Report consolidating the inter-institutional consultations and Policy/strategy analysis – Energy Sector







Initiative for Climate Action Transparency – ICAT Report consolidating the inter-institutional consultations and Policy/strategy analysis, the method and summary of each consultation and analysis

Deliverable #2

#### **AUTHORS**

Sennye Masike PhD

Clisystems Ltd Hamilton New Zealand

#### 18 February 2022

#### **DISCLAIMER**

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, photocopying, recording or otherwise, for commercial purposes without prior permission of UNOPS. Otherwise, material in this publication may be used, shared, copied, reproduced, printed and/ or stored, provided that appropriate acknowledgement is given of UNOPS as the source. In all cases the material may not be altered or otherwise modified without the express permission of UNOPS.

#### PREPARED UNDER

Initiative for Climate Action Transparency (ICAT) project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety, the Children's Investment Fund Foundation (CIFF), the Italian Ministry for Ecological Transition, and ClimateWorks









The ICAT project is managed by the United Nations Office for Project Services (UNOPS)



# Table of contents

### Contents

Acronyms	5
Introduction	7
Objective of the report	7
Methods and approachesExpected outputs	
Institutional arrangements for MRV and best practices	8
Current institutional arrangements on MRV	12
Current policy framework and strategies on institutional arrangement and information exchange	14
Stakeholder consultation results on institutional arrangements	
Budget for strengthening the current institutions	20
Inter-ministerial body/steering committee	
Technical Management Unit	23
Sectoral working groups/thematic groups	23
Public and private sector arrangement	24
Data collection, data quality assurance/control expertise	
Policy/legal framework to enhance institutional arrangement	25
Linking energy sectorial structures and the national MRV structures	
QA/QC system in place	26
Discussions of the key findings from the consultation	27
Conclusions	28
Recommendations	29
References	30
Annex 1: Stakeholders consulted	31
Annex 2: Inter-ministerial questionnaire	32
List of Figures	
Figure 1: Key components of the institutional arrangements	
Figure 2: Model structure of institutional arrangements with optional components	
Figure 3: Ideal structure for the National GHG inventory teamties Figure 4: Institutional arrangements for the NAP process	
Figure 5: Stakeholder response on reconfiguring MENT for MRV	
Figure 6: Stakeholder response on configuring modalities	

Figure 7: Stakeholders' response on changing DMS mandate	18
Figure 8: Strengthening and configuring of DMS	18
Figure 9: Response of configuring and strengthening NCCC for MRV	19
Figure 10: Knowledge of existence of steering committee	20
Figure 11: Existence committees to be strengthened	22
Figure 12: Stakeholders' response on the existence of TMU	23
Figure 13: Stakeholder response on the existence of TMU	24
Figure 14: Establish MoA/MoU	25
Figure 15: Existence of QA/QC system	26
List of Tables	
Table 1: data and required skills for MRV system	25

# **Acronyms**

BB Business Botswana

BCCP Botswana Climate Change Response Policy

BDQAF Botswana Data Quality Assessment Framework

BERA Botswana Energy Regulatory Authority

BPC Botswana Power Corporation
BTR Biennial Transparency Report

BURs biennial update reports
COP Conference of parties

DAP Department of Animal Production

DFRR Department of Forestry Resources and Rangelands

DMS Department of Meteorological Services

DoE Department of Energy

ETF Enhanced Transparency Framework

GHG Greenhouse Gases

GoB Government of Botswana

ICAT Initiative on Climate Action Transparency
INDCs Intended Nationally Determined Contribution
IPCC Intergovernmental Panel on Climate Change

IPPU Industrial Processes and Product Uses

LULUCF Land use, land-use change, and forestry

M&E Monitoring and Evaluation

MENRCT Ministry of Environment, Natural Resources Conservation and Tourism

MFED Ministry of Finance and Economic Development

MoA Memorandum of agreement

MoU Memorandum of understanding

MRV Measuring, reporting and verification

NCCU National Climate Change Unit

NDCs Nationally Determined Contributions

NDP National Development Plan

NEMES National Monitoring and Evaluation System

NEP National Energy Policy
NSS National Statistics System

PA Paris Agreement
SB Statistics Botswana

TNC Third National Communications

Report consolidating the inter-institutional consultations and Policy/strategy analysis – Energy Sector

ToRs Terms of reference

QA/QC Quality Assurance/Quality Control

UB University of Botswana

UNFCCC United Nations Framework Convention on Climate Change

## Introduction

Botswana being a Party to the United Nations Framework Convention on Climate Change (UNFCCC) as a non-Annex I member operates within the realm of UNFCCC requirements.

In 2015, at COP21, the parties proposed strengthening the UNFCCC requirements by establishing an enhanced transparency framework (ETF) under the Paris Agreement (PA). The main aim of the ETF is to build mutual trust and confidence. One of the requirements set by the Paris Agreement is for countries to develop and submit their nationally determined contributions (NDCs). The NDCs are effectively the backbone of the Paris Agreement. The ETF is an improvement of the current measuring, reporting and verification (MRV) framework, and it includes provisions to track progress towards the implementation and achievement of NDCs.

This includes amongst other development and submissions of the National Communications (NC), biennial update reports (BURs), Nationally Determined Contributions (NDCs) etc. The NDCs are the backbone of the Paris Agreements whose aims is to reduce the global GHG emissions to levels that will stabilize global temperature below 2 °C above pre-industrial levels. It is therefore fundamental that Conference of Parties, measure and report their NDC policy efforts in a transparent manner. Hence the Enhanced Transparency Framework (ETF).

Recognizing the importance to strengthen the capacity of the developing countries, the Initiative for Climate Actions Transparency (ICAT) was established. ICAT has already worked with numerous countries to strengthen and enhance their capacity to report their policy efforts (NDC mitigation) in a transparent manner as per the ETF.

Consequently, this report is part of the larger project titled "The Initiative for Climate Action Transparency (ICAT) for the Energy sector for the Government of Botswana". It is initiated by the Government of Botswana (GoB) in partnership with ICAT. Its main objective is to enhance the government capacity to measure and report the country's policy efforts in reducing the national GHG emissions.

# Objective of the report

The objective of the assignment is to undertake inter-institutional consultation with the relevant stakeholders on the institutional arrangements with the purpose of strengthening and enhancing their transparency frameworks with emphasis on the energy sector.

The specific objectives of the assignment are:

- Consultation with stakeholders on institutional arrangement and institutional capacity steering committee and technical unit, and,
- Desk-top review on institutional arrangements on MRV, policy framework and international best practices.

# Methods and approaches

To achieve the main objective of this assignment (undertaking inter-institutional consultations and policy/strategy analysis for the country's MRV), two main methods were employed. The first method was desk review. Desk review involved identifying and reviewing all the relevant documents on institutional arrangements and policy/strategies frameworks for the MRV. Documents such as the UNFCCC on institutional arrangements, Partnerships on Transparency in the Paris Agreements website, which document best practices from different countries' MRV institutional arrangements and policy framework were collated and reviewed to identify salient features of MRV institutional arrangements, international best practices, and policy frameworks.

The second method that was employed was stakeholders' consultation. This is an important method as it gives first-hand information on existing institutional arrangements which can be strengthened for the MRV. It also identified the gaps, strengths of the existing institutional arrangements and areas of synergies and collaborations. Consultation was undertaken based on guiding questions covering the various thematic areas of the institutional arrangements for the MRV. The key stakeholders across the line-ministries departments and private sector were consulted. Annexes 1 and 2 are a list of the stakeholders consulted and the guiding questions used.

### **Expected outputs**

The expected outcome from the report is a record consolidating the inter-institutional consultation and policy/strategy on the country's MRV and international best practices. Essentially, the report details the salient features of the institutional arrangement for the MRV as recommended by the UNFCCC, international best practices on robust institutional arrangements, the policies, and strategies. This is then followed by the current institutional arrangements and consultation results from the stakeholders.

# Institutional arrangements for MRV and best practices

Robust and well-functioning institutional arrangements are essential for the enhanced transparency framework (ETF) (Elsayed, 2013; UINFCCC, 2020). Well-defined institutional arrangements enhance and facilitate information exchange and reporting across the implementing entities (line-ministries, private sector, communities etc.) that are involved in the country's NDC. According to UNFCCC (2020), the key components of institutional arrangements defined in Figure 1 are:

- Organizational mandates,
- Expertise,
- Data flows,
- Sustems and tools; and,
- Stakeholder engagement.

