Readiness and Preparatory Support **Proposal Template**

Programme title:	Enabling Readiness for Capacity Building on Installation and Maintenance of Solar PV in Timor-Leste
Country:	Timor-Leste
National designated authority:	State Secretariat for Environment (SSE)
Implementing Institution:	UN Environment Programme – The Climate Technology Centre and Network (CTCN)
Date of first submission:	29 August 2019
Date of current submission / version number	16 April 2020 V.2

GREEN CLIMATE FUND

How to complete this document?

- Please visit the Empowering Countries page of the GCF website to download the Readiness Guidebook and learn how to access funding under the GCF Readiness and Preparatory Support Programme.
- This document should be completed by National Designated Authorities (NDA) or focal points with support from their Delivery Partners where relevant. Once completed, this document should be submitted to the GCF by the NDA or focal point to countries@gcfund.org.
- Please be concise. If you need to include any additional information, please attach it to the proposal.
- If the Delivery Partner implementing the Readiness support is not a GCF Accredited Entity for project Funding Proposals, please complete the Financial Management Capacity Assessment (FMCA) questionnaire and submit it prior to or with this Readiness proposal. The FMCA is available for download at the Library page of the GCF website.

Where to get support?

- If you are not sure how to complete this document, or require support, please send an e-mail to countries@gcfund.org.
- You can also complete as much of this document as you can and then send it to countries@gcfund.org, copying both the Readiness Delivery Partner and the relevant GCF Country Dialogue Specialist and Regional Advisor. Please refer to the Country Profiles page of the GCF website to identify the relevant GCF Country Dialogue Specialist and Regional Advisor.
- We will get back to you within five (5) working days to acknowledge receipt of your submission and discuss the way forward.

Note: Environmental and Social Safeguards and Gender

Throughout this document, when answering questions and providing details, please make sure to pay special attention to environmental, social and gender issues, particularly to the situation of vulnerable populations, including women and men. Please be specific about proposed actions to address these issues. Consult Annex IV of the Readiness Guidebook for more information.

Please submit the completed form to:

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Please use the following naming convention for the file name:

"GCF Readiness Proposal-[Country]-[yymmdd]"

1. SUMMARY

Country submitting the proposal	Country name:	Timor-Leste
	Name of institution representing NDA or Focal Point:	State Secretariat for Environment (SSE)
	Name of contact person:	Dr. Julião dos Reis
	Contact person's position:	Acting Executing Executive Secretary of NDA, Timor-Leste
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Date of initial submission	29 August 2019	
Last date of resubmission	17 December 2019	**Version number** V.2
Which institution will implement the Readiness and Preparatory Support project?	☐ National designated authority ☐ Accredited entity ☒ Delivery partner	
	Please provide contact information if the implementing partner is not the NDA/focal point	
	Name of institution:	UN Environment Programme – The Climate Technology Centre and Network (CTCN)
	Name of official:	Ermira Fida
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Title of the Readiness support proposal	Enabling Readiness for Capacity Building on Installation and Maintenance of Solar PV in Timor-Leste	
Type of Readiness support sought	Please select the relevant GCF Readiness activity area below (click on the box): ☐ I. Country capacity for engagement with GCF ☒ II. Country programming process ☐ III. Direct access to climate finance	

	☐ IV. Climate finance accessed ☐ V. Formulation of national adaptation planning and/or other adaptation planning processes
Brief summary of the request	Timor-Leste's Strategic Development Plan (2011-2030) states that, by 2020, at least half of the country's energy needs will be provided by renewable sources, with approximately 100,000 families having access to solar powered electric light and sets a target of 100% electrification by 2030. Over the years, various initiatives have installed solar PV systems in rural areas to improve access to energy services for households in remote areas, while also reducing deforestation cause by the use of traditional wood fuel and improving resilience to climate change related disasters. However, as a least developed country, Timor-Leste has limited capacity in terms of technical and management skills to ensure the sustainable use of renewable energy technologies. According to the Integrated Vulnerability Assessment (IVA) conducted at the village level in 2018 by the Government of Timor-Leste's Secretary of State for Environment (SEE) and National Directorate of Climate Change (NDCC), many of the installed solar PV systems have fallen into disrepair, with no schemes in place to provide financial and technical capacities for long-term maintenance and spare parts.[1] In the absence of such competencies, households revert back to using traditional sources of energy such as fire wood, candle nut, and kerosene lamps leading to resulting in air pollution and deforestation. In order to address these challenges, Timor-Leste's National Designated Entity (NDE), with support from the NDA, requested technical assistance from the Climate Technology Centre and Network (CTCN) to draft a Readiness proposal focusing on strengthening managerial and technical capacities around solar PV system installation and maintenance, as well as preparing a GCF Concept Note and a comprehensive strategy to design a programme for enhancing effective use of solar PV in the country. The support will help facilitate the transition to a low-carbon energy sector and contribute to a sustainable, climate resilient development pathway. This project aims to support the government of Timor-Leste particularly the technical professional staffs of environment, Ministry of Public Works (National Directorate of Renewable Energy) and National Centre for Employment and Professional Training of Tibar (CNEFP) to strengthen the capacity in technical and management of solar PV. The project will also benefit current energy specialists in Timor-Leste who will receive training on solar PV installation and maintenance. Specific attention will be paid to ensuring that women are supported in the skill building portion of the project. This assistance is aligned to Timor-Leste's INDC objectives of capacity development in low emissions and climate resilient development and contribution to mitigation action in the country. The proposed interventions will strengthen the effective use of solar PV based distributed electricity systems in rural communities and villages in Timor-Leste, with the aim of transitioning to a low-carbon energy sector and building a sustainable, climate resilient development pathway. The proposed interventions will directly contribute to various national processes. In its Intended Nationally Determined Contributions (INDC), Timor-Leste lists strengthening renewable energy (RE) use as a mitigation priority for reducing carbon emissions and dependency on imported fuel, while also addressing adaptive capacity to climate change. The support will also contribute to targets laid out in the Strategic Development Plan (2011-2030), which states that by 2030, 50% of electricity generation will come from RE sources, and will feed into the draft Decree-Law Establishing the National RE System and the accompanying RE Plan under development.

[1]The IVA is under preparation by the Secretary of State for Environment, National Directorate of Climate Change.

	The current Government of Timor-Leste is planning to scale up the use of renewable energy in the country and it is targeted to reach 50% by 2030 as it is said in SDGs. The government has signed an agreement with some companies to invest in renewable energy in rural area, from the Secretary of State for Environment also has signed agreement with two companies to promote renewable energy in the country. Therefore, the Readiness support will help to increase skills and knowledge in technical as well as management areas to ensure sustainability and prepare for the implementation of renewable energy to achieve the target. Because of the focus on building national capacity and building a skilled solar PV workforce, the proposed intervention has promising potential for south-south cooperation and to replicate in the other countries in the region that are Small Islands Developing States or Least Developed Countries having similar landscape. CTCN will implement this project though international experts who will partner with national partners to provide the best available training and analysis to ensure that Timor-Leste has the capacity to scale up and sustain relevant action. The knowledge resources generated from this project will be disseminated publicly through CTCN website.

Total requested amount and currency	USD 304,492	**Anticipated duration**	18 months
Has the country received or is expecting to receive other Readiness and Preparatory Support funding allocations (including adaptation planning) from GCF or other donors?	☒ Yes ☐ No <u>Readiness Activities</u> Title: GCF Readiness Project – Outcomes 1 and 2 Description: This first request for assistance from the GCF Readiness Programme targeted two broad areas: 1) establishing and strengthening the National Designated Authority; and 2) establishing strategic frameworks for engagement with the GCF, including preparation of a country programme. Delivery Partner: UNDP Status: Completed Total Financing: US$ 300,000 Title: GCF Readiness and Preparatory Support “Enhancing human resources, systems and procedures in Timor-Leste to effectively engage with the Green Climate Fund” AE: National Directorate of Climate Change (NDCC) Approved: July 2019 Total Financing: US$695,038		

2. BACKGROUND

The objective of this Readiness proposal is to support Timor-Leste in strengthening the effective use of solar PV within community/village based distributed electricity systems, with the aim of transitioning to a low-carbon energy sector and building a sustainable, climate resilient development pathway.

