Guidelines:

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

Requesting country or countries:	Botswana
Request title:	Development of an Energy Saving Performance Contracting (ESPC) Model for Energy Efficiency in Government Buildings for Botswana
NDE	Botswana Institute for Technology Research and Innovation (BITRI), Innocent Basupi, Senior Researcher, ibasupi@bitri.co.bw
Request Applicant:	Ministry of Minerals and Energy (MME), Department of Energy (DOE), Simasiku Titus Mukwaso, Principal Energy Engineer, smukwaso@gov.bw

Climate objective:

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

Geographical scope:

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

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

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

Botswana's public sector buildings account for a significant share of national electricity consumption, driven by inefficient lighting, air-conditioning systems, and ageing electrical equipment. Electricity generation in Botswana remains largely fossil-fuel based, meaning that high electricity consumption directly contributes to greenhouse gas emissions and increased fiscal pressure on government budgets. Government electricity expenditure exceeded BWP768 million annually (2018 estimates), highlighting both a climate and economic challenge. Energy audits conducted following a Presidential Directive of 2015 revealed that government buildings have an estimated energy savings potential of up to 35% through cost-effective retrofitting measures.

Despite this potential, implementation of energy efficiency measures has been constrained by:

- Limited public capital budgets
- Absence of a standardized Energy Saving Performance Contracting (ESPC) framework
- Limited private-sector participation in public-sector energy efficiency projects

Without an enabling ESPC model, Botswana is unable to systematically leverage private sector expertise and finance to reduce emissions, improve energy efficiency, and meet national climate commitments.

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

Botswana has demonstrated commitment to energy efficiency through policy formulations and planning instruments, including Vision 2036, Energy Efficiency Strategy, the National Energy Policy, and public-sector energy efficiency initiatives under the Sustainable Environment pillar.

In 2015, Botswana also released a Presidential Directive which instructed the Department of Energy to implement Energy saving measures in government institutions/buildings. The Department of Energy undertook energy audits in some of the government buildings to identify energy saving opportunities. These audits confirmed substantial energy-saving potential but did not lead to large-scale implementation due to financing and institutional barriers.

While energy efficiency and conservation programmes exist, Botswana currently lacks:

- A formal Energy Saving Performance Contracting policy framework, which will enable Government institutions to retrofit energy efficient gadgets without tapping into their compromised budget.
- Standardized ESPC contracts and procurement guidelines
- Measurement and verification (M&V) systems to support performance-based payments

The proposed CTCN technical assistance will complement and operationalize these existing efforts by enabling a structured and scalable implementation mechanism.

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

The main technology-related barriers include:

1. Institutional and Regulatory Barriers
   - No nationally approved ESPC framework for public buildings

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

- Unclear risk allocation between government and Energy Saving Companies considering performance risks, losses, payment terms, etc.

2. Technical Barriers

- Limited capacity for Measurement & Verification (M&V) of energy savings
- Lack of standardized performance benchmarks

3. Market Barriers

- Limited local ESCO market readiness
- Low confidence from financiers in public-sector EE projects

4. Financial Barriers

- Absence of performance-based financing mechanisms
- Dependence on upfront public capital expenditure

Contribution to Programme of Work 2023-2027:

As per 3rd Programme of Work of the CTCN, please indicate the system transformation area, key enablers and cross-sectoral themes related to the request:

System transformation areas (mandatory)

☐ Water-Energy-Food Nexus ☐ Sustainable Mobility ☒ Energy Systems ☒ Buildings and Infrastructure

☐ Business and Industry

Key enablers (optional)

☒ National Systems of Innovation ☐ Digitalization

Cross-sectoral themes (optional)

☒ Gender ☒ Youth ☐ Indigenous Peoples

Sectors:

Please indicate the main sectors related to the request:

☐ Coastal zones ☐ Early Warning and Environmental Assessment ☐ Human Health ☒ Infrastructure and Urban planning

☐ Marine and Fisheries	☐ Water	☐ Agriculture	☐ Carbon fixation
☒ Energy Efficiency	☐ Forestry	☒ Industry	☐ Renewable energy
☐ Transport	☐ Waste management		

Please add other relevant sectors:

Technical assistance requested (up to one page):

Overall Objective

To develop a Botswana-specific Energy Saving Performance Contracting (ESPC) model that enables large-scale energy efficiency retrofits in government buildings without upfront public capital expenditure.

Anticipated Activities

- Review of national energy, service company acceleration and contracting frameworks
- Assessment of the ESCO market and financing landscape in Botswana
- Development of:
  - ESPC policy and institutional framework
  - Standard ESPC contract templates
  - Financial and risk allocation mechanisms that address performance risks by determining whether ESCOs absorb losses or the government pays, while providing clarity on whether payments are strictly tied to verified savings.
  - Measurement & Verification (M&V) protocols
- Stakeholder consultations and validation workshops
- Capacity building for government institutions and local ESCOs

Anticipated Products

- Approved national ESPC framework
- Standardized ESPC contracts and guidelines
- Implementation roadmap and pilot pipeline
- Trained government officials and private-sector actors

Expected timeframe:

12-15 MONTHS

Anticipated gender and other co-benefits from technical assistance:

The ESPC model will generate multiple co-benefits, including:

- Gender benefits: Improved indoor comfort and working conditions in public buildings, particularly benefiting women-dominated sectors such as health and education. Both men and women owning ESCOs are going to benefit from the programme.
- Economic benefits: Reduced government expenditure on electricity therefore saving money for other purposes. This will also create jobs through ESCOs for Batswana and therefore people's livelihood will be improved.
- Environmental benefits: Reduced GHG emissions and improved air quality

Anticipated follow-up activities after this technical assistance are completed:

- Piloting of ESPC projects in priority government buildings for tangible demonstration
- Scaling up across ministries, local authorities, schools, and hospitals
- Mobilization of domestic and international financing (e.g. GCF, development banks)
- Replication of the ESPC model in other SADC countries

Key stakeholders:

Stakeholder	Role to support the implementation of the technical assistance
Ministry of Finance	Contracting and Financial oversight
Request Applicant (Department of Energy)	Lead coordination and implementation
Botswana Power Corporation	Energy data and technical input
ESCOs	Implementation of energy efficiency measures
Botswana Bureau of Standards	Measurement, Verification and Quality assurance
Ministry of Infrastructure and Transport	To advice and oversee the implementation of energy efficiency measures
Facility Managers from different Ministries	Facilitation of the ESPC Model

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

The request was initiated by the Department of Energy under the Ministry of Minerals and Energy, building on prior energy audits, policy reviews, and stakeholder engagement related to public-sector energy efficiency. Consultations were undertaken with relevant government departments and technical experts to identify barriers and suitable solutions.

Alignment with National Policy Frameworks

Vision 2036:

The project supports:

- **Pillar 3 (Sustainable Environment)** through reduced electricity consumption and emissions
- **Pillar 4 (Governance)** by strengthening regulatory and institutional systems

Nationally Determined Contributions (NDCs):

The project contributes directly to Botswana's NDCs mitigation actions by:

- Reducing demand-side electricity consumption
- Lowering emissions associated with electricity generation and imports

- Providing measurable, reportable energy savings for NDC tracking and monitoring, reporting, and verification (MRV) systems

National Energy Efficiency Strategy:

The project operationalises priority actions including:

- Removal of inefficient appliances from the market
- Demand-side management and peak load reduction
- Consumer awareness and market transformation
- Institutional capacity building and enforcement

The request will be submitted in collaboration with the National Designated Entity (NDE) following national approval procedures.

Reference document (please include date of document)	**Extract** (please include chapter, page number, etc.).
ESPC Project Proposal – Ministry of Minerals and Energy (2024)	
Long-term Low Emission Development Strategies	
National Energy Policy (2021)	POLICY STATEMENT: Energy Efficiency and conservation initiatives will be supported, particularly from the demand side, with a view to minimize energy wastage and to offset carbon emissions from conventional power generation. Page…18 of the Botswana National Energy Policy
Nationally Determined Contributions (NDCs) (2024)	MITIGATION CONTRIBUTION: The country intends to achieve an overall emissions reduction of 15% by 2030, taking 2010 as the base year.
Botswana Vision 2036 National Development Plan (NDP)(2025/26 - 2029/30)	ENERGY SECURITY: Botswana will be energy secure, with diversified safe and clean energy sources. Emphasis will be placed on energy efficiency as a management strategy to meet escalating energy demand. Appropriate technologies that enhance energy efficiency and minimise the emission of greenhouse gases will be used. Page 23 of Botswana Vision 2036 document.

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

The request was initiated by the Department of Energy under the Ministry of Minerals and Energy, building on prior energy audits, policy reviews, and stakeholder engagement related to public-sector energy efficiency. Consultations were undertaken with relevant government departments and technical experts to identify barriers and suitable solutions.

The request will be submitted in collaboration with the National Designated Entity (NDE) following national approval procedures.

Background documents and other information relevant to the request:

- ESPC Project Proposal – Ministry of Minerals and Energy (2024)
- National Energy Policy
- Botswana Vision 2036
- Botswana NDP 11 & 12
- Presidential Directive CAB2015
- National Energy Efficiency Strategy

OPTIONAL: Linkages to Green Climate Fund Readiness and Preparatory Support

The CTCN is collaborating with the GCF in order to facilitate access to environmentally sound technologies that address climate change and its effects, including through the provision of readiness and preparatory support delivered directly to countries through their GCF NDA. These actions are in line with the guidance of the GCF Board (Decision B.14/02) and the UNFCCC, particularly paragraphs 4 and 7 of 14/CP.22 and paragraph 4, 7 and 8 of 14/CP.24 that addresses Linkages between the Technology and the Financial Mechanisms[2].

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

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

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

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

NDA name:

Date:

Signature:

Monitoring and impact of the assistance:

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

By signing this request, I affirm that processes are in place in the country to monitor and evaluate the technical assistance provided by the CTCN. I understand that these processes will be explicitly identified in the CTCN Response Plan and that they will be used in the country to monitor the implementation of the technical assistance following standard CTCN procedures. This includes active engagement as NDE together with the key project proponent / beneficiary in regular project steering meetings.

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

Signature:	
NDE name:	Innocent Basupi
Date:	03/03/2026
Signature:	

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

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