CTCN
CLIMATE TECHNOLOGY CENTRE & NETWORK

Technical Assistance Response Plan – Terms of Reference

Country	**Tanzania**
Request ID#	**2021000054**
Title	Developing a National Framework for deploying and scaping up E-Mobility (EM) in Tanzania
NDE	Dr. Gerald Majella Kafuku Acting Director, Centre for Development and Transfer of Technology Tanzania Commission for Science and Technology P.O. Box 4302 Dar es Salaam, Tanzania Email: kafukugm@gmail.com, gerald.kafuku@costech.or.tz Phone: +255766604977
Proponent	Mr. Daniel M. Werema Principal Economist Ministry of Works and Transport P.O Box 638 Dodoma, Tanzania Email: daniel.werema@uchukuzi.go.tz Phone +255688244673/735244673 Eng. Emilian Nyanda Ministry of Energy P.O. BOX 2494, 40474 Dodoma Email: emilian.nyanda@nishati.go.tz Phone: +255754438231 Mr. Isack E. Samalema Vice President's Office Division of Environment P.O. Box 2502, 40406 Dodoma Email: isack.samalema@vpo.go.tz Phone: +255767357235

Summary of the CTCN technical assistance

Transportation is a key enabling sector for Tanzania's economy. However, investments in transport infrastructure, especially in upgrading vehicle fleets have been lacking in the past decades. The landscape of road transportation is diverse with formal and informal transport operators besides individual motorization. Most vehicles use fossil fuels and contribute to increased GHG emissions and air pollution.

In its updated Nationally Determined Contributions (NDCs) from July 2021, Tanzania has prioritized both, energy and transportation, as leading mitigation sectors. The promotion of low emission transport systems through the deployment of mass rapid transport systems and investments in, inter alia, road infrastructures, as well as the accelerated transition to renewable energy sources is at the core of the country's ambitions. However, the transition towards transport electrification is a complex process, characterized by the interplay of vehicle adoption, charging network deployment and the

required enabling environment with policies, financing and capacity building, commonly requiring deep multi-sectoral cooperation.

This technical assistance aims at developing an effective national framework for deploying and scaping up e-mobility in Tanzania. This includes the development and adoption of national electric vehicle policies, the market development through clear implementation frameworks adapted to the three (3) cities Dar es Salaam, Mwanza and Dodoma, and the delivery of capacity building activities. These three cities are chosen for their potential for fast growth; potential for piloting the green cities concept; as well as having the large number of residents who mostly commute via road transport using small commuter three-wheelers and two-wheelers.

Agreement:

National Designated Entity to the UNFCCC Technology Mechanism
Name: *Dr. Gerald Majella Kafuku*
Title: *Acting Director, Centre for Development and Transfer of Technology, Commission for Science and Technology*

Date: May 21, 2022

Signature: Gerald.

Proponent 1 (signature of the Proponent is optional)
Name: *Mr. Daniel M. Werema*
Title: *Principal Economist, Ministry of Works and Transport*

Date: 1/6/2022

Signature:

Proponent 2 (signature of the Proponent is optional)
Name: *Eng. Emilian Nyanda*
Title: *Ministry of Energy*

Date:

Signature:

Proponent 3 (signature of the Proponent is optional)
Name: *Mr. Isack E. Samalema*
Title: *Vice President's Office Division of Environment*

Date:

Signature:

UNFCCC Climate Technology Centre and Network (CTCN)
Name: Rose Mwebaza
Title: CTCN Director

Date: 02-06-2022

Signature:

1. Background and context

Transportation is an important enabling sector for the Tanzania's economy. However, investments in transport infrastructure, especially in upgrading vehicle fleets have been lacking in the past decades. The primary transport means for goods and people is by road. The common mode of transport in these areas are motor vehicles and motorized 2- and 3-wheeled vehicles. There is also a strong presence of informal transport operators mainly made up of mini-bus operators, moto-taxi and 3-wheeler operators. Most vehicles use fossil fuel and contribute to increased GHG emissions and air pollution. In cities, due to rapid urban growth and growing individual motorization, the transport system suffers from chronic congestion. In Dar es Salaam for example, which is ranked as the 3rd fastest growing city in Africa and the 9th fastest in the world, apart from the Bus Rapid Transport, public transport depends on a large fleet of privately-owned mini-buses, which are sometimes unroadworthy and contribute to congestion and air pollution.

In its updated Nationally Determined Contributions (NDCs) from July 2021, Tanzania has prioritized both, energy and transportation, as leading mitigation sectors. The promotion of low emission transport systems through deployment of mass rapid transport systems and investments in, inter alia, road infrastructures, as well as the accelerated transition to renewable energy sources is at the core of the country's ambitions. Furthermore, the National Transport Policy envisions the transport sector to have efficient and cost-effective transport services to all segments of the population and sectors of the national economy with maximum safety and minimum environmental degradation. Electric-Mobility (EM) is currently recognized as a viable and attractive option that can help countries redress the adverse issues faced with conventional transportation systems. Tanzania also aims to leverage on e-mobility technologies to enjoy benefits such as reduced energy imports, green growth and local job creation.

Tanzania has put up policies and strategies that aim at promoting the use of renewable energy technologies in various sectors of the economy. These include the National Transport Policy in 2003, The NDCs in 2021, National Climate Change Strategy, the National Energy Policy in 2015, the Science and Technology Policy in 1996, among others. However, from the government perspectives, there is no specific initiative or effort that directly focuses on e-mobility besides the electricity-powered Standard Gauge Railway which is intended to replace the old, inefficient metre-gauge railway system.

This technical assistance aims at developing an effective national framework for deploying and scaping up e-mobility in Tanzania. This includes the development and adoption of national electric vehicles policies, regulations, that support market transformation through clear implementation frameworks adapted to the three (3) cities Dar es Salaam, Mwanza and Dodoma, and the delivery of awareness and capacity building activities. These three cities are chosen for their potential of fast growth as well as having large number of residents who mostly commute using road transport using commuter buses, three wheelers and two wheelers.