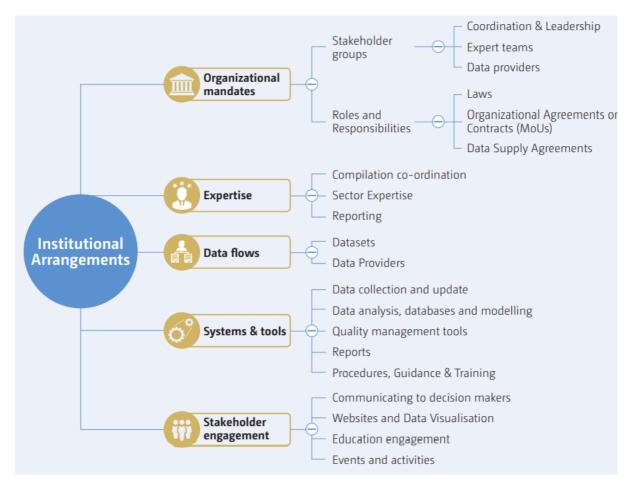


Figure 1: Key components of the institutional arrangement. Adopted from UNFCCC (2020)

The salient feature of the well-established institutional arrangement entails amongst others

- · inclusion of relevant institutions,
- sound horizontal integration or connectivity amongst the NDC implementing entities,
- composition of well-trained staff,
- terms of reference (TORs) of the committees established, and,
- comprehensive legal and policy frameworks (Elsayed, 2013, UNFCCC, 2020).

Defined ToRs of the institutions and workforces involve in the MRV is critical as it facilitates engagement and ownerships of the responsibilities. In addition, it is fundamental that the scope of the institutional arrangements is well-articulated in terms of the MRV for GHG emissions reporting (i.e., mitigation), adaptation, and support needed and received.

Legal framework is fundamental for enhancing cooperation in terms of data exchange between the NDC implementing entities. While the legal framework sets out expectations for data supply and knowledge-sharing, UNFCCC (2020) advises that when countries transit to the ETF, there will be a need to modify or develop new laws which support the transition.

A review of the existing literature on institutional arrangements indicated there is no one-size-fit-all institutional arrangements. For instance, UNFCCC (2020) noted that institutional arrangements are unique to each country. Consequently, there is no formula for integrating relevant organizations other than to focus on the data flows between the implementing entities (UNFCCC, 2020:17). Focusing on data flows is key as the transparency framework deal with measuring and reporting the country's policy efforts as far as GHG emission reduction is concerned. Thus, it is fundamental that data source and exchange are enhanced.

Though the institutional arrangement varies from country to country, they are characterised by the following common elements:

- Coordinating authority: in Botswana, the coordinating authority is the Ministry of Environment, Tourism and Conservation in Botswana (MENT)
- Inter-ministerial/steering committee: this will be technical unit that coordinates the MRV of
  the climate change activities (adaptation and mitigation and support needed and received)
  across the economic sectors. It will constitute representative from the implementing entities
  at the high level.
- Technical coordinators: this will be an individual or a team within each implementing entity (institution/department) whose task is to collect and comply the climate change policy efforts (adaptation and mitigation and support needed and received)
- Sectoral working groups: within each sector, a working group is established. In accordance
  with the Paris Agreement, the economic sectors that requires thematic working groups are
  Energy, Industrial Process, and product use (IPPU), Land-use, land-use change and Forestry
  (LULUCF), and Waste. Ideally, the working group will constitute government, research,
  private sector, and civic communities.

The ideal operational structure for the institutional arrangement for the EFT is as depicted in Figure 2 below.

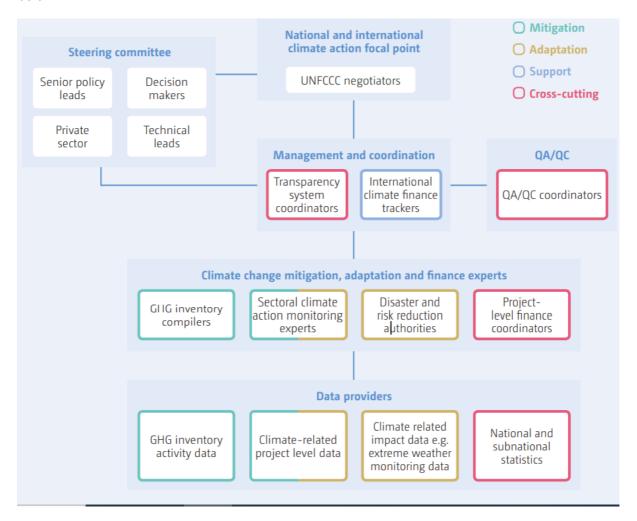


Figure 2: Model structure of institutional arrangements with optional components. Adopted from UNFCCC (2020)

One of the best practices highlighted is the use of the existing institutional arrangements. Obviously, they will require strengthening and enhancement by adding relevant components and defining the

responsibilities. The advantage of adapting and strengthening the existing institutional arrangements is that scarce resources will be used efficiently. Secondly, as these are the existing arrangements, it therefore means they can be fine-tuned to overcome institutional barriers (UNFCCC, 2020).

Another reason for using the existing institutional arrangements' structure is to ensure that climate change (MRV) structures do not operate in isolation but are mainstreamed into existing national planning processes. Creating new structures for MRV could create structures that operate in parallel to the existing structures. This could be counterproductive as institutions find it difficult to mainstream climate change issues and less prioritise MRV as institutions feel it is not their priority mandate.

One of the best international experiences of using the existing institutional arrangements is the case of German GHG emissions reporting. It is estimated that 80 per cent of the GHG emissions reporting in German comes from the Federal Statistics Office (UNFCCC, 2020). Based on the institutional arrangements in the country, there is sufficient data flow between the industry and the Federal Statistics Office (UNFCCC, 2020). As The Federal Statistics Office has same mandate as Statistics Botswana, it is advisable to adopt the Germany best practice and use Statistics Botswana as the central data agency. Similarly, the Government of Rwanda has also adopted the same approach where MRV data and information will be managed within existing Results Based M&E system of the environment and climate change sector.

Another best practice on the institutional arrangements is the development of a central registry for the mitigation and adaptation actions. Observation is that the implementing entities will in many instances, have the mandate to implement both the adaptation and mitigation activities. Therefore, establishing central registry for adaptation and mitigation will facilitate standardising data collection formats and cross-cutting benefits.

UNFCCC (2020) advises on the development and strengthening the institutional arrangements during the preparation or updating of climate change strategies (including NDCs) and national reports (such as NCs, BURs and BTRs) as a best practise. Subsequently, this will ensure that the institutional arrangements are developed in the context of needs for the key outputs and enable stakeholders to be engaged in and focused on producing those outputs. Following this advice, Georgia established a national MRV systems for the BUR, which incorporated the Nationally Appropriate Mitigation Actions (NAMA) as well as other mitigation actions (UNDP, 2019a).

Colombia has developed a comprehensive MRV framework to track climate finance (Climate Finance MRV) from public, private, and international sources (UNDP, 2018). Colombia's Climate Finance MRV framework is classified as good practise as it follows a multi-level governance approach, by a high level of stakeholder engagement and is transparent in nature (UNDP, 2018). Thus, one of the international best practices to robust stakeholder engagement and transparency of the institutional arrangements. Similarly, the Government of Rwanda, has also established a comprehensive stakeholder engagement which is guided by the establishment of legal framework. This is in line with the UNFCCC recommended best practices of having a well-functioning Legal framework to ensure ownership.

Establishment of the sectoral agreements which defines the legal and policy frameworks of the MRV is another good practice as evident in Costa Rico. The Sectoral Agreements represent important governance instruments due to the strong inter-sectoral cooperation between key stakeholders, the innovative policy instrument used (UNDP, 2019).