Timor-Leste is highly vulnerable to the impacts of climate change due to its geographical location, topography and socio-economic conditions, and has a significant lack of coping and adaptive capacity. The country's current energy demand is met mainly by imported fossil fuels, mostly for electricity generation and transportation, resulting in high energy expenses and susceptibility to fluctuating fuel costs. In addition, it has a small and fragmented power system, mainly based on small and medium diesel power plants, and electrification rates that vary greatly between urban and rural areas, 88% and 19% in 2013 respectively, with only the capital, Dili, and the city of Baucau having 24-hour electricity, with regular power outages. The majority of rural energy consumption is provided by traditional biomass fuels, leading to considerable deforestation and making these communities more susceptible to the impacts of climate change due to limited access to basic energy services (i.e. food security, lighting, cooking, healthcare). 89 out of total 442 Sucos[2] with the lowest living standards in Timor-Leste, the average share of households with electricity is only 3% that is even lower than other basic infrastructure services like improved water and sanitation.[3]

Following agriculture, the energy sector in Timor-Leste is the second major source of GHG emission (17% of the total GHG emission) attributed to the energy consumption for transportation and electricity generation. The targeted growth rate for electricity generation (in terms of MW) in Timor-Leste during 2004 until 2025 is around 8% to cater the growing electricity demand over these years. In the baseline, the electricity is generated using diesel at around specific consumption of 0.27 liters per kWh. With continued baseline scenario, the GHG emissions from electricity generation is estimated to reach a level of 780 kilo tons of CO_2e in 2025 from 49 kilo tons of CO_2e in 2005.

Timor-Leste has significant renewable energy (RE) potential and increased RE use could greatly reduce dependence on imported fuel and offset high costs of energy, while generating livelihood and reducing reliance on fuel wood and kerosene in rural communities. As per a sectoral assessment conducted by Asian Development Bank for 2016-2020 in Timor-Leste[4], 450 MW of renewable energy potential was identified through pre-feasibility studies. However, only 1.09 MW of renewable energy generation capacity has been developed, consisting of mostly solar and some small hydropower generators. While the wind power projects are facing investment delays, hydro power without dams are most suitable for monsoon season, the solar power is identified by government as most suitable technology to provide energy access to the off grid rural communities and villages.

With high solar radiation of 6 kWh/day, solar energy could generate around 22 MW of power. Furthermore, considering low population densities and low income in rural areas, distributed solar PV systems are a lower cost electrification option compared to grid extension. Hence, solar has potential to deal with problem tree for energy comprising the low energy access, low service reliability, high service for delivery cost etc. In view of this, the Government of Timor-Leste has increased its investment in solar PV including promoting solar home systems for off-grid rural electricity. The Timor-Leste Strategic Development Plan (SDP) 2011-2030[5] has major contribution in setting context for National Program for Development of Sucos. The SDP states that energy supplies from renewable source have the potential to make a dramatic contribution to economic growth and help to reduce poverty levels in remote rural areas. Under the Program of Eighth Constitutional Government, investment in the renewable energy system with recommended actions comprising electrification of 100,000 households through solar energy systems and providing access to the electricity for 30-40% of 442 villages, have critical linkages to the outcome of the proposed intervention[6].

According to information from the National Directorate of RE, a total of 32,000 solar PV units have been installed in both rural and urban areas. In addition, the 2016 INDC states that 11% of households (205,631 in total) have access to solar home systems installed primarily by the government.

[2] Villages are known as Sucos in local Timorese (Tetum) language
[3] https://www.adb.org/publications/least-developed-sucos-timor-leste
Least Developed Sucos: Timor-Leste
[4] https://www.adb.org/sites/default/files/linked-documents/cps-tim-2016-2020-ssa-05.pdf
Summary on Sector Assessment under ADB's Country partnership strategy for Timor-Leste 2016-2020
[5] http://www.pnds.gov.tl/website/blog/publication/timor-leste-strategic-plan-2011-2030-2/wppa_open/
Part3- Infrastructure Development under SDP 2011-2030
[6] http://timor-leste.gov.tl/?cat=39&lang=en#prog3.4.1

Despite having huge potential for solar PV, several technical and financial barriers have constrained its uptake. Lack of technical skills have left many installed solar PV systems in disrepair while the lack of solar PV network management skills has stalled further investment and progress towards increasing the share of RE in the country's energy mix and achieving its mitigation and adaptation targets. The proposed interventions will address these barriers and will build on the past and ongoing initiatives which have installed solar energy systems in rural and remote areas with the aim of increasing access to energy services, reducing fuel costs, reducing deforestation from use of wood fuel, contributing to sustainable farming practices, improving livelihoods, and decreasing vulnerability to the impacts of climate change. The proposal will deliver the following outputs:

1) Training material, curriculum, and Training of Trainers (ToT) programme for off-grid and grid-connected solar PV installation and maintenance to strengthen managerial and technical capacities and increase skills among rural communities
2) An Action Plan for upgrading the existing National Centre for Employment and Professional Training of Tibar (CNEFP) for conducting training on solar PV for managers and technicians in order to fill the skills gap in both the maintenance of current systems and the design, installation and management of an expanded solar PV network. The Action Plan will be based on an analysis of the current solar PV skills gap and future employment opportunities as well as an assessment of the solar PV technologies and solutions most suited to the national circumstances in TL. The Action Plan will pay particular attention to the potential role of women as solar PV managers and technicians.
3) A GCF Concept Note and a comprehensive strategy to design a "Sustainable Solar PV Programme for Rural Communities in TL" to strengthen the effective use of solar PV in TL, including:
   (i) A market and feasibility study to understand supply and demand of solar PV
   (ii) Programme design with financing structures aligned with national policies and market conditions, and cost-efficient for financial institutions
   (iii) Integrated economic and financial model developed to determine the programme's economic and mitigation impact potential
   (iv) Engagement and consultation with key stakeholders to receive inputs and feedback on proposed programme, and
   (v) A Gender Assessment and a Gender and Social Inclusion Action Plan to identify areas of vulnerability and potential co-benefits of the programme

The outcomes of the Readiness project will support:

- Increase the capacities of government staff, youth retailers, technicians, engineers, and other relevant stakeholders in Solar PV value chain, on the managerial and technical aspects of effective solar PV use
- Strengthen the capacity of the CNEFP to provide training and certifications related to solar PV implementation, including conducting training at the village level
- Strengthening effective solar PV use, in particular in rural and remote areas, through techno-economic assessments; analysis of policy, regulatory, and financial frameworks, including social and environmental risk assessment mechanisms; technical assistance; stakeholder engagement and consultation; and a gender analysis.

The proposed program will contribute to strengthening the sustainability of the solar energy infrastructure and achievement of co-benefits in other SDGs:

- Infrastructures like solar plants will be exposed to the natural hazards in Timor-Leste like storms and winds. The proposed program will build human capacity to conduct risk assessments through the design specifications of the solar plants that meet the standards to operate in the local climatic conditions. For example, Solar PV panels with supporting stands and frames that can withstand strong winds, technologies to stand dry conditions during drought, relocations of the plants in case of floods and sea level rise and insurance mechanism to protect the investor in the case extreme and unavoidable conditions.
  Renewable electricity will fulfil basic needs in sustainable ways by replacing kerosene for domestic lighting, by promoting electric cooking to discourage deforestation to derive wood fuel,. The economic, social and environmental co-benefits derived from the introduction of renewable energy technologies like solar will also include increased employment opportunities as there will be a direct opportunity to be trained as solar professionals or entrepreneurs, improved livelihoods by increasing the light time at home and the savings made from reduced kerosene expenditures, greater social cohesion and

security due to the light at the common areas in the community at night, better health due to reduced air pollution and a more equitable gender balance in the division of labor as the women will save time to utilize it for social and economic upliftment of the family.

"The women in our village want solar panels so their children can study at night" is a statement made by Community leader of Laulara sub district in Timor-Leste also emphasizes the need of solar panel in rural communities.

- The outcome of the proposed program will support in building solar workforce within the rural communities. The skilled work force within the communities will be best positioned to promote the benefits and co-benefits of solar PV while considering social, cultural and religious aspects and to influence the willingness of the user to pay for the services.

