

Guidelines:

- This Request Submission Form should be completed by the organisation requesting technical assistance from the Climate Technology Centre & Network (CTCN) in collaboration with the National Designated Entity (NDE) of the country in question
- The Form must be signed by the NDE. Please see updated contact list of NDEs here: <http://unfccc.int/ttclear/support/national-designated-entity.html>
- The Form can be submitted as a Word file containing a digital signature or as a signed and scanned PDF file in combination with an un-signed Word file
- For requests submitted by multiple countries, all the NDEs of the respective countries shall sign identical Forms before official submission to the CTCN
- NDEs have the opportunity to submit CTCN requests in collaboration with National Designated Authorities (NDAs) for the Green Climate Fund (GCF) if targeting the GCF Readiness Programme.

Requesting country or countries:	Republic of Vanuatu
Request title:	Feasibility Study for Low Emission Land Transport Sector in Vanuatu
NDE	Mr Mike Waiwai, Director, Department of Climate Change, Ministry of Climate Change, Government of Vanuatu, e- mwaiwai@vanuatu.gov.vu , Tel: +678 22160
Request Applicant:	Mr. Antony Garae, Director, Department of Energy, Ministry of Climate Change, Government of Vanuatu; E – gantony@vanuatu.gov.vu ; Tel: +678 25201

Climate objective:

- Adaptation to climate change
- Mitigation of climate change
- Combination of adaptation and mitigation of climate change

Geographical scope:

- Community level
- Sub-national
- National
- Multi-country

If the request is at a sub-national or multi-country level, please describe specific geographical areas (provinces, states, countries, regions, etc.).

Problem statement related to climate change (up to one page):

This section should answer the question “what is the problem?” Please summarise the problem related to climate change and/or the negative impacts of climate change in the country that the request aims

to address.

Vanuatu is a small island country in the Pacific which depends almost entirely on imported fossil fuel for its energy and transport needs.

The increasing world market price of fuels has direct impact on the economy given its direct influence on the cost of electricity services and the cost of transport in Vanuatu. Obviously, this creates additional burden to the country's efforts to adapt to the adverse impacts of climate change. The continuous reliance on these fossil fuels is not only unsustainable for Vanuatu but goes against Vanuatu's national climate change mitigation ambition as reflected in its Nationally Determined Contributions, its Climate Change and Disaster Risk Reduction Policy, its National Energy Roadmap and Vanuatu's National Sustainable Development Plan.

Vanuatu imports over 56 million litres of fuel each year with diesel being the largest volume (63%). Of this, land transport has the lion share of 50% followed by electricity (38%). Consequently, it is safe to say that the largest contributor of GHG emissions in Vanuatu comes from the land transport sector.

There is very little information available on the land transport sector. The information on land transport are very fragmented due to the unclear institutional frameworks in place. It is therefore very difficult to make evidence-based decision making in terms of policy and legislative frameworks for low emission transport system. .

The public transportation system in Vanuatu is still inefficient due to no transport routing systems established. The public transportation system in Vanuatu is owned by individuals with no control from the central or provincial government. This makes the number of buses and taxis uncontrollable leading to more air pollution and increased emission of greenhouse gases.

Vanuatu lacks the policy and legislative framework to control the importation of inefficient vehicles into the country. There is no preferential treatment for the importation of energy efficient vehicles into the country. For example, the importation of hybrid vehicles and electric vehicles would be charged the same duty and other taxes just like other normal vehicles. This creates lack of interest for the introduction of energy efficient vehicles into the country and therefore no capping of GHG emissions in the transport sector. For vehicle performance and lifetime monitoring, there is nothing in place to limit the amount of GHG emissions from the transport sector.

The lack of education and awareness on the importation and use of low emission vehicles is a barrier to the rapid uptake of energy efficient vehicles into the county. Although people are cognizant on caring for the planet earth and mitigating climate change, if people are not educated on the environmental and economic benefits of using energy efficient vehicles, their choices will be influenced more on the capital cost rather than the environmental and economic benefits of low emission vehicles. Low emission vehicles are more expensive compared to other conventional vehicles but much cheaper in the long run. It is also good for the environment.

Given that there is little introduction of energy efficient vehicles in Vanuatu, the technical know-how of these new energy efficient vehicles are limited. This is a barrier to many individuals who wish to buy or import highly energy efficient and low emission vehicles.