Harmonisation of the country's GHG MRV systems, is another best practice that was employed by the Government of Colombia to ensure accurate and transparent NDC international reporting (USAID, 2019). This involved a review of the mitigation activities. This was followed by analyses of the existing systems, processes and highlighting areas for improvement and provided several tangible recommendations to better synchronize reporting methodologies and the greenhouse gas inventory (USAID, 2019). The output was a national GHG inventory data management platform, which streamline the national inventory data collection process and reduce the learning curve for system adoption (USAID, 2019).

# Current institutional arrangements on MRV

Botswana has systematically and progressively concentrated its effort in building an interfaced institutional architecture to ensure that it implements climate change interventions and comply with UNFCCC requirements. These existing institutional arrangements can be strengthened to enhance the country's MRV that are aligned to the ETF. The most important existing structure is the National GHG emission inventory team. The institutional arrangements for the GHG emission constitute the coordinating authority which is the Ministry of Environment, Natural Resources, Conservation and Tourism (MENT), UNFCCC climate change focal point, housed at the Department of Meteorological Services (DMS), and the GHG team experts for all the economic sectors (agriculture, energy, Industrial process and product use, waste, LULUCF). The proposed National GHG inventory team is a depicted in Figure 3 below. Currently, the experts that need to be established to complete the institutional arrangements for the National GHG inventory team are:

- Quality Assurance/ Quality Control expert,
- · Uncertainty assessment expert,
- Data and document management data, and,
- Task groups for each sector.

Thus, following the international best practise of UNFCCC of strengthening the existing the institutional arrangements, the existing GHG structure can be strengthened to include other MRV components namely mitigation, adaptation and international support needs and received in alignment to figure 2.

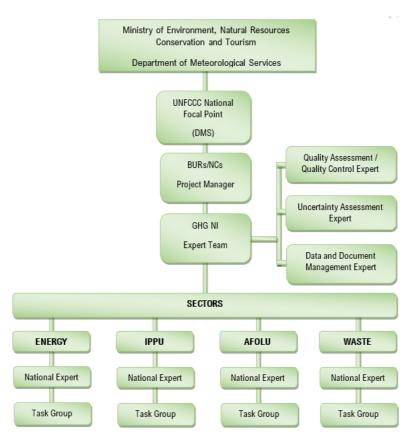


Figure 3: Ideal structure for the National GHG inventory team

The Botswana Climate Change Response Policy (BCCP) has also suggested institutional arrangements for the implementation of the national policy. The proposed institutions and committees are:

- National Climate Change Coordinating Organisational Structure, which will be established under a legal framework,
- National Climate Change Committee (which is already existing),
- Parliamentary Portfolio Committee on Natural Resources and Environment,
- Implementing entities (both the departments within the line ministries and private sector);
   and,
- Climate Change Committees (which is proposed under the Policy).

Aligned with the BCCP, the GoB developed its National Adaptation Plan Framework (NAP framework). The main goal of the NAP framework is to give direction and guidance to the development, implementation, and monitoring of the country's NAP process. In alignment with the BCCP, the institutional framework for the NAP process includes the central government as the coordinating authority (Ministry of Presidential and affairs and public Affairs), the National Climate Change Unit (NCCU) will provide oversight and coordinate the NAP processes. Other important stakeholders include the Parliamentary Portfolio committee, National committee on Climate Change (NCCC) and the implementing entities being the line ministries and their respective department. At the grass-roots levels, the district climate change committees, village development committees (VDC) and Civil Society Organisation (CSO) will play a critical implementation role. Figure 4 depicts the proposed institutional arrangements for the NAP for the country. As climate change adaptation and mitigation activities such as ecosystems-based approaches, can be cross-cutting, it is important that the NAP process institutional arrangements are considered when strengthening the institutional arrangements for the NDCs.

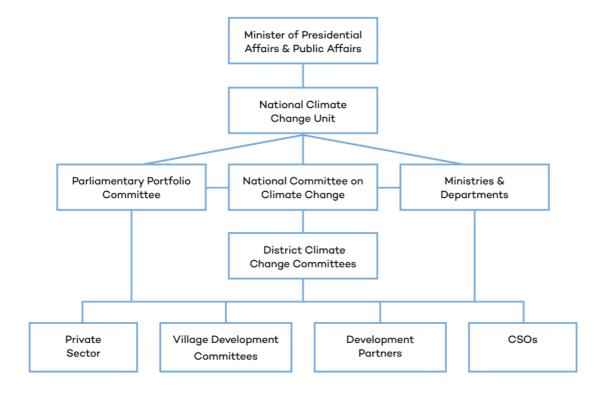


Figure 4: Institutional arrangements for the NAP process. Adopted from GoB (2020)

At the national level, the country established the National Climate Change Committee (NCCC) which constitutes Government Ministries/departments, Non-Governmental Organisations (NGOs), and the private sector. The NCCC was established as an advisory body to coordinate the implementation of Botswana's obligations under the UNFCCC. The Deputy Permanent Secretary (DEA) in the Ministry of Environment, Natural Resource Conservation and Tourism is the chairperson of the Committee.

The NCCC was established to ensure horizontal integration across the various institutions both the private sectors and the public sectors. It is for this reason that it is strategically places in the institutional arrangements for the NAP processes.

Regarding the international support received, the Ministry of Finance and Economic Development (MoF) is the focal point (National Designated Authority) for Green Climate Fund. It keeps a data base for finance originating from the GCF. Linking it up to the existing institutional arrangements will facilitate information flow to the climate change focal point.

Another key existing institution that needs to be integrated in the country MRV's to facilitating information flow and exchange between the implementing entities is Statistics Botswana. Statistics Botswana collects data from all implementing entities and the data is also shared within agencies. Statistics Botswana operates as the Lead Agency in the National Statistics System. To facilitate data collection, some officers from Statistics Botswana are seconded to line ministries and departments to provide technical support, and for easy collection of administrative data. Subsequently, this currently institutional arrangement between Statistical Botswana and line ministries, should be strengthened and extended to cover the NDC MRV systems.

As shown by the international best practice in Germany where 80% of the data comes from Federal Statistics Office, it is critical that the current arrangements are strengthened for Statistic Botswana to play a central role in information exchange for NDC MRV.

Regarding the institutional arrangements for the energy sector, the sector falls between two ministries, one of them being Ministry of Mineral Resources, Green Technology and Energy Security (MMRGTES) portfolio. The Department of Energy (DoE) under the MMRGTES is an oversight governmental entity that is tasked with the overall governance of the energy sector (GoB, 2020). Botswana Energy Regulatory Authority (BERA) is a government parastatal established by the Botswana Energy Regulatory Act of 2016. It is an oversight body regulating all types of energy sources in the country (GoB, 2020). The main implementing entities (IEs) for the energy sector in the country are Botswana Power Corporation (BPC) and the Botswana Oil Limited (BOL).

The prolific use of fuelwood in the country implies that the Ministry of Environment, Natural Resources Conservation and Tourism (MENRCT) through the Department of Forestry Resources and Rangeland (DFRR) is also involved in the regulation of energy resources in the country.

Subsequently, the institutional arrangements for the energy MRV must include all these institutions to ensure information exchange and transfer which is a requirement for the MRV.

Current policy framework and strategies on institutional arrangement and information exchange

The pinnacle legal framework for the data and information sharing and exchange in the country is the Statistics Act of 2009. It is an "Act to establish a body corporate to be known as Statistics Botswana; to require that official statistics be produced by means of a process that is guided by the National Statistical System; to provide principles for the production and dissemination of official statistics; and for matters incidental thereto" (GoB, 2010:pg1).

The Act led to the establishment of Statistics Botswana and thereafter the National Statistical System. According to the Act, the NSS should constitute all institutions in the country dealing with or directly involved in the production of vital statistics, use of official statistics and other statistics, research and development of statistical methods and techniques; and training and education (GoB, 2010).

Thus, through the establishment of the NSS, the Act makes a provision of the institutional arrangements for data collection and analysis. In addition, the Act makes provision for collection and data and information as it calls for the statistics or information to be exchanged among the parties or shared with the other parties, as long as confidentiality of individual data is respected (GoB, 2010). Thus, the Statistics Act provide legal framework for the institutional arrangements and information exchange for the NDC MRV systems.

