

<b>Country</b>	<b>Botswana</b>
<b>Request ID#</b>	
<b>Title</b>	<i>Development of draft legislation for the facilitation of clean/renewable energy and low carbon, public transport alternatives</i>
<b>NDE</b>	<i>Penny Lesolle, Botswana Institute of Technology Research Innovation</i>
<b>Proponent</b>	<b>Permanent Secretary, Ministry of Environment Wildlife and Tourism, Government of Botswana</b>

**Summary of the CTCN technical assistance**

*The summary should provide a brief description of the problem (barrier to climate technology deployment) and how the technical assistance will address it (brief summary of outputs and activities). Please also briefly indicate national actors involved and the anticipated timeline. Please note this summary will be used for public communication purposes so it is important that it is well written. (maximum 1250 characters including spaces) **This CTCN Response Plan will facilitate the development of legislation that catalyses the uptake of appropriate technologies for the implementation of mitigation and adaptation related climate policies and activities [as set out in Botswana's nationally determined contribution].***

**Agreement:**

*(If possible, please use electronic signatures in Microsoft Word file format)*

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**National Designated Entity to the UNFCCC Technology Mechanism for which the Climate Technology Centre and Network is the operative arm**

Name: Penny Lesolle

Title: Manager

Date: 21/11/2018



Signature:

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**UNFCCC Climate Technology Centre and Network (CTCN)**

Name: Jukka Uosukainen

Title: CTCN Director

Date: 26.11.2018

Signature:



## **1. Background and context**

*Please provide a brief description of the background and context for the CTCN Response Plan. Please include national and sectoral information using recognized and publicly available sources. (maximum 2500 characters including spaces).*

### **Botswana's mitigation priorities:**

Botswana intends to achieve an overall reduction of its greenhouse gas emissions of 15% by 2030, taking 2010 as the base year. Base year emission estimation is 8307 Gg of CO<sub>2</sub> equivalent. This emissions reduction target was estimated based on baseline GHGs inventory for the three GHGs, namely, CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. Primary sources of emissions are the energy (both mobile and stationary sources), waste, and the agricultural sectors.

Achieving the 15% greenhouse gases (GHGs) emissions reduction target requires robust and comprehensive planning within the sectors. The normative aspects of policy, including enabling legislation that can facilitate achieving this target are either lacking or insufficient in scope, and consequently, it is essential that there are conducive legal frameworks in place to enable the achievement of the national target. This proposed emission reduction path will be subjected to legislative review and endorsement by Parliament.

### **Botswana's adaptation priorities:**

Climate change adaptation framework in the country is guided and informed by the following documents:

- i. The Second National Communication to the United Nations Framework Convention on Climate Change
- ii. The Botswana Sustainable Land Management Paper
- iii. National Water Master Plans

In order to ensure that climate change adaptation measures are mainstreamed into national development planning and sectoral planning, the current environmental programmes and projects must strategically address climate change adaptation.

This CTCN Response Plan will facilitate the development of legislation that catalyses the uptake of appropriate technologies for the implementation of mitigation and adaptation related climate policies and activities.

## **2. Problem statement**

*Founded on the national and sectoral context, please include a brief problem statement clarifying the main problems and barriers for climate change mitigation and/or adaptation that the CTCN Response Plan will address and overcome. (maximum 1250 characters including spaces).*

The impacts of global climate change and variability are becoming more evident with increased incidences of droughts, floods, hailstorms, more hot days and heat waves. Climate change is one of the biggest threats facing global development with the developing countries being more vulnerable due to their low adaptive capacity. Climate change has been widely recognized and accepted as a reality, as have the serious problems that it poses, with far reaching social, political, economic and environmental consequences, particularly in vulnerable countries such as Botswana.

The Government of Botswana regards climate change as one of the most serious threats to the country and its people. Government is of the view that climate change has the potential to undermine many of the positive developments made in its attaining the country's developmental imperatives. In Botswana, climate change manifests itself in a number of ways: Botswana experiences increased variability of key climate elements such as temperature and rainfall.

Some of the key sectors of the economy affected by climate change include: Water resources where water security and quality have and continue to decline as climate is warming and rainfall is getting less balanced, rangeland quality, where productivity has decreased, and the agriculture sector, where low yield and increased manifestation of pests and disease negatively affecting this once main contributor to the national GDP. Human health has also not been spared as a warmer climate has increased the prevalence of vector borne diseases to places where they initially were not known to exist. Lastly, shifts in ecosystems due to change climate have the potential to negatively affect the tourism sector.