Dar es Salaam is the largest business city in Tanzania with a population of approximately 7 million people. The city has road network of 4,858.11 Km which includes the trunk and regional road 601.21

Km and districts and feeder roads 4,256.9 Km[1]. Out of these Distict and feeder roads, 86% are gravel and soil roads, while 14% are tarmac roads. Commuter buses (Daladala) is the main public transport used by many residents in Dar Es Salaam City. There are currently significant number of three and two wheelers which have a great role in moving residents from main roads to streets with mostly gravel and soil roads.

On the other hand, Dodoma is the capital city of Tanzania with a population of 2,647,410 people as of 2020 with an annual growth rate of 3.1[2]. The city has road network of 1524.1 km of which 48.6 km are paved, 191.7 km are gravel and 283.8 km are earth[3]. Also, commuter buses, three and two wheelers are mostly used by residents as means of primary transport.

Similarly, Mwanza city is the second largest commercial city of Tanzania located in the lake zone with a population of 3,826,573 people as of 2020 with an annual growth rate of 4.1[4]. Also, there is significant dependence of commuter buses, three and two wheelers as means of primary transport.

2. Problem statement

The transition towards transport electrification is a complex process, characterized by the interplay of vehicles adoption, charging network deployment and the required enabling environment with policies, regulations, financing and capacity building, commonly requiring deep multi-sectoral cooperation.

Tanzania particularly faces the following problems and barriers:

- Lack of detailed analysis on market and demand: There is lack of analysis on the market for electric vehicles and the users' needs including modes of transport, travel times and travel behaviors, as well as the market potential of electric vehicles in Tanzania
- Lack of charging infrastructure: There is need to put up mechanisms and supply of charging infrastructure from both grid electricity and renewable energy sources such as solar PV. There are currently no public and only few private charging stations (like of Ngorongoro national park and e-motorcycles in Dar es Salaam), and no regulations on Access, Standards and Connection.
- Lack of integrated plans: Penetration of electric vehicles will require coordinated actions across ministries, agencies, national policies and development plans which are linked to the transport sector. This will help sending a strong policy signal for market players.
- High upfront cost of up-taking e-mobility: A range of supporting policy incentives and concessions to mitigate market barriers, in order to finance the scale-up of electric vehicles and charging infrastructure.
- E-mobility knowledge gap: Public knowledge and understanding on e-mobility options, cost of obtaining access to the use of the stations as well as fabrication designs and know how especially in conversion of two and three wheelers, is very limited.
- Absence of supporting system: The deployment of electric vehicles is limited by the availability of sale services such as maintenance, repair whose skills needs to be enhanced.

[1] Dar es Salaam City Strategic Plan 2019-2024
[2] National Bureau of Statistics: Tanzania in Figures 2020
[3] https://dodomacc.go.tz/storage/app/media/uploaded files/DODOMA%20MUNICIPAL%20PROFILE.pdf
[4] National Bureau of Statistics: Tanzania in Figures 2020

These barriers have so far limited the deployment and uptake of electric vehicles in Tanzania. This technical assistance aims at overcoming these barriers, as detailed in the Logical Framework.

3. Logical Framework for the CTCN Technical Assistance:

(Guidance: Please note that multiple activities lead to one Output, and multiple Outputs lead to one Outcome. There can be several Outputs, but only one Outcome description capturing the CTCN technical assistance. Deliverables are the products or services to be delivered to the NDE/Proponent/CTCN based on the Activities and the Outputs.)

	Month																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
***Objective**:* The objective of this technical assistance is to develop and introduce national electric vehicles policy and to support EV market development through targeted EV implementation frameworks and capacity building																		
Outcome: This technical assistance aims to enhance institutional capacity to support the deployment and scale-up of electric vehicles in Tanzania for the transition to a sustai transport system.																		
Output 1: Development of implementation planning and communication documents																		
Activity 1: *All implementers must undertake the following activities at the beginning and at the end of the CTCN technical assistance.* i) A detailed work plan of all activities, deliveries, outputs, deadlines and responsible persons/organisations and detailed budget to implement the Response Plan. The detailed work plan and budget must be based directly on this Response Plan; ii) Based on the work plan, a monitoring and evaluation plan with specific, measurable, achievable, relevant, and time-bound indicators used to monitor and evaluate the timeliness and appropriateness of the implementation. The monitoring and evaluation 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 (please refer to item iv below and section 14 in the Response Plan); iii) A two-page CTCN Impact Description formulated in the beginning of the technical assistance and update/revised once the technical assistance is fully delivered (a template will be provided); iv) A Closure and Data Collection report completed at the end of the technical assistance (a template will be provided).																		
Deliverable 1: i) Detailed work plan ii) Monitoring and evaluation plan iii) CTCN Impact Description iv) Closure and Data Collection report	X X X																	X X

Output 2: Market assessment to establish a baseline and evaluate the market potential for electric vehicles
Activity 2.1: Kick-off meeting Organize a kick-off meeting with key stakeholders, including representatives from the Ministry of Works and Transportation, Ministry of Energy, Vice President's Office, CTCN National Designated Entity (NDE), CTCN, DART and others. The objective of the kick-off meeting is to introduce project stakeholders, present the detailed implementation plan and agree on the next steps. The kick-off meeting will be held in-person. International consultants will join virtually. A government institution venue will be made available at reduced cost. A maximum of 10 individuals will participate in the kick-off meeting.
Activity 2.2: Conduct of an EV market assessment Conduct a low emission vehicle market readiness assessment to assist in understanding the status of Tanzanian market in preparation for the delivery of a National Electric Vehicles Policy. This market assessment involves research methods such as desk research (i.e. preparatory and secondary research) and participant approaches (i.e. in-depth interviews and focus groups with stakeholders) as an input into policy development. This will include an infrastructure analysis (energy and charging infrastructure and grid reliability for the three (3) cities Dar es Salaam, Mwanza and Dodoma), assessment of vehicle availability (registered and unregistered modes of transport, types of vehicle, including public transport: mass rapid transport system/bus/ mini-van/ taxi/ three-wheeler; and private transport: four wheelers, two wheelers, etc.), and identification of key stakeholders along the e-mobility value chain (fabricators, artisans, part suppliers, consumers, etc.). The market assessment will also identify the potential in different sectors and type of vehicles including the energy requirement and associated infrastructure. Furthermore, barriers will be identified, such as energy availability and the reliability of the charging infrastructure. A financing gap analysis will be part of this activity as well. The market assessment will also include a policy gap analysis, evaluating existing transport policies (including emission standards, fuel quality etc.), renewable energy policies and electricity generation plans, as well as policies related to fiscal incentives for vehicle purchase, public procurement of transport vehicles and steps to decarbonize the public transport fleet. Barriers to the introduction or improvement of such policies will be identified.

