

Country	Sri Lanka
Request ID#	2019000048
Title	Technical Assistance for the Development of a Climate Smart City in Kurunegala, Sri Lanka (Mitigation Elements)
NDE	Dr. R.D.S. Jayathunga, Director Climate Change Secretariat, Ministry of Environment and Wildlife Resources Tel: +94718574058/ +94112034198 Fax: +94 (0) 112879978 Email: climatesec@gmail.com, sunimal68@hotmail.com Address: Climate Change Secretariat Ministry of Environment & Wildlife Resources, 416/1/C, Robert Gunawardena Mawatha, Battaramulla, Sri Lanka
Proponent	Mr. Pradeep Thilakarathne, Municipal Commissioner Municipal Council Building, Kurunegala, Sri Lanka Tel: +94717139660

Summary of the CTCN technical assistance

Kurunegala city is one of the most intensively developing economic and administrative capitals of Sri Lanka located in the North Western Province.

To tackle these challenges, the Ministry of Environment & Wildlife Resources of Sri Lanka and Municipal Council Kurunegala requested CTCN Technical Assistance. The Technical Assistance has the aim to: i) analyze current state and baseline GHG emissions of Kurunegala city in energy, transport and waste sectors (hereinafter the sectors considered are specified in energy, transport and waste area), ii) identify list of low emission technologies for 3 sectors, iii) develop the roadmap including low emission technologies for each sector, and iv) build the capacity of city planners and policy makers in order to guide on how to transform Kurunegala city into a low emissions city.


By developing a roadmap, the Technical Assistance will contribute to reduce greenhouse gas emissions and support the transition to a low emission municipality.

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Agreement:

**National Designated Entity to the UNFCCC
Technology Mechanism**

Name: Dr. R.D.S. Jayathunga
Title: Director (Climate Change)
Date:
Signature:


Dr. R.D.S. Jayathunga
Director (Climate Change)
Ministry of Mahaweli Development and Ecology
"Sobadam Piyasa"
No. 415/C1, Robert Gunawardana Mawatha,
Battaramulla

**Proponent (signature of the Proponent is
optional)**

Name: Mr. Pradeep Thilakarathne
Title: Municipal Commissioner
Date:
Signature:


Pradeep Thilakarathne
Municipal Commissioner
Municipal Council
Kurunegala.

**National Designated Entity to the UNFCCC
Technology Mechanism (providing pro bono support)**

Name: Ms. Jinhee Park
Title: Director,
Ministry of Science and ICT
Date: 14/07/2020
Signature:



UNFCCC Climate Technology Centre and Network (CTCN)

Name: Rose Mwebaza
Title: CTCN Director
Date: 30/06/2020
Signature:



1. Background and context

Sri Lanka is an island country in Southern Asia

As an intersection of the south and the north districts of Sri Lanka, Kurunegala city (capital city of Kurunegala district with a population of more than 40 thousand) has a potential to become a major city (Greater Kurunegala).¹ The annual average population growth rate of 4 per cent and an increasing demand for skilled labor and transportation facilities display the dynamic economic activities of the city. The increasing economic activities together with the high population density (3,000/km²), on the other hand, have caused social and environmental problems such as air pollution and issues with water management. Against this context, the city established the Kurunegala Town Development Plan 2019-2030.

Therefore, the Kurunegala Municipal Council (KMC) has the responsibility to develop and implement an appropriate urban action plan focusing on climate mitigation. For this purpose, the KMC requested CTCN to provide technical assistance in developing the pathway for the transition to a low-emission municipality.

2. Problem statement

Kurunegala City located in the North Western Province of Sri Lanka, is one of the most intensively developing economic and administrative capitals. The growing rate of population of Kurunegala city is approximately 4% and the rate is relatively high with considering residential area. The main highways pass through the center of the city and it is connected to main cities.

The geographical characteristic of the city and the condition of the roads cause severe traffic congestion and the growing population leads to the increase of energy consumption and generation of waste.

To cope with the arising issues, Kurunegala city requested technical assistances to CTCN, which develop a roadmap to convert Kurunegala city to climate smart city. The request was made with an integrated approach to implement adaptation and mitigation interventions to make Kurunegala a climate smart city in all aspects. From the implementation perspective, the Technical Assistance with adaptation interventions² are carried out followed by mitigation measures in energy, transport and waste sectors to mitigate Greenhouse Gas Emissions.

¹ Kurunegala city is located in North Western Province near the central hill of Sri Lanka. The city is plain area with small size (11km²) but high population density (3,000/km²), and has huge rocky outcrops surrounding the city's central area.