There are some ongoing efforts and programs that could be potential entry points, building blocks and have linkages with the proposed intervention:

SN	Existing or Ongoing efforts in the field related to this proposal/ GCF in Timor-Leste	Building blocks/ entry points/ linkages with the proposed intervention
1	GCF Country program	The GCF country program has helped in establishing and strengthening the National Designated Authority; and strategic frameworks for engagement with the GCF. This will help the proposed project to seamlessly use the established institutional structure for processing and implementing the GCF proposal.
2	GCF project- Safeguard vulnerable communities and their physical and economic assets from climate change induced disasters.	The GCF project will inculcate the capacity within the rural communities to safeguard the physical assets is a direct entry point for the proposed project. Rural communities and villages will also learn to value the solar panels as one of the important assets under electricity supply infrastructure. Beyond undertaking adequate operation and maintenance the solar panels will be safeguarded from the natural disasters. The GCF project also works closely with municipal and village level government at administrative sub-national-level. Established mechanisms, identified stakeholders, learnings and experiences from the GCF project will be referred and adopted in the program to be designed under proposed project.
3	CTCN incubator program on Implementation of Nationally Determined Contributions in Timor-Leste	CTCN program conducted capacity development workshop of stakeholders from Timor-Leste on mitigation technologies covering Solar Photovoltaic (PV) Systems for Increasing Rural Electricity Access and Improved Livelihoods. The participants who joined this workshop are potential trainers under the proposed program.

3. LOGICAL FRAMEWORK AND IMPLEMENTATION SCHEDULE

Outcomes		Baseline [7] (ratings)	Targets (ratings)	Activities [8] (brief description and deliverables)	Anticipated duration [9]: 18 months Monthly implementation plan of activities [10]																	
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Outcome 1: Country Programming Process : **Appropriate technology solutions identified and prioritized in accordance with national strategies and plans for climate mitigation and adaptation**) (Outcome 2-2.5 as per Annex 1 of GCF readiness and preparatory support guidebook)	**Curriculum, training material, and ToT programme on off-grid and grid- connected solar PV installation and maintenance developed (Supporting environment for the identified climate technology solutions)**																					
	Sub-Outcome 1.1: Value Chain Assessment undertaken to understand the existing value chain for implementing solar PV in rural communities and to identify appropriate actors at National Levels to be trained	From the existing solar installations at community levels, the prime stakeholders involved in the value chain will be identified. (Rating 1)	Conducting training programs to cover 442 villages will not be feasible under the proposed project. Hence, it is intended to develop the training agents/ trainers at national levels on Training of Trainers model. The trainers/training agents will be identified from the existing value chain and from a couple of villages representing around 2 people from each village. Report outlining the existing value chain for solar PV implementation, including recommended target audience for training (Rating 2)	**Activity 1.1.1:** Develop and distribute a set of questionnaires geared towards relevant government officials, engineers, technicians, retailers/dealers, village chiefs, youth retailers etc. to get a picture of the existing value chain for solar PV implementation in rural communities **Deliverable 1.1.1:** Completed questionnaires for each target audience				X														
				Activity 1.1.2: Organize workshop for consultations with above mentioned actors at the national and village levels to discuss existing value chain, including market and business structures and roles of different actors (back-to-back workshops with Activity 1.2.2) **Deliverable 1.1.2:** Summary report on outcomes of consultations with a short and structured survey/ feedback on knowledge of different national/village actors before and after the consultations				X													
				Activity 1.1.3: Compile information and data from questionnaires and consultations into a value chain assessment report **Deliverable 1.1.3:** Value Chain Assessment report					X												
	Sub-Outcome 1.2:	None		**Activity 1.2.1:**				X														

[7] For baselines rated at 1 or 2, please shortly elaborate on current baselines on which the proposed activities can be built on, processes that are in place that the current Readiness proposal can strengthen, or any gaps that the proposed activities would fill in. If more space is needed, please elaborate this in Section 2.

[8] Please include tangible and specific deliverables for each activity proposed, and the timeframe (month number) in which it will be delivered to GCF. Please note that during implementation all deliverables should be included within the implementation reports for GCF consideration.

[9] The anticipated start date is 1st July 2020 and the end date is anticipated to be after 18 months from the start date as per the implementation plan.

[10] If the duration of the proposal is longer than 24 months, please change the monthly columns to indicate 2 or 3 months each (e.g. change month "1" to month "1-2' or "1-3").

	Capacity Gap Analysis undertaken to assess the existing level of capacity/skills of different stakeholders around solar PV and to inform recommendations on types of training modules to be developed (i.e. technical vs management, basic vs advanced)	(Rating 0)	Capacity Gap Analysis report on existing level of capacity/ skills around solar PV, including recommendations on specific training modules to be developed (Rating 1)	Develop and distribute a set of questionnaires for government officials, technicians, engineers, youth retailers to assess the level of existing capacity/skills around solar PV installation and maintenance and identify main areas in need of capacity development **Deliverable 1.2.1:** Completed questionnaires for each target audience																			
				Activity 1.2.2: Organize workshop for consultations with above mentioned actors at the national and village levels to discuss capacity gaps and areas for development (back-to-back workshops with Activity 1.1.2) **Deliverable 1.2.2:** Summary report on outcomes of consultations with a short and structured survey/ feedback on knowledge of different national/village actors before and after the consultations				X														
				Activity 1.2.3: Prepare Capacity Gap Analysis report based on information gathered, including recommendations on type of training modules to be developed (i.e. technical vs management, basic vs advanced) **Deliverable 1.2.3:** Capacity Gap Analysis report					X													
	Sub-Outcome 1.3: Development of a curriculum for local lead partner in support with the training centres to implement solar PV training, training material for each module identified in 1.2 (i.e. technical vs management, basic vs advanced), and a ToT programme for bringing training to the community level	None (Rating 0)	Training material on off-grid and grid- connected solar PV, a curriculum for training centres, and a ToT programme (Rating 1)	**Activity 1.3.1:** Develop a curriculum (both theoretical and practical elements) and design and develop content for each module and for implementing the training **Deliverable 1.3.1:** Training material for each module and curriculum (both theoretical and practical elements) for implementing the training (in PPT and hard copy)										X								
				Activity 1.3.2: Translation of certain modules from English to Tetum **Deliverable 1.3.2:** Translated modules (in PTT)												X						
				Activity 1.3.3: Design a ToT programme for selected trainees (i.e. training agents) to bring training to the community level, including a syllabus and course curriculum on how Trainers will be trained and a sustainable model through which trainings can be disseminated at the village/community level **Deliverable 1.3.3:** ToT Program with a short and structured survey/ feedback on knowledge of different national/village actors to be done before and after the training									X								

Outcome 2: Country Programming Process: Appropriate **technology solutions identified and prioritized in accordance with national strategies and plans for climate mitigation and adaptation** (Outcome 2- - 2.5 as per Annex 1 of GCF readiness and preparatory support guidebook)	**An Action Plan in place for upgrading the existing National Centre for Employment and Professional Training of Tibar (CNEFP) for conducting training on solar PV installation and maintenance (Implementation plan for the identified climate technology solutions)**																						
	Sub-Outcome 2.1: Baseline assessment undertaken to (1) assess existing training around solar PV at the CNEFP (2) forecast employment opportunities in the solar PV sector and (3) develop recommendations for any additional human, technical, or financial resources required	National Centre for Employment and Professional Training of Tibar (CNEFP) is a nationally accredited institute that provides certification on several vocational courses including Energy and Solar energy[11]. In addition, it has hands on experience of installing, maintaining and delivering training and practical skills to members of the local communities on solar installations.[12] (Rating 1)	The CNEFP is established as a centre of excellence in TL for training on solar PV installation and maintenance. This can be replicated for other training centers with similar certification courses on related areas like CNFP Becora, DIT Baucau, Centro Tecnico D. Bosco, CTC – salele – Suai has certification courses on electricity. Further the academic institutes for higher education like DIT and UNTL[13] can adopt the academic curriculum in their faculty of technology for diploma and engineering studies. The universities have limited facilities and professional trainers on Solar PV. (Rating 2)	**Activity 2.1.1:** Organization of workshops and consultations with various actors at the CNEFP to evaluate existing training related to solar PV **Deliverable 2.1.1:** Summary report with a short and structured survey/ feedback on knowledge of different national/village actors before and after the consultations		X																	
				Activity 2.1.2: Undertake assessment of existing training programs, future employment opportunities (especially for women) and provide recommendations for any required additional capacity **Deliverable 2.1.2:** Baseline assessment report				X															
	Sub-Outcome 2.2: Recommendations provided to the CNEFP for setting up a certification scheme or accreditation process for solar PV installers			**Activity 2.2.1:** In consultation with the CNEFP, review options for putting in place a certification scheme or accreditation process for solar PV installers (i.e. sizing, siting, operations and maintenance) **Deliverable 2.2.1:** A report outlining a set of recommendations and draft accreditation requirements						X											
	Sub-Outcome 2.3: Action Plan prepared based on the outcomes of 2.1 and 2.2, outlining recommendations for the CNEFP to strengthen its capacities on solar PV training			**Activity 2.3.1:** Draft an Action Plan for the CNEFP, based on outcomes of previous activities, for strengthening its capacities around solar PV training. This will include technical and managerial training curriculum, ToT programme, training materials, enrolment requirements, certification/accreditation scheme etc. **Deliverable 2.3.1:** Report outlining the Action Plan											X						
	Sub-Outcome 2.4 A pilot training program is undertaken by the local lead partner with support from CNEFP using the training materials developed in			**Activity 2.4.1:** Organize a pilot training program at the CNEFP including technical and managerial modules and a ToT session **Deliverable 2.4.1:** Pilot training with a short and structured survey/ feedback on knowledge of different national/village actors before and after the training, summary of															X		