Finally, gender and youth aspects should be considered in the market assessment. Based on these gap analyses, the market potential of EVs with appropriate infrastructure, financing and policy options will be evaluated.	
Deliverable 2: Deliverable 2.1: Kick-off meeting report Deliverable 2.2: Market assessment report	X X
Output 3: Development of national electric vehicles policy	
Activity 3.1: Formulation of a Policy Working Group Identify major stakeholders for e-mobility in Tanzania through consultative process and establish a Project Working Group (PWG) assembling key strategic stakeholders for the design and implementation of the Electric Vehicles Policy and related business models and projects in Tanzania. Representatives from the public sector, local governments of the three (3) cities Dar es Salaam, Mwanza and Dodoma, private sector, academia, and civil society should be included in the PWG. A maximum of 20 individuals will be selected as part of the PWG. The PWG will be co-chaired by the Ministry of Works and Transport, the Ministry of Energy and the Vice President's Office Division of Environment. The Secretariat will be handled by the CTCN's National Designated Entity (NDE). A 2-days PWG kick-off meeting will be organized with a presentation of and discussions on the findings of the market assessment on Day 1, and the policy development kick-off on Day 2. The PWG kick-off meeting will be held in-person at a government institution venue made available at reduced cost. The PWG should have a fair gender distribution.	
Activity 3.2: Conduct of regular PWG meetings The PWG will meet on a quarterly basis (month 6, 9, 12, 15, 18). The PWG will be in charge of endorsing the final versions of the Electric Vehicles Policy, implementation roadmap, business models and GCF concept note as defined in subsequent activities. Out of the five scheduled quarterly meetings, three will be held in-person and	

the others will be held virtually. A government institution venue will be made available at reduced cost. For virtual meetings, no DSA will be paid to participants.																			
Activity 3.3: Development of the national electric vehicles policy Develop the Draft National Electric Vehicles Policy and Public Procurement Framework, including • Objectives • EV (2-wheelers, 3-wheelers, 4-wheelers) and mass rapid transport system targets, as well as charging infrastructure targets • Policy incentives for EV including new vehicles • Registration of electric vehicles • Temporary allowance for used EV import • Conversion of existing vehicles to use electricity • Incentives for charging infrastructure and battery swapping stations • Environment aspects of EV such as e-waste management, battery recycling and others A national stakeholder consultation on the recommended Draft National Electric Vehicles Policy will be organized. This consultation will bring together representatives from the industry, importers, consumer groups, manufacturers, regulatory authorities and academia. The consultation will last 2 months, including a national stakeholder consultation workshop. The 1-day consultation workshop will host a maximum of 30 individuals. A government institution venue in Dodoma will be made available at reduced cost. The final National Electric Vehicles Policy and Public Procurement Framework will be endorsed by the PWG for subsequent submission to the Cabinet of Tanzania for consideration and adoption. The Ministries of Works and Transportation, Energy and the Vice President's Office will facilitate the adoption and entry into effect.																			
Deliverables 3: Deliverable 3.1: Terms of reference of the Project Working Group (PWG), list of PWG members, PWG kick-off workshop report, including agenda and (gender disaggregated) list of participants. Deliverable 3.2: Quarterly PWG meeting reports including agenda and (gender disaggregated) list of participants Deliverable 3.3: Final and adopted National Electric Vehicle Policy and Public Procurement Framework; National consultation workshop report				X								X							X

Output 4: Development of EV implementation framework and business models
Activity 4.1: Feasibility study for EV market development Assess and undertake a technical and economic feasibility for the three (3) cities Dar es Salaam, Mwanza and Dodoma with regards to the local adoption and scale-up of EVs and a detailed cost-benefit-analysis of EV technology supports and measures as identified in Tanzania's National Electric Vehicles Policy (including infrastructure, vehicle types, specifications, incentives, etc.).
Activity 4.2: Identification of business models for promoting use of EVs Identify and develop business models for the promotion of using electric vehicles in the three (3) cities Dar es Salaam, Mwanza and Dodoma. One business model per city should be developed. The business models will detail the products/services, the financing model, and the responsibilities of stakeholder groups. Private sector partners and other potential development partners should be identified. The identification, definition and validation of business models and schemes should be conducted in close communication with local stakeholders from the public and private sector and the civil society.
Activity 4.3: Development of the EV implementation and market readiness framework Develop an implementation and market readiness framework at a national level and for the three (3) cities Dar es Salaam, Mwanza and Dodoma for the adoption and scale-up of electric vehicles. The implementation and market readiness framework should include recommendations on policy implementation, infrastructure, vehicle types, and incentives, as well as clear roles and responsibility of stakeholder groups with a special emphasis on the private sector, timelines and financing needs and options. Specific recommendations on gender and youth should be provided. Actions should be identified based on the previous market assessment as well as by integrating international experience, and should be categorized as short-, mid-, and long-term.
Activity 4.4: Development of a GCF concept note for one business model overall Develop one (1) GCF concept note drawing from previously identified business models and project ideas that accelerate the adoption and scale-up of electro-mobility in Tanzania.

