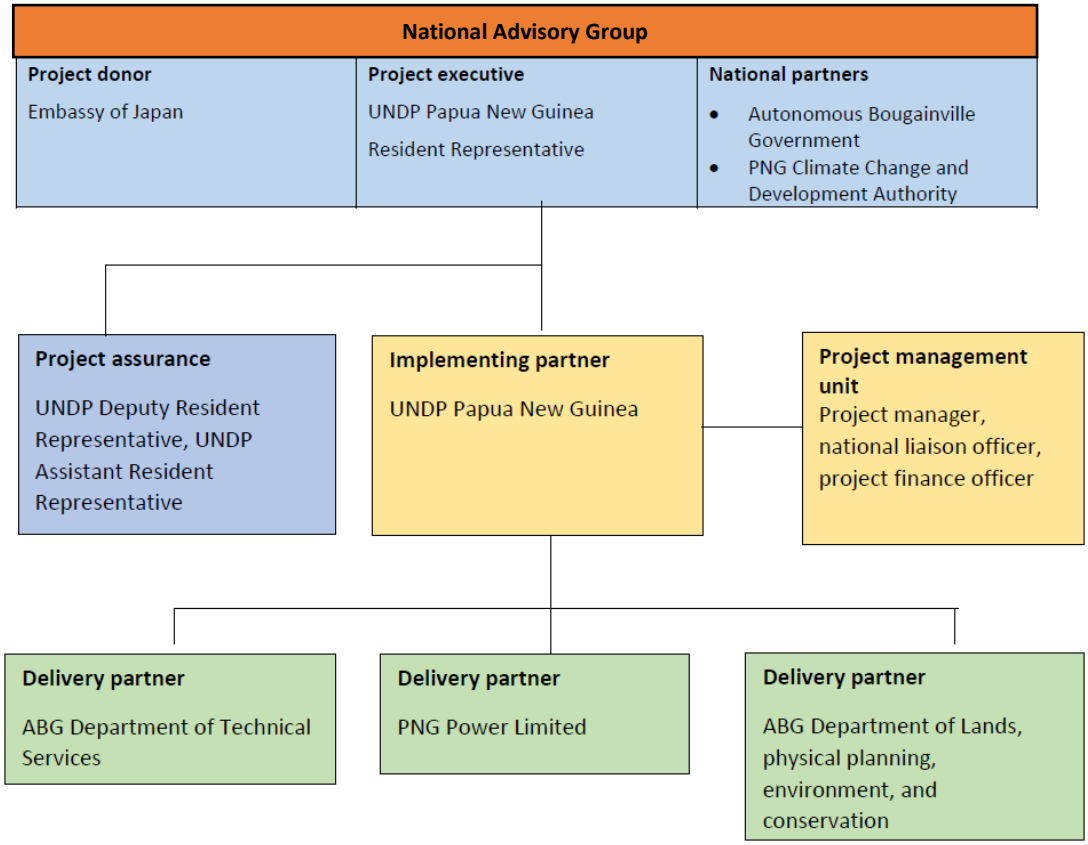
D. Map of Targeted Areas in Vanuatu

Pico hydro Site and Beneficiaries			
Name of the Site	**Islands**	**Location**	**Beneficiaries**
Nambarangiut	Pentecost	15°35'4.63"S 168° 7'58.16"E	81
Melsisi	Pentecost	15°44'8.39"S 168° 9'5.09"E	345
Larimaat	Pentecost	15°43'19.64"S 168°13'5.63"E	100
Pangi	Pentecost	15°56'10.88"S 168°12'23.57"E	70
Naone	Maewo	15° 0'34.65"S 168° 4'14.07"E	138
Persona	Santo	14°50'47.56"S 166°44'52.59"E	238
Fanlambil	Santo	15°22'11.83"S 167° 0'46.52"E	75
Labang Nuying	Tanna	19°27'39.21"S 169°18'58.42"E	84
Nemeng	Gaua	14°15'37.48"S 167°35'48.11"E	552
Awuro	Gaua	14°15'58.53"S 167°35'32.77"E	225
Lawa	Malekula	16°26'16.27"S 167°25'59.25"E	458
WATERFALL	Pentecost	15°46'40.35"S 168°10'21.51"E	300 (pending site inspection)
TOTAL			**2666**