Past and on-going efforts to address the problem (up to half a page):

This section should answer the question "what has been done or is currently being done to address the

problem?" Please describe past and on-going processes, projects or initiatives implemented in the country or region to tackle the climate problem as described above.

Vanuatu places high importance on its efforts to adapt and mitigate climate change. This is highlighted in the Environment and Climate Change Pillar of the National Sustainable Plan for Vanuatu 2017 – 2030, Vanuatu's overarching government policy.

Vanuatu is one of the first signatories of the Climate Change Paris Agreement when it was opened for signature in April 2016 and consequently submitted its Nationally Determined Contributions. The NDC aims at achieving close to 100% renewable energy generation by 2030 and with reduced dependence on diesel fuel. Similarly, the updated National Energy Roadmap has a vision of achieving 100% renewable energy by 2030 and reducing fuel dependence by 30% by 2030.

In an endeavor to become climate resilient, Vanuatu developed its own Climate Change and Disaster Risk Reduction Policy 2016 – 2030. This policy aims at building a nation whose communities, environment and economy are resilient to the impacts of climate change and disaster risks. The high dependence on imported fossil fuels is regarded as a potential disaster risk for Vanuatu.

Vanuatu has in the past developed and tried using coconut oil for power generation and transport. The technology is feasible but the issue is with the supply of coconut oil which is not sustainable and is much more expensive than using diesel fuel. It was therefore uneconomical and the project of using coconut oil for power generation and transport died out. However, it is worth reinvestigating options on how to make this technology feasible.

The Customs Department is currently taxing vehicles based on their engine size. The bigger the engine size, the higher the duty and other taxes. This is great in terms of the country's effort to encourage people to use smaller cars with smaller engines, meaning less pollution.

The Pacific Centre for Renewable Energy and Energy Efficiency is progressing a consultancy assignment to develop a regional electric mobility policy and programme in the Pacific. This will complement efforts at the national level.

Specific technology¹ barriers (up to one page):

This section should answer the questions "what are the technology barriers that hinder national efforts described above" and "how will the CTCN technical assistance complement these efforts?" Building upon the problem statement and taking into consideration the existing efforts described above, please describe the specific technology barriers encountered by the requesting applicant to identify, assess or deploy climate technology(ies) in an effort to address the problem statement. The described barriers should be within the scope of the requested CTCN technical assistance (described in the section below).

There is little to no progress in improving the climate change mitigation aspects of the land transport sector in Vanuatu. This is due to a number of barriers:

- Policy and Legislative - The lack of quantified energy efficiency target in the transport sector. This is due to lack of adequate technical information in the land transport sector. Policy makers felt reluctant to make bold decisions without reliable data and tangible evidence.

¹ "any equipment, techniques, practical knowledge and skills needed for reducing greenhouse gas emissions and adapting to climate change" (Special Report on Technology Transfer, IPCC, 2000)

- Financial Barriers – Vanuatu relies heavily on donor funding due to its fragile economy and limited income generation initiatives. There is inadequate budget allocated to make improvements in the land transport sector;
- Technical and Institutional Barriers – limited capacity and skilled personnel in country to conduct technical assessments and feasibility study on the future of low emission land transport sector in Vanuatu. The institutional arrangements need to be assessed on its effectiveness and efficiency in addressing land transport sector issues in Vanuatu
- Education and Awareness - The technological improvements in the land transport sector is only known and appreciated by few people. The majority of the people don't understand the climate change, environmental and economic benefits that derived from the use of low efficient land transport system.

The CTCN support is needed in two folds:

- i) To fund the feasibility study which will inform the Government on the missing information that is required for the development of the low emission land transport system in Vanuatu.
- ii) To develop a Simplified Approval Process (SAP) project proposal under the Green Climate Fund (GCF) for the actual implementation of the initiatives identified in the feasibility study.

Sectors:

Please indicate the main sectors related to the request:

- | | | | |
|---|---|---------------------------------------|--|
| <input type="checkbox"/> Coastal zones | <input type="checkbox"/> Early Warning and Environmental Assessment | <input type="checkbox"/> Human Health | <input type="checkbox"/> Infrastructure and Urban planning |
| <input type="checkbox"/> Marine and Fisheries | <input type="checkbox"/> Water | <input type="checkbox"/> Agriculture | <input type="checkbox"/> Carbon fixation |
| <input checked="" type="checkbox"/> Energy Efficiency | <input type="checkbox"/> Forestry | <input type="checkbox"/> Industry | <input checked="" type="checkbox"/> Renewable energy |
| <input checked="" type="checkbox"/> Transport | <input type="checkbox"/> Waste management | | |

Please add other relevant sectors:

Cross-sectoral enablers and approaches:

Please indicate the main cross-sectoral enablers and approaches

- | | | | |
|---|--|---|--|
| <input checked="" type="checkbox"/> Communication and awareness | <input type="checkbox"/> Economics and financial decision-making | <input checked="" type="checkbox"/> Governance and planning | <input type="checkbox"/> Community based |
|---|--|---|--|

- Disaster risk reduction
 Ecosystems and biodiversity
 Gender

Technical assistance requested (up to one page):

Founded on the problem statement, past/on-going efforts and technology barriers, please describe the requested technical assistance. The technical assistance should clearly contribute to mitigation or adaptation to climate change as described in the problem statement and contribute to overcome the specific technology barriers.

Within a clearly defined scope, the description of technical assistance should be structured into the following:

- Overall objective
- Anticipated groups of activities to be performed by the technical assistance
- Anticipated products to be delivered by the technical assistance.

Please note that the CTCN facilitates technical assistance and is not a project financing mechanism.

- **Overall Objective**

The study would aim at clearly identifying the feasibility of reducing GHG emissions through the implementing energy efficiency in Vanuatu's land transport sector.

The general objectives are to:

- I. Identify the policy, legislative and regulatory barriers to improving the energy efficiency in Vanuatu's land transport sector
- II. Identify the technical, financial, institutional and capacity barriers to improving the energy efficiency in Vanuatu's land transport sector
- III. Develop 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. Develop a full GCF project proposal for Vanuatu using the information and data collected from the feasibility study

- **Anticipated groups of activities to be performed by the technical assistance**

The anticipated activities to be performed by the TA would include:

- i. Desktop Study and Inception Report – this report would confirm the consultant's understanding of the assignment, his/her approach and methodology and some of his/her findings on the current status of land transport sector in Vanuatu
- ii. Mission trips, Consultations and Workshops – The TA will make two trips to Vanuatu on this assignment- one towards the start and the other towards the end of the assignment. The consultant is expected to conduct extensive consultations with key stakeholders including a series of national workshops for face-to-face meetings. All matters relating to the gender aspects of the project will be dealt with in the workshops.
- iii. Surveys and Baseline Assessments – The consultancy maybe required to conduct surveys during the assignment to confirm any uncertainty in the assignment and to establish baseline data for the project for future M&E purposes.
- iv. Exposure Visits – Given that energy efficiency in the land transport will be new for many people in Vanuatu especially when we are considering introducing electric vehicles, it is important that some of the policy makers including senior officials of the Government are aware and see for themselves the benefits of switching to electric vehicles. It is anticipated that an

exposure visit to New Zealand is conducted as part of this Technical Assistance.

• **Anticipated products to be delivered by the technical assistance.**

It is expected that the following deliverables will be the outcome of this TA:

- I. Draft Feasibility Study Report on Low Emissions in Vanuatu's land transport Sector
- II. Final Feasibility Study Report on Low Emissions in Vanuatu's land transport Sector
- III. Draft GCF Financing Proposal for the funding of the Low Emission in Vanuatu's Land Transport Sector
- IV. Consultation and Workshop Reports
- V. Trip Reports

Expected timeframe:

Please indicate the expected duration period for the requested technical assistance. Please note CTCN technical assistance is limited to a maximum duration of 12 months.

Expected Duration of the assignment will be for a period of at least 6-8 months.

Anticipated gender and other co-benefits from the technical assistance:

Please describe the activities with gender linkages as well as the anticipated gender and other co-benefits (e.g. biodiversity, economic, social, cultural, etc.) that are likely to be generated as a result of the technical assistance.

For more information, you can find guidelines on the CTCN's website here:

<https://www.ctc-n.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development>

Further reading on gender can be found on the CTCN website here:

<https://www.ctc-n.org/technology-sectors/gender>

This TA will address the gender in the following ways:

- The feasibility study will have a dedicated section on gender which will flesh out how men and women including children and other marginalized citizen of the country can participate and benefit from the project
- The consultation meetings, workshops and trainings planned under the TA will have a strong gender focus and provides equal opportunity for everyone to participate
- The education and awareness aspects of the assignment will demonstrate social and financial benefits of going into more efficient and low emission land transport in Vanuatu

Key stakeholders:

Please list the stakeholders who will be involved in the implementation of the requested CTCN technical assistance and describe their role during the implementation (for example, government agencies and ministries, academic institutions and universities, private sector, community organizations, civil society, etc.).

Stakeholder	Anticipated Role in the Assignment
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National Designated Entity, Department of Climate Change	Overall oversight of the TA
Requested Applicant, Department of Energy	Day to day management and coordination of the TA
Pacific Community's (SPC) Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE)	Technical Advice and support to the NDE and Requested Applicant. Lead in coordination and conduct of the national consultations, workshops and the arrangements of technical visits
Ministry of Infrastructure and Public Utilities (MIPU)	Coordination with its transport divisions on issues related to land transport
National Statistics Office	Supply of data regarding number of fleets, fuel usage in land transport, etc
Ministry of Tourism and Traders	Coordination with Tourism, cooperatives and Trades divisions
Vanuatu Chamber of Commerce and Industry (VCCCI)	Coordination with the business vehicle owners and other private importer of vehicles
Ministry of Internal Affairs	Coordination with Provincial and Community level leaders

Alignment with national priorities (up to 2000 characters including spaces):

Please describe how the technical assistance is consistent with national climate priorities such as: Nationally Determined Contribution, national development plans, poverty reduction plans, technology needs assessments, Low Emission Development Strategies, Nationally Appropriate Mitigation Actions, Technology Action Plans, National Adaptation Plans, sectorial strategies and plans, etc.

Reference document (please include date of document)	Extract (please include chapter, page number, etc.).
Nationally Determined Contribution (NDC)	Vanuatu's current NDC focused on transitioning to 100% renewable energy by 2030. (NDC p.4). The NDC is currently under review and one of the priorities of this updated NDC would be the inclusion of the land transport. Vanuatu realized that to address its over dependence on petroleum and increasing its ambition to reducing its GHG emissions, it needs to tackle the land transport issue which is the biggest consumer of fossil fuel and undeniably the biggest contributor of GHG emissions in the country
The Vanuatu National Energy Roadmap	As highlighted on page 21 of the National Energy Roadmap, Vanuatu aims to ensure accessible, secure, reliable and sustainable energy with objectives to: <ul style="list-style-type: none"> - achieve a greater diversity of energy sources - reduce the likelihood and impact on consumers of volatility in the prices of imported petroleum products and - Facilitate the development of energy infrastructure and energy supply chains that are resilient to natural disasters The target is to reach 100% renewable energy 2030. The report further highlighted that an initial area of focus under the NERM is to improve the efficiency of energy use in land transport (para 4, p.21)
National Sustainable Development Plan (NSDP) 2016 - 2030	Vanuatu's NSDP has a strong regard for the environment pillar and that is to ensure a pristine natural environment on land and at sea that continue to service our food, economic and ecological needs, enhance resilience

	<p>and adaptive capacity to climate change and natural disasters (NSDP, p.5&6). Some key objectives under these pillars are:</p> <p>ENV2.1. Increase access to knowledge, expertise and technology to enact our blue-green growth strategies</p> <p>ENV 2.2 Ensure new infrastructure and development activities cause minimal disturbance to the natural land and marine environment.</p> <p>ENV 2.3 Promote renewable sources of energy and promote efficient energy use</p>
Technology Needs Assessment	A Technical Needs Assessment is still under development during the development of this TA request.
National Adaptation Plans	NA
Vanuatu GCF Country Programme (2018)	<p>The Vanuatu GCF Country Programme on Annex 4.2 (p.83) provides summary of the national and sectoral policies, acts and regulations. Some of these important sectoral policies are:</p> <ul style="list-style-type: none"> - National Sustainable Development Plan 2016 – 2030 - National Climate Change and Disaster Risk Reduction Policy 2016 – 2030 - National Energy Policy 2016 – 2030 - Nationally Determined Contributions <p>A lot of emphasis from these policies has placed significant emphasis on climate change mitigation through renewable energy and energy efficiency.</p>

Development of the request (up to 2000 characters including spaces):

Please describe how the request was developed at the national level and the process used by the NDE to approve the request before submitting it (who initiated the process, who were the stakeholders involved and what were their roles?) and describe any consultations or other meetings that took place to develop and select this request, etc.

The need for improving energy efficiency in the land transport, moving towards low carbon development in the transport sector and reducing Vanuatu's dependence on fossil fuels has been reflected in many consultations at the local and national level. It was clearly reflected in a number of key documents including the Updated National Energy Policy 2016 – 2030, National Climate Change and Disaster Risk Reduction Policy 2016 – 2030 and Nationally Determined Contributions Roadmap.

The request was also presented recently PCREEE-coordinated at the Vanuatu National Energy Dialogue in Port Vila in September 2019 of which the meeting noted with some sense of urgency to proceed forward with the project.

The National Designated Entity which is the Director of the Department of Climate Change (DoCC) and the Director of Energy being the request applicant have been fully briefed and has strong support of this project.

The request has been submitted and endorsed at the Nationally Advisory Board (NAB) on Climate Change and Disaster Risk Reduction.

The NAB being mandated by the Cabinet is the supreme decision-making body with regards to climate change. The members of the NAB comprised of key government departments, the Vanuatu Chamber of Commerce and a representative of the NGO.

- Vanuatu Meteorology and Geohazards Department
- Department of Energy
- National Disaster Management Office
- Department of Climate Change
- Department of Environment
- Department of Fisheries
- Department of Forestry
- Department of Agriculture
- Department of Water
- Department of Livestock
- Department of Public Works
- Department of Foreign Affairs
- Department of Trades
- Vanuatu Chamber of Commerce and Industry (VCCI)
- Vanuatu Association of Non-Government Organization (VANGO)

These Government departments have strong linkage with climate change and the environment including the Department of Public Works being responsible for transport. The views of the private sector are being represented by the Vanuatu Chamber of Commerce, an association for private businesses and the views of the community and the NGOs are being represented by VANGO. The NAB therefore has the representation of all sectors of the country (i.e. government, private, community). The NAB makes the final recommendations to the NDE for final approval and signature on the document.

Background documents and other information relevant for the request:

- Please list all relevant documents that will help the CTCN analyse the context of the request and national priorities. Please note that all documents listed/provided should be mentioned in this request in the relevant section(s), and that their linkages with the request should be clearly indicated. For each document, please provide web-links (if available) or attach to the submission form. Please add any other relevant information as required.
Kindly refer to Reference Documents part above
- Please indicate if this request has been developed with the support of the CTCN Request Incubator. N/A

OPTIONAL: Linkages to Green Climate Fund Readiness and Preparatory Support

The CTCN is collaborating with the GCF in order to facilitate access to environmentally sound technologies that address climate change and its effects, including through the provision of readiness and preparatory support delivered directly to countries through their GCF NDA. These actions are in line with the guidance of the GCF Board (Decision B.14/02) and the UNFCCC, particularly paragraphs 4 and 7 of 14/CP.22 that addresses Linkages between the Technology and the Financial Mechanisms².

² Please see:

https://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cop22_i8b_tm_fm.pdf

The CTCN is therefore implementing some of its technical assistance using GCF readiness funds accessed via the country's NDA. Any application for GCF support, including the amount of support provided, is subject to the terms and conditions of the GCF and should be developed in conjunction with the NDA.

Please indicate whether this request has been identified as preliminarily eligible by the NDA to be considered for readiness support from the GCF.

Initial engagement: The GCF NDA of the requesting country has been engaged in the design of this request and the NDA will be involved in the further process leading to an official agreement for accessing GCF readiness support.

Advanced engagement (preferred): The GCF NDA of the requesting country has been directly involved in the design of this request and is a co-signer of this request, the signature indicating provisional agreement to use readiness national funds to support the implementation of the technical assistance.

NDA name: Mike Sam Waiwai

Date: 10th September 2019

Signature:



Monitoring and impact of the assistance:

By signing this request, I affirm that processes are in place in the country to monitor and evaluate the technical assistance provided by the CTCN. I understand that these processes will be explicitly identified in the CTCN Response Plan and that they will be used in the country to monitor the implementation of the technical assistance following standard CTCN procedures.

I understand that, after the completion of the requested assistance, I shall support CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country.

Signature:

NDE name: Mike Sam Waiwai

Date: 10th October 2019

Signature:



THE COMPLETED FORM SHALL BE SENT TO THE CTCN@UNEP.ORG

The CTCN is available to answer all questions and provide guidance on the application process.