As per GCF Concept Note Template, the concept notes will include a project summary, detailed project information, indicative financing/cost information and supporting documents that may include a theory of change, economic and financial models, pre-feasibility studies, evaluation reports from previous projects, and/or results of environmental and social risk screening.																		
Deliverables 4: Deliverable 4.1: Feasibility study for EV market development Deliverable 4.2: Three business model briefs Deliverable 4.3: EV implementation and market readiness framework Deliverable 4.4: GCF concept note											X		X		X X			
Output 5: Capacity building and awareness creation on electric vehicles																		
Activity 5.1: Development of communication material and strategy Develop a national communication strategy and material for electric vehicles in Tanzania. This includes brief factsheets on the basics of e-mobility and its impact, adapted to different stakeholders including public sector, private sector (stakeholders along the e-mobility value chain), and the general public.																		
Activity 5.2: Conduct of capacity building workshops Organize three (3) workshops on the National Electric Vehicles Policy targeted for public and private sector institutions, academia, civil society organizations, and NGOs that are related to e-mobility. The three (3) workshops will be held respectively in the cities Dar es Salaam, Mwanza and Dodoma. The workshop will host a maximum of 30 individuals per city. The objective of the workshops will be to introduce the developed policy and framework, to create awareness about the benefits of electro-mobility amongst the various stakeholders, and to promote possibilities for partnerships and projects between stakeholders. This may include collaboration between public and private sector entities to pilot low-carbon transportation technologies at local level in line with developed policies and frameworks. Gender equality and social inclusion will be promoted. A pre- and post-event survey will measure the impact of the workshop and expectations on the participants.																		

Deliverables 5: Deliverable 5.1: Communication strategy and material Deliverable 5.2: Workshop material and report, including agenda and (gender disaggregated) list of participants, as well as pre- and post-event survey																	X	X

4. Resources required and itemized budget:

Please provide an indicative overview of the resources required and itemized budget required to implement the CTCN technical assistance, including for M&E-related activities, using the table below. Important to note that minimum 1% of the budget should explicitly target gender specific activities related to the technical assistance (please see section 10 for further information on gender). Once the Response Plan is completed, a Response Implementation partner(s) will be selected by the Climate Technology Centre (CTC). A detailed activity-based budget for the CTCN assistance will be finalized by the CTCN and selected Implementer.

Activities and Outputs	**Input: Human Resources** *(Title, role, estimated number of days)*	**Input: Travel** *(Purpose, national vs. international, number of days)*	**Inputs: Meetings/events** *(Meeting title, number of participants, number of days)*	**Input: Equipment/Material** *(Item, purpose, buy/rent, quantity)*	**Estimated cost** *Please accumulate the costing at Activity and Output level and provide an estimated costing range for each activity and the total Response Plan*	
					Minimum	**Maximum**
Output 1: **Development of implementation planning and communication documents**	*IE1: 5 days* *NE1: 5 days*				***USD 3,500***	***USD 3,850***
Activity 1.1: Formulation of i) Detailed work plan, ii) Monitoring and					*USD 3,500*	*USD 3,850*

evaluation plan, iii) CTCN Impact Description, iv) Closure and Data Collection report.						
Output 2: Market assessment to establish a baseline and evaluate the market potential for electric vehicles	*IE1: 12 days* *IE2: 16 days* *IE3: 6 days* *NE1: 22 days* *NE2: 6 days* *NE3: 3 days*				***USD 27,195***	***USD 29,914.50***
Activity 2.1: Kick-off meeting		*Local travel for NE1, NE2 and NE3, as well as 10 individuals who participate in the kick-off meeting.*	*Project kick-off meeting* *In-person with key stakeholders. National will join in-person and international consultants will join virtually.*		*USD 5,795*	*USD 6,374.50*
Activity 2.2: Conduct of an EV market assessment					*USD 21,400*	*USD 23,540*
Output 3: Development of national electric vehicles policy	*IE1: 25 days* *IE2: 30 days* *IE3: 17 days* *NE1: 35 days* *NE2: 12 days* *NE3: 12 days*				***USD 80,845***	***USD 88,929.50***
Activity 3.1:		*International travel for*	*2-days PWG kick-off*		*USD*	*USD*

Formulation of a Policy Working Group		*IE1, IE2 and IE3 with a 2 days stay.* *Local travel for NE1, NE2 and NE3, as well as 20 PWG members.*	*meeting.* *In-person meeting with PWG members (maximum 20 individuals). National and international consultants will join in-person.*		*19,160*	*21,076*
Activity 3.2: Conduct of regular PWG meetings		*Local travel for NE1, NE2 and NE3, as well as 20 PWG members.*	*Quarterly PWG meetings.* *Three of the five scheduled quarterly meetings, only one will be held in-person and the others will be held virtually. For virtual meetings, no DSA will be paid to participants.*		*USD 21,790*	*USD 23,969*
Activity 3.3: Development of the national electric vehicles policy		*International travel for IE1, IE2 and IE3 with a 2 days stay.* *Local travel for NE1, NE2 and NE3.*	*National stakeholder consultation workshop.* *In-person workshop with national stakeholders (maximum 30 individuals). National and international consultants will join in-*		*USD 39,895*	*USD 43,884.50*

			person.			
Output 4: Development of EV implementation framework and business models	*IE1: 37 days* *IE2: 37 days* *IE3: 17 days* *NE1: 45 days* *NE2: 9 days* *NE3: 7 days*				***USD 57,700***	***USD 63,470***
Activity 4.1: Feasibility study for EV market development					*USD 21,500*	*USD 23,650*
Activity 4.2: Identification of business models for promoting use of EVs					*USD 9,900*	*USD 10,890*
Activity 4.3: Development of the EV implementation and market readiness framework					*USD 21,300*	*USD 23,430*
Activity 4.4: Development of a GCF concept note for one business model overall					*USD 5,000*	*USD 5,500*
Output 5: Capacity building and awareness creation on electric vehicles	*IE1: 20 days* *IE2: 15 days* *NE1: 25 days* *NE2: 10 days* *NE3: 35 days*				***USD 57,475***	***USD 63,222.50***
Activity 5.1: Development of					*USD*	*USD*

communication material and strategy					*10,000*	*11,000*
Activity 5.2: Conduct of capacity building workshops		*International travel for IE1 and IE2 with a 5 days stay.* *Local travel for NE1, NE2 and NE3 as well as 10 additional participants for 3 days.*	*Capacity buildings workshops.* *Three (3) workshops will be held respectively in the cities Dar es Salaam, Mwanza and Dodoma in-person. The workshop will host a maximum of 30 individuals per city. No DSA or travel costs will be covered for the participants. National and international consultants will join in person.*		*USD 47,475*	*USD 52,222.50*
Estimated range of costing for the entire Response Plan					***USD 226,715***	***USD 249,386.50***

5. Profile and experience of experts

Based on the required Human Resources identified in section 4 (Resources required and itemized budget) please provide a description of the required profile of all involved experts for the implementation of the CTCN Response Plan.

Experts required	Brief description of required profile
International experts	

Team leader and climate change expert (IE1)	Essential: • Master's degree in science/technology, finance, project management/ climate change adaptation and mitigation/ or another relevant field • Minimum 10 years of relevant expertise; expertise in climate change mitigation work with a focus on policy development, project management, and high-level negotiations. • Previous experience in the development of policies in the area of urban transport and mobility • Language skills: excellent command of oral and written English. Highly desirable: • Working experience in the Southern African region • Familiarity with the UN process, market assessment methodology and policy actions planning
International Transportation Policy Expert (IE2)	Essential: • Master's degree or higher in urban transport, urban studies, civil engineering, environment or related field • 10 years' experience of providing technical and policy services in urban transport and mobility with an environmental and climate perspective • Experience of developing national plans related to electro-mobility/ climate mitigation projects at a country or regional level • Experience of engaging with multiple actors in the development of initiatives aimed at building regional/national capacity • Experience in conducting detailed market assessments and data collection in the area of transport and mobility • Working experience in the Southern African region • Language skills: excellent command of oral and written English Highly desirable: • Understanding of wider policy measures and drivers to overcome barriers to the deployment of technologies and sectors for climate change mitigation and adaptation. • Knowledge of enabling environments

International Finance Expert (IE3)	• University degree in accounting, economics or finance is required and further studies on public service, building, transportation or infrastructure finance desirable • Minimum 7 years of experience in financial mechanisms and procedures, preferably in relation to government work • Knowledge and experience in working with government and private sector. • Knowledge and experience in designing and implementing loan applications and programmes as well as funding proposals. • Language skills: excellent command of oral and written English Highly desirable: • Working experience in the Southern African region
National experts	
National Transportation Policy Expert (NE1)	• Formal academic qualification in urban transport, urban studies, civil engineering, environment or related field • 7 years' experience of providing technical and/or policy services in urban transport and mobility in Tanzania • Experience in conducting detailed market assessments and data collection in the area of transport and mobility • Knowledge of enabling environments in Tanzania • Language skills: excellent command of oral and written English
Gender Expert (NE2)	• Formal academic qualification in gender studies or other discipline with focus on the field of gender issues in Southern Africa (Tanzania desirable) • At least 7 years working experience with gender mainstreaming issues in Southern Africa • knowledge and experience of gender mainstreaming in climate change adaptation and mitigation, experience in the mobility and transport sector is a plus • Language skills: excellent command of oral and written English
Communications Expert (NE3)	• University degree in communications, journalism or other closely related field

	• At least 7 years professional experience in the field of communications, ideally in the area of transportation and mobility • Proven expertise in developing and implementing communication strategies and material • Experience with preparing and conducting capacity building workshops involving multiple stakeholders • Language skills: excellent command of oral and written English

6. Intended contribution to impact over time

GHG emissions from energy and mobility account for the largest share of national emissions in Tanzania. Significant future growth is forecasted as the demand for vehicles and transport services increases with economic growth, particularly for passenger cars. The intended contribution of this technical assistance is to:

- Create an effective policy and market transformation environment for the deployment and uptake of electric vehicles
- Address the legal and regulatory barriers for the adoption of electric vehicles, charging infrastructure, and linked business models
- Provide affordable and low emission transport
- Reduce rising levels of CO2 and SO2, and particulate matter in ambient air
- Contribute to achieving the country's NDCs and the Paris Agreement objectives

7. Relevance to NDCs and other national priorities

The Government of Tanzania ratified the UNFCCC, Kyoto Protocol and the Paris Agreement, and subsequently submitted its Nationally Determined Contribution to the UNFCCC in 2015 and an updated NDCs in 2021. The updated NDCs recognizes energy and transportation as key mitigation sectors, prioritizing the promotion of low emission transport systems through deployment of mass rapid transport systems and investments in, inter alia, road infrastructures, as well as the accelerated transition to renewable energy sources.

Furthermore, the National Transport Policy from 2003 already envisiones the transport sector to have efficient and cost-effective transport services to all segments of the population and sectors of the national economy with maximum safety and minimum environmental degradation.

Lastly, the Tanzania National Energy Policy from 2015 foresees the sustainable development and utilization of energy resources to ensure optimal benefits to Tanzanians and contribute towards transformation of the national economy.

8. Linkages to relevant parallel on-going activities:

Tanzania has put up a series of policies and strategies that aim at promoting the use of renewable energy technologies in various sectors of the economy. These include The National Transport Policy, The Nationally Determined Contributions, National Climate Change Strategy, The Energy Policy, The Science and Technology Policy and many more. However, there is no specific initiative or effort that directly regulates electric vehicles.

At an urban level, Dar es Salaam authorities have shown their interest in electric mobility by taking part in the EU-funded project SolutionsPlus. The project encompasses demonstration actions which cover electric tuk-tuks in Dar es Salaam. There are also other sporadic initiatives by the private sector in promoting the EVs which face policy and regulatory hurdles.

9. Anticipated follow up activities after this technical assistance is completed:

This technical assistance involves the development of a National Electric Vehicle Policy as well as

the support in market development for the deployment and uptake of electric vehicles. This will include the development of implementation frameworks and the identification and preparation of business models and a concept note, and it will be supported through a communication strategy and capacity building workshops.

It is anticipated that, once delivered, this technical assistance will positively impact Tanzania's economy by shaping an EV Policy and building the enabling regulatory and market development measures and instruments necessary to deploy sustainable transport measures so to curb emissions growth.

In details, the technical assistance will include the following follow-up activities:

- Adoption of National Electric Vehicles Policy
- Operationalization of implementation framework at national and urban level in Dar es Salaam, Mwanza and Dodoma; and plans for future adoption of the models in other urban areas
- Introduction of financing mechanisms for the establishment of charging infrastructure and the purchase of electric vehicles / retrofitting of existing vehicles
- Development of charging infrastructures
- Implementation of business models by public sector, private sector or through private-public-partnerships
- Submission and implementation of GCF concept note
- Roll-out of multi-stakeholder communication campaign on e-mobility

10. Gender and co-benefits:

Imbedded in design of the activities:	This technical assistance prioritizes gender and co-benefits with the following actions: • Support gender sensitive policy planning and budgeting across all activities, ensuring that it adequately incorporates gender considerations • Ensure equal gender representation in key decisions • Advocate for equity in all policy development and implementation • Support interventions aimed at increased participation of vulnerable groups in the deployment of e-mobility • Develop and implement methods to monitor the increase of opportunities for employment for the female employable population • Support initiatives for training and skills development to achieve objectives of women's economic empowerment, especially in capacity building workshops on e-mobility
Gender and co-benefits intended as result of the activities:	Based on the above interventions to prioritize gender and co-benefits, the following results are expected from the technical assistance: • Gender sensitive National Electric Vehicles Policy that increases opportunities for women involvement and employment • Enhanced skills of women in the area of e-mobility through capacity building interventions

11. Main in-country stakeholders in implementation of the technical assistance activities:

Using the table below, please list and describe the role of in-country stakeholders, participants and beneficiaries who will be involved in or directly consulted during implementation of the assistance.

In country stakeholder	Role in implementation of the technical assistance
National Designated Entity (Centre for Development and Transfer of Technology, Commission for Science and Technology)	Technical assistance coordination, stakeholder engagement, secretariat of the PWG, policy shaping and development
Ministry of Works and Transportation	Technical assistance coordination, stakeholder engagement, data and research input, transport prioritization, co-chair of the PWG, policy shaping and development
Ministry of Energy	Technical assistance coordination, stakeholder engagement, data and research input, co-chair of the PWG, policy shaping and development, promotion of the use of renewable energy in the transport sector
Vice President's Office Division of Environment	Technical assistance coordination, stakeholder engagement, co-chair of the PWG, policy shaping and development
Ministry of Finance and Planning	Policy shaping and development, input into financial measures and instruments to stimulate uptake of EVs, Support the incentives for developing infrastructure for charging and battery replacement, support of fiscal policies on e-mobility,
President's Office, Regional Administration and Local Governments (PO-RALG)	Technical coordination in adoption of the EVs in the municipalities, policy integration and adoption
Tanzania Renewable Energy Association (TAREA)	Policy shaping and development, advocacy and awareness creation
National Institute of Transport (NIT)	Policy shaping and development, transport prioritization, contribution on roadworthiness testing and certification of EV equipment
Non-governmental / non-profit organizations (ELICO Foundation, etc.)	Policy shaping and development, technology development and demonstration, advocacy and awareness creation
City and district governments and councils (Dar es Salaam, Mwanza and Dodoma)	Policy shaping and development, stakeholder engagement, data and research input, action planning and adoption of urban implementation frameworks
Universities and technical institutions (Dar es Salaam Institute of Technology, etc.)	Policy shaping and development, data and research input, support in research, design and fabrication of EVs
National and urban transport operators (Dar Rapid Transit Agency, etc.)	Policy shaping and development, data provision, potential partners for business model development
Private sector (fabricators, artisans, part suppliers, etc.)	Assisting in the identification of market needs and exploring new business models, private sector mobilization and stakeholder input, input into financial measures and instruments to stimulate

	uptake of EVs
Tanzania Police Force, Road safety unit, vehicle inspectors	Support permissions of EV equipment
Financial institutions (national banks, IDBs, etc.)	Private sector mobilization and stakeholder input, input into financial measures and instruments to stimulate uptake of EVs
Media and news platforms	Communication and knowledge distribution on policy, implementation framework and information on EVs

12. SDG Contributions:

*Instructions: Please complete the grey section below for **a maximum of three SDGs** that will be advanced through this TA. A complete list of SDGs and their targets is available here: https://sustainabledevelopment.un.org/partnership/register/.*

Goal	Sustainable Development Goal	Direct contribution from CTCN TA (1 sentence for top 1-3 SDGs)
1	End poverty in all its forms everywhere	
2	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	
3	Ensure healthy lives and promote well-being for all at all ages	
4	Ensure inclusive and equitable quality education and promote life-long learning opportunities for all	
5	Achieve gender equality and empower all women and girls	
6	Ensure availability and sustainable management of water and sanitation for all	
7	Ensure access to affordable, reliable, sustainable, and modern energy for all (consider adding targets for 7)	The anticipated outcome is a National Electric Vehicle Policy and accompanying Implementation Framework that presents a number of strategic, long-term, transformational e-mobility measures that will drive climate resilient and low carbon growth in Tanzania
	7.1 - By 2030, ensure universal access to affordable, reliable and modern energy services	
	7.2 - By 2030, increase substantially the share of renewable energy in the global energy mix	
	7.3 - By 2030, double the global rate of improvement in energy efficiency	
	7.a - By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	The technical assistance will identify the environmentally sound technologies that will be integral to delivering on Tanzania's NDC, including required charging infrastructure.
	7.b - By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	
10	Reduce inequality within and among countries	
11	Make cities and human settlements inclusive, safe, resilient and sustainable	
12	Ensure sustainable consumption and production patterns	
13	Take urgent action to combat climate change and its impacts	*All TAs should indicate relevance to Goal 13 and at least one target below (13.1 to 13.b).*
	13.1 - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	
	13.2 - Integrate climate change measures into national policies, strategies and planning	

	13.3 - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Stakeholder engagement, skills development and capacity building is central to the methodological approach of this technical assistance.
	13.a - Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	
	13.b - Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	

13. Classification of technical assistance:

Please indicate primary type of technical assistance. Optional: If desired, indicate secondary type of technical assistance.

Please tick off the relevant boxes below	*Primary*	*Secondary*
☐ 1. Decision-making tools and/or information provision	☐	☐
☐ 2. Sectoral roadmaps and strategies	☐	☐
☐ 3. Recommendations for law, policy and regulations	X	☐
☐ 4. Financing facilitation	☐	X
☐ 5. Private sector engagement and market creation	☐	X
☐ 6. Research and development of technologies	☐	☐
☐ 7. Feasibility of technology options	☐	X
☐ 8. Piloting and deployment of technologies in local conditions	☐	☐
☐ 9. Technology identification and prioritisation	☐	X

Please note that all CTCN technical assistance contributes to strengthening the capacity of in country actors.

14. Monitoring and Evaluation process

Upon contracting of the implementing partners to implement this Response Plan, the lead implementer will produce a monitoring and evaluation plan for the technical assistance. The monitoring and evaluation plan must include specific, measurable, achievable, relevant, and time-bound indicators that will be used to monitor and evaluate the timeliness and appropriateness of the implementation. The CTCN Technology Manager responsible for the technical assistance will monitor the timeliness and appropriateness of the Response Plan implementation. Upon completion of all activities and outputs, evaluation forms will be completed by the (i) NDE about overall satisfaction level with the technical assistance service provided; (ii) the Lead Implementer about the knowledge and learning gained through delivery of technical assistance; and (iii) the CTCN Director about timeliness and appropriateness of the delivery of the activities and outputs.

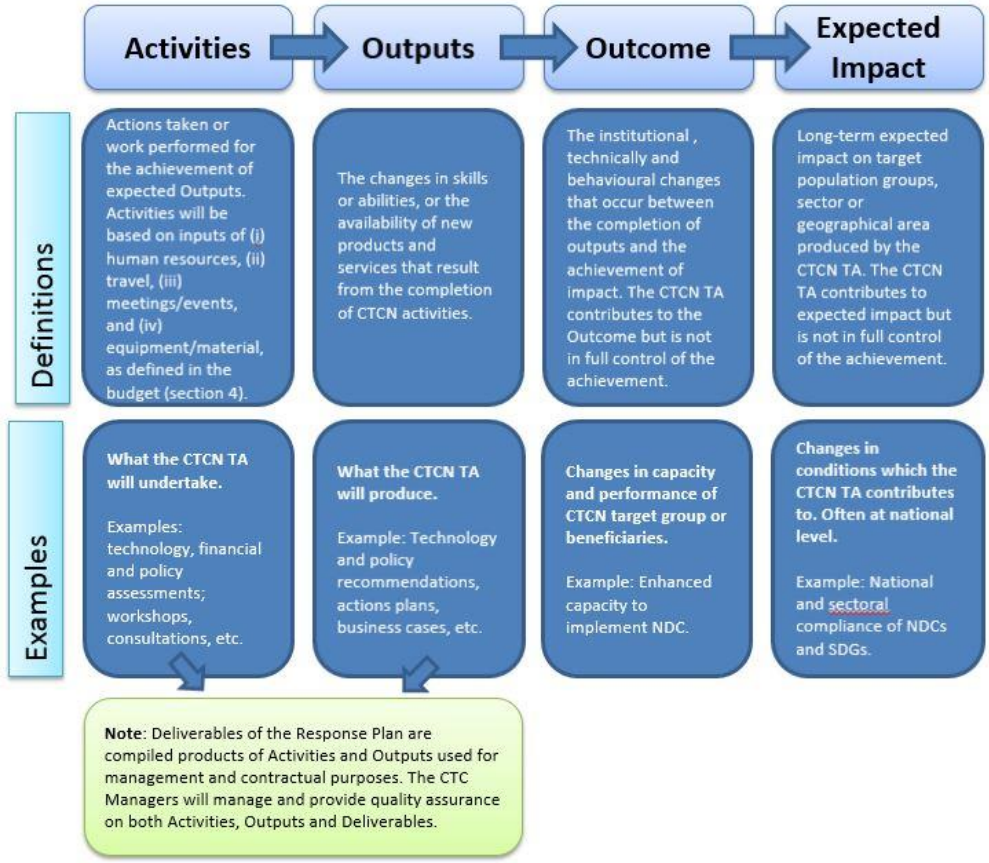
Annex 1: Guidance note for designing a Response Plan (to be deleted when submitting the Response Plan)

1. Objective of the Response Plan

The Response Plan is developed by CTCN specialists in response to a country request for technical assistance. It constitutes the Terms of Reference of the CTCN technical assistance that will be provided to the country and it provides the formulation of and subsequent basis for the monitoring and evaluation of the Response Plan implementation, as well as its expected outcomes and anticipated impacts.

2. Results chain and Logical Framework Approach to be defined in the CTCN Response Plan

The result chain is the causal sequence that stipulates the necessary flow of actions and processes to achieve desired objectives and results – beginning with inputs, moving through activities and outputs, and culminating in individual outcomes. The outcome will contribute to the desired impact in the society. The Logical Framework Approach is an analytical process used to support objectives-oriented project planning and management. It provides a set of pre-defined concepts which are used as part of an iterative process to aid structured and systematic analysis and management of the CTCN technical assistance.



3. Role of the Response Planning Design Team

The Response Planning Design Team is selected by the Climate Technology Centre (CTC). The composition of the team depends on each particular request but may include the National Designated Entity (NDE), the request Proponent, Climate Technology Manager of the CTCN, experts from the CTCN Consortium, UNIDO and UNEP experts from regional offices and other experts as needed.

