CTCN
CLIMATE TECHNOLOGY CENTRE & NETWORK

CTCN Technical Assistance
Request Submission Form

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:	NAURU
Request title:	Feasibility Study for Sustainable Land Transport for Nauru
NDE	Reagan Moses Director Climate Change Department of Commerce, Industry & Environment(DCIE), Government Office, Republic of Nauru Email : reagan.moses@gmail.com
Request Applicant:	Midhun Ajaykumar Director of Energy Department of Commerce, Industry & Environment(DCIE), Government Office, Republic of Nauru Email : directorofenergycienauru@gmail.com | midhun.ajaykumar@naurugov.nr Mob : +674-5579297

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) :

Nauru currently has a heavy reliance on imported fossil fuels, which is used for electricity generation, transportation and cooking. The costs of energy services have gone alarmingly high due to this dependency, which results in high carbon emissions and creates a huge drain of scarce funds, which is not sustainable for the long-term development of Nauru. To reduce these emissions, there is a need to adopt for a better fuel source or an improved technology. This transition needs to be staged immediately, so that the required infrastructure and support can be developed to ensure a fully functioning transport system in Nauru.

According to IPCC 2014 mitigation report road transport is the largest contributor to GHG emissions, which in 2010 were around 7 Gt per annum increasing at around 6% per annum. Nearly all of the transport emissions (94%) come from combustion of fossil fuels and is estimated to reach 12 Gt per annum by 2050. The ITF report also suggests that motorized land transport will double by 2050 if no mitigation measures are enforced. At present, the number of motor vehicles in the world in 2010 was around 1 billion, so BAU could see this double to 2 billion vehicles somewhere between 2035 and 2050. Further, vehicle ownership is rapidly increasing in Nauru, subsequently increasing the emissions from transport sector. Reducing emissions in the transport sector is particularly difficult as is well recognized that an efficient transport system is needed for development and growing national economies. The main options which reduce emissions without limiting transport availability are the use of alternative fuels such as renewable generated electricity to power land transport vehicles.

Nauru has a total stretch of 30 kilometres of roads, of which about 80 percentage is paved. The major road circles the island, while the others connect the phosphate mines with coastal settlements. Based on the latest statistics from the Department of Transport, it is estimated that around 3400 petrol vehicles 950 diesel vehicles and approximately about 500 unregistered vehicles (including cars, small trucks, motorcycles, trucks, buses and vans) are being used in Nauru. In 2006 the total amount of petroleum fuels imported was 6,000 metric tonnes that is just over 5 million litres, of which 71.25% is used for power generation and the rest for transportation and commercial users. Based on the GHG emission scenario under the SNC it can be estimated that transport sector in Nauru contributes to approximately 17,000 tonnes of CO2 emission per annum. It is to be specifically noted that Nauru does not have a strong public transport system, and still the emissions are relatively high even without the public transport contribution. On the institutional component of the government operations, no updates/modifications or review of the transport sector policies and regulation have previously been conducted, and there are no strategic documents specific to Transport sector other than Nauru's National Sustainable Development Strategy (NSDS) 2005 -2025 (revised 2009). For example, there are no regulations related to emissions standards, or updated import regulations, vehicle performance and lifetime monitoring, in place to limit the amount of GHG emissions from the transport sector. An additional barrier to climate resilient decision-making is the lack of Transport sector baseline information, which limits effective tracking and monitoring of fuel efficiency and other climate-relevant transparency metrics.

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

The Nauru Energy Road Map (NERM) 2018 – 2020 is a key policy document relevant to the transport sector's efforts to support energy efficiency and climate change mitigation, which builds upon the energy sector development agenda laid out in the National Sustainable Development Strategy (NSDS) 2005 -2025 (revised 2009) and the National Energy Policy Framework (NEPF) of 2009.

The Government of Nauru recently updated the Nauru Energy Road Map 2018-2020(NERM) setting ambitious targets for the energy sector to enable achievement of Nauru's overall vision outlined in the priorities of the Nauru Energy Policy Framework (NEPF) and the National Sustainable Development Strategy (NSDS). During the update, a quick review of the transport sector and ways through which it can contribute to climate change mitigation, was performed. As an output of the review, it was strongly suggested that the transport sector in Nauru requires critical attention. There are no on-going projects in Nauru to address the climate change issues on the transport sector. No detailed feasibility study or gap analysis was ever conducted on the transport sector. There is an urgent need to revisit and analyse both the technical and the institutional aspects of the transport sector to identify ways it can contribute to the low carbon mobility system, as part of this feasibility study.