**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.)*

<b>Objective: To develop legal frameworks that will facilitate the uptake of technologies appropriate for mitigation and adaptation action.</b>												
<b>Outcome: Legislative Instruments backstop policy and Botswana NDC commitments to that relate to the development and deployment of mitigation and adaptation related technologies.</b>												
	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Output 1: Development of workplan and related communication documents</b>												
<p><b>Activity 1:</b> All implementers must undertake the following activities at the beginning and at the end of CTCN Technical Assistance.</p> <p>i) A detailed workplan of all activities, deliveries, outputs, deadlines and responsible persons/organizations and detailed budget to implement the Response Plan. The detailed workplan and budget must be based directly on this Response Plan;</p> <p>ii) Based on the workplan, 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);</p> <p>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);</p> <p>iv) A Closure and Data Collection report completed at the end of the technical assistance (a template will be provided).</p>												
<b>Deliverable 1:</b>												
Detailed workplan	X											
Monitoring and evaluation plan	X											
CTCN impact description (draft version)										X		





	<i>(Legal Response Initiative)</i>	<i>transport systems, agriculture and water use. 30 days, 1 trip to Botswana</i>	<i>Botswana in relevant Ministries (3 days)</i>			
<i>Develop Legal Drafts on Public transport, agriculture and water use</i>	<i>Consultant/UN Staff Member</i>	<i>Considering review of existing legislation done by LRI, to develop draft legislation on the three areas of transport, agriculture and water with specific focus on technology development and deployment International (with local assistance)</i>	<i>Meetings with the Different Ministries, Departments and private sector to agree on technical parameters and scope of legislation</i>	<i>n/a</i>	<i>Consultant Costs (30,000)</i>  <i>UN Staff member (Travel and DSA) 4,000</i>	<i>Consultant Costs (30,000)</i>  <i>UN Staff member (Travel and DSA) 4,000</i>
<i>Stakeholder Consultations</i>	<i>Botswana Government</i>	<i>To engender political buy in from all stakeholders on legislation and consultations with Attorney General's Office.</i>	<i>3 meetings with three groups of stakeholders</i>	<i>Meeting room/conference costs (3 x 5,000)</i>	<i>15,000</i>	<i>15,000</i>
<b>Estimated range of costing for the entire Response Plan</b>					<b>62,000</b>	<b>64,000</b>

**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.*

<b>Experts required</b>	<b>Brief description of required profile</b>
<i>Please use the same titles for all experts as applied in section 4.</i>	<i>Please provide a short description of expertise and experience needed (education, sectors of expertise, years of experience, country experience, language requirements, etc.).</i>
Legal Response Initiative	LRI provides free legal support to poor and particularly climate vulnerable developing countries as well as civil society observer organisations. It works through a network of lawyers from law firms, barrister chambers and universities in different jurisdictions who give hands-on assistance during meetings, draft legal opinions or build the capacity of lawyers and negotiators from developing countries.
The Commonwealth Secretariat	The Commonwealth Secretariat supports Commonwealth member countries to achieve development, democracy and peace. It helps to strengthen governance, build inclusive institutions and promote justice and human rights. Its work helps to grow economies and boost trade, empower young people, and address threats such as climate change, debt and inequality. The CS provides training and technical assistance and support decision-makers to draw up legislation and deliver policies. CS deploys experts and observers who offer impartial advice and solutions to national problems.
Robert Ondhowe	Legal Officer at the National Law Unit of the Law Division, UN Environment.

## **6. Intended contribution to impact over time**

*Please provide a brief description of the intended contribution to impact over time of the outcome and outputs provided by this technical assistance on resilience to climate change and/or carbon abatement. To the extent possible, please quantify the intended impact contribution, for example by indicated estimated number of people potentially impacted over time, GDP contribution of the focus sector, carbon emissions by the focus sector, etc. This intended contribution to impact is what will happen if the objective (as articulated in section 3) is met. Please ensure relevant complementarity with text in sections 7 to 12. (maximum 1250 characters including spaces).*

The development of appropriate legislation will trigger and catalyze the uptake of technologies associated with certain climate related actions, particularly adaptation (agriculture and water use) and mitigation (low carbon transport options). In particular, the combination of strengthened intellectual property rights as well as enabling legislation should engender the development and deployment of technologies such as solar powered water purification systems, climate smart agriculture as well as zero emissions vehicles for public transport.

Botswana has a population of approximately 2,250,000 (UN Stats) with about half resident in urban areas and therefore directly impacted by any advances in more efficient, less polluting public transport systems. The other half live in rural areas and are broadly dependent on agriculture, particularly animal production. Smart agriculture technologies will advance both productivity and long terms sustainability.

Botswana is a water deficient country with well advanced water related infrastructure. However, increasing population coupled with extreme weather events will require more advanced water management solutions, particularly for populations in remote and inaccessible locations, with access to non-potable water in need of purification and lacking access to energy sources.

## **7. Relevance to NDCs and other national priorities**

*Please identify relevance and contribution from the technical assistance to the Nationally Intended Contributions (NDC) and other relevant national prioritized efforts (TNAs, TAPs, NAPs, NAMAs, etc.). (maximum 2500 characters including spaces).*

The 1<sup>st</sup> nationally determined commitment specifically requests assistance in strengthening legal frameworks to facilitate meeting commitments that reduce vulnerability and increase resilience, as well as meeting its emissions reductions commitment. In addition, Botswana is committed to using market based mechanisms to meet its mitigation commitments. This will require a realigning of its legal landscape to meet the exigencies of the carbon markets, particularly as relate to finance and technology. With respect to technology, the options will include mitigation technologies these will focus on energy efficiency and renewable options.

