



Partnership on Transparency
in the Paris Agreement



CBIT-GSP
CLIMATE TRANSPARENCY



forestry, fisheries
& the environment
Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Report

Training Workshop for Anglophone African Countries:

“Deep dive into tracking NDC mitigation commitments under the Paris Agreement”

Co-organized by The Partnership on Transparency in the Paris Agreement (PATPA) and The Capacity Building Initiative for Transparency - Global Support Programme (CBIT-GSP)

Hosted by the Government of South Africa through the Department of Forestry, Fisheries, and the Environment (DFFE)



16th-18th of May 2023

Pretoria, South Africa



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Support Project for the Implementation of the Paris Agreement (SPA)

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List of abbreviations

AFOLU	Agriculture, forestry, and other land use
BUR	Biennial Update Report
BTR	Biennial Transparency Report
CBIT GSP	Capacity Building Initiative on Transparency – Global Support Programme
COP	Conference of Parties in the framework of the United Nations Framework Convention on Climate Change (UNFCCC)
CTF	Common Tabular Format
ETF	Enhanced Transparency Framework (of the Paris Agreement)
FAO	Food and Agriculture Organization of the United Nations
GACMO	Greenhouse Gas Abatement Cost Model
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IKI	German funding instrument by BMU
IPCC	Intergovernmental Panel on Climate Change
LEAP	Low Emissions Analysis Platform
MPGs	Modalities, Procedures and Guidelines
MRV	Measurement, Reporting and Verification
NDC	Nationally Determined Contribution
PATPA	Partnership on Transparency in the Paris Agreement
SPA	Support Project for the Implementation of the Paris Agreement
UNEP CCC	United Nations Environment Programme Copenhagen Climate Centre
UNDP	United Nations Programme for Development
UNFCCC	United Nations Framework Convention on Climate Change

Overview

1.1 Purpose of the event

The workshop provided a platform for attendees for face to face experience and understanding on reporting processes and approaches to track Nationally Determined Contributions (NDC) mitigation commitments under the Paris Agreement.

The general objective of the meeting was to support country teams in charge of reporting NDC mitigation commitments under the Paris Agreement in technical understanding of the goals, principles, and actions associated with the reporting process for NDC mitigation commitments under the Paris Agreement. The specific objectives were as follows:

1. Provide these national mitigation teams with useful information and experiences to facilitate their reporting to the UNFCCC under the Paris Agreement, preparing them to use the common tabular format foreseen in the Enhanced Transparency Framework (ETF).
2. Learn from international experiences how to use support tools to improve the technical assessment, tracking, and mitigation report.
3. Participate in putting into practice concrete situations of mitigation assessment, tracking, and reporting, having in mind reporting under the ETF.
4. Exchange experiences and lessons learned, corresponding to the application of tools and systems for mitigation assessment, tracking, and reporting.
5. Identify common challenges and opportunities for collaboration among country teams on mitigation assessment, tracking, and reporting.

1.2 Context for the event

Parties to the UNFCCC adopted the Paris Agreement at COP21 in 2015 and through it established the Enhanced Transparency Framework; a new transparency regime under which Parties will report their climate action. Before the Paris Agreement, the transparency regime under the United Nations Framework Convention on Climate Change (UNFCCC) was characterized by differing obligations for developed and developing countries.

- Annex I (developed) countries were required to submit National Communications (NCs), which are comprehensive reports on a country's activities to address climate change, including information about greenhouse gas (GHG) emissions and removals, national circumstances, policies and measures, vulnerability assessment, financial resources and transfer of technology, and education, training and public awareness. In addition to the NCs, Annex I Parties were also required to submit annual GHG inventories and Biennial Reports (BRs) detailing progress in achieving emission reductions and provision of support to Non-Annex I Parties.
- Non-Annex I (developing) countries were also required to submit National Communications, albeit less frequently and with less detailed information compared to Annex I countries. The NCs from Non-Annex I Parties included information on a less detailed GHG inventory, measures to mitigate climate change, and their needs and actions to adapt to climate change. At the 2010 UNFCCC conference, a new mechanism was established where Non-Annex I Parties were also invited to submit Biennial Update Reports (BURs), with their first

BUR due by December 2014. The BURs provide updates to the information presented in their NCs, including the GHG inventory, mitigation actions, and support received.

The Paris Agreement, adopted in 2015, introduced an Enhanced Transparency Framework (ETF) with the aim of promoting trust and clarity among Parties and tracking progress towards achieving the goals of the Agreement. The ETF applies to all Parties but takes into account their differing capacities, therefore all Parties are obligated to report the information below but can use flexibility where necessary:

- A. National Circumstances and Institutional Arrangements
- B. Description of a Party's NDC under Article 4 of the Paris Agreement
- C. Information Necessary to Track Progress
- D. Mitigation Policies, Actions, and Plans
- E. Summary of GHG Emissions and Removals
- F. Projections of GHG Emissions and Removals
- G. Other information

The Paris Agreement established this Enhanced Transparency Framework (ETF) and under this, the Modalities, procedures and guidelines for the transparency framework were then established at the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA)

Figure 1 Timeline for key decisions and guidance in UNFCCC process

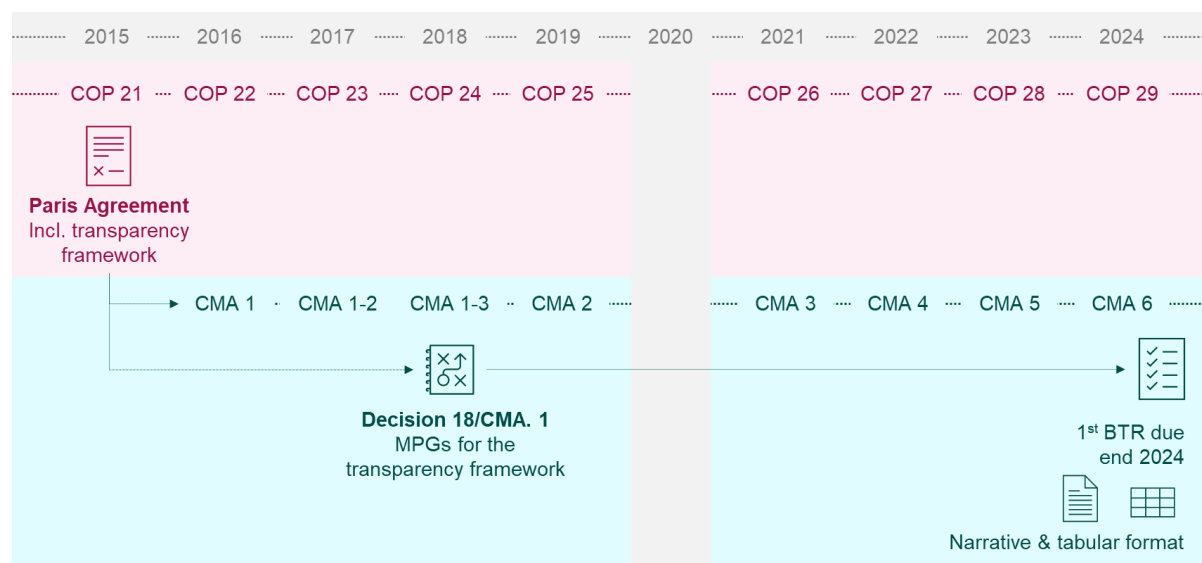


Figure 2 Key decision matrix for NDC progress tracking

COP 21 - Paris Climate Change Conference - November 2015	Paris Agreement - Article 13	<p>Para 1. In order to build mutual trust and confidence and to promote effective implementation, an enhanced transparency framework for action and support, with built-in flexibility which takes into account Parties' different capacities and builds upon collective experience is hereby established.</p>	<p>Para 7. Each Party shall regularly provide the following information:</p>	
			<p>(b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.</p>	
CMA 1 - Marrakech Climate Change Conference - November 2016	<p>Decision 18/CMA.1 Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement</p>	<p>I. Introduction</p>	<p>E. Reporting format 10. In the Biennial Transparency Report (BTR):</p>	<p>(b) Each Party shall provide the information necessary to track progress in implementing and achieving its NDC under Article 4 of the Paris Agreement, in accordance with the MPGs contained in chapter III below;</p>
			<p>A. National Circumstances and Institutional Arrangements B. Description of a Party's NDC under Article 4 of the Paris Agreement C. Information Necessary to Track Progress D. Mitigation Policies, Actions, and Plans E. Summary of GHG Emissions and Removals F. Projections of GHG Emissions and Removals G. Other information</p>	
		<p>III. Information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement</p>	<p>79. Each Party shall report the information referred to in paragraphs 65–78 above in a narrative and common tabular format, as applicable. Such common tabular formats should accommodate all types of NDC under Article 4, as appropriate.</p>	

Reported information necessary to track NDC progress as per Decision 18/CMA.1	A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
Presentation: Provisions of the ETF & MPGs relating to the tracking of NDCs and definition of indicators	√	√	√	√	√	√	√
Presentation: Elements on Mitigation assessment		√		√		√	
Presentation: GACMO and LEAP software as a supporting tool to estimate ex ante mitigation actions		√		√		√	
Round panel: Country presentations of NDC-mitigation section, and ongoing or planned implementation initiatives		√	√	√		√	
Presentation: Elements on Projections and Mitigation tracking including PATPA publication on Projections		√	√	√		√	
Presentation: Definition of NDC indicators		√	√	√		√	

Presentation: Introduction to BTR contents and UNFCCC reporting tools (Common Tabular Format: 5/CMA3)	√	√	√	√	√	√	√
Presentation: Example of a reporting tool: FAO reporting tool	√	√	√	√	√	√	√
Presentation: Data needs and how to gather or estimate missing data		√	√	√	√	√	
Panel discussion: Country presentations of ongoing or planned tracking of mitigation initiatives and on national challenges to report and implement tracking systems and how to address them		√	√	√			
Premier of the PATPA explainer video “Linkages between NDCs and the ETF” and demonstration of the PATPA and FAO “Biennial Transparency Report (BTR) Guidance and Roadmap Tool”	√	√	√	√	√	√	√

1.3 Delivery

The event started with an introductory 2-hour webinar on 25 April 2023 providing participants with instructions to parts of the training workshop and summarizing some of the most relevant content to be included in greater detail in the face-to-face training that will take place in May in Pretoria from 16-18 May 2023. The webinar is summarised in section 1.4 below.

The workshops took place over three days on May 16-18th, 2023. Each day comprised a series of presentations from partners and country representatives. The presentations and break-out groups are respectively summarised in Sections 2 and 3 below.

1.4 Summary of the introductory webinar

The introductory webinar was organized by CBIT-GSP together with PATPA and DFFE of South Africa in preparation for the face-to-face training on “Deep-dive into tracking NDC mitigation commitments under the Paris Agreement” for countries which are members of PATPA’s Anglophone Africa Regional Group and CBIT-GSP’s Anglophone Africa Regional Transparency Network. The in-person training took place in Pretoria from 16 to 18 May.

The objective of the webinar was to introduce participants to NDC tracking, and mitigation analysis and present examples of filled common reporting tables to give participants an idea of what we would like to achieve after the training. Participants from CBIT-GSP Anglophone Africa Network were also required collect necessary information from their own country for use during the in-person workshop in Pretoria during hands-on exercises.

The approach to the training ensured that the training deliver on its objectives and at the end the participants were equipped with necessary knowledge to be able to track their own NDCs. In preparation for the face to face training the webinar highlighted that the training comprised of 4 consecutive stages of which the introductory webinar that lasted for 2 hours presented the first stage.

Stage 1: Introductory webinar (25 April 2023),

Stage 2: Collection of data in-country for use during the in-person workshop

Stage 3: In-person workshop (16-18 May)

Stage 4: Follow-up after the in-person workshop

The speakers at the webinar were:

- Ms. Fatima-Zahra Taibi (UNEP-CCC) delivered a presentation and explained the 4 stages of the training workshop: objectives, content, and format.
- Mr. YALI Wang’s (UNFCCC) presentation focused on the introduction to ETF reporting requirements, with a focus on reporting information to track the progress of NDCs.
- Mr. Fernando Farias (UNEP-CCC) Mitigation tracking in the context of UNFCCC, data compilation, and UNFCCC templates. Existing tools for BTR preparation, NDC tracking, indicators, and projection. Instructions for following stages: Data needs for following stages II and III of the Workshop. Presentation of templates to be filled as a part of the workshop.
- Ms. Aiymgul Kerimray (UNEP-CCC) – presented a practical case on NDC tracking.

The details of the webinar can be found on this link [Deep Dive into Tracking NDC Mitigation Commitments under the Paris Agreement \(for the CBIT-GSP Anglophone Africa Network\) | CBIT Global Coordination Platform \(cbitplatform.org\)](#).

2 Summary of presentations and exercises

2.1 Day 1 – Introduction and ex-ante (projections) calculations

The first day started with an opening ceremony including welcome and greetings from the host and PATPA founding member South Africa via Mr. Maesela Kekana, Deputy Director-General: Climate Change and Air Quality at DFFE as well as Ms. Catarina Tarpo of PATPA, and Ms. Fatima-Zahra Taibi and Sheila Kiconco of CBIT-GSP.

Workshop element		Presentation: Provisions of the ETF & MPGs relating to the tracking of NDCs and definition of indicators UNFCCC more detailed and focused on mitigation				
Presenter		Dominic Sheldon (Ricardo E&E)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
√	√	√	√	√	√	√
Summary						
<p>The presentation elaborated on the seven-information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement.</p> <ul style="list-style-type: none"> A. National circumstances and institutional arrangements, B. Description of a Party's NDC under Article 4 of the Paris Agreement, including updates, C. Information necessary to track progress, D. Mitigation Policies, Actions, and Plans, E. Summary of GHG Emissions and Removals, F. Projections of GHG Emissions and Removals, G. Other Information 						
Key messages						
<ul style="list-style-type: none"> • The session focused on NDC Mitigation Commitments under the Paris Agreement, delving into the necessary components for tracking and achieving Nationally Determined Contributions (NDCs). Key aspects discussed included the influence of a country's unique circumstances and institutional frameworks, the details of a party's NDCs under Article 4 of the Paris Agreement, and methods to track progress. • Additionally, the significance of specific indicators, recent data, and a country's mitigation efforts, along with summaries and projections of GHG emissions and removals, were highlighted. • The session further explored the connection with other provisions of the Paris Agreement, such as accounting, tracking NDCs, and cross-referencing to other arrangements. It also addressed the role of adaptation, communication, and contributions to the Global Stocktake (GST) process, and the repercussions of inconsistent or missing mandatory reports. • Lastly, it underscored the reporting of details associated with implementing and achieving an NDC, such as mitigation strategies, affected sectors, gases, and related costs. The session concluded by summarizing these critical points. 						

Workshop element		Presentation: Elements on Mitigation assessment (mitigation actions, policies, and measures, sectorial mitigation, top-down/bottom-up approaches, ex-ante/ex-post)				
Presenter		Fernando Farias (UNEP CCC)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√		√		√	
Summary						
The presentation summarized conceptualizing mitigation, assessing mitigation and approaches, compiling and reporting results of mitigation assessments, and overcoming barriers in reporting mitigation information.						
Key messages						
<p>Mitigation Assessments:</p> <ul style="list-style-type: none"> • Mitigation projection information is mandatory for all parties, with some flexibility for developing countries. • Identifying mitigation measures, policies, actions, and plans is crucial for Party reporting to the UNFCCC. • Actions, policies, plans, and measures that can influence the amount of GHG in the atmosphere need to be identified along with their objectives and expected co-benefits. <p>Overcoming Barriers in Reporting Mitigation Information:</p> <ul style="list-style-type: none"> • Barriers in collecting and integrating information on ex-ante and ex-post determinations of expected or achieved mitigation effects can be overcome by: <ul style="list-style-type: none"> ○ Developing common training for government staff involved in the preparation of information for mitigation assessments. ○ Encouraging homogeneity in the use of technical language. ○ Creating a set of national templates for distribution to various ministries. ○ Utilizing compatible or identical computing tools where possible. ○ Implementing and applying compatible Measurement, Reporting and Verification (MRV) systems. <p>Conclusion:</p> <p>The session successfully enhanced the capacity of developing countries to track their NDC mitigation commitments under the Paris Agreement.</p> <p>Overcoming reporting barriers can be achieved through common training, national templates, compatible computing tools, and MRV systems.</p>						

Workshop element		Presentation: GACMO and LEAP as supporting tools to estimate ex ante mitigation actions				
Presenter		Dr. Aiyngul Kerimray (UNEP CCC) and Dominic Sheldon (Ricardo E&E)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√		√		√	
Summary						
<p>GACMO: Ex-ante estimation of mitigation of emissions/removals with GACMO, applied exercises with GACMO model (using the case of Mauritius).</p> <ul style="list-style-type: none"> • Overview of the structure of the GACMO methodology <ul style="list-style-type: none"> ○ Start Year Data: Energy Balance, GHG Inventory ○ Setting up Business as Usual Scenario (BAU) ○ Setting up Mitigation Scenario (by adding mitigation options in the future periods) • Applied exercises and group work using GACMO tool for the case of Mauritius: <ul style="list-style-type: none"> ○ Inserting input data to the model: grid emission factor, electricity price ○ Updating growth rates ○ Inserting mitigations options to the model (offshore wind, renewable hybrid facilities, reforestation, electric vehicles) ○ Participants compared mitigation options in terms of their costs and emissions reduction using Marginal Abatement Cost Curve <p>LEAP as a supporting tool to estimate ex-ante mitigation actions. The key steps for developing an energy demand model using the LEAP model are as follows:</p> <ol style="list-style-type: none"> 1. Set up the scope and scale: This involves determining the breadth and depth of the energy model, including the sectors to be considered and the level of detail required 2. Define the time period: This involves setting the base year, scenario year(s), and end year for the model 3. Create a data structure for energy demand analysis: This involves defining the different components of energy demand, such as households, transportation, and industry 4. Develop a set of current accounts for historical energy consumption: This involves collecting and analyzing data on historical energy consumption to provide a baseline for the model 5. Create a baseline scenario: This involves developing an energy model that represents the future if current trends continue and no new policies are introduced 6. Develop a policy scenario: This involves developing an energy model that explores potential changes in energy consumption if certain policies or measures are implemented 7. Enter data for different sectors: This involves inputting data on energy consumption patterns for different sectors, such as households, transportation, and industry 						

8. Use the LEAP Tree Structure: This is a visual representation of the different components of the energy model, such as sectors and sub-sectors

9. Use the Interp Function: This function is used to linearly interpolate data points between the base year and the end year

Key messages

GACMO Key lessons

GACMO Model:

- Introduced the GACMO model to estimate the mitigation of emissions/removals with NDCs.
- Participants learned how to insert input data to the GACMO through practical exercises and how to interpret results of GACMO
- Demonstrated how the GACMO model can be used to compare different mitigation options using Marginal Abatement Curve (through practical exercises and group discussions)
- Provided a step-by-step guide to develop the GACMO model, highlighting its application in tracking NDCs.

Renewable Energy:

- Practical exercise focusing on renewable energy hybrid facilities, specifically small-scale solar PV and battery energy storage.
- Aimed to determine the emission reduction and cost per ton of emission reduced using the Mauritius Renewable Energy Roadmap 2030 as a reference.
- Participants inserted this mitigation option in GACMO and learned how to interpret results of the calculations

Forestry:

- Discussed afforestation as a mitigation action in the forestry sector.
- Showed potential for emissions reduction through sustainable forest management practices.
- Participants inserted this mitigation option in GACMO and learned how to interpret results of the calculations

Comparison of Mitigation Actions:

- Compared different mitigation actions in terms of emissions reduction and costs.
- Identified the most and least efficient mitigation actions based on their emission reduction potential and cost per ton of emission reduced.
- Participants learned how to interpret results of the Marginal Abatement Cost Curve

Key Lessons:

- The importance of using models like the GACMO to estimate the impact of mitigation actions and track progress towards NDC targets.
- Through practical exercises demonstrated how to insert data to GACMO and how to interpret result of the GACMO model (e.g. Marginal Abatement Cost Curve).

Key Outputs:

- Insight into tracking NDCs and implementing mitigation actions for developing countries.
- Understanding of the GACMO model, its development, and application.
- Knowledge of how different mitigation options (e.g. renewable energy, reforestation) can be inserted in the GACMO tool to create mitigation scenario and to generate Marginal Abatement Cost Curve.

- Realization of the need to address data gaps in NDC calculations and make use of existing data resources.

LEAP Key lessons

The key advantages of using the LEAP model for energy demand modelling are that it allows for the creation of detailed energy models that can be customized to specific regions or countries, it can incorporate a wide range of data sources and variables, and it can simulate the impact of different policy interventions on energy demand.

LEAP allows for modelling of energy demand by providing a framework for organizing and analyzing data related to energy consumption. It includes a range of modules and tools for modelling different aspects of energy demand, such as household energy use, transportation, and industrial processes. LEAP also allows for the creation of scenarios that can simulate the impact of different policy interventions on energy demand, such as the implementation of energy efficiency measures or the adoption of renewable energy sources. Overall, LEAP provides a powerful tool for policymakers and energy analysts to better understand and manage energy demand in a given region or country.

Pros of using the LEAP model for energy demand modelling include its flexibility and ability to model complex energy systems. It also allows for the integration of different data sources and the ability to model different scenarios. Additionally, LEAP is widely used and has a large user community, which can provide support and resources for model development

Cons of using the LEAP model include its complexity, which can make it difficult for new users to learn. It also requires a significant amount of data input and can be time-consuming to set up and run. Additionally, the accuracy of the model is dependent on the quality of the data used, which can be a challenge in some cases.

2.2 Day 2 – From ex ante to ex post (targets and indicators)

Workshop element		Presentation: Projections and Mitigation tracking				
Presenter		Fernando Farías (UNEP CCC)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√	√	√		√	
Summary						
Overview of the Workshop Session						
Key Points Presented:						
<i>Section 1: Projections:</i>						

- Defined projections as estimations of expected future GHG emissions, vital for scenarios of net-zero emissions during this century.
- Discussed the need for projections to ascertain countries' compliance with GHG targets in their NDCs.
- Outlined the [PATPA publication "Projections of Greenhouse Gas Emissions and Removals: An Introductory Guide for Practitioners"](#), including details on emission estimation drivers, data requirements, assumptions, indicator definitions, and outputs.
- Stressed the importance of assessing projection quality and the need for continuous evaluation.

Section 2: NDC Tracking:

- Emphasized the importance of tracking progress to determine if a mitigation initiative is on track and being implemented as planned, and to identify any gaps needing attention for expected results.
- Described the three main steps of progress tracking, including the definition and application of progress indicators, the ex-post estimation of actions, policies, and measures in terms of avoiding GHG emissions, and monitoring of key performance indicators.
- Discussed both qualitative and quantitative progress indicators, measuring aggregate emissions reduction from mitigation actions, and the identification of co-benefits of mitigation actions for sustainable development and economic and social growth.
- Illustrated how to assess and track progress following the MPG and the selection and coverage of mitigation initiatives for assessment and reporting.
- Highlighted common barriers in assessing progress of mitigation initiatives and provided solutions to overcome them.

Key messages

Key Lessons:

- The need for thorough and continuous assessment of the quality of projections to ensure countries are on track with their GHG reduction targets.
- The importance of tracking progress, applying progress indicators, and evaluating ex-post the actions, policies, and measures in terms of avoiding GHG emissions.
- Understanding of the challenges in assessing progress of mitigation initiatives and strategies to overcome these barriers.

Key Outputs:

- Comprehensive understanding of the role of projections in achieving net-zero emissions and how they are linked to NDCs.
- Insight into the steps involved in NDC tracking, including progress indicators and key performance indicators, measuring aggregate emissions reduction, and identifying co-benefits of mitigation actions.
- Guidance on how to overcome common barriers in assessing the progress of mitigation initiatives.

Workshop element		Presentation: Definition of NDC indicators				
Presenter		Dominic Sheldon (Ricardo E&E)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√	√	√			
Summary						
<p>Key Points Presented:</p> <p><i>Identifying and Compiling NDC Indicators - Step by Step Approach (based on the PATPA publication "NDC Progress Indicators" to be downloaded here soon):</i></p> <ul style="list-style-type: none"> The workshop provided a systematic guide to identifying and compiling NDC indicators, comprising the following steps: <ul style="list-style-type: none"> Step 1: Identify and assess NDC targets - The first step emphasized understanding mitigation and adaptation targets in the NDC, documented in a tabular format. Step 2: Make targets SMART - This stage focused on refining the scope, units, reference/baseline levels of the targets, and engaging the relevant stakeholders. Step 3: Identify type of indicator suitable to track the target - At this stage, indicators for quantitative and qualitative targets were determined. It noted the usefulness of implementation-related progress indicators at the national level. Step 4: Identify data and methodology required - This step involved identifying the necessary information, assessing its availability and quality, and determining whether scope or unit adjustments were needed. It also looked into calculations required and the methodologies to be used. Step 5: Compiling, reporting, documenting, archiving - The final step stressed the importance of integrating data collection with existing processes, planning long-term improvements for data quality and availability, and proper documentation for future compilations. Learning from national GHG inventory and statistical offices' processes was also encouraged. <p><i>Rwanda's Mitigation and Adaptation Indicators:</i></p> <ul style="list-style-type: none"> Practical examples of Rwanda's mitigation and adaptation indicators were given, providing real-life insight into identifying and compiling NDC indicators. 						
Key messages						
<p>Key Lessons:</p> <ul style="list-style-type: none"> Understanding the process of identifying and assessing NDC targets. 						

- The importance of making targets SMART and involving relevant stakeholders.
- The necessity of identifying appropriate indicators for tracking targets.
- The crucial role of data and methodology in NDC tracking, emphasizing the importance of quality, availability, and appropriate adjustments.
- The essential practices of compiling, reporting, documenting, and archiving data, with a view for long-term improvement and learning from existing processes.
- The utility of practical examples (like those from Rwanda) for better understanding the process of identifying and compiling NDC indicators.
- Understanding of the unique national situations that can impact a country's progress towards its NDCs.
- Knowledge about the specific indicators and latest data used by countries to track their NDC progress.
- Insight into the step-by-step approach to identifying and compiling NDC indicators, including the process of making targets SMART, identifying suitable indicators, gathering necessary data, and implementing methodologies.
- Practical insight through examples of Rwanda's mitigation and adaptation indicators.

Key Outputs:

- A comprehensive understanding of tracking NDCs, identifying unique national circumstances, and institutional arrangements.
- Detailed knowledge on how to track progress towards NDCs, including understanding of mitigation policies, actions, and plans, as well as GHG emissions and removals.
- Step-by-step guide to identify and compile NDC indicators, beneficial for future progress tracking.
- Practical examples from Rwanda providing real-world insights into identifying and compiling NDC indicators.

Workshop element		Introduction to BTR contents and UNFCCC reporting tools (Common Tabular Format: 5/CMA3) and work on filling BTR tables (UNFCCC reporting tools)				
Presenter		Fernando Farías (UNEP CCC)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√		√		√	
Summary						

The session was designed to build the capacity of Anglophone African countries and other developing nations to track their Nationally Determined Contributions (NDC) mitigation commitments under the Paris Agreement. The workshop stressed the utilization of BTR tables, Common Tabular Format (CTF) tables, and the country's National Greenhouse Gas (GHG) Inventory for NDC tracking.

The BTR tables, due by 31/12/2024, provide information needed to track progress of NDCs and the impact of mitigation policies and measures, actions, and plans. BTR Mitigation Chapter results are utilized for this purpose. Furthermore, following the MPGs it was emphasized, using National GHG Inventory data for progress tracking.

CTF tables, comprising 12 tables and one appendix, offer a system for electronic reporting of tracking progress on implementing and achieving NDCs. They cover selected indicators, tracking progress of NDCs, and monitoring mitigation policies and measures, among other things.

Workshop participants had the chance to practice filling in these tables using data from their own countries, guided by examples from countries like Mauritius, Tunisia, Australia, New Zealand, Canada, USA, Ireland, Japan, and Saudi Arabia. They filled in BTR tables, CTF tables, projections tables, and response measures tables based on their countries' most recent national inventory reports.

Key messages

Key Inputs:

- Use of BTR tables, CTF tables, and National GHG Inventory for NDC tracking.
- Examples of filled tables from multiple countries to guide the participants.
- Practical exercises in filling out these tables with participants' own data.
- The workshop emphasized the importance of following the MPGs.

Key Lessons:

- BTR tables and CTF tables are essential tools for tracking progress on NDC mitigation commitments.
- National GHG Inventory data is crucial for NDC progress tracking.
- Filling out these tables and the MPGs provided practical experience in tracking progress.
- Tracking policies and measures that have a significant impact on GHG emissions is important.
- The workshop provided skills and knowledge necessary to track NDCs under the Paris Agreement.
- Targets in the countries NDC need to be smart to evaluate the GHG emission progress. I identify the type of indicator, and timing and redraft the target if necessary to make it measurable.

2.3 Day 3 – From ex post to tracking and reporting

Workshop element

Presentation: Data needs and dealing with insufficient data

Presenter		Fernando Farías (UNEP CCC)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√	√	√	√	√	
Summary						
<p>Key Inputs:</p> <p><i>Relevance of Data:</i></p> <ul style="list-style-type: none"> • The workshop emphasized the importance of good quality data for transparent and credible mitigation assessments. • Data management cycles for mitigation assessments were discussed. • The workshop differentiated between bottom-up data (collected at the source or project level) and top-down data (macro-level statistics collected at the jurisdiction or sector level). • It was stressed that high-quality datasets should be reliable, credible, comprehensive, relevant, complete, and representative. • There was a strong emphasis on investing in Quality Assurance and Quality Control of the data. <p><i>Dealing with Insufficient Data:</i></p> <ul style="list-style-type: none"> • The workshop addressed the issues that arise from inconsistent, incomplete, and changed data. • Proxy indicators or data were introduced as potential solutions for insufficient data quality. • The role of technical experts in identifying suitable proxy data and methods for reporting it was discussed. • The use of splicing techniques, including overlap, surrogate, interpolation, and extrapolation, were presented as methods to fill data gaps. • The necessity of evaluating specific circumstances to select the best technique was emphasized. 						
Key messages						
<p>Key Lessons Learned:</p> <ul style="list-style-type: none"> • The critical importance of good quality data in mitigation assessments and transparency systems. • The difference between bottom-up and top-down data, and their relevance in mitigation assessments. 						

- The importance of investment in Quality Assurance and Quality Control of data.
- The potential to use proxy indicators or data and splicing techniques to deal with insufficient or incomplete data.
- The crucial role of technical experts in identifying suitable proxy data and choosing the right splicing technique for specific circumstances.

Workshop element		Presentation: Filling UNFCCC Reporting tables using GACMO tool				
Presenter		Dr. Aiymgul Kerimray, UNEP CCC				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
√	√	√	√	√	√	√
Summary						
<p>The session, presented by Dr. Aiymgul Kerimray, a Mitigation Specialist at the UNEP Copenhagen Climate Centre, aimed to enhance the capacity of Anglophone African countries to track their Nationally Determined Contributions (NDC) mitigation commitments under the Paris Agreement. It focused on utilizing the Greenhouse Gas Abatement Cost Model (GACMO) for developing GHG emissions projections under with measures, with additional measures and without measures scenarios.</p> <p>Results from the GACMO model exercises were presented with the cases of Marginal Abatement Revenue (MAR) curves for Chile and Mauritius, and projections of greenhouse gas (GHG) emissions in both Business As Usual (BAU) and Mitigation scenarios. These case studies helped visualize the use of the tool for other countries.</p> <p>The GACMO tool was presented as a significant asset for identifying GHG emission reduction targets and specific sectoral targets, such as the capacity of renewable energy, hectares of reforestation, and the number of electric vehicles. The tool also proved effective in estimating expected GHG emissions reduction and tracking the achieved GHG emissions reduction by implementing mitigation policies and measures.</p> <p>The workshop also presented the Common Tabular Format (CTF) tables for NDC mitigation commitment tracking. They cover a range of details from descriptions of selected indicators and definitions to understand NDC, to methodologies and accounting approaches consistent with the Paris Agreement.</p> <p>Exercises were conducted to fill in data on one mitigation policy or measure of their country in CTF Table 5 and on GHG emissions projections under "with measures" and "without measures" scenarios in CTF Tables 7 and 9, respectively.</p>						
Key messages						
Key Inputs:						

- Dr. Aiyngul Kerimray, a Mitigation Specialist, led the workshop.
- GACMO model was introduced for developing GHG emissions projections and for estimating the expected/achieved emissions reduction from mitigation options.
- CTF tables for NDC mitigation tracking were presented.
- Case studies of GACMO application on Mauritius and Chile were demonstrated.
- Practical exercises were conducted using CTF tables and GACMO model.

Key Lessons:

- The GACMO model is effective in identifying target levels of GHG emission reduction.
- Demonstrated examples of filled CTF Tables and participants learned how to fill CTF Tables with their own data.
- The exercises provided participants with hands-on experience in using these tools.
- The workshop successfully built capacity to track NDC mitigation commitments.
- The GACMO model was recognized as useful tool for identifying target levels of NDC indicators and developing GHG emissions projections.

Workshop element		Presentation: Example of a reporting tool and practical Exercise: using FAO reporting Tool				
Presenter		Viviane Umulisa (FAO)				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
√	√	√	√	√	√	√
Summary						
The FAO NDC tool facilitates the data collection of the information required to track progress made in implementing and achieving their NDCs and the compilation of the common tabular formats (CTF).						
Key messages						
The tool allows assessing the progress on NDC implementation by comparing planned versus implemented mitigation and adaptation actions, also in graphical format; evaluating GHG reduction achieved against the sectoral and/or national baseline and NDC target scenario (in connection with the use of the FAO Technical guidance for the Nationally Determined Contribution Expert Tool (NEXT) tool. The tools is Excel-based, easy-to-use, six templates to collect data required by Chapter III of the MPGs						

Key take aways and observations from the day:

- If data of sufficient quality is not available, or no data is available at all, some inferences about the possible impact of the actions, policies, and measures can still be reported by employing proxy indicators/data.
- The use of proxy data helps fill data gaps in the preparation of baselines or mitigation assessments, by including data from a similar activity/geographic area/country as a stand-in for the activity being assessed. However, technical experts should identify which data could be employed as a proxy and how it should be reported.
- The NDC tracking tool helps to facilitate data collection of progress for each indicator both qualitative and quantitative.

3 Summary of peer-to-peer discussions

The Fishbowl approach was used for discussion and Q&A. These discussions are summarised in the sub-sections below.

3.1 NDC-mitigation section, and ongoing or planned implementation initiatives-Mauritius

Workshop element		NDC-mitigation section, and ongoing or planned implementation initiatives-Mauritius				
Presenter		Roufida Teemul-Jannoo & B. Aisha Golamaully, Mauritius				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√	√	√		√	
Summary						
Key messages						
<ul style="list-style-type: none"> • Guiding rationale for the development of mitigation component in NDC which has a total cost of NDC is USD 6.5 billion. Climate Change Act 2020 - the existing regulatory framework to fight against climate change has been strengthened. • Overview of mitigation goals, targets, and key initiatives, Mauritius aims to reduce overall GHG emissions by 40% in 2030 compared to the BAU scenario of around 6,900 ktCO₂eq in 2030. This economy-wide emissions reduction target comprises the energy, transport, waste, agriculture, and IPPU sectors. • Process and Modelling Tools Methodology and modelling tools used in NDC development and National GHG inventory (2016) under BUR-1. Mauritius used the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, IPCC Good Practice Guidance, and Uncertainty Management in National Greenhouse Gas Inventories, and 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands. The exponential Smoothing (ETS) model is used for the BAU scenario, taking 						

into account the country's national circumstances and challenges. GHG targets are based on existing documents from various ministries (e.g MEPU, CEB, EEMO) additional studies and technology roadmaps developed in collaboration with industry stakeholders, academic experts, and technical consultants, served as additional inputs on the potential of future technologies for long-term mitigation in Mauritius. Proxies were used where no country-specific data were available. Assumptions: recovery of energy was estimated at 6.6% in 2021 and 5.2% in 2022 based on the GDP growth rate. The implementation of the NDC is unconditional (35%) as well as conditional (65%) on external financial support received.

- **Stakeholder Engagement and Consultation Process.** A comprehensive multi-stakeholder participatory approach was adopted. Some **75 meetings** were held with concerned Ministries, Private Sectors, Funding Agencies, Academia, and NGOs, among others.
- **Scenarios and Decision-making.** Different scenarios are considered in NDC development Based on key decisions and initiatives taken/planned by line ministries based on the local circumstances and challenges. Research Papers for the transport sector based on modelling and medium EV growth rate scenario and studies under the UNDP Climate Promise Initiative (waste sector) have also provided inputs for the calculation of avoided GHG in the waste sector.

Key Messages from the Fishbowl discussion among panellists and audience:

- **Mauritius:** Importance of stakeholder engagement and ensuring effectiveness through structures such as working groups and building from the experience of developing the Third National Communication. Hold both sector meetings and bilateral meetings chaired by the Permanent Secretary and there is ownership of the process at the highest level. The country established litigation working groups, for instance in the energy industry, six sub-working groups, and in mitigation and adaptation, we had eight technical working to develop national communication. Mauritius is in the process of establishing a functional Climate Change Department.
- **Mauritius:** Using the University, the country has done waste characterization for the country and even developed some parameters which can be used in the inventory software. The University has also developed degradable organic compounds and local emission factors.

3.2 NDC-mitigation ongoing or planned implementation initiatives - Zimbabwe.

Workshop element		NDC-mitigation ongoing or planned implementation initiatives - Zimbabwe.				
Presenter		Dingane Sithole & Mr. Tapiwa Kamuruko (Jnr), Zimbabwe				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√	√	√		√	

Summary

Process and Modelling Tools:

- Detailed discussion on the methodology and modelling tools used in NDC development, including the Low-Emissions Analysis Platform (LEAP).
- Importance of factors such as historical GHG data, mitigation measures, stakeholder consultations, multicriteria analysis, clear lead institution, time frame, and data quality in the NDC development process.

Stakeholder Engagement and Consultation Process:

- Emphasized the necessity of stakeholder engagement and introduced the NDC Partnership Initiative.
- The initiative involved technical partners, ministries, departments, agencies, and various stakeholders including the private sector, civil society organizations, community-based organizations, faith-based organizations, and non-governmental organizations.

Scenarios and Decision-making:

- Presented various scenarios considered in NDC development and the factors considered when selecting the final NDC scenario.
- Highlighted the importance of data management and national capacity building.

NDC-Mitigation Overview:

- Explored the rationale for developing the mitigation component in NDCs, including the mitigation goal, national context, policies and strategies, and sectoral policies and strategies.
- Presented an overview of mitigation goals, targets, and key initiatives, including GHG reduction, energy efficiency, solar PV, biofuel, N₂O abatement, clinker substitution, HFCs phase down, AFOLU, natural forest, plantations, fire management, waste, and composting.

Key messages

Key Lessons:

- The importance of stakeholder engagement and consultation in NDC development process.
- The necessity of clear data management and national capacity building.
- Recognition of the challenges related to data availability, data quality, and stakeholder engagement in NDC development.

Key Outputs:

- Comprehensive understanding of NDC development, stakeholder engagement, and decision-making.
- Insight into the use of modelling tