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**TERMS OF REFERENCE (TOR)**

**Title: Feasibility Study for Low Emission Land Transport Sector in Vanuatu**

CTCN request reference number 2019000058

Countries: Vanuatu

16 December 2020

**1 BACKGROUND INFORMATION**

The Climate Technology Centre and Network (CTCN) is the operational arm of the United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism and co-hosted by the United Nations Environment (UN Environment) in collaboration with the United Nations Industrial Development Organization (UNIDO) and supported by 11 partner institutions with expertise in climate technologies. The mission of the CTCN is to promote accelerated development and transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate-resilient development.

These requests for Technical Assistance (TA) are being submitted to the CTCN by the National Designated Entity (NDE) of the respective country. Eligible requests are processed by a group of selected experts who develop a Response Plan. The scope of services under these Terms of Reference shall be executed based on a restricted solicitation process where only accepted Members of the CTCN Network, are eligible to submit proposals.

**In case you are not a CTCN network member yet, you may bid for implementation of the technical assistance, subject to the condition that you submit your completed application for CTCN Network membership before the last date of the bid closure and the same is acknowledged by the CTCN. Furthermore, the contract award – should your bid be selected – is conditional to your network membership application having been successfully approved by the Director of CTCN. The requirement to join the CTCN network is only relevant to the main bidder and no sub-contractors.**

The maximum estimated budget for this contract is USD 199,400.

**It is mandatory for the implementer(s) to allocate at least 1% of the budget to integrate a gender-approach to the activities. Please refer to the CTCN Gender Mainstreaming Tool for Response Plan Development for guidance at <https://www.ctc-n.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development>.**



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### 2 PROJECT CONTEXT

Vanuatu is an archipelago with a population of 234,000 and faces the challenges of managing its heavy reliance on fossil fuel while providing clean, reliable and affordable electricity to the 67% of its population who still live without it. In accordance with the Vanuatu National Energy Road Map, the Government of Vanuatu has set targets of increasing access to electricity as well as increasing utilization of renewable energy. Vanuatu's generation fuel mix includes diesel, wind, solar, hydro, and biofuels with a 2016 renewable share of 20% for the Union Electrique du Vanuatu Limited concession areas.

Vanuatu has set a target of increasing electricity access by households in concession areas to 75% by 2020 and has achieved 71.7% in 2017. In 2018, it surpassed its 60% target of increasing electricity access by households in off-grid areas in 2020 and have achieved 64.4%. It has set a target of increasing electricity access by public institutions (on- and off-grid) by 80% in 2020 and have achieved 71.6% in 2018. Furthermore, its target of increasing the proportion of electricity generated from renewable energy sources to 65% by 2020 was only 18% in 2017.

Vanuatu's effort to reduce reliance on fossil fuel and increase access to clean, reliable and affordable energy sources has focused mostly on the 38% of the fuel imports that is used for power generation. Very little has been done about the 50% of the fuel imports that is consumed in the land transport sector.

The nature of land transportation in Vanuatu is made up of individual business owners operating public transport services, such as buses and taxi services, though, few major tour companies operating larger fleets of bus services to meet mainly the demands of tourism industry. Nevertheless, Buses and taxis have dominated the mode of land transportation services in Vanuatu.

The main land transport issues and constraint to sustainable economic development identified in Vanuatu can be summarized as follows; poor condition of road infrastructure; the lack of management and planning across all government agencies and institutions responsible for land transportation, main functional weaknesses occur in operations, finance, management and planning of a land transport sector. While social issues cannot be ignored such as, increased number of vehicles plying in the limited network of roads may become a problem in the future given the limited scope to expand the existing routing infrastructure mainly in Port Vila. Environmental health concerns on the traffic fumes has been highlighted also as contributing factor to increasing rate of respiratory cases in the two major urban centers, Port Vila and Luganville. The high cost of fuel remains to be an issue in land transportation contributing to the high vehicle operating costs each year. Municipal and provincial governments having a key role in planning, operations and ownership of land transportation assets, are constrained by the lack of planning and management capacity to perform these tasks.

Vanuatu faces unique challenges in its transport sector and have therefore approached CTCN for technical assistance by way of a study aimed at clearly identifying the feasibility of reducing GHG emissions through the implementation of energy efficiency measures in Vanuatu's land transport sector.



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This study will not only demonstrate but also unleash:

- i. the policy, legislative and regulatory barriers to improving the energy efficiency in Vanuatu's land transport sector
- ii. the technical, financial, institutional, awareness and capacity barriers to improving the energy efficiency in Vanuatu's land transport sector
- iii. an implementation plan, budget and an M&E framework for the barrier removals for supporting a vibrant and low emission land transport sector in Vanuatu
- iv. a GCF Project Concept Note for Vanuatu using the information and data collected from the feasibility study

The request and response plan with other details about it can be accessed from the following link:

<https://www.ctc-n.org/technical-assistance/projects/feasibility-study-low-emission-land-transport-sector-vanuatu>

### **3 AIM OF THE CONTRACT**

The contractor is expected to take full responsibility for the satisfactory execution of the technical assistance described herein. All activities will be conducted under the close supervision of Regional Manager in CTCN and with the National Designated Entity (NDE) in Vanuatu.

The objectives of the technical assistance project are:

- Undertake the feasibility study on Low Emissions in Vanuatu's land transport sector
- Conduct stakeholder consultations on the outcome of the feasibility study
- Capacity building on Low Emissions in Vanuatu's land transport

### **Scope and activities of the proposed contracted services**

The Contractor/ implementer is expected have thorough understanding of the requirements through this ToR, Signed Response Plan and the request to undertake the following activities in the timeline indicated:

#### **Output 1: Planning and communication documents**

##### **Activity 1: Development of implementation planning and communication documents in CTCN templates**

###### **A 1.1: Inception Meeting (Virtual)**



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**A 1.2:** A work plan detailing activities, respective deliverables, outputs, timelines and responsible persons/organizations and detailed budget to implement the Response Plan, meeting the requirements of the Response Plan.

**A 1.3:** Monitoring and evaluation plan with specific, measurable, achievable, relevant, and time-bound indicators used for timeliness and appropriateness of the implementation. The plan should apply selected indicators from the Closure and Data Collection report template and enable the lead implementer to complete the CTCN Closure and Data collection report at the end of the assignment.

**A 1.4:** A two-page CTCN Impact Description formulated in the beginning of the technical assistance and update/revised once the technical assistance is fully delivered based on the template provided by CTCN. The template will be provided by CTCN.

**A 1.5:** A Closure and Data Collection report is to be completed at the end of the technical assistance. The template will be provided by CTCN in the beginning of the activity.

### **Deliverables 1**

**D 1.1:** Minutes of Inception meeting

**D 1.2:** Detailed work plan

**D 1.3:** Monitoring and evaluation plan

**D 1.4:** CTCN Impact Description

**D 1.5:** Closure and Data Collection template and report

### **Output 2: Barriers to low carbon development in Vanuatu's land transport sector and how best they can be removed are identified and analyzed**

**A 2.1:** Conduct a desktop study of the legislative / policy, institutional, technical, market, financial and information / awareness barriers to low carbon development in Vanuatu's land transport sector. The approach used for conducting the desk study, references and findings of the study will be documented as a report under deliverable 2.

**A 2.2:** Conduct 2 stakeholder consultation and a follow up field mission in Vanuatu for assessing the potential barriers faced by land transport sector in Vanuatu, separating perceived from actual barriers, and to identify efficient and effective barrier removal measures.

- The objective of consultation will be to inform the stakeholders about the objective of the study and to seek their support to conduct a survey on the barriers faced by land transport sector in Vanuatu. The draft questions in the survey will be introduced, and preliminary thoughts of the stakeholder will be sought on the barriers. Efforts should be made to engage stakeholders (total about 20-30 exclusive participants in each workshop- 2 workshops) throughout the value chain of the land transport sector including users from all genders and a wide range of social groups;



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- The consultation will be followed by a field mission to collect relevant data and information from relevant stakeholders in the value chain of land transportation sector through a structured survey. Beyond barriers, the survey would aim to collect relevant data and information related to potential interventions and its implementation to overcome the barriers. The summary of the discussions undertaken in each site visit will be documented as a report under deliverable 2.

**A 2.3:** Based on the survey conducted in Activity 2.2, develop a barrier analysis with potential interventions to remove barriers. While the suggested barrier removal interventions will be based on international experience, it should fit to the local conditions in Vanuatu.

### **Deliverables 2**

- 2.1: Stakeholder consultation reports with the draft survey
- 2.2: Report on desk study and field visit survey conducted
- 2.3: A draft report on proposed interventions for barrier removal

### **Output 3: A concept note on low carbon land transport sector programme for Vanuatu is developed and adopted**

**A 3.1:** Develop a concept note on the feasibility of based on a multi-stakeholder Objective Oriented Project Planning workshop to design Vanuatu's barrier removal program for the land transport sector. The barrier removal program will clearly come up with the following:

- identified barriers to develop low carbon land transportation in Vanuatu,
- proposed interventions to remove the barriers,
- techno-economic feasibility of the identified interventions fitting to the local socio-economic conditions including the role of gender mainstreaming from implementation aspect
- detailed action plans with required budget and timeline to implement the barrier removal interventions.

**A 3.2:** The draft concept note on the program will undergo 2 multi-stakeholder Objective Oriented Project Planning workshops to ensure bottom approach is followed in adopting the program.

The concept note on the feasibility study will be revised incorporating the feedback from the consultation workshop and will be reviewed by NDE and Project proponent for finalization.

To ensure the effective continuation of the work carried out under this technical assistance, the program should be developed in align with the requirements of the template of the GCF note. GCF concept note template should be attempted to be filled with best available data and information generated from the program. However, based on the gaps identified from the feasibility of the proposed barrier removal interventions, most suitable approach, as applicable, will be followed with suitable supporting mechanisms for example strengthening institutions, if found as a gap, may be advised to be addressed through readiness support from GCF.

### **Deliverables 3:**

- 3.1: Draft feasibility report on barrier removal program for the land transport sector of Vanuatu



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3.2: Stakeholder Consultation report

3.3: Final feasibility report on barrier removal program for the land transport sector of Vanuatu

**Output 4: Capacity Development on low carbon land transport**

**A 4.1:** A three days capacity building program will be organized in Vanuatu including the findings of the study and way forward. The efforts should be made to balance the gender ratio of the up-takers of the capacity building program. The travel for undertaking this activity should be clubbed with Activity 3.2.

**Deliverables 4:**

4.1: Report on capacity building program

4.2: Knowledge resources generated from the capacity building program

**4 GENERAL TIME SCHEDULE**

The activities under this contract should follow the timeline presented for each deliverable and are expected to be completed within a period of twelve 8 to 12 months from the award of contract. However, the bidder has the option of proposing a customized duration of the activities under this contract with supporting justifications.

**5 QUALIFICATION REQUIREMENTS AND EVALUATION CRITERIA**

The bidder shall as a minimum present the following qualifications of the team. Please note the requirement to have national expert(s) in the team. Additional qualifications and experts may be added to the proposal.

Qualification requirements (technical aspects required)	Evaluation criteria
<p><b>Project Manager- PM</b></p> <ul style="list-style-type: none"> <li>• Master’s Degree in relevant field of specialization</li> <li>• Have at least 15 years of experience in managing and conducting research and surveys, stakeholder engagements and developing technical programmes and financial proposals</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrated experience of leading and managing a team of experts from different cultural backgrounds and fields of expertise</li> <li>• Prior experience of working in the land transport and / or energy sector of Pacific Island Countries and understanding of greenhouse mitigation through energy efficiency will be an added advantage</li> <li>• Experience of working collaboratively with governments, regional and international organizations</li> <li>• Have proficiency in reading, writing and speaking English and must be able to communicate with stakeholders effectively and to deliver on outputs in a timely manner.</li> </ul>
<p><b>Land Transport Expert - LTE</b></p> <ul style="list-style-type: none"> <li>• Master’s Degree in relevant field</li> </ul>	<ul style="list-style-type: none"> <li>• An expert in the land transport sector of SIDS, both in the infrastructure / technical and engineering aspects as</li> </ul>



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Qualification requirements (technical aspects required)	Evaluation criteria
<p>of specialization</p> <ul style="list-style-type: none"> <li>At least 10 years of experience working for the land transport sector of a SIDS</li> </ul>	<p>well as policy aspects too</p> <ul style="list-style-type: none"> <li>Knowledge of both civil and mechanical engineering would be an advantage</li> <li>Familiarity with e-mobility and renewable energy-based transport systems and technologies</li> <li>Years of experience in stakeholder consultations and developing funding proposals</li> <li>Developing national programmes in the land transport sector</li> </ul>
<p><b>Gender Expert-GE</b></p> <ul style="list-style-type: none"> <li>Master’s degree in Social or Natural Sciences or another relevant discipline, preferably with a specialization in gender</li> <li>At least 10 years of field experience working with women, youths and rural communities on energy and mobility issues</li> </ul>	<ul style="list-style-type: none"> <li>Understanding and demonstrated ability to incorporate gender considerations in the removal of barriers to sustainable development in SIDS,</li> <li>Understanding of the culture and diversity in Melanesia</li> <li>Have proficiency in reading, writing and speaking English and must be able to effectively communicate with stakeholders.</li> </ul>

**6 LANGUAGE REQUIREMENTS**

The working language for the purposes of this project is English, thus an excellent command of English is required of the proposed personnel. The final deliverables must be submitted in English. The technical and financial proposal under this tender must also be submitted in English.

All delivered documents must be of such a quality that no further editing will be required.

**7 DELIVERABLES SCHEDULE**

The table below details the indicative schedule for this assistance.

Deliverables	Delivery date
<b>D 1.1:</b> Minutes of Kick off meeting discussion	As soon as after signing the contract
<b>D 1.2:</b> Detailed work plan	Within 1 month from Kick off meeting
<b>D 1.3:</b> Monitoring and evaluation plan	Within 1 month from Kick off meeting
<b>D 1.4:</b> CTCN Impact Description	Within 1 month from Kick off meeting
<b>D 1.5:</b> Closure and Data Collection template and report	12 months from Kick off meeting



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<b>Deliverables</b>	<b>Delivery date</b>
<b>D 2.1:</b> Stakeholder consultation reports with the draft survey	5-7 months from Kick off meeting
<b>D 2.2:</b> Report on desk study and field visit survey conducted	5-7 months from Kick off meeting
<b>D 2.3:</b> A draft report on proposed interventions for barrier removal	5-7 months from Kick off meeting
<b>D 3.1:</b> Draft feasibility report on barrier removal program for the land transport sector of Vanuatu	5-9 months from Kick off meeting
<b>D 3.2:</b> Stakeholder Consultation report	5-9 months from Kick off meeting
<b>D 3.3:</b> Final feasibility report on barrier removal program for the land transport sector of	5-9 months from Kick off meeting
<b>D 4.1:</b> Report on capacity building program	8-12 months from Kick off meeting
<b>D 4.2:</b> Knowledge resources generated from the capacity building program	8-12 months from Kick off meeting