The NDC estimates that to achieve the set target of 15% GHG emission reduction by 2030, the country would require approximately USD18.4 billion. These funds will be allocated to energy and transport sector infrastructural developments which will contribute to emission reductions.

Therefore, future activities need to be conducted on the following key issues:

- Identification of sources of funding for implementation of the mitigation measures
- Share of government and international contribution to support the mitigation measures

- An assessment of the impacts to the national economic growth for allocating national
- resources to mitigation measures
- Development of conducive legal framework to support 15% emission reductions

**8. Linkages to relevant parallel on-going activities:**

*Please identify relevant previous and ongoing public and private sector initiatives, projects or programmes that the CTCN assistance will specifically build on and contribute to. To the extent possible, please add practical and operational details on the linkages between existing activities and the CTCN assistance. (maximum 2500 characters including spaces)*

The Commonwealth Secretariat, in collaboration with UN Environment and the UNFCCC, is currently developing the Law and Climate Change Toolkit (“the Toolkit”), which is an online platform designed to assist national lawmakers develop effective legal frameworks for addressing climate change and correspondingly, national commitments to the Paris agreement. This tool will be used in the review and drafting of proposed new legislation, with a key component being using this opportunity to build up the toolkit on areas currently under development, both for the benefit of Botswana and for other countries in the future.

In addition, the Commonwealth Secretariat has undertaken a preliminary mission as part of a project to establish a law reform Unit in Botswana. While this will cover all of law, this proposal to strengthen legislation on climate related technologies will draw on synergies from the law reform unit. Lastly, UN Environment hopes to have finalised the legal request portal being developed in partnership with the Legal Response Initiative, and this should be showcased during this project, and its use for other aspects of climate change law highlighted.

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

*Please describe the expected future use of the outputs and deliveries produced by this technical assistance, after the CTCN implementation is completed, towards contributing to the anticipated impacts over time articulated in section 5. For example, what organizations or stakeholders will use the outputs of the technical assistance after it is completed, for what purpose, at what scale and scope the outputs and deliveries will be applied, when and what will be the next steps undertaken, etc. (maximum 2500 characters including spaces)*

The second NDC scheduled for 2020 should indicate the impact of the activities undertaken under this CTCN response Plan. More immediately, draft legislation agreed upon with the Attorney General’s office should lead to strengthening of legislation either in parliament or at a subsidiary level.

Stakeholders which include municipalities and local authorities in charge of public transport systems, departments of governments which oversee agriculture and water sectors, including private sector entities such as cooperatives, should be guided by the relevant legislation to achieve the objectives set out in national policy.

There is no immediate clarity on the process of securing intellectual property rights with relation to climate friendly technologies. There is significant information relating to trade related aspects of intellectual property (TRIPS). This response plan should look to redress this balance.

**10. Gender and co-benefits:**

Imbedded in design of the activities:	<p><i>Please describe all support to gender aspects, women’s equality and other co-benefits embedded into the Response Plan (please include a reference to the actual activities and outputs as described in section 3).</i></p> <p>In reviewing, existing legislation (Activities 1.1, 2.1, 3.1) specific emphasis will be made on identifying any gender bias, particularly in water and agriculture areas.</p>
Gender and co-benefits intended as result of the activities:	<p><i>Please describe all gender aspects, women’s equality and other co-benefits expected as a result of the CTCN technical assistance.</i></p> <p>The development of draft legislation will include, where necessary elements of gender support, particularly in the areas of water and agriculture related technologies, women being more negatively impacted upon by unsustainable water management practices and reduced levels of food security. Proposed legislation will encourage the uptake of technologies that are gender-neutral and accessible across the gender divide.</p>

### 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
Ministry of Environment	Lead Interlocuter
Ministry of Transport	
Ministry of Water	
Ministry of Agriculture	
Attorney General’s Chambers	

### 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	Promotion of climate smart 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	Promote sustainable water management
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	
12	Ensure sustainable consumption and production patterns	
13	Take urgent action to combat climate change and its impacts	<i>All TAs should indicate relevance to Goal 13 and at least one target below (13.1 to 13.b).</i>
	13.1 - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Reduced vulnerability in agricultural and water sectors
	13.2 - Integrate climate change measures into national policies, strategies and planning	Develop legislation to backstop policy
	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	
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	Facilitate participation in the market based mechanisms of the UNFCCC

### 13. Classification of technical assistance:

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

<i>Please tick off the relevant boxes below</i>	<i>Primary</i>	<i>Secondary</i>
<input type="checkbox"/> 1. Technology identification and prioritisation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> 2. Research and development of new climate technologies	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 3A. Feasibility studies for specific known climate technology options	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 3B. Piloting of known technologies in local conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> 4A. Law, policy and regulatory reform recommendations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 4B. Sector specific roadmap or strategy design	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 5. Finance facilitation and market creation	<input type="checkbox"/>	<input checked="" 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.*