Botswana Climate Change Response Policy (BCCRP) is the ultimate legal framework that guides the country's climate change decision making and national planning. The Policy calls for the development of the legal framework that will guide the establishment of the National Climate Change Coordinating Organisational Structure that will be responsible for implementation, monitoring and evaluation and compliance with Climate Change response measures as defined by the policy.

# Stakeholder consultation results on institutional arrangements

As per international best practise, it is critical that inclusive consultation is undertaken as one of the first steps towards an establishment of institutional arrangements for MRV which will transit to the ETF. The consultation for the establishment of institutional arrangement is important for the following reasons:

- Firstly, it fosters buy-in and ownership for the established NDC institutional arrangement,
- Secondly, it enhances and promotes future stakeholder participation as they have been involved in the establishment of the institutional arrangements and are aware of their institutional duties and responsibilities, and,
- Thirdly and lastly, prevent duplication and formation of parallel institutional arrangement by ensuring that the existing institutional arrangements are strengthened to execute the NDC tasks.

Accordingly, intensive consultation was undertaken across various line-ministries, civil communities, research institutions and the private sector as a first step towards the establishment of the robust and all-inclusive institutional arrangements for the energy sector.

Due to the Covid 19 restrictions and to adhere to the established protocols, consultation was undertaken through electronic questionnaire surveys. Annex 2 is a questionnaire that was used for consultations. In line with the UNFCCC institutional arrangement best practice, the questionnaire seeks to determine the existing country climate change institutional arrangement, their compositions (institutions), data and information exchange amongst others.

### Current coordinating body/lead institution

The entry point on the inter-ministerial consultation for the MRV which will transit into EFT institutional arrangements was to identify the existing arrangements and how they can be reconfigured or strengthened to enhance effective MRV systems. Currently, national climate change response falls under the Ministry of Environment, Natural Resources Conservation and Tourism (MENT) portfolio. It is the coordinating body/lead institution on national climate change respond with the focal point housed at the Department of Meteorological Services (DMS). DMS is the lead entity for the coordination of the country's response to climate change and focal point to UNFCCC. DMS guides in the formulation of the legal framework and coordinates the country efforts to meet the UNFCCC requirements.

Then there is the National Climate Change Committee (NCCC) which constitutes Government Ministries/departments, Non-Governmental Organisations (NGOs), and the private sector. The NCCC was established as an advisory body to coordinate and provide guidance on the implementation of Botswana's obligations under the UNFCCC.

Statistics Botswana is another institution that plays a central role as far as data and information exchange is concerned. The institution was formed following the Statistics Act of 2009. To facilitate data collection and exchange, it has seconded its employees to the line-ministries and departments.

Another team that was established as institutional arrangement for the reporting of Greenhouse gases (GHGs) is the national GHG emissions inventory which constitutes experts from research institutes (University of Botswana, Botswana University of Agriculture and natural Resources), Statistics Botswana, DMS and Department of Forestry and Range Resources (DFRR).

Based on these existing institutions, consulted institutions were asked to state their view with the current arrangements and whether there is need for reconfiguring and strengthening.

#### MENT - Lead ministry

All the stakeholders which participated in the consultation, fully concurred with the current institutional arrangement where MENT is the relevant ministry to lead climate change initiatives. However, 63% of the stakeholders highlighted the need for reconfiguring and strengthening the lead ministry to effectively execute on its mandate as far as MRV is concerned. On the other hand, 37% found no cause for strengthening or reconfiguring it (Figure 5). Of those institutions which indicated the need for strengthening MENT as the leading ministry for climate change initiative including MRV systems, some of the suggestions for strengthening include:

- Establishment of a Green Energy Department under MENT and harmonize all Climate Change Initiatives under the Green Energy Department,
- Step up a committee constituting the ministries to drive NDC at which NCCC should report,
- Establish a National Climate Change Department need constituting relevant expertise from different fields e.g., Agriculture, Forestry, and Health etc,
- Establish new structures or strengthen existing structures to facilitate sourcing of more funds from donors/international organisations to support GHG Inventories compilation, for developing NDCs, BTRs, and NCs,
- The ministry to establish a separate budget for annual GHG inventory preparation, and,
- Establish sustainable institutional arrangements that will advocate for high-level support, long-term funding and mainstreaming of the transparency framework in the climate agenda and sectoral plans.

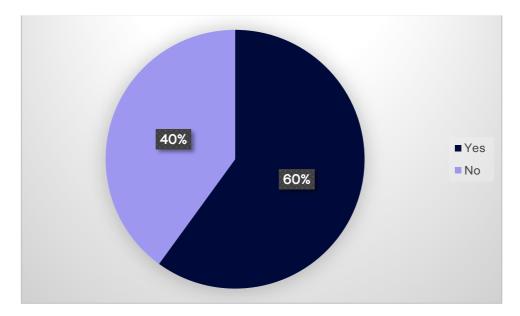


Figure 5: Stakeholder response on reconfiguring MENT for MRV

Subsequently, an assessment of the suggested ways to configure and strengthen the MENT as the leading ministry can be categorised into groups being:

- 1. An establishment of a new department to oversee climate change initiative including NDC implementation and MRV systems, and,
- 2. Strengthening the ministry to mobilise funding for MRV and capacity building.

The suggested department, according to one stakeholder will assume the responsibility of DMS as a focal point and DMS will focus on mandate of weather forecasting.

The proportion of those who suggested formation of new department under MENT and those who suggested strengthening the ministry to mobilise funding for MRV is as depicted in (Figure 6).

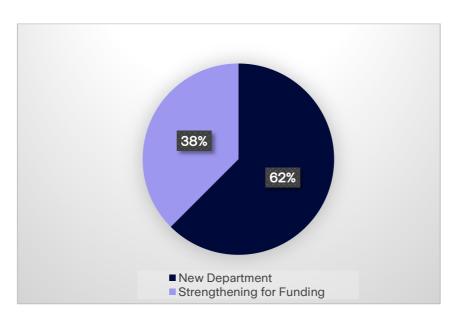


Figure 6: Stakeholder response on configuring modalities

In addition, it was also noted that there is National Strategy Office (NSO), a government organ whose mandate is to coordinate government strategies and monitor them. It was thus suggested it could be an ideal candidate for overseeing monitoring of the NDC and the MRV system. Furthermore, it was highlighted that the MFED has management system for monitoring the development projects which can be interfaced or strengthened for the NDC MRV. Consequently, using NSO and the existing NEMES systems will avoid duplication of efforts and having to report to multiple structures which produce the same results.

#### DMS - focal point

Majority of the stakeholders consulted (Figure 7) indicated that DMS should continue with the central role of coordinating the climate change initiative and act as a focal point for UNFCCC. Only 7% indicated that it should focus on its mandate of weather forecasting.

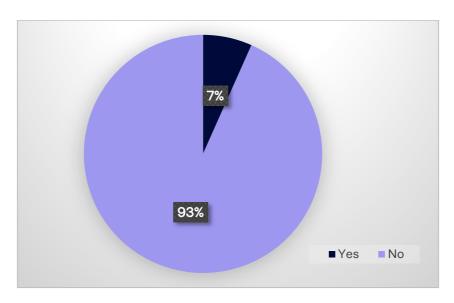


Figure 7: Stakeholders' response on changing DMS mandate

Of those who indicated that it should continue as the focal point and coordinate MRV systems, 90% indicated that it does not require strengthening or configuring as depicted Figure 8 below.

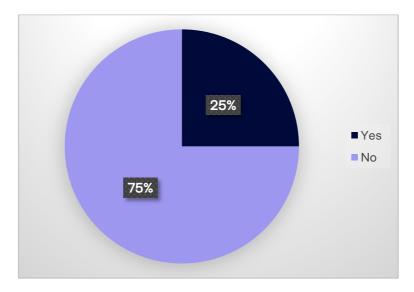


Figure 8: Strengthening and configuring of DMS

Of those who indicated strengthening DMS as the focal point institution, the following as the suggested strengthening activities:

- Establish a Unit within DMS for coordinating National MRV system,
- Strengthen DMS financial management systems to enable it to directly manage the national GHG emission inventory budget,
- Establish a single system covering all the requirements of the ETF and allow for easy compilation of the data necessary to report National Communications and BTRs; and,
- Establish a GHG data portal.

#### NCCCC- as an advisory body

All the stakeholder concurred that the NCCC should continue its mandate as an advisory body to coordinate the implementation of Botswana's obligations under the UNFCCC. In terms of reconfiguring and strengthening NCCC, 64% of the respondents indicated that it needs to be strengthened while the rest found it to be fine (Figure 9).

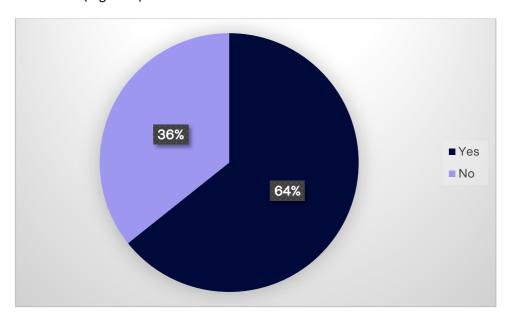


Figure 9: Response of configuring and strengthening NCCC for MRV

Some of the suggested strategic activities for strengthening NCCC for it to play a facilitative and coordinating role on MRV and later ETF include:

- Establish a full-time secretariat with seconded officers covering Mitigation, adaptation and international aid received,
- Increase the representation of all the sectors (e.g., mines, energy, petroleum-retailers/wholesalers, oil, etc.) under Business Botswana and the additional members from the GHG inventories, MRV, BTR and NCs,
- To change the committee to Botswana National Climate Change Board and should be legally formed under the Climate Change Policy and Legislation,
- The committee needs to produce annual programmes and intensify its coordination and revise its ToRs, and,
- The committee to create focal points across government, parastatals, private sector.

#### Statistics Botswana

As per international best practise, statistics institutions/entities play a central in data and information exchange which is critical for MRV system. Thus, stakeholders were quizzed on its functionality and whether there is a need for strengthening it for MRV and later ETF system. All the stakeholder indicated that the current arrangement where Statistics Botswana is the data provider is ideal. However, they indicated that there is a need to strengthen the existing arrangement where Statistics Botswana can play a more active role in the MRV. Some of the recommended strategic activities that should be considered include signing a memorandum of agreement (MoA) and memorandum of understanding (MoU) with DMS to formalise its participation on MRV through provision of data and information. The suggested strengthen will be similar to the Germany institutional arrangement for GHG inventory. Furthermore, it was suggested that Business Botswana should be assigned the role of building capacity on data collection and quality control/assurance.

#### GHG inventory team

Majority of the stakeholders indicate that the GHG inventory team need to be strengthened to effectively execute its mandate. One of the strategic activities that were highlighted by the line-ministries and the private sector was the need for rigorous training of the team members to be at par with the UNFCCC reporting standards. In addition, it was also noted that there is a need to strengthen the current team by including expertise from other sectors such as crop and animal experts; GIS/mapping, remote sensing; range ecologist; transport engineers and waste/sanitation experts. Furthermore, it was also noted that BPC which constitute the highest GHG emitter in the country inclusion in the GHG inventory team is crucial. Lastly, it was also noted that a MoA/U between the GHG inventory and MENT/DMS is signed to formalise the arrangement. One of the key components of the institutional arrangements as per international best practise is the establishment of MoU which foster responsibilities and ownerships amongst the institutions. It is thus critical that MoA/U between the inventory team and DMS is signed.

#### Budget for strengthening the current institutions

Configuring the institutions to enhance the country's capacity to meet the PA requirements and facilitate transition from the MRV to the ETF by 2024 at latest might will require additional budget. Consequently, stakeholders were consulted on the budget implications of the strengthening the current organisational structures in place. Various points were noted by the stakeholders. For configuring the current institutions, stakeholders noted that it will not require budget increase as the personnel under the different structures such as NCCC, DMS, MENT and Statistics Botswana are government employees who are co-opted into committees to perform the duties as part of their government roles.

However, for the establishment of the new department as recommended by some stakeholders, and strengthening the institutions, it was noted that there will be cost implications as this will require capacity building and development through training. Source of funding for capacity building that were identified by the stakeholders included government budget and international funding. For the government budget, stakeholders recommended increasing national budget which can be financed through carbon tax, carbon markets and removal of carbon subsidies. Therefore, it was suggested that the government should establish Climate Change Fund for managing such funds.

Other sources to mobilise the funding for strengthening institutions that were identified included international funding from loans and grants from climate funds and multilateral organisations and carbon markets. Clearly, this will call for the development of the country's NDC financing strategy.

### Inter-ministerial body/steering committee

Inter-ministerial body/steering committee (SC) is one of the important elements of the institutional arrangement for MRV. It promotes coordination across key stakeholders and information flow and data exchange across implementing entities/key sectors. Stakeholders were thus quizzed on the existence of such a committee in the country and their responds are depicted in Figure 10.

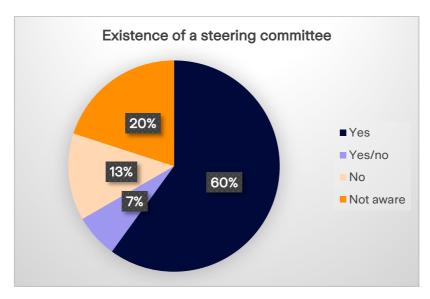


Figure 10: Knowledge of existence of steering committee

Stakeholders who indicated that there is an existence of an inter-ministerial body/steering committee which can be strengthened for the MRV system which will transit to EFT highlighted the following committees as ideal for strengthening:

- NCCCC- Chaired Deputy Permanent Secretary (DEA) in the MENT constitute line ministries/department, NGOs), and the private sector. Established as an advisory body to coordinate the implementation of Botswana's obligations under the UNFCCC,
- Sustainable Environment Thematic Working Group- this is the working that oversee the implementation of government programmes to achieve sustainable environment as per vision 2030, and,
- Energy Sector level Consultative Council-chaired by the Minister of Mineral Resources, Green Technology and Energy Security (MMGE), membership include Dept. of Mines, Dept. of Energy, BPC, BERA, Business Botswana.

Of those who indicated that there are existing committees which can be strengthened to be the steering committee, 75% identified NCCC as the ideal committee (Figure 11).

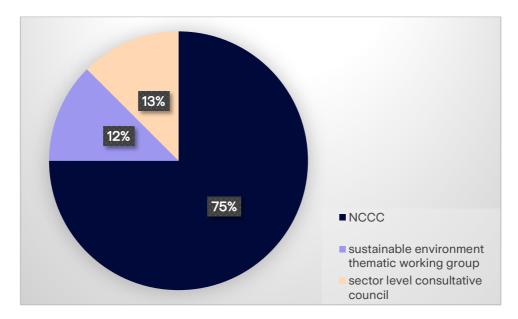


Figure 11: Existence committees to be strengthened

In terms of strengthening the existing committees, the following are some of the suggested activities:

- The committee should comprise experts from different fields, with emphasis on high emitters and highly vulnerable sector and should constitute high level officers,
- Funding needs to be improved for the steering committee to effectively execute its mandate,
- The committee should only contain technocrats and technical officers with the relevant knowledge on operationalisation of the NDC MRV system,
- Secretariat should be assigned to MENT/DMS,
- All key sectors should be in the committee (private sector, NGOs, and research institutions) and should be accountable for the performance of their sectors,
- Establish a working group under the NCCC to focus specifically on MRV, and its chair can report on progress in all the NCCC meetings,
- Establish a memorandum of agreement (MoA) and Memorandum of understanding (MoU) for the steering committee; and,
- Revise the terms of reference of the steering committee.

In terms of the duties and responsibilities of the steering committee, stakeholders highlight the following:

- To oversee UNFCCC reporting and the implementation of the ETF for NDC tracking progress and achievement,
- Ensure compliance to the UNFCCC MRV and transition to the EFT,
- Ensure alignment between proposed and existing government projects with climate change targets and commitments,
- To champion institutional monitoring and measures implementation progress made, analyses challenges which will guide policy and strategy formulations, improved NDC MRV coordination and facilitate stakeholder engagement,
- Facilitate coordination between the actors/implementing entities in terms of data and information exchange,
- Guide on capacity building needs for the MRV system for key sectors, and,
- Report to the national level, the MENT on matter incidental to NDC and its MRV.