[11] http://fokabafuturu.com/jobs/education-training/
[12] https://www.evwind.es/2014/10/04/east-timor-solar-energy-plan-nominated-for-award/47888
[13] http://www.untl.edu.tl/pt/ensino/faculdades/engenharia-ciencias-e-tecnologia

	Outcome 1 with at least 30% participation by women			feedback from trainees, and final meeting to review and incorporate feedback.																		
Outcome 3: Climate finance strategies and project pipeline strengthened **Climate Finance strategies defined the potential use of a combination of funding options from public resources** (Outcome 4-4.1 as per Annex 1 of GCF readiness and preparatory support guidebook)	**Preparation of a GCF Concept Note and a financing comprehensive strategy to design and support a sustainable programme for strengthening the effective use of solar PV in Timor-Leste**																					
	Sub-Outcome 3.1: Market Research and Feasibility Study undertaken to understand the supply and demand of both off-grid and grid-connected solar PV in TL	Timor-Leste has accomplished solar PV installations for certain number of households. The studies conducted for these installations will be referred. (Rating 1)	Market Research and Feasibility Study on solar PV supply and demand in TL. (Rating 2)	**Activity 3.1.1:** Undertake a Market Research and Feasibility Study including the following components: (i) energy market characteristics – energy prices, price trends, disaggregated energy consumption (in order to analyse the impact of solar PV according to the sector) (ii) market size – segment and size the market according to characteristics including the potential number of systems, investment per system/segment, and total investment and financing required, as well as business opportunities (iii) policy framework – laws and regulations, incentives schemes and existing initiatives that can be built upon (iv) financing situation – available financial instruments or business models that could support RE solutions in the defined target sectors as well as potential financial institution partners that are active in TL (v) solar resource and PV power potential – review of existing maps and GIS data to assess solar radiation potential (vi) technology solutions – available suitable off-grid and grid-connected solar PV technologies and providers in the country (vii) economic viability – investment needs and cost-benefit analysis (viii) end-user needs – fundamental, basic, and livelihood generation **Deliverable 3.1.1:** Market Research and Feasibility Study including findings of (i) to (viii). It will provide the basis for development of the a comprehensive strategy and financing strategy (to be included as an Annex)											X							
	Sub-Outcome 3.2: Programme design prepared with financing structures per type of market segment (on-grid,	None (Rating 0)	Programme design which is economically and operationally viable, aligned with national policies and market conditions, and cost-	**Activity 3.2.1:** Prepare the programme design for off-grid and grid-connected PV which will be based around a financial model and will define the following mechanisms: (i) financing mechanisms – financing mechanisms may include commercial credits, concessional												X						

	grid-connected, households, government facilities), which is economically and operationally viable, aligned with national policies and market conditions, and cost-efficient for financial institutions		efficient for financial institutions (Rating 1)	(ii) loans, leasing/renting, power purchase agreements and/or on-bill mechanisms, and existing national incentives (grants, subsidies, financial and non-financial risk mitigation mechanisms – different financial risk mitigation instruments [14]for investors and for the bank will be analysed (i.e. credit guarantees, surety bonds, insurances etc.). De-risking investments might be done through other types of mechanisms such as standardized contracts, procedural guarantees, 3rd party technical validations and legal support technical assistance – including policy and regulatory support, awareness raising, capacity building, and MRV processes. Specific areas of focus will include, but is not limited to, the following: - Technical and management training for solar PV in order to fulfil the Strategy Development Plan (SDG) 2011-2030. - Capacity building for youth at the village level in order to increase their capacity to install and maintain solar PVs in their village. This comes as a result of the 4th Government Plan which had installed 23,000 solar PVs in rural areas. Most of the equipment has been destroyed or is in bad condition; therefore, there is a need for increased capacity around maintenance and adaptability of the existing equipment. - Capacity building on solar PV for agriculture, not only for lighting but also for pumping water (horticulture) with the aim of increasing community income and improving livelihoods. - Development of RE and EE policies and action plans **Deliverable 3.2.1** Programme design report will build on the market and feasibility work and gender analysis – it will define the mechanisms, role of key actors, and include an implementation plan and proposed budget (to be included as Annexes to the comprehensive strategy)																			
	Sub-Outcome 3.3: Integrated economic and financial model developed to determine the programme's economic and	None (Rating 0)	Integrated economic and financial model (Rating 1)	**Activity 3.3.1:** Design an integrated economic and financial model looking at volume of financing leverages, tons of CO_2 equivalent reduced or avoided, and social/economic/environmental co-benefits, as well as financial analysis of the systems for different market sectors, cash flows for the programme, and sensitivity analysis. Based on the output of the indicators,												X						

[14] Solar plants in Timor-Leste have risks of getting damaged from storms and cyclones. Such risk should be integrated to consider the design of the solar plants. In the extreme cases the investor should be protected with an appropriate insurance.

	mitigation impact potential			appropriate financing mechanisms considered in the designing of the program 3.2.1 will be recommended. **Deliverable 3.3.1:** Integrated economic and financial model (in excel)																		
	Sub-Outcome 3.4: Gender Assessment undertaken and a Gender and Social Inclusion Action Plan developed to identify areas of vulnerability and potential co-benefits of the programme	None (Rating 0)	Gender Assessment and Gender and Social Inclusion Action Plan around solar PV implementation (Rating 1)	**Activity 3.4.1** Analyse the different roles, rights, needs, and opportunities of women and men, boys and girls within the context of the proposed programme (in parallel with other activities being carried out) using sex-disaggregated data where possible. To address the outcome of the activity the components for Technical Assistance in Programme designed will be adjusted including policy and regulatory support, awareness raising, capacity building, and MRV processes in addition to the inclusion of Gender and Social plan in 3.4.2 **Deliverable 3.4.1** Gender Assessment providing recommendations on how the proposed programme can address gender inequalities; ensure the differential needs of women and men are addressed, ensure men and women have equal access to resources, services, and capacity development; ensure equal participation in management arrangements and as beneficiaries, partners and stakeholders; and ensure women's equal participation in decision-making processes								X										
				Activity 3.4.2 Develop a Gender and Social Inclusion Action Plan to ensure gender mainstreaming is clearly visible in the programme design and implementation, including clear targets, gender design features and measurable performance indicators to ensure women's participation and benefits. **Deliverable 3.4.2** A Gender and Social Inclusion Action Plan to be incorporated into the Programme design presenting work undertaken to address gender issues; targets and design features to address gender concerns and ensure tangible benefits to women and men, especially from vulnerable communities; mechanisms to ensure implementation of gender design elements; and gender sensitive monitoring and evaluation indicators										X								
	Sub-Outcome 3.5: Consultations with key stakeholders undertaken to receive feedback on the proposed programme and mechanisms and	None (Rating 0)	Regular and engaging consultations held with key stakeholders to ensure participation and ownership of the proposed programme (Rating 1)	**Activity 3.5.1** Schedule consultations with key stakeholders including public authorities, financial institutions, energy utilities, women's groups, technology providers/developers, potential end users/beneficiary groups (communities/villages) will be conducted on the adjusted program design after 3.3.1 and 3.4.1. The feedback will be incorporated to revise the program design.											X					X		

	adapt, or include, additional elements to the proposed programme in order to ensure it is realistic and attractive for local market actors, and also to engage stakeholders and build enthusiasm and ownership			**Deliverable 3.5.1** Consultation agenda and summary reports																			
	Sub-Outcome 3.6 A GCF Concept Note and a comprehensive strategy developed	None (Rating 0)	GCF Concept Note and a comprehensive strategy (Rating 1)	**Activity 3.6.1** Prepare a GCF Concept Note for early feedback from the GCF **Deliverable 3.6.1** GCF Concept Note submitted to GCF															X				
				Activity 3.6.2 Prepare the a comprehensive strategy based on the information gathered in above activities **Deliverable 3.6.2** GCF a comprehensive strategy submitted to GCF and responses to feedback																	X	

4. ADDITIONAL INFORMATION (ONLY FOR ADAPTATION PLANNING SUPPORT)

This section is only to be completed when seeking support for formulation of national adaptation plans and/or other adaptation planning processes. Please see Part 3 Section 4 in the Readiness Guidebook.

5. BUDGET, PROCUREMENT, IMPLEMENTATION, AND DISBURSEMENT

5.1 Budget plan

Please complete the Budget Plan in Excel using the template available in the Library page of the GCF website.

Outcomes	Budget Categories (choose from the drop-down list)	Unit	# of Unit	Unit Cost	Detailed Budget (in US$) Total Budget (per budget category)	Total Budget (per sub-outcome)	Total Budget (per outcome)	Disbursement Plan 6m	12m	18m
1. Country Programming Process (Outcome 2 as per Annex 1 of GCF readiness and preparatory support guidebook)	**Training material, curriculum, and ToT programme on off-grid and grid- connected solar PV installation and maintenance developed**									
	1.1 Value Chain Assessment undertaken to understand the existing value chain for implementing solar PV in rural communities and to identify appropriate actors to be trained — Consultant - Individual - International	W/Day	15	500.00	7,500.00	25,500.00	84,000.00	25,500.00		
	Consultant - Individual - Local	W/Day	12	250.00	3,000.00					
	Workshop/Training	Workshop	1	3,500.00	3,500.00					
	Workshop/Training	Workshop	1	3,500.00	3,500.00					
	Travel – Local	DSA	1	2,500.00	2,500.00					
	Travel - International	Mission	1	4,500.00	4,500.00					
	Office Supplies	Lumpsum	1	500.00	500.00					
	Audio Visual & Printing	Workshop	1	500.00	500.00					
	1.2 Capacity Gap Analysis undertaken to assess the existing level of capacity/skills of different stakeholders around solar PV and to inform recommendations on types of training modules to be developed (i.e. technical vs management, basic vs advanced) — Consultant - Individual - International	W/Day	15	500.00	7,500.00	25,500.00		25,500.00		
	Consultant - Individual - Local	W/Day	12	250.00	3,000.00					
	Workshop/Training	Workshop	1	3,500.00	3,500.00					
	Workshop/Training	Workshop	1	3,500.00	3,500.00					
	Travel – Local	DSA	1	2,500.00	2,500.00					
	Travel - International	Mission	1	4,500.00	4,500.00					
	Office Supplies	Lumpsum	1	500.00	500.00					
	Audio Visual & Printing	Workshop	1	500.00	500.00					
	1.3 Development of a curriculum for training centres to implement solar PV training, training material for each module identified in 1.2 (i.e. technical vs management, basic vs advanced), and a ToT — Consultant - Individual - International	W/day	45	500.00	22,500.00	33,000.00		16,500.00	16,500.00	
	Consultant - Individual - Local	W/Day	34	250.00	8,500.00					
	Audio Visual & Printing	Training Mater	1	2,000.00	2,000.00					
2. Country Programming Process (Outcome 2 as per Annex 1 of GCF readiness and preparatory support guidebook)	**An Action Plan in place for upgrading the existing National Centre for Employment and Professional Training of Tibar (CNEFP) for conducting training on solar PV installation and maintenance**									
	2.1 Baseline assessment undertaken to (1) assess existing training around solar PV at the CNEFP (2) forecast employment opportunities in the solar PV sector and (3) develop recommendations for any additional human, technical, or financial resources required — Consultant - Individual - International	W/day	15	500.00	7,500.00	14,750.00	80,250.00	14,750.00		
	Consultant - Individual - Local	W/Day	11	250.00	2,750.00					
	Workshop/Training	Venue/DSA	1	2,500.00	2,500.00					
	Travel – Local	Consultation	1	1,000.00	1,000.00					
	Travel - International	Mission	1	1,000.00	1,000.00					
	2.2 Recommendations provided to the CNEFP for setting up a certification scheme or accreditation process for solar — Consultant - Individual - International	W/Day	18	500.00	9,000.00	9,000.00		9,000.00		
	2.3. Action Plan prepared based on the outcomes of 2.1 and 2.2, outlining recommendations for the CNEFP to strengthen its capacities on solar PV training — Consultant - Individual - International	W/Day	17	500.00	8,500.00	12,000.00			12,000.00	
	Consultant - Individual - Local	W/Day	14	250.00	3,500.00					
	2.4. A pilot training program is undertaken using the training materials developed in Outcome 1 w ith at least 30% participation by w omen — Consultant - Individual - International	W/Day	20	500.00	10,000.00	44,500.00			1,000.00	43,500.00
	Consultant - Individual - Local	W/Day	18	250.00	4,500.00					
	Workshop/Training	Workshop	1	16,000.00	16,000.00					
	Travel – Local	DSA	1	8,000.00	8,000.00					
	Travel - International	Mission	1	4,500.00	4,500.00					
	Office Supplies	Lumpsum	1	1,000.00	1,000.00					
	Audio Visual & Printing	Workshop	1	500.00	500.00					
3. Climate finance strategies and project pipeline strengthened (Outcome 4 as per Annex 1 of GCF readiness and preparatory support guidebook)	**Preparation of a GCF Concept Note and a comprehensive strategy to design a sustainable programme for strengthening the effective use of solar PV in Timor-Leste**									
	3.1 Market Research and Feasibility Study undertaken to understand the supply and demand of both off-grid and grid-connected solar PV in TL — Consultant - Individual - International	W/day	28	500.00	14,000.00	16,500.00	85,500.00	5,500.00	11,000.00	
	Consultant - Individual - Local	W/Day	10	250.00	2,500.00					
	3.2 Programme design prepared w ith financing structures per type of market segment (on-grid, grid-connected, households, government facilities), w hich is economically and operationally viable, aligned w ith national policies and market conditions, and cost-efficient for financial — Consultant - Individual - International	W/Day	30	500.00	15,000.00	17,500.00			17,500.00	
	Consultant - Individual - Local	W/Day	10	250.00	2,500.00					
	3.3. Integrated economic and financial model developed to determine the programme's economic and mitigation impact — Consultant - Individual - International	W/Day	26	500.00	13,000.00	15,500.00			15,500.00	
	Consultant - Individual - Local	W/Day	10	250.00	2,500.00					
	3.4. Gender Assessment undertaken and a Gender and Social Inclusion Action Plan developed to identify areas of vulnerability and potential co-benefits of the programme — Consultant - Individual - International	W/day	15	500.00	7,500.00	13,500.00		11,500.00	2,000.00	
	Consultant - Individual - Local	W/Day	20	250.00	5,000.00					
	Travel – Local	Consultation	1	1,000.00	1,000.00					
	3.5. Consultations w ith key stakeholders undertaken to receive feedback on the proposed programme and mechanisms and adapt, or include, additional elements to the proposed programme in order to ensure it is realistic and attractive for local market actors, and also to engage stakeholders in the programme early, and build enthusiasm and — Consultant - Individual - International	W/Day	7	500.00	3,500.00	10,750.00		2,000.00	8,750.00	
	Consultant - Individual - Local	W/Day	5	250.00	1,250.00					
	Workshop/Training	Venue/DSA	1	500.00	500.00					
	Travel – Local	Consultation	1	1,000.00	1,000.00					
	Travel - International	Mission	1	4,500.00	4,500.00					
	3.6. A GCF Concept Note and a comprehensive strategy developed — Consultant - Individual - International	W/Day	20	500.00	10,000.00	11,750.00			2,500.00	9,250.00
	Consultant - Individual - Local	W/Day	7	250.00	1,750.00					
Total Outcome Budget							**249,750.00**	110,250.00	86,750.00	52,750.00
Project Management Cost (PMC) Up to 7.5% of Total Activity Budget	Consultant - Individual - Local	Month	18	800.00	14,400.00	Actual amount and % of PMC requested:	Maximum PMC that can be requested:			
	Audit Fee	Lumpsum	1	3,500.00	3,500.00					
	Travel – Local	Lumpsum	1	500.00	500.00	✓ **18,400.00**	**18,731.25**			
					-	✓ **7.37%**	**7.50%**			

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

Breakdown (per budget category)	Total (per budget category)
Audio Visual & Printing	3,500.00
Audit Fee	3,500.00
Consultant - Individual - International	135,500.00
Consultant - Individual - Local	55,150.00
Professional Services – Companies/Firm	-
IT Equipment	-
Office Supplies	2,000.00
Travel - International	19,000.00
Travel – Local	16,500.00
Workshop/Training	33,000.00
0	-
0	-
0	-
0	-
0	-
Total Outcome Budget + PMC	**268,150.00**

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

Total Outcome Budget		**249,750.00**
Project Management Cost (PMC)	7.4% requested	**18,400.00**
Contingency	5% requested	**12,487.50**
Sub-Total (Total Outcome Budget + Contingency + PMC)		**280,637.50**
Delivery Partner Fee (DP) - Up to 8.5% of the Sub-Total		**23,854.19**
Total Project Budget (Total Activity Budget + Contingency + PMC + DP)		**304,491.69**

Budget Note	Detailed Description
Sub-Outcome 1.1	National consultant (solar PV expert) for 9 days @$250 per day for Activities 1.1.1, 1,1,2, 1.1.3
Sub-Outcome 1.1	International consultant (solar PV expert) for 11 days @$500 per day for Activities 1.1.1, 1.1.2, 1.1.3
Sub-Outcome 1.1	National consultant (admin and workshop organization) for 3 days @$250 per day for Activities 1.1.1, 1.1.2
Sub-Outcome 1.1	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 1.1	Workshop/Training - one workshop in Dili ($3500) and one rural workshop ($3500) - venue, equipment, resource persons, catering, travel
Sub-Outcome 1.1	Office supplies for workshop @$500
Sub-Outcome 1.1	Audio Visual & Printing for workshop @$500
Sub-Outcome 1.1	Local travel and DSA for workshop @2500
Sub-Outcome 1.1	International travel to TL to carry out work, consultations etc. @$4500 (flights, DSA etc.)
Sub-Outcome 1.2	National consultant (solar PV expert) for 9 days @$250 per day for Activities 1.2.1, 1,2,2, 1.2.3
Sub-Outcome 1.2	International consultant (solar PV expert) for 11 days @$500 per day for Activities 1.2.1, 1.2.2, 1.2.3
Sub-Outcome 1.2	National consultant (admin and workshop organization) for 3 days @$250 per day for Activities 1.2.1, 1.2.2
Sub-Outcome 1.2	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 1.2	Workshop/Training - one workshop in Dili ($3500) and one rural workshop ($3500) - venue, equipment, resource persons, catering, travel
Sub-Outcome 1.2	Office supplies for workshop @$500
Sub-Outcome 1.2	Audio Visual & Printing for workshop @$500
Sub-Outcome 1.2	Local travel and DSA for workshop @2500
Sub-Outcome 1.2	International travel to TL to carry out work, consultations etc. @$4500 (flights, DSA etc.)
Sub-Outcome 1.3	National consultant (solar PV expert) for 22 days @$250 per day for Activities 1.3.1
Sub-Outcome 1.3	International consultant (solar PV expert) for 42 days @$500 per day for Activities 1.3.1, 1.3.3
Sub-Outcome 1.3	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 1.3	Translator for 12 days @$250 per day for Activty 1.3.2
Sub-Outcome 1.3	Audio Visual & Printing for workshop @$2000
Sub-Outcome 2.1	National consultant (solar PV expert) for 7 days @$250 per day for Activities 2.1.1, 2.1.2
Sub-Outcome 2.1	International consultant (solar PV expert) for 14 days @$500 per day for Activities 2.1.1, 2.1.2
Sub-Outcome 2.1	National consultant (admin and workshop organization) for 4 days @$250 per day for Activities 2.1.1
Sub-Outcome 2.1	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 2.1	Workshop/Training - Tibar workshops/consultation catering etc. @$500
Sub-Outcome 2.1	Any required local travel @$1000
Sub-Outcome 2.1	The consultations can take place during the same trip as for Outcomes 1.1 + 1.2 (cost of additional DSA = $1000)
Sub-Outcome 2.2	International consultant (solar PV expert) for 16 days @$500 per day for Activities 2.2.1
Sub-Outcome 2.2	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 2.3	National consultant (solar PV expert) for 14 days @$250 per day for Activities 2.3.1
Sub-Outcome 2.3	International consultant (solar PV expert) for 12 days @$500 per day for Activities 2.3.1
Sub-Outcome 2.3	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 2.4	National consultant (solar PV expert) for 15 days @$250 per day for Activities 2.4.1
Sub-Outcome 2.4	International consultant (solar PV expert) for 20 days @$500 per day for Activities 2.4.1
Sub-Outcome 2.4	National consultant (admin and workshop organization) for 3 days @$250 per day for Activities 2.4.1
Sub-Outcome 2.4	Workshop/Training - 6 day training + 1 final meeting (venue, catering, resource persons, travel, accommodation) = $16,000
Sub-Outcome 2.4	Travel and DSA for workshop @$8000
Sub-Outcome 2.4	International travel to TL for training @$4500 (flights, DSA etc.)
Sub-Outcome 2.4	Office Supplies for training @$1000
Sub-Outcome 2.4	Audio Visual & Printing for training @500
Sub-Outcome 3.1	International consultant (sustainable energy and finance specialist) for 26 days @500 per day for Activity 3.1.1
Sub-Outcome 3.1	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 3.1	National consultant (energy economist and finance expert) for 10 days @250 per day for Activity 3.1.1
Sub-Outcome 3.2	International consultant (sustainable energy and finance specialist) for 28 days @500 per day for Activity 3.2.1
Sub-Outcome 3.2	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 3.2	National consultant (energy economist and finance expert) for 10 days @250 per day for Activity 3.2.1
Sub-Outcome 3.3	International consultant (sustainable energy and finance specialist) for 22.5 days @500 per day for Activity 3.3.1
Sub-Outcome 3.3	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 3.3	National consultant (energy economist and finance expert) for 10 days @250 per day for Activity 3.3.1
Sub-Outcome 3.4	International consultant (energy and gender expert) for 15 days @500 per day for Activity 3.4.1
Sub-Outcome 3.4	National consultant (energy and gender expert) for 20 days @250 per day for Activity 3.4.1
Sub-Outcome 3.4	Local travel for consultations @1000
Sub-Outcome 3.5	International consultant (sustainable energy and finance specialist) for 7 days @500 per day for Activity 3.5.1
Sub-Outcome 3.5	National consultant (energy economist and finance expert) for 5 days @250 per day for Activity 3.5.1
Sub-Outcome 3.5	Workshop/Training - catering etc. for workshops/consultations @500
Sub-Outcome 3.5	Local travel to rural areas when required @1000
Sub-Outcome 3.5	International travel to TL for consultations @$4500 (flights, DSA etc.)
Sub-Outcome 3.6	International consultant (sustainable energy and finance specialist) for 18 days @500 per day for Activity 3.6.1
Sub-Outcome 3.6	Senior Adviser/Manager to review and ensure the quality of the outputs are in line with GCF proposal and provide technical input for 4 days @$500 per day
Sub-Outcome 3.6	National consultant (energy economist and finance expert) for 7 days @250 per day for Activity 3.6.1
Project Coordinator	Project Coordinator to support NDA and implementation team for 18 months @$800 per month

5.2 Procurement plan

Please complete the Procurement Plan in Excel using the template available in the Library page of the GCF website. For goods, services, and consultancies to be procured, please list the items, descriptions in relation to the activities in section 2, estimated cost, procurement method, relevant threshold, and the estimated dates. Please include the procurement plan for at least the first tranche of disbursement requested below and provide a full procurement plan for the entire duration of the implementation period if available at this stage.

Item	Item Description	Estimated Cost (US$)	Procurement Method	Thresholds (Min-Max monetary value for which indicated procurement method must be used)	Estimated Start Date	Projected Contracting Date
Goods and Non-Consulting Services						
Workshops	Venue, catering, equipment rental	33,000.00	Low value procurement based on min 3 bids	Greater than $10,000	Q1	Q1
Audio Visual & Printing	Printing, training material, USB sticks, miscellaneous	3,500.00	Single source purchase based on low value	Greater than $10,000	Q1	Q1
Travel	Flights, road travel, daily subsistence	35,500.00	Low value procurement based on min 3 bids	Less than $10,000	Q1	Q1
Office Supplies	Workshops/trainings	2,000.00	Single source purchase based on low value	Greater than $10,000	Q1	Q1
	Sub-Total (US$)	$ 74,000.00				
Consultancy Services						
International Consultant	International Solar PV Expert	64,000.00	Open tender	Greater than $10,000	Q1	Q1
International Consultant	Senior Advisor/Manager	13,250.00	Open tender	Greater than $10,000	Q1	Q1
International Consultant	Sustainable Energy and Finance Specialist	50,750.00	Open tender	Greater than $10,000	Q2	Q2
International Consultant	International Energy and Gender Expert	7,500.00	Open tender	Greater than $10,000	Q1	Q1
Local Consultant	Admin and Workshop Organization	3,250.00	Open tender	Greater than $10,000	Q1	Q1
Local Consultant	Local Solar PV Expert	19,000.00	Open tender	Greater than $10,000	Q1	Q1
Local Consultant	Translator (English to Tetum)	3,000.00	Open tender	Greater than $10,000	Q2	Q2
Local Consultant	Energy Economist and Finance Expert	10,500.00	Open tender	Greater than $10,000	Q2	Q2
Local Consultant	Local Energy and Gender Expert	5,000.00	Open tender	Greater than $10,000	Q1	Q1
Local Consultant	Project Coordinator	14,400.00	Open tender	Greater than $10,000	Q1	Q1
	Sub-Total (US$)	$ 190,650.00				

5.3 Disbursement schedule

Please specify the proposed schedule for requesting disbursements from the GCF. For periodicity, specify whether it's quarterly, bi-annually or annually only.

UNEP, as the Delivery Partner for this Readiness and Preparatory Support Proposal, will submit requests for disbursement for approved proposals to the GCF in accordance with the an executed and effective agreement amending the Framework Readiness and Preparatory Support Grant Agreement between the GCF and UNEP dated 13 December 2017.. Disbursement requests will be signed by the authorised representative of the UNEP and will include details of the bank account into which the grant will be deposited. UNEP, the Delivery Partner for this R&P Support Proposal for Timor-Leste, will administer the grant disbursed by the GCF in accordance with UNEP's regulations, rules, and procedures including maintenance of records of grant, disbursements and expenditure. UNEP will follow the disbursement schedule as per the an executed and effective agreement amending the Framework Readiness and Preparatory Support Grant Agreement between the GCF and UNEP dated 13 December 2017.

Disbursement will be subject to the execution and effectiveness of and in accordance with an amendment to the Framework Readiness and Preparatory Support Grant Agreement between the GCF and UNEP dated 13 December 2017.

6. IMPLEMENTATION ARRANGEMENTS AND OTHER INFORMATION

6.1 Implementation map

Please describe how funds will be managed by the NDA and/or the Readiness Delivery Partner.

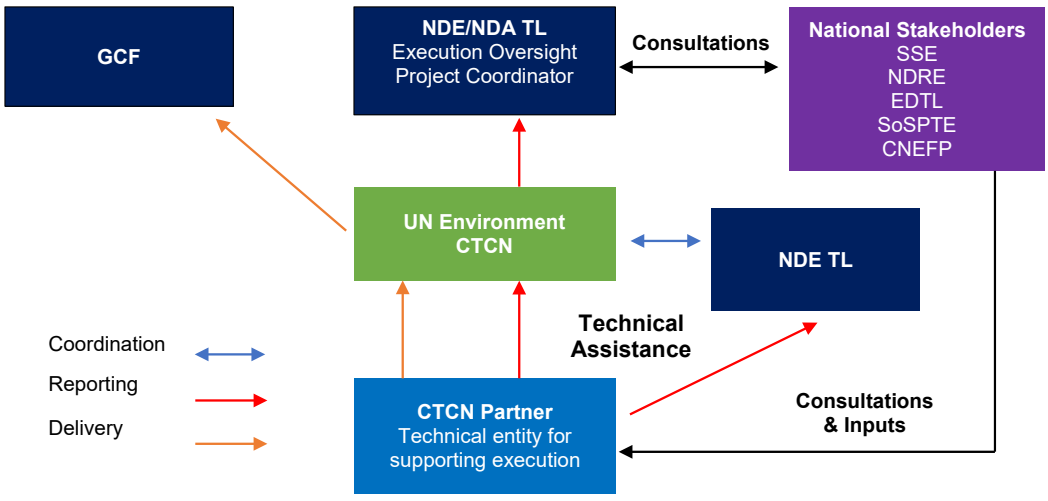
UNEP will manage the funds for the activities under this readiness agreement. UNEP will agree on a plan with the NDA of Timor-Leste to monitor the implementation of the activities using the grant proceeds. However, UNEP will be responsible for the implementation of the activities under this readiness and preparatory support proposal.

The start date, as anticipated in logframe will be contingent on the execution and effectiveness of an amendment to the Framework Readiness and Preparatory Support Grant Agreement between the GCF and UNEP dated 13 December 2017.

The selected agency to implement the proposal from the Climate Technology Network through a bidding process will report to CTCN/UNEP as per their contractual arrangement and in line with UN rules and regulations. They will produce regular progress and financial reports and will submit deliverables to CTCN/UNEP. Funds will only be released if and when the deliverables are satisfactory and cleared by CTCN/UNEP. They will return any unspent funds within ninety days of expiry or notice of termination of the CTCN/UNEP.

The UNFCCC country focal points for GCF (NDA) and technology (NDE) will provide active support to the implementer in the execution of this technical assistance. Their roles as country focal points will include, but not be limited to: ensuring the activities associated with execution oversighting and project coordination of this technical assistance are aligned with national climate priorities; promote and engage with key stakeholders as identified by the implementer; promote and present this technical assistance in climate change-related events; and participate in CTCN events and in national workshops affiliated with this technical assistance, if required. They will also be expected to provide guidance and review any relevant documents produced and will be kept apprised of the progress of the technical assistance. They will also help in inter-ministerial coordination required for the implementation of the project through communications, consultation with and coordination of the representation from the relevant line ministries. As discussed in this proposal, there are ongoing GCF program where the local communities are engaged. Further, Government has already implemented solar PV projects at community level through agreements with village heads. From these ongoing or existing programs, the established linkages, working modalities and institutional arrangements with village heads and other actors identified in the value chain of solar PV in Timor-Leste will be referred and explored to identify and engage the key stakeholders in the proposed program.