² Technical Assistance on adaptation measures for the Development of Kurunegala as a climate smart city- <https://www.ctc-n.org/technical-assistance/projects/development-kurunegala-climate-smart-city>

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	
Objective: Develop a pathway for the transition to a low emission municipality in Kurunegala.													
Outcome: This assistance will explore options to decarbonize, electrify and optimize energy use in Kurunegala with a view to identifying investments and further action leading to a transition to a low emission municipality.													
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													
<ul style="list-style-type: none"> i) A detailed work plan of all activities, deliveries, outputs, deadlines and responsible persons/organizations and a 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, will be formulated in the beginning of the technical assistance. 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:													
<ul style="list-style-type: none"> i) Detailed work plan (to be submitted in the beginning of the technical assistance) ii) Monitoring and evaluation plan (to be submitted in the beginning of the technical assistance) iii) CTCN Impact Description (to be submitted in the beginning of the technical assistance) iv) Closure and Data Collection report (to be submitted in the end of the technical assistance) 													

<p>Output 2: Identification of baseline GHG emissions and current state of the city</p>																									
<p>Activity 2.1: Inception of the project For further research, define the process of the project and make a detailed work plan. Before the analyzing the current state and GHG emissions of the city, arrange the requisite data, identify the governmental institution or organization producing or managing each specific data and select stakeholders and local consultancy team.</p>																									
<p>Activity 2.2: Analysis of current state of Kurunegala city in energy, transport and waste sectors Based on the results of the inception workshop and a desk review of the municipal activities (processes and activities conducted within the Municipality on energy, waste and transport), an analysis for current state and baseline greenhouse gas (hereinafter, GHG) emissions of the city will be implemented in energy, transport and waste sectors. A priority among the sectors will be determined based on inter alia contribution to greenhouse gas emissions, existing standards or policies, mandate of the municipal government, potential emission reductions, and expected cost per ton of CO₂ equivalent reduced. In the case of insufficient data to analyse baseline GHG emissions of the city, appropriate baseline emissions can be determined by the reliable materials such as, national inventory report, technology needs assessment, reports published by international organization and so on, to estimate baseline GHG emissions.</p>																									
<p>Deliverable 2: i) Report on the Project Inception (including data collecting target, list of stakeholders, selection result of local consultancy team) ii) Report on current state and baseline GHG emissions analysis of Kurunegala city (energy, transport and waste sectors)</p>																									
<p>Output 3: Identification of sector specific low emission transition options</p>																									
<p>Activity 3.1: Identify the most viable investment options based on feasibility, enabling environment and cost To understand the range of investment options, an analysis will be conducted of the most feasible technologies to reduce emissions in the 3 sectors (energy, transport, waste). The analysis will consider the availability of technologies or approaches, the presence of supportive policies, options for financing the planned investment, and emission reduction potential.</p>																									

<p>Activity 3.2: Stakeholder review</p> <p>Based on the analysis, a series of stakeholder consultations with each of the sectors covered in Activity 3.1 will be held. The stakeholder consultations will involve 10 – 20 participants in each sector (energy, transport, waste) and will include the presentation of identified options in order to solicit feedback on the prioritization of technologies.</p> <p>All the travels and face to face meetings will be planned and undertaken after a detailed assessment of the risks due to COVID 19 and following the related advisory by the national and local government from the country where the project is located and the country where the implementer is located.</p> <p>This must be assured through a letter of undertaking provided by the authority of the entity requesting for travel and meetings before it is conducted.</p>	
<p>Activity 3.3: Finalization of the sector specific list of low emission technologies and approaches</p> <p>Based on the feedback from Activity 3.2, a finalized list of sector specific low emission technologies will be presented for the 3 selected sectors. The lists will include information on the emission reduction potential as well as the expected cost.</p> <p>In the case of insufficient data to analyse feasibility of technologies derived from Activity 3.1, consultation with local experts is required to finalize the list of low emission technologies for 3 sectors. (energy, transport, waste)</p>	
<p>Deliverable 3:</p> <ul style="list-style-type: none"> i) List of low emission technologies for 3 sectors (energy, transport, waste) with approximate costing per technology ii) The result of the stakeholder review 	
<p>Output 4: Roadmap for the transition to a low emission municipality</p>	
<p>Activity 4.1: Development of a draft roadmap for 3 sectors (energy, transport, waste)</p> <p>Based on the results from output 3 a fully elaborated roadmap for the transition to a low emission municipality will be developed. The roadmap will outline the steps to be followed in order to implement or adopt the priority technologies and approaches. The completed roadmap will consist of a series of sector specific mini-plans as needed. The roadmap will include recommendations on policy reform or review, financing options, suggesting indicators of monitoring and evaluation, and training and skill development. The roadmap will also contain a specific section on ensuring the gender responsiveness of the transition.</p>	