### **Technical Management Unit**

Ideally, it is important that technical management unit (TMU) is also created whose role is to coordinate reporting across the implementing entities (departments, private sector etc). This is one of the structures entities that has been observed to be common amongst various countries (Elsayed, 2013, UNFCCC, 2020). In line with international best practise of using existing structures, the stakeholders were consulted on the existence of such units within their organisation. Figure 12 depicts the response from the stakeholders on the existence of a TMU.

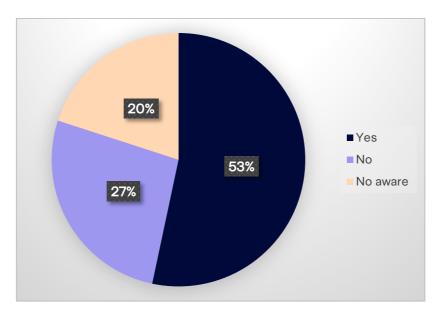


Figure 12: Stakeholders' response on the existence of TMU

For those who indicated that there is a TMU which can be strengthened to facilitate to operationalise the country's MRV, they indicated that the DoE has a Statistics and Modelling unit whose responsibility includes national energy planning. Thus, this team can be trained on the energy MRV aspects such as mitigation amongst others. Currently, it was highlighted that the unit has limited human resources and need to be strengthened.

Consequently, the energy sector has an existing unit which can be enhanced and strengthened for the purpose of coordinating the energy MRV.

## Sectoral working groups/thematic groups

Sectoral working groups also known as thematic groups are an important element of the institutional arrangements for the MRV which will transit into the EFT. In line with the international best practise, the GoB developed an institutional arrangement for the GHG emission inventory which is supposed to have sectoral working groups (Figure 3). Thus, stakeholders were consulted to determine the existence of a sectoral working group. The stakeholders' response on the existence of the sectoral working groups was evenly spread between those who indicated that there are TMU and those who indicated that they do not exist. On the other hand, 20% were not aware of any sectoral working groups.

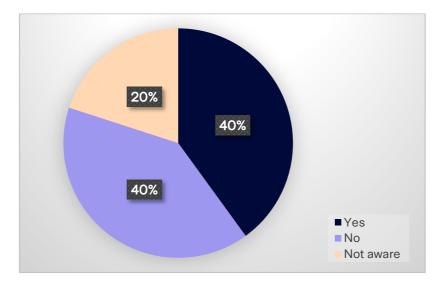


Figure 13: Stakeholder response on the existence of TMU

For those who indicated that there are sectoral working groups, the following groups were highlighted as the units that can be strengthened:

- Sectoral working groups which report to the Sector Level Consultative Council. They include energy sector, petroleum sector, mines sector, and the transport sector,
- Sectoral working groups / thematic working groups (TWGs) which are made up of government officials from relevant ministries and private sector such as sustainable environment thematic working groups, and,
- SDGs technical task Force which are multi-sectoral. These are task force for the implementation of the country's Sustainable Development Goals.

For the energy sector the ideal thematic working group will be the energy sectoral working group which report to the sector level consultative council. The working group will be ideal for working with the energy GHG emission inventory team.

## Public and private sector arrangement

Public and private sector participation is fundamental for the MRV/ETF as they are involved in energy projects, renewable projects, adaptation and generate data. Ultimately, they are the custodian of GHG emission, mitigation, and adaptation data. Therefore, enhancing the participation will facilitate data flow and exchange for the MRV and later the ETF system. Furthermore, it is important that they are capacitated to generate reliable and quality data. Some of the strategic activities that were suggested by the stakeholders to enhance public and private sector arrangement include:

- Ensure adequate representation of the public and private by including their oversight bodies (civil societies such as Business Botswana) and representative in strategic committees such as sectoral working groups, NCCC etc,
- Development and operationalisation of the stakeholder engagement and communication strategy to raise awareness (public and private sectors) on the NDC and reporting systems,
- Strengthen the existing government ministries/departments-private sector structures,
- Enforcement of the Statistics Act of 2009 to ensure mandatory reporting and data flow and exchange between the various sectors,
- Creative programmes and incentives such as carbon credit schemes, clean development mechanisms to encourage private sector participation in mitigation and adaptation and reporting, and,

• Develop and operationalise Memorandum of understanding (MOU) on data sharing and information exchange.

## Data collection, data quality assurance/control expertise

MRV/ETF system hinges on data quality, data flow and information exchange between the actors and the GHG inventory team. Stakeholders were thus consulted on the skills that they will require to enhance the institutions to operationalise the MRV systems which will transit to EFT. Table 1 below depicts the skills that the stakeholders envisaged will be required to enhance the institutions participation in the MRV system with emphasis on the energy sector.

Table 1: data and required skills for MRV system

Activity/Role	Expertise required
Data collection for NDC MRV	Statistician, Energy and renewable experts, waste to renewable energy experts, Forestry experts
Data QA/QC	Data analysis experts, statisticians,
GHG emission inventory	Expertise in IPCC software, statisticians and sectoral expert such as energy, waste, transport
GHG mitigation	Modelling experts (LEAP software), expertise in IPCC software, statistician, and sectoral experts such as energy to waste, renewable energy, and sectoral experts
Resource requirement and allocation tracking	Economist and accountants

Consequently, the stakeholders indicated that the suggested experts need to be adequately trained and be timely subjected to refresher short courses.

## Policy/legal framework to enhance institutional arrangement

UNFCCC (2020) highlights policy/legal framework as an imperative in the institutional arrangements for the MRV systems. Firstly, its facilitate and enhance an enabling environment data and information exchange amongst the institutions. Secondly, as an enforcement instrument it can be used for enhancing accountability. Due to the importance of the Legal framework, it is highly recommended that countries might need to modify or develop new laws which support transition to ETF (UNFCCC, 2020).

In light of the central role played by the legal framework in the facilitating data transfers and information, consultations were also focused on existence of legal instruments that will create an enabling environment for the optimal MRV functioning.

One aspect of the legal framework that came out strong from the stakeholders was need for establishing MoA/MoU with the private sector for information sharing (Figure 14). For instance, it was noted that a MOU with other strategic partners such as The Hospitality and Tourism Association of Botswana (HATAB) could facilitate data sharing on tourism and hospitality sector systems which are not easily accessible particularly in the delta where majority of the establishments are off grid.

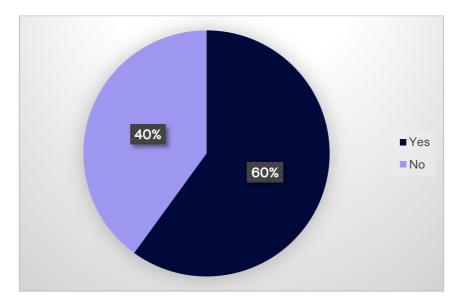


Figure 14: Establish MoA/MoU

The recommendation of establishing MoA/U is consistent with the international best practise elsewhere such as Germany where they have been established to facilitate information sharing to the Federal Statistics Office. In addition, stakeholders highlighted various legal framework that need to be enacted to facilitate information sharing and implementing entities responsibilities. Data and information sharing in the country is mandated by the Statistics Act of 2009, therefore this act was highlighted by the stakeholders for enforcement to ensure that data is shared. Other legal instruments that were mentioned include for enactment or enforcement as they are already existing include:

- National Climate Change Response Policy,
- · Botswana Regulatory Energy Act,
- National Energy Policy Implementation Plan, Regulations under the BERA Act, and,
- Botswana Energy Regulatory Act of 2016.

However, other stakeholders noted that the main actors in this MRV institutional arrangement come from government and as such, there is no need for a legal instrument or Act to mandate them to work. The suggestion was to have a Cabinet Directive that sets up the institutions at the higher level, e.g., ministerial level expert/technical committee. The other committees can be instituted through drafting of Terms of References. The TORs should also have an equivalent document covering aspects of MRV budgets and the funding sources.