In September 2018, Nauru commenced its Technology Needs Assessment (TNA) project under the UNFCCC. As part of the TNA, Nauru will focus on prioritising at least six key technologies for its two mitigation sectors which include energy efficiency and waste management. There will be opportunities to harmonise the TNA work with the proposed CTCN project so that both can inform each other.

Specific technology[1] barriers (up to one page):

Progress in meeting Transport sector efficiency targets under the Nauru Energy Road Map 2018-2020 are hindered by many challenges/barriers, which include :

- Policy/regulatory and Institutional barriers – No previous reviews or updates/amendment to the transport sector policy/regulatory and Institutional framework have been conducted. Additionally, no transport sector specific roadmaps have been developed other than the national plans.
- Financial barriers – Nauru has a heavy reliance on donor funding due to its fragile economy and limited resources for income generation, which subsequently limits the budgetary allocation towards transport sector energy efficiency activities.
- Technical barriers – Limited capacity and skilled personnel in-country to conduct feasibility studies, base lining and monitoring fuel efficiency data, and identify the right technology options for Nauru.
- Awareness and cultural barriers – The residents of Nauru are not familiar with the concept of low carbon mobility, whilst having preferences for larger vehicles that are fuel inefficient and unsuitable for the local context. Hence there exists a significant lack of understanding of cultural preferences and awareness regarding the diverse benefits of the scheme to both society and the biophysical environment.

The prime aim of this request to CTCN is to support Nauru in creating an analysis report on the current Transport sector, with solutions on how to achieve the Transport sector energy efficiency goals, and

[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)*

also the details on what technology is to be adopted and how, identification of institutional gaps in the current system and solutions to support a low carbon economy. The assistance from CTCN will contribute to SDG13 Climate Action, SDG7 Affordable and Clean Energy, Nauru Nationally Determined Contribution (NDC) under the United Nations Convention on Climate Change, and the national policies of Nauru, mainly the Nauru Energy Road Map 2018-2020.

Sectors:

Please indicate the main sectors related to the request:

☐ Coastal zones	☐ Early Warning and Environmental Assessment	☐ Human Health	☐ Infrastructure and Urban planning
☐ Marine and Fisheries	☐ Water	☐ Agriculture	☐ Carbon fixation
☑ Energy Efficiency	☐ Forestry	☐ Industry	☑ Renewable energy
☑ Transport	☐ Waste management		

Please add other relevant sectors:

Cross-sectorial enablers and approaches:

Please indicate the main cross-sectoral enablers and approaches

☑ Communication and awareness	☐ Economics and financial decision-making	☑ Governance and planning	☐ Community based
☐ Disaster risk reduction	☐ Ecosystems and biodiversity	☑ Gender	

Technical assistance requested (up to one page):

Overall objectives and anticipated groups of activities to be performed by the technical assistance :

The overall objective is to reduce heavy dependence on fossil fuels within the transport sector, and transition to a low carbon, sustainable mobility system.

The technical assistance will be one of first in the transport sector,for which there are 3 actions identified. The major activities corresponding to each action are mentioned below :

Action 1 : Perform a detailed background analysis on the current Transport sector operations including a review on existing policies and regulations, technical & financial aspects.

1. Review the current vehicle and fuel consumption statistics
2. Review the current transport regulations and policies
3. Analyze fuel economy of the current fleet and develop a baseline for monitoring the progress on energy efficiency and CO2 emission reductions
4. Identify suitable low emission alternatives for fossil fueled private vehicles, based on avoid, shift and improve framework and the local context. The options will include public transport (bus, mini buses), cleaner vehicles and fuels (hybrid vehicles, hydrogen or high octane fuels or other bio fuels, LPG or CNG vehicles, etc).
5. Analyse alternative technology solutions
6. Identify gender gaps and gender specific needs in the transport sector as well as for other marginalized groups (e.g., those who are physically challenged, elderly or unemployed youth) so that the proposed solutions are inclusive.
7. Identifying general socio-economic, including cultural challenges to accessing and utilizing public transport services amongst the Nauruan community

Action 2 : Develop a roadmap for technology solutions identified

1. Identify improvements in the existing policies, regulations and existing standards
2. Identify new policies and standards - options like Fuel Economy rating/labeling, GHG Rating, emission standards, sustainable procurement standards, import regulation improvement etc.
3. Identify institutions and develop the institutional framework
4. Develop a roadmap for awareness creation and promotion of low carbon transport in Nauru

Action 3 : Capacity building on the Transport Sector Operations, with focus on Low carbon development, promotion of low emission transport mechanisms and effective monitoring.