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<p>Activity 4.2: Stakeholder review</p> <p>A stakeholder review meeting of 20-30 participants will be held to review the roadmap, assess its feasibility and provide feedback.</p> <p>All the travels and face to face meetings will be planned and undertaken after a detailed assessment of the risks due to COVID 19 and following the related advisory by the national and local government from the country where the project is located and the country where the implementer is located.</p> <p>This must be assured through a letter of undertaking provided by the authority of the entity requesting for travel and meetings before it is conducted.</p>	
<p>Activity 4.3: Finalization of the roadmap and development of one draft concept note to prepare fund implementation</p> <p>Based on the discussions under Activity 4.2 the roadmap will be revised and finalized to consider stakeholder recommendations. Based on the final roadmap, support will be provided for the elaboration of one draft concept note for funding from the GCF.</p>	
<p>Deliverable 4:</p> <ul style="list-style-type: none"> i) A roadmap including low emission technologies for each sector ii) Report of the stakeholder review iii) A GCF draft concept note for one climate technology 	
<p>Output 5: Capacity building of city planners</p>	
<p>Activity 5.1: Training workshop (for two days)</p> <p>This activity aims to give guidance for implementing and monitoring the roadmap. The training will also include guidance on how to integrate gender aspects and identify actions that would be the next steps for the stakeholders of Kurunegala to address. During the training event, the outputs of previous activities will be shared with a maximum of 20 city planners and policy makers or related stakeholders.</p> <p>All the travels and face to face meetings will be planned and undertaken after a detailed assessment of the risks due to COVID 19 and following the related advisory by the national and local government from the country where the project is located and the country where the implementer is located.</p> <p>This must be assured through a letter of undertaking provided by the authority of the entity requesting for travel and meetings before it is conducted.</p>	

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<p>Activity 5.2: Utilizing GHG Inventory for the Kurunegala city in energy, transport, waste sectors</p> <p>GHG Inventory for the city is needed to comprehend the total GHG emissions and contributions of each sector. GHG Inventory will be developed based on existing GHG Inventory the city already established and the result of this project. The GHG Inventory could calculate the GHG emissions amounts of the city along with the amounts of each sector, if the sufficient data for calculation is provided. Emission factors in the 'Kurunegala GHG emission Inventory Report, 2016-17' will be applied to calculating emissions amounts in priority and emission factors in IPCC 2006 Guidelines will be complemented in case of absence of proper emission factors. The GHG Inventory will be utilized and updated every 6 months/annually by the municipality personnel.</p>	
<p>Deliverable 5</p> <ul style="list-style-type: none"> i) Report from the training workshop ii) GHG Inventory for the Kurunegala city in energy, transport, waste sectors 	

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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	
					Minimum	Maximum
Output 1: Development of implementation planning and communication documents	N/A	N/A	N/A	N/A	USD 2,000	USD 2,300
Output 2: Identification of baseline GHG emissions and current state of the city	Local Expert 5day	N/A	N/A	Web meeting application	USD 35,000	USD 39,000
Output 3: Identification of sector specific low emission transition options	Local, Energy, Transport, Waste Expert each 5 days	Survey and meeting, Sri Lanka, 7 days	Interim workshop (stakeholder review), 20 participants, 1 day Final workshop (stakeholder review), 20 participants, 1 day	Web meeting application Meeting venue	USD 38,000	USD 44,000
Output 4: Roadmap for the transition to a low emission municipality	Local, Energy, Transport, Waste Expert each 10 days	Meeting, Sri Lanka, 3 days		Web meeting application Meeting venue	USD 44,500	USD 50,000

Output 5: Capacity building of city planners	Local, Energy, Transport, Waste Expert each 10 days	Meeting, Sri Lanka, 2 days	Capacity building workshop, 20 participants, 2 day	Web meeting application Meeting venue	USD 29,000	USD 33,000
Analysis of gender inequality and review of the final deliverables of the technical assistance by gender expert	Local, Gender expert, 5days	N/A	N/A	N/A	USD 1,500	USD 17,00
Estimated range of costing for the entire Response Plan					USD 150,000	USD 170,000