# Linking energy sectorial structures and the national MRV structures

The various sectoral MRV (energy, IPPU, LULUCF, and Waste) needs to be coordinated into one system for national NDC reporting. It thus vital that the sectoral MRV institutional structures are linked with the national structures. According to the stakeholders, the energy sector TMU and other sector will report to the NCCC which will in turn report to the climate change focal point. To strengthen vertical integration, it was suggested that some members in the NCCC should also be present in the TMU and working groups. This arrangement will foster strong connectivity between the various institutions (committees) and facilitate data sharing and information exchange.

## QA/QC system in place

The last aspect of the MRV institutional arrangement that was discussed was the QA/QC system. UNFCCC (2020) explicitly highlight the need for a QA/QC expertise in the MRV systems. It was thus

necessary to assess the QA/QC system in the country and their improvements. Majority of the stakeholders indicated that there is no QA/QC system in place only 12% indicated that there is a QA/QC in place. For those who indicted that there is a QA/QC in place, they noted that Statistics Botswana as custodian of data generation in the country have systems (e.g., Botswana Data Quality Assessment Framework (BDQAF) in place to ensure QA/QC as per the international standards. Incidentally, the BDQAF was developed in accordance with UN Fundamental Principles of Official Statistics guidelines.

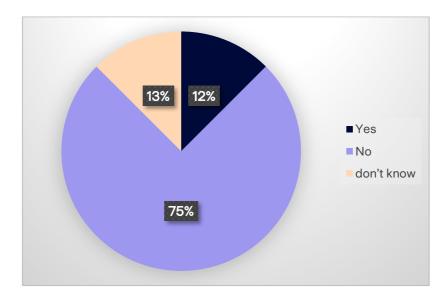


Figure 15: Existence of QA/QC system

For the majority who indicated that there is no QA/QC system in place the following were some of the recommendations to establish a system in place:

- establish QA/QC Team made up of professionals/scientists (modellers/statisticians/data analytics) to verify the data collection methods and analysis minimize errors,
- the team should constitute members from the TMU and Statistics Botswana to ensure a coordinated logical approach to the MRV systems,
- develop and operationalise a country QC/QA framework plan to guide the process, and,
- establish NDC MRV data Processing Centre, with data management specialists and statisticians.

# Discussions of the key findings from the consultation

As per best practice, consultation was undertaken to guide the process of establishing an inclusive institutional arrangement for the MRV energy sector that will ensure coordination with other sectoral MRV and the national structures. At the national level, stakeholders indicated that there are current existing institutional arrangements that can be optimised/ strengthened for the country's MRV systems. The current national structure where the MENT is the lead ministry and the DMS as a focal point for UNFCCC was unanimously agreed by the stakeholders as ideal for the country MRV which will transit to EFT in 2024 at the latest. However, the stakeholders indicated the need for strengthening MENT in terms of mobilising funding for the MRV.

With regards to the inter-ministerial committee, the stakeholders indicated that existing NCCC should be strengthened to assume the responsibility of the inter-ministerial committee since it constitutes all the line-ministries, civil societies, and the private sector. To strengthen its capacity, there is a need to include all the stakeholders in the committee, establish a MoA/U for the steering committee and adequately revise their ToRs.

At the sectoral level, it was suggested that generally each department has its own technical unit which can be strengthened for the sectoral MRV. For instance, DoE has a Statistics and Modelling unit whose responsibility includes national energy planning, and this can be strengthened by increasing its budget and human resources.

With regards to the task groups, three existing structures were suggested for strengthening being Sectoral working groups: SDGs technical task forces and the thematic working groups. However, for the energy sector the appropriate working seems to be the sectoral working group which report the Sector Level Consultative Council.

The stakeholders were adamant that these existing structures are well aligned to undertake the NDC MRV once they are strengthened through capacity building as well as by increasing the budget and revision of the ToRs.

Public and private participation enhance was also recommended for strengthening by ensuring their memberships in all the critical committees such as NCCC and the sectoral committees. However, it was noted that there is a need to develop and implement stakeholder engagement and communication strategy to raise awareness (public and private sectors) on the NDC and reporting systems. Lastly, development of MoA/U with the private was also identified as important.

Various legal and policy instruments were identified for their enforcement to ensure data sharing and information transfers between the actors. Some of the existing instruments that were identified include Statistics Act of 2009, climate change policy, national energy policy, Botswana Regulatory Energy Act of 2016, and Regulations under the BERA Act. In addition, it was also noted that it is important that MoA/U be established and the ToRs.

On the other hand, the consultations reveal lack of a QA/QC system for the MRV in the country and therefore there is a need to establish it. This will require development and operational of the QA/QC framework plan for the country. Since statistics Botswana has data quality in place, it is important that the QA/QC system need to be linked and aligned to the existing Statistics Botswana QA systems since all the data is obtained from Statistics Botswana.

Lastly, the MRV system will require various expertise statisticians, Energy and renewable experts, waste experts and economists. In addition, some of the tasks will require knowledge on IPCC software and LEAP to generate GHG emission inventory and mitigation measures emission reduction potential.

## Conclusions

Based on the discussions with the stakeholders, the following conclusions are made:

• There are existing institutional arrangements at the national level for the MRV system. The current institutional arrangement includes Statistics Botswana which has been tasked to collect national data inclusive of the GHG emissions and the mitigation measures. For instance, Statistics Botswana reports on the renewable energy alternatives such as solar boreholes, use of solar geysers, GHG emissions from coal and use of fuelwood. These statistics are vital for NDC targets tracking. Furthermore, Statistics Botswana has seconded its employees to various institutions which makes it easier to collect the data. Additionally,

- there is a fully functioning GHG inventory team which reports to DMS, the UNFCCC National focal point.
- There is a need for strengthening the existing institutions and their arrangements for MRV systems which will transit to the ETF. The current suggested National GHG Inventory arrangement is the ideal structure for transition to EFT. However, critical positions such as establishing thematic working groups, quality assessment/quality control expert, data and document management expert are essential for strengthening the existing arrangement.
- There are legal instruments such as Statistics Act which facilitate data and information exchange. This is one of the most fundamental legal instruments as data flow amongst the stakeholders is essential for EFT. It is thus essential that the Act extended cover all stakeholders (private sectors) to ensure that all data generators avail data (energy mitigation and emissions) to Statistics Botswana which can be accessed by the National GHG inventory team.
- Currently, the institutions whose employees are co-opted into GHG national inventory team
  have no formal arrangements with DMS. There is therefore a need to establish and
  operationalise MoA and MoU to enhance participation of the public, private and all actors in
  the MRV systems.

## Recommendations

Based on the finding from the consultation, the following recommendation are drawn:

- Develop the MoA and MoU between the private and public sector on data sharing and information exchange on the NDC activities. MoA and MoU promote ownership and spell out each stakeholder's responsibilities. Thus, overlaps in terms stakeholders' duties and responsibilities are illuminated. Therefore, by developing MoA and MoU institutions will know their roles and responsibilities in the NDCs. This will enhance and facilitate their full participation in terms of data provision, reporting the NDC mitigation, adaptation and support received.
- Ensure that the private sector participation is fully enhanced by including its members in vital and strategic committees such as NCCC and sectoral working groups. The private sector is a critical player in the NDC. Almost all the energy mitigation activities will be undertaken by the private sector (solar borehole, efficient lighting, solar geysers, solar rooftop programme, energy efficient building and PV solar station). Therefore, their participation at the strategic committees will facilitate NDC information flow for reporting.
- Enforce the existing legal instruments particularly Statistics Act of 2009 to ensure data sharing and information exchange. Currently, the Statistics Acts of 2009 is more inclined to Statistics Botswana to generate data. It is also important that it is strengthened to cover other institutions and the private sector.
- Develop and operationalise the QA/QC framework for the country in line with the existing data quality assurance systems, e.g., Botswana Data Quality Assessment Framework of Statistics Botswana. The Paris Agreement calls for transparency in reporting the NDC and it is transparency is synonyms to improved data quality. QA/QC framework will enhance and facilitate improved data quality.
- Establish a QA/QC coordinator which should be linked to the sectoral working group and the technical management unit. The current GHG inventory institutional arrangement structure has included the QA/QC coordinator however this position has not been filled. This is an important position as it will contribute to improved data quality.
- Strengthen the DoE Statistics and Modelling unit to act as a technical management unit for
  the energy sectoral MRV. The DoE is the oversight body for the energy sector in the country.
  It is ideal that a technical management unit is housed within DoE. Currently, it handles energy
  statistics and undertakes energy modelling. It can be strengthened by including additional
  members and assume the additional role of technical management unit.