1. Capacity building of relevant government agencies and community members on low carbon mobility, effective monitoring of fuel efficiency, emissions, transport sector management, etc.(this will provide clarity and the data necessary for the Third National Communication (TNC), Voluntary National Reviews(VNR), NERM Progress assessment, NDC Reviews etc.)
2. Consultations and focus group workshop that aim to mobilise the community to understand their needs, barriers and vision for public transport that is climate resilient in Nauru. Engaging the community including marginalised groups such as those with physical challenges, in co-defining and co-designing a public transport system at this early stage will ensure buy-in and sustainability.

Anticipated products to be delivered by the technical assistance.

1. Background analysis report on the current context of the Transport sector, including the technical, institutional/governance and socio-cultural factors
2. Identifying and publishing fuel economy data to be used as a baseline for monitoring the progress
3. Action plan for transport sector - institutional strengthening, technology solutions, public transport, transport sector management and fuel efficiency improvement
4. Capacity building programs for relevant government agencies and community members (e.g. Public servants, womens associations, physically challenged and unemployed youth, etc.) on low carbon mobility, effective monitoring of fuel efficiency, emissions, transport sector management, etc.

Expected timeframe:

Expected time duration : Mid to end of 2019

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

Traditionally, Nauru is a matrilineal society where women have a strong voice at the family and community level, but patriarchal values are evident in policy and laws. Gender equality is considered a new concept. The leadership and decision making social norms and perceptions of 'appropriate' gender roles for women and men pose an obstacle to women's full participation in leadership and decision making.

Nauru has two women members in its National Parliament, out of a total of 19 which constitute to a participation of 10.5 per cent. Nauru is a signatory to the Convention for the Elimination of all Forms of Discrimination against Women (CEDAW). The Government has emphasized gender equality and women empowerment through the establishment of a Women's Office under the Department of Home Affairs, under the only female Cabinet Minister's portfolio. About 35.6% of management and decision making positions in the Government of Nauru Public Service are held by women.

The implementation of deliverables obtained from the technical assistance has a direct effect on the daily lives of the average woman in Nauru. Improved access to transport services will help create a more inclusive society at all levels. Gender mainstreaming during the implementation of the technical assistance output ensures equal and meaningful participation by men, women, youth and physically challenged in planning & decision making of the transport sector. The proposal also aims to actively mobilise and engage women in relevant government agencies involved in transport management to gain their inputs and build capacity throughout the proposed project. Moreover, the proposal aims to actively involve women and other marginalised members of the community to gain their perspectives during defining and designing the low carbon transport system for Nauru. The sustainability of the proposed outputs will be contingent on their early buy-in and involvement through all phases of the project.

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.).

Stakeholders	Role to support the implementation of the technical assistance
National Designated Entity	Department of Commerce Industry and Environment(DCIE)
Request Applicant	Midhun Ajaykumar, Director of Energy, DCIE

Department of CIE	Berilyn Jeremiah, Secretary, DCIE
Department of Transport	Lesi Olsson, Secretary of Transport
Department of Transport	Charisma Benjamin, Acting Director for Land Transport(Regulatory)
Department of Justice and Border Control	Richard Brennan, Director of Customs
Department of Finance	John Peterson, Special Advisor to the Minister for Finance
Chief Secretary Department	Michaelangelo Dimapilis, Director of Administration
Bureau of Statistics	Ipia Gadabu, Director of Statistics
Department of Home Affairs and Culture	Joy Heine, Director of Women's Affairs
Nauru Utilities Corporation	Abraham Simpson, CEO
UNEP-DTU partnership	Technical input & guidance into the design of project, review of reports and other outputs.
Combined Women's Congregational Fellowship	Winnie Tsitsi, President
University of South Pacific(USP)	Alamanda Luti, Director, Nauru Branch

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

The Transport sector improvement and Energy efficiency in the transport sector is a common priority identified in all of our related national plans and policies. Due to budget and other limitations for implementing the same, there are only a limited number of activities performed in this segment. It is also very important to note that there have never been a review or feasibility study conducted on the transport sector before in Nauru. The output of the current technical assistance request to CTCN will act as our Road Map for Sustainable Road Transport in Nauru.

Given below are direct linkages of our national plans\policies\strategies towards the goals of CTCN.