The implementation map below summarizes the different interactions between the different parties involved in this technical assistance:



CTCN processes before the selection of the implementer (described in the implementation map)

The CTCN process for managing technical assistance is the following: requests for technical assistance can be prepared by any applicant organization from a developing country, but all requests must be submitted by the CTCN NDE (national focal point in the concerned country). Once submitted, all requests submitted by developing countries are assessed as per eligibility, balancing and prioritization criteria approved by the CTCN Advisory Board. The three eligibility criteria are the following: 1) The support provided will contribute to increased resilience and/or mitigate emissions and is aligned with national plans; 2) The support will enhance endogenous capacities; and 3) Processes are in place in the requesting country to monitor and evaluate any support provided (that is, project accountability is ensured). Balancing criteria are looking at inter and intra-regional a geographical balance (with a preference for requests submitted by LDCs and other highly vulnerable and low capacity countries; balance between adaptation and mitigation objectives, and balance between various types of support spanning the technology cycle. Prioritization criteria consider several elements that demonstrate project strengthen and potential for success, including the promotion of endogenous capacities and appropriate technologies, potential for scale up, for South-South cooperation, for leveraging public and private financing, for creating social, economic and social benefits, promoting gender equality etc.
Once a request is deemed eligible and prioritised, the CTCN selects the best expertise among its consortium partners to develop a response plan. The criteria for selection are: Relevant technical expertise, Experience and network in national context, Relevant language capacity, Response Planning track record, Representative use of the consortium partners in Response Planning and Feedback/ preference from the NDE.

Based on the discussion with the NDE, request proponent and feedback from the CTCN, the consortium partner develops the response plan. Once an advanced version is prepared, it is presented to CTCN's director and the NDE for signature. Once the response plan is signed, the contracting of the CTCN partner starts. The CTCN partner will contracted through an open bidding process in which all CTCN network members can participate. CTCN will issue the tender, receive the bids and conduct evaluation through its host agencies. The selected partner entity will be awarded with the contract to implement the project.

The request proponent of this project is the National Directorate for Climate Change. Key stakehoders of this project include Traning center Tibar, Ministry of Public Works- National Directorate of Research and Development, EDTL, Ministry of Public Works, National Directorate of Renewable Energy, State Secretariat for Environment, National Directorate of Climate Change.

The CTCN (hosted by UNEP-UNIDO) is providing technical assistance to the Government of Timor-Leste, as per its COP Mandate, and supporting Timor-Leste to develop this readiness proposal. The CTCN Engagement with the Government of Timor-Leste is mature with close co-operation between the NDA and NDE. The implementing partner will be procured through formal tendering procedures if the Readiness proposal is approved for implementation. The relevant COP decisions are provided below for easy reference:

Decision 14/CP.22: Linkages between the Technology Mechanism and the Financial Mechanism of the Convention
Para 4. Welcomes the increased engagement between the Green Climate Fund and the Climate Technology Centre and Network, particularly with respect to utilizing the Readiness and Preparatory Support Programme and the Project Preparation Facility of the fund, noting the potential of such engagement in supporting developing country Parties to build their capacity for implementing technology projects and programmes;
Para 6. Invites Green Climate Fund national designated authorities and focal points to use the support available to them under the Readiness and Preparatory Support Programme to, inter alia, conduct technology needs assessments and develop technology action plans;
Para 7. Also invites developing country Parties to develop and submit technology-related projects, including those resulting from technology needs assessments and from the technical assistance of the Climate Technology Centre and Network, to the operating entities of the Financial Mechanism for implementation, in accordance with their respective policies and processes;

Decision 15/CP.22: Enhancing climate technology development and transfer through the Technology Mechanism
Para 13. Underlines the importance of well-functioning and strengthened collaboration between the national designated authorities for the Green Climate Fund, the focal points for the Global Environment Facility and the national designated entities for technology development and transfer
Para 15. Welcomes the increased engagement between the Green Climate Fund and the Climate Technology Centre and Network, particularly with respect to utilizing the Readiness and Preparatory Support Programme and the Project Preparation Facility of the fund in order to respond to country-driven requests for technical assistance;
Para 16. Encourages the advancement of the engagement referred to in paragraph 15 above, including through the strengthening of collaboration between national designated authorities for the Green Climate Fund and national designated entities for technology development and transfer;
Para 17. Invites the Climate Technology Centre and Network to include the outcomes of the engagement referred to in paragraphs 15 and 16 above in its annual report to the Conference of the Parties at its twenty-third session."

6.2 Risks, monitoring and evaluation (M&E), and other relevant information

Risk	Mitigation Action
Delayed implementation of the proposed readiness activities	During the preparation phase of the proposed GCF Readiness support activities, implementation partners have been initially identified, and the proposed implementation schedule will be reviewed and updated before commencement of the actual implementation. Delays faced in other readiness activities managed by UNEP will be carefully assessed and the lessons learnt will be applied avoid the similar delays in this project. This would be done through establishing enhanced coordination mechanism at the national level through the NDE And /NDA office
Low level participation from local authorities, technicians/engineers, village chiefs, training centres, women and youth retailers.	The project will involve key players from the inception phase, and disseminate latest updates on progress of the GCF readiness support activities through appropriate communication channels in Timor-Leste.
Lack of data to complete the analytical work	Close collaboration with municipal, rural, and national government agencies and community organizations will be established in order to ensure access to relevant data.
Management and Implementation risk- Lack of effective coordination with relevant stakeholders	Identifying and engaging the key stakeholders from the earlier stage of the program, working in close collaboration with them to gather relevant feedback and input to reflect them in the design of the program, defining in advance- the measurable indicators for the deliverables and key implementation risks and mitigation measures are the objectives of the M&E that will help to ensure ownership of project deliverables by the beneficiary and monitor effectiveness in implementation of actions.
Security and National Risks	There are no UNSCR sanctions that would apply to this proposal, any of its activities, counterparties or beneficiaries Further, The proposal is prepared in close collaboration with NDE and NDA and no such national risks were identified with related to this proposal

The project will comply with the UNEP-CTCN standard monitoring, reporting and evaluation procedures. Reporting requirements and templates are an integral part of the legal instrument to be signed by the CTCN Partner and UNEP. The details on standard monitoring and evaluation procedures are publicly available at https://www.ctc-n.org/resources/ctcn-monitoring-evaluation-system

The CTCN will closely work with the NDA of Timor-Leste in the implementation and keep it regularly informed through UNFCCC country focal points for technology (NDE). The international expert entity (implementer) will closely work with the NDE and Technology Manager, who will be responsible the execution of the technical assistance. The proposed intervention will ensure that the knowledge base created as part of this program should reach to the rural communities and villages through the skilled trainers created in this program. Hence, besides project management and technical expertise on Solar PV, the international expert entity will also have the expertise and skills to design such programs for landscapes similar to Timor-Leste. Also, the expert will allocate adequate time for undertaking consultations to customize the program to meet the needs of Timor-Leste. The NDA, along with NDE, will provide the following support (including but not be limited to):

- ensuring the activities associated with the implementation of this technical assistance are aligned with national climate priorities;
- promote and engage with key stakeholders including:
  - Secretary of State for Environment (SSE)
  - Ministry of Public Works
  - Secretariat of State for Professional Training and Employment (SoSPTE)

  - National Directorate of Renewable Energy (NDRE)
  - National Directorate of Research (EDTL)
  - National Centre for Employment and Professional Training of Tibar (CNEFP)
  - Ministry of Agriculture and Fisheries
  - Rede Feto (Women Group)
  - State Secretary of Equality and Inclusion
- promote and present this technical assistance in climate change-related events; and
- participate in CTCN events and in national workshops affiliated with this technical assistance, if required

CTCN along with NDA/NDE will appoint a project coordinator located in the country to support NDE and NDA to ensure execution of project by the implementer and closely coordinate with CTCN Technology Manager.

The National Directorate of Climate Change (NDCC) serves as the hub for all Government engagement in climate change related issues. The Secretary of State for Environment (SSE), through the NDCC, will be the execution oversight and project coordination entity for the readiness work. The Ministry of Public Works, through the NDRE and EDTL, will be key partners and will provide training on solar PV at the management level and this will lead to building integrity and accountability internal controls through appropriate parameters that will be designed as the part of the activities under outcome 1, on the other hand the SoSPTE and the CNEFP will provide training at the technical level.
The NDCC is leading the Working Group on Climate Change which the member consists of key line ministries, international agencies and local NGO. This group conducts quarterly meeting to update the activities or project related to climate change.

In accordance with UN regulations and practices, title to any equipment and supplies that may be purchased during the implementation of the project shall rest with UN Environment after consultation with NDA, unless the GCF directs at any time in its sole discretion, that title be transferred to the GCF or any other source. Upon completion of the project, the disposal of the equipment and supplies will be effected in accordance with effectiveness of the amendment to the Framework Agreement between the GCF and UNEP dated 13 December, 2017.

The GCF shall hold the intellectual property rights to any publications and materials developed during project implementation.