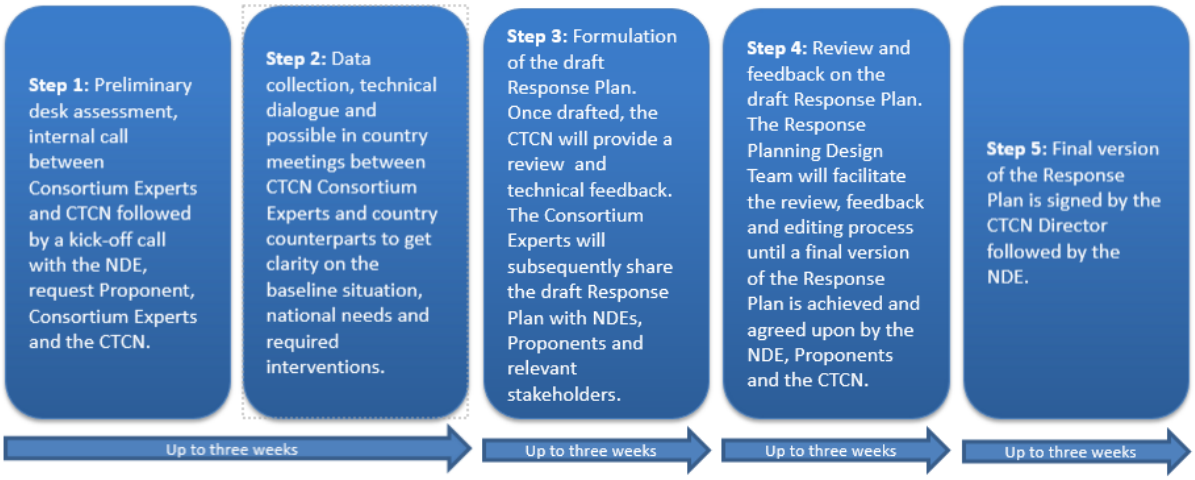
The role of CTCN Consortium experts is to lead the design of the Response Plan. The NDE will provide overall guidance on national context and priorities whereas the request Proponent will provide more detailed information on the sector, barriers and requested assistance. The Climate Technology Manager of the CTCN will provide quality assurance of timeliness and appropriateness of the Response Plan.

The Response Planning Design Team will draft all sections of the Response Plan template building on the information contained in the CTCN Request, based on expertise on the given topic and potentially further data collection, as required. This will be done by the CTCN Consortium Experts in consultation with the NDE, request Proponent and relevant stakeholders. The Response Plan has to be agreed to and approved by the NDE and the CTCN Director. This Response Plan will serve as the basis to identify, select and engage an expert institution from the Climate Technology Network or Consortium to lead the implementation of the CTCN Response Plan in the requesting country.

To the extent possible, staff from UNEP and UNIDO Regional, Sub-Regional and/or National Offices should be involve in all stages of formulation of the Response Plan to maximize synergies and avoid overlap with ongoing initiatives, as well as ensure relevance to regional and national context.

4. Process for designing the Response Plan

The Response Planning process should be completed over a period of up to 60 working days (12 weeks). Indicative steps and related timelines are laid out below:



5. Design Considerations

CTCN
CLIMATE TECHNOLOGY CENTRE & NETWORK

Annex 1. Guidance Note for the Response Plan template

In order to maximize the impact of the technical assistance provided by the CTCN and provide an effective M&E process, the Response Plan should integrate as much as possible the considerations below:

Climate Technology focus: The Response Plan should have a clear focus on climate technologies, and identify activities that enable the identification, development, deployment or diffusion of one or several specific technologies (including equipment, techniques, knowledge and skills).

Barrier removal / Problem solving: The activities should contribute to address the specific problem statement identified in the Request. The barriers identified should be those hampering the identification, development, deployment or diffusion of one or several climate technologies or climate actions. Therefore, it may be necessary to limit the CTCN Response Plan to a set of activities for technical assistance commonly agreed with the NDE (and Proponent when needed) compared to the original request submitted. The CTCN will liaise with NDEs and Proponent in case the scope of the technical assistance deviates from the original request.

Use of the CTCN assistance by stakeholders: The Response Plan should identify clearly how the products of the CTCN assistance will be used in the short term once support is delivered, by who and when, to ensure it will lead to specific impacts in the country. The activities should engage the stakeholders that will use the concrete results of the assistance to deploy the technologies, including from the private sector, the public sector, research institutions, etc.

Within the scope of CTCN resources: The cost of the technical assistance provided by the CTCN cannot exceed USD 250,000 per Response Plan. Therefore, it may be necessary to prioritize activities and limit the CTCN Response Plan to a set of priority activities commonly agreed with the Proponent and the NDE to remain under this value. Under section 4 of the Response Plan template, an indicative activity based budget should be presented. The proposed budget is indicative and should present an estimated costing range per activity, output as well as a total costing range for the delivery of the Response Plan. Once the Response Plan is finalised and published for tendering, interested parties will provide competitive offer against the indicative budget.

CTCN activities and outputs should be linkable to monitoring and evaluation indicators: All proposed activities and outputs must be linkable to monitoring and evaluation indicators that are specific, measurable, achievable, relevant, and time-bound. The monitoring and evaluation process and corresponding indicators will be developed by the Lead Implementer as part of the work plan and will allow the CTCN technology Manager to monitor the timeliness and appropriateness of the implementation.

Synergies with existing efforts: The Response Plan should focus on activities that are not already being fully supported or that are in the process of being fully supported by another national, regional or international organization. Synergies and complementarity also require that the CTCN assistance is not duplicating past activities. It is possible in the Response Plan to indicate co-financing from the government, the Proponent or another stakeholder, that will maximize the effectiveness of the CTCN assistance.

Gender mainstreaming: The CTCN mission is to build or strengthen developing countries' capacities to identify technology needs, to facilitate the preparation and implementation of technology projects and strategies taking into account gender considerations. The Response Plan must therefore describe how gender considerations will be included and monitored within the proposed activities, and any gender co-benefits that will be gained as a result of implementing the CTCN technical assistance.