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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
Expert in low emission urban development	At least Master's degree (equivalent/extensive experience or expertise) in a relevant discipline: Expertise area: low emission development, urban design, engineering or architecture Minimum 10 years relevant experience
Expert in low emission transport	At least Master's degree (equivalent/extensive experience or expertise) in a relevant discipline: Expertise area: low emission transport, electric mobility Minimum 10 years relevant experience
Expert in urban planning	At least Master's degree (or equivalent/extensive experience or expertise) in a relevant discipline: Expertise area: urban planning, climate change mitigation Minimum 10 years relevant experience
Expert in gender responsive development	At least Master's degree (or equivalent/extensive experience or expertise) in a relevant discipline: Expertise area: gender and climate change, or gender and development Minimum 5 years relevant experience
Local Consultant in low emission urban planning	Expertise area: climate change mitigation, urban planning, surveys Abundant experience to collaborate with: i) International organizations and agencies, or external research institutes on climate change in urban contexts ii) Government think tank or local government on climate change or urban planning Minimum 3 years relevant experience

6. Intended contribution to impact over time

In the short-term benefit, this TA will incorporate climate resilient aspects and low carbon technologies into city development plans. In addition, it will mainstream climate change aspects into provincial agenda. In the long-term benefit, this project will enhance climate resilience and the low carbon pathways of the KMC City.

The Climate Smart City framework and roadmap will guide policy makers and urban planners to make critical decisions on investing and implementing projects, such as clean and green infrastructure, renewable energy, sustainable transport, waste management, etc., which contributes to the GHG emissions reduction. The GHG reduction target of Kurunegala city by this TA project is aligned with the national GHG reduction goal in INDC, 20% in the energy sector (4% unconditionally and 16% conditionally) and by 10% in other sectors (transport and waste) by 3% unconditionally and 7% conditionally by 2030. The framework and roadmap would also guide the policy makers on how to increase the climate resilience of the city infrastructure, urban landscapes and urban community in the face of adverse impacts of climate change.

In terms of the numbers of people affected by climate change, more than 40,000 people living in a capital city of Kurunegala district will be potential beneficiaries. After the effect of the framework and roadmap has been proven, it can be spread out to the other cities in Sri Lanka, then the beneficiaries will be the entire people of the country.

This TA will promote access to financing for the deployment of prioritized technologies and it will lead to the widespread replication of the project model in order to cope with climate change in energy, transport and waste sectors throughout the country. The approach to this financing will be through mechanisms like GCF and GEF to induce the larger investment.

On the basis of the comprehensive activities as components, eventually the TA will contribute to make Kurunegala city into climate smart city through deploying the low carbon technologies with improved capacity and awareness of the stakeholders to mainstream the climate change aspects into provincial agenda.

7. Relevance to NDCs and other national priorities

Sri Lanka has submitted Nationally Determined Contributions (hereinafter, NDC) in 2010, including both mitigation and adaptation parts.

In NDC secondly submitted in 2016, Sri Lanka presents an aim of mitigation part to reduce GHG emission in energy (electricity generation), transport, industry, forests and waste. The detailed objective of NDCs for Mitigation intends to reduce the GHG emissions against BAU scenario by 20% in the energy sector (4% unconditionally and 16% conditionally) and by 10% in other sectors (transport, industry, forests and waste) by 3% unconditionally and 7% conditionally by 2030.

Under the initiation of coping with the climate change, Sri Lanka has taken several positive steps by introducing national policies, strategies and actions in order to address climate change induced impacts, amongst which are the National Climate Change Policy of Sri Lanka, National Climate Change Adaptation Strategy for Sri Lanka in 2010, the Climate Change Vulnerability Profiles; Water, Health, Agriculture and Fisheries, Urban Development, Human Settlements and Economic Infrastructure in 2010, the Technology Needs Assessment and Technology Action Plans for Climate Change Adaptation and Mitigation in 2014, the National Action Plan for Haritha Lanka Programme in 2009 and Urban Transport Master Plan 2032 based on the National Transport Policy in 2009 and National Policy Framework- Vistas for Prosperity and Splendour 2020

For the next step, government has established the action plans, such as Nationally Appropriate Mitigation Actions, Readiness Plan for Implementation of Intended Nationally Determined Contributions, Technology Needs Assessment and Technology Action Plans for Climate Change Mitigation and so on.

Especially, the report of Technology Needs Assessment (hereinafter, TNA) and Technology Action Plan for Climate Change mitigation in 2014, describes the technologies required in energy, transport and industry sectors categorized in Sri Lanka's Second National Communication on Climate Change.

In accordance with Sri Lanka NDC, this TA project sets the objective to develop Kurunegala city to climate smart city by reducing GHG emissions in energy, transport and waste sectors. To accomplish the objective of Kurunegala city, this project will consider climate technologies elaborated in the report of Sri Lanka TNA by priority.