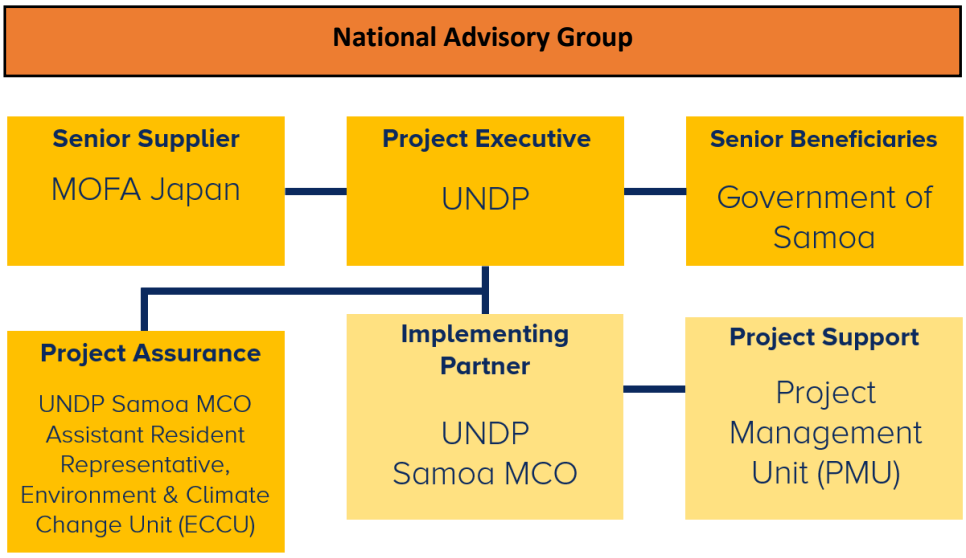
Note: Out of 12 sites, 8 will be selected based on the household coverage, accessibility and water flow consistency.

ANNEX 14: COUNTRY-LEVEL PROJECT ORGANIZATION STRUCTURES

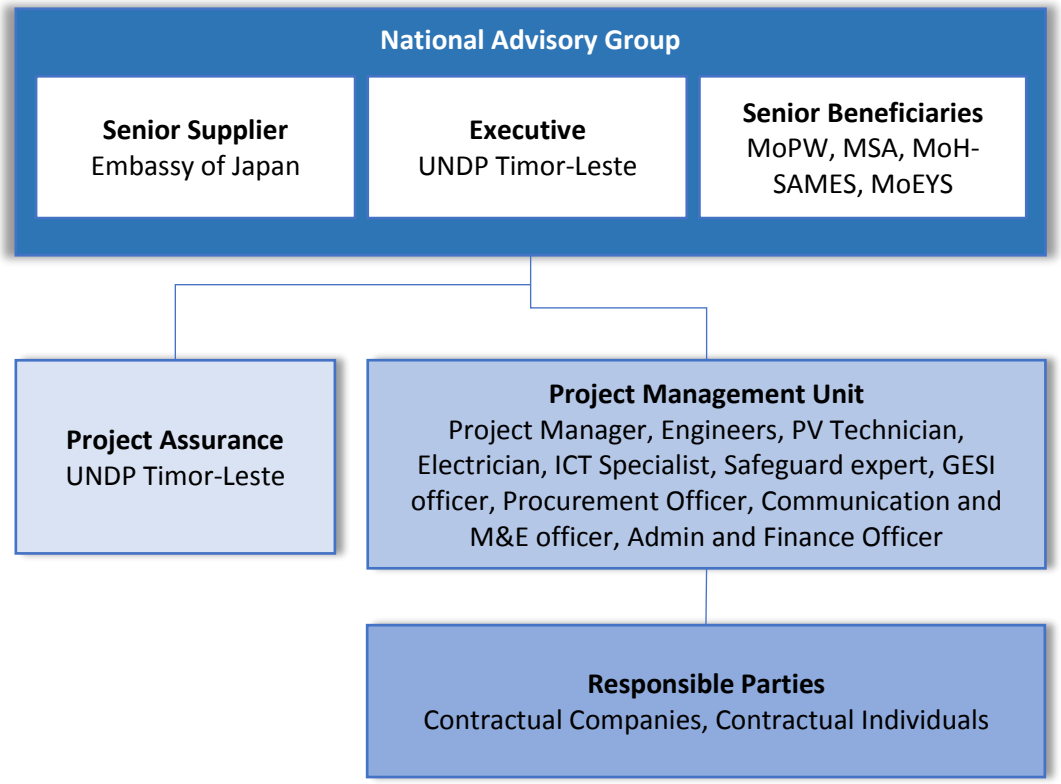
A. Project Organization Structure in Papua New Guinea



B. Project Organization Structure in Samoa



C. Project Organization Structure in Timor-Leste



D. Project Organization Structure in Vanuatu