- Strengthen and widen the ToR for the NCCC to act as an inter-ministerial committee.
   Transition to EFT will require an inter-ministerial committee, instead of forming another committee, it is cost-effective to strengthen and widen the ToR of an already existing NCCC to an inter-ministerial committee. Thus, additional members from other ministries and private will be co-opted into the committee.
- Develop the country's NDC financing strategy which will finance some aspects of the MRV system transition to EFT. Transiting from the MRV to EFT will require additional resources. It is therefore critical that the country has an NDC financing strategy to support the NDC implementation and tracking.

## References

Elsayed, S (2013) Institutional Arrangements for MRV. <a href="https://transparency-partnership.net/sites/default/files/institutional\_arrangements\_mrv\_final.pdf">https://transparency-partnership.net/sites/default/files/institutional\_arrangements\_mrv\_final.pdf</a>

GoB (2020) National Adaptation Plan Framework for Botswana. Department of Meteorological Services, Ministry of Environment, Natural Resources Conservation and Tourism. Gaborone, Botswana

GoB (2010) Statistics Act 2009. Government of Botswana, Government Printers, Gaborone, Botswana.

UNFCCC (2020) Handbook on institutional arrangements to support MRV/transparency of climate action and support. https://unfccc.int/sites/default/files/resource/Hand%20book\_EN.pdf

UNDP (2018). A review of domestic data sources for climate finance flows in recipient countries. Available at: https://reliefweb.int/sites/reliefweb.int/files/resources/GFLAC-Web.pdf

UNDP (2019) establishing climate governance at a sector level: Costa Rica's Sectoral Agreement. Available at: https://transparency-partnership.net/system/files/document/200114\_GPD\_CostaRica\_RZ.pdf

USAID (2019). Strengthening Greenhouse Gas MRV Systems in Colombia: A RALI Engagement Case Study. https://transparency-partnership.net/good-practice-database?keys=&page=7

UNDP (2019a) National benefits of climate reporting: the MRV system of Georgia. <a href="https://transparency-partnership.net/system/files/document/200113">https://transparency-partnership.net/system/files/document/200113</a> GPD Georgia-Climate-reporting RZ.pdf

# Annex 1: Stakeholders consulted

Name	Institution
Mr Lesedi Bafetanye	Botswana Energy Regulatory Authority
Mr Modise Koofhethile	Botswana Oil Limited
Mr Stephen Mopalo	Botswana Power Corporation
Mr Molemi Pule	BURS
Ms Rolang Mpe	Business Botswana
Mr Kgotso Oteng	Department of Animal Production, MoA
Dr. Mareledi Gina Maswabi	Department of Energy
Mr. Oagile Johannes Setlhare	Department of Energy
Mr Mosimanegape Nthaka	Department of Environmental Affairs
Mr Lesika Basalumi	Department of Forestry and Range Resources
Mr. Maikutlo Mokakapadi	Department of Meteorological Services
Mr Balekodi K Mothofela	Department of Road Transport Safety
Ms Boineelo T Sealetsa	MFED- Focal Point for the GCF in Botswanan
Dr Obakeng Sethamo	SASSCAL Botswana Node
Dr Kakanyo Fani Dintwa	Statistics Botswana
Mr Galebonwe Ramaphane	University of Botswana
Mr Rethobogile Botebele	United Nations Development Programme

# Annex 2: Inter-ministerial questionnaire

Deliverable 2: Report consolidating the inter-institutional consultations and policy/strategy analysis.

This consultation is a follow-up of the situational analysis consultation. The purpose of this consultation is to seek guidance and inputs from the stakeholders on the establishment of an institutional arrangement for Measuring, Reporting and Verification (MRV) system that will track implementation of the Nationally Determined Contribution (NDC). It is important that stakeholders have input in the institutional arrangements to ensure adequate representation in the MRV system and to have ownership and buy-in from all the relevant stakeholders.

#### Objectives of the consultations:

- a. To examine existing institutional arrangements for the climate change MRV and strengthen them to enhance country's MRV transparency
- b. To assess additional institutional organs/agencies/structures that will be required to enhance the intended MRV system, their roles (TOR) and constitution
- c. To assess the existing policy/strategy/legal framework and how they can be improved to enhance the MRV system

Name	
Position	
Institution	
Mandate	
Email	
Website	
Phone	

#### NATIONAL LEVEL MRV INSTITUTIONAL FRAMEWORK

1. The current coordinating body/lead institution is the Botswana Ministry of Environment, Natural Resource Conservation and Tourism (MENT), with the coordinating body housed at the Department of Meteorological Services (DMS) and guided by the National Climate Change Committee (NCCC). Statistics Botswana houses statistics for GHG Inventory and the National GHG Inventory team prepares the GHG Inventory.

Would you have any views on that current institutional arrangement and any strengthening or reconfiguration required to enhance their roles for MRV? Please list your views and proposals:

1.	
Institution	Reconfiguration/strengthening proposed
MENT	
DMS	
NCCC	
Statistics Botswana	
GHG Inventory Team	

Do you think if the strengthening or reconfiguration would require additional budget? If so, what

would be the best way to increase the budget?
2. Inter-ministerial body/steering committee (SC) is one of the important elements of the institutional arrangement for MRV. It promotes coordination across key stakeholders and information flow and data exchange across implementing entities/key sectors.
Yes/No
a. If yes, kindly describe its structure and duties/roles
b. How can the existing inter-ministerial steering committee be strengthened to facilitate and enhance MRV for GHG inventory, mitigation, and international support? (e.g., Who/stakeholders do you propose to be in such an SC; What size should the SC be)
c. If No to 2, kindly indicate the key institutions and personnel, their rank that must be represented in the inter-ministerial steering committee as part of institutional arrangements for MRV
3. Kindly highlight some of the expected duties and responsibilities of the inter-ministerial steering committee for NDC MRV
4. Institutional arrangement for the NDC MRV also requires creating a Technical Management Unit (TMU) to guide on NDC MRV sectoral technical issues. Is there already a structure that can act in this capacity in the departments that can function or be strengthened as the TMU for NDC MRV?
Yes/No
a. If yes, kindly indicate the structure/component of the existing technical management unit, and indicate how they can be strengthened to include NDC MRV under their Terms of reference
b. If No, kindly indicate the ideal structure in terms of personnel, their rank of the technical management unit for the NDC MRV
SECTORAL MRV STRUCTURES - ENERGY or TRANSPORT
5. NDC MRV requirements is the creation of the sectoral working groups/thematic groups/thematic teams for MRV in sectors (e.g., Energy, Transport etc.). Are there any existing sectoral working groups/thematic groups that can be proposed to undertake such NDC MRV/climate change?
Yes/No

groups/thematic groups/thematic teams and ho function	cture/composition of the existing sectoral working withey can be strengthened to perform NDC MRV
b. If No, kindly indicate the ideal structure groups/thematic groups/thematic teams for the N	eture and key experts for the sectoral working
•	oe developed or strengthened to ensure that public ation prioritize and mainstream data collection and
·	sectorial structures to support: data collection and nissions preparation, GHG mitigation impact analysis, IRV in the sectors?
Role within the sector	Expertise required
Data collection for NDC MRV	
Data QA/QC	
GHG Inventory preparation	
GHG Mitigation Impact analysis	
Resource requirements and allocation tracking	
	required to create and enable operations (e.g., ement both at national and sectoral level (e.g., Act or als below:
SYNERGY	
E.g., participation of sectorial representatives in S	ures would link up with the national MRV structures. SC, TMU etc.
	ey for MRV/ETF and the QA/QC is a key process to there is a good QA/QC system in place and well
3.	
4. Yes/No	
5.	

Report consolidating the inter-institutional consultations and Policy/strategy analysis – Energy Sector

a. how it	If yes, kindly indicate the current structure/composition of the existing QA/QC system and can be strengthened.
b.	If No, kindly indicate the ideal structure and expertise needed for the QA/QC system.