8. Linkages to relevant parallel on-going activities:

In the past, climate concerns have not been integrated in the city design. However, there is a push towards the incorporation of climate concerns and providing enabling environment in the national and sub national level planning.

Sri Lanka has already published green building guidelines for government sector buildings and a code of practice for energy efficient buildings and introduced an awarding system for green buildings. Year 2018 budget has been named as Blue Green Budget and allocated provisions for low carbon development initiatives such as carbon tax, carbon pricing, promoting for renewable energy, weather index climate insurance schemes, virtual blue green institute, etc. The Kurunegala Municipality area has been identified as one of the two 'Green Zones' in the island under the UNDP-GEF NAMA project implemented by the Sustainable Energy Authority of Sri Lanka. Biogas digesters have also been installed. Measures have been taken to provide Solar PV net metering systems for residences. Further, there is a proposal to expand the Kurunegala city and transform it into a Megapolis City (Greater Kurunegala) in the years to come. Measures have also been taken to construct the Central Expressway which links Colombo, Gampaha, Meerigama, Kurunegala to Dambulla to reduce traffic congestion.

CTCN Technical Assistance on adaptation, which aims to contribute to the enhancement of climate resilience of Kurunegala city, also has been implemented in the same vein with this request to draw out the integrated pathway of adaptation and mitigation interventions for make Kurunegala a climate smart city.

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

Anticipated follow up activities are expected as follows:

- a) Mainstreaming key climate smart interventions proposed from the framework and the Master Plan into Kurunegala City development Plan, prepared by Urban Development Authority (UDA)
- b) Setup an institutional governance mechanism, steering committee and technical working group for effective integration of climate smart city features into the UDA Master Plan for Kurunegala City
- c) Establishment of a climate change monitoring system for KMC through intervention of baseline status
- d) Establish GHG Inventory for the city which can be updated by the municipality personnel
- e) Incorporation of recommended technologies into other foreign funded programmes

10. Gender and co-benefits:

Imbedded in design of the activities:	This response will be reviewed by a gender expert before the implementation starts. The survey on the understanding the climate change risk will include articles for gender issues to investigate gender inequality and the survey questionnaires will be reviewed by a gender expert. The final deliverables of the technical assistance will be reviewed by a gender expert.
Gender and co-benefits intended as result of the activities:	The gender responsive elements in the roadmap will result in the engagement of women in long term municipal planning processes and may create green job opportunities for women.

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
Climate Change Secretariat, Ministry of Environment and Wildlife Resources	Provide assistance during the CTCN TA implementation
Municipal Council Kurunegala (KMC)	Provide political leadership and support, assist with access to data for determining baseline information, facilitate stakeholder, and support in the consultations and implementation of actions as the request proponent of this CTCN TA
Urban Development Authority, Kurunegala	Support to integrate national circumstances into Kurunegala's adaptation action planning and support in providing data for determining baseline information, facilitate stakeholder, and support in the consultations and implementation of actions
Land Use Planning Department, Kurunegala	Provide and prepare adequate scale spatial maps and ground verification work
Road Development Authority, Kurunegala	Support to integrate climate change concerns into city planning, and introduce relevant maps and plans for minimizing traffic congestion
Local Consultant (NCPCSL)	Assist the CTCN TA and provide technical support
Provincial base NGOs and CBOs	Support in mobilizing people for consultations.
Water Supply & Drainage Board	Waste treatment plant under WSDB purview, provide technical support
Ceylon Electricity Board	Responsible for supply of electricity, provide technical support
Sri Lanka Sustainable Energy Authority	Responsible for solar installations and renewable energy projects, provide technical support
Officer in Charge – Traffic control	Support recommendations to reduce traffic congestion

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)	
	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	
	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	The CTCN TA will develop an urban low emission transition plan for Kurunegala.

12	Ensure sustainable consumption and production patterns	
13	Take urgent action to combat climate change and its impacts	
	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	The purpose of this CTCN TA is to integrate the result of the assessment into the local urban development plan.
	13.3 - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	
	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	Identified result from the assessment will encourage the local government to establish an urban action plan with consideration for gender issues.
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
<input type="checkbox"/> 1. Decision-making tools and/or information provision	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> 2. Sectoral roadmaps and strategies	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/> 3. Recommendations for law, policy and regulations	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 4. Financing facilitation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 5. Private sector engagement and market creation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 6. Research and development of technologies	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 7. Feasibility of technology options	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 8. Piloting and deployment of technologies in local conditions	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 9. Technology identification and prioritization	<input type="checkbox"/>	<input type="checkbox"/>

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

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