1. Nauru Energy Road Map (NERM) 2018 – 2020
   - Linked Goal : 30% Energy efficiency by 2020
   - Action Plan for Transport sector:
     - Implementation of energy efficiency in transport
     - Investigate substitutes to diesel and petrol for transport
2. Nauru Sustainable Development Strategy 2005-2025
   - Linked Goal : Improve transport infrastructure and provide reliable and affordable public transport service
3. Republic of Nauru Climate Change Adaptation and Disaster Risk Management Framework (RONAdapt)
   - Linked Goal : Reduce Transport fuel use by ensuring mobility
4. Nauru NDC
   - Climate Change Adaptation priority on Energy security
   - Climate Change Mitigation priority in reducing fossil fuel imports by using indigenous

renewable energy and implementing energy efficiency measures.

5. National Energy Policy Framework (NEPF)
   - Linked Strategy : Reduce the dependency of fossil fuels
6. Technology Needs Assessment(TNA) – The TNA project in Nauru started in late 2018 which prioritises at least six key technologies for its two mitigation sectors which include energy efficiency and waste management. The Statement of Works section under the Country Cooperation Agreement (Sept 2018) provides details about the same
7. Nauru is also a party to the Conference Of Parties (COP) and is committed to implementing actions to reduce GHG emissions in support of climate change efforts.
8. Nauru is also committed to providing the National communications. We are currently working with Subbarao Consulting Services Ltd, for the Third National Communications (TNC).
9. For the first time , we would be a part of the upcoming Voluntary National Reviews(VNR) in 2019

Reference document (please include date of document)	**Extract** (please include chapter, page number, etc.).
NERM	Nauru Energy Road Map (NERM) 2018 – 2020 – Page 9, 12 & 16
NSDS 2005-2025	Nauru Sustainable Development Strategy 2005-2025 – Page : 49
Nauru NDC	Nauru NDC (last page, under the heading : Fairness, Equity and Ambition)
RONAdapt	Republic of Nauru Climate Change Adaptation and Disaster Risk Management Framework (RONAdapt) – Page
NEPF	National Energy Policy Framework (NEPF) – Page 14, 16
TNA Nauru	Country Cooperation Agreement (Sept 2018) refer to Annex A Statement of Works

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

The CTCN Technical Assistance request was initiated by the Energy Division under the Department of Commerce, Industry and Environment (DCIE). The reviewed and updated Nauru Energy Road Map (NERM) 2014 – 2020 clearly defines the goal to have a 30% improvement in energy efficiency in the residential, commercial and government sectors. Energy Efficiency in the Transport sector is one of the six key action plans identified under the NERM.

The Government of Nauru Cabinet officially endorsed the updated NERM 2018 – 2020 in Feb 2018. During the inception stage of the NERM, there were rigorous consultations conducted with the key stake holders, who are also part of the NERM Coordination Committee. The Department of Transport is a key stakeholder and member of the Coordination Committee for implementing the targets of the NERM 2018 - 2020. Given below are the committee members.

- Department of Commerce, Industry and Environment (DCIE)
- Department of Transport
- Nauru Bureau of Statistics, Department of Finance and Economic Planning
- PAD, Department of Finance and Economic Planning

- Nauru Utilities Corporation (NUC)

The same idea to proceed with requesting for technical assistance on the transport sector was raised during the discussions as part of the Technology Needs Assessment (TNA) mission with UNEP-DTU staff during August 2018 as well.

In addition to the above, there were consultations held with the Secretory – DCIE, Secretory-Department of Transport and Manager – Vehicle Registrations, Department of Transport. This Project Proposal was then officially presented to the cabinet, and was successfully approved on Friday, 4th January, 2019 (a copy of the cabinet resolution is attached).

Background documents and other information relevant for the request:

- Nauru Energy Road Map (NERM) 2018 – 2020
- Nauru Sustainable Development Strategy 2005-2025
- Nauru NDC
- Republic of Nauru Climate Change Adaptation and Disaster Risk Management Framework (RONAdapt)
- TNA - Country Cooperation Agreement (Sept 2018)

This request has been developed with the support of the CTCN Request Incubator.

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 Mechanisms[2].

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.

[2] Please see: https://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cop22_i8b_tm_fm.pdf

☐ 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:

Date:

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: Department of Commerce, Industry and Environment

Date: 7th January, 2019

Signature:

Reagan Moses
Director Climate Change
Department of Commerce, Industry & Environment(DCIE),
Government Office, Republic of Nauru
Email : reagan.moses@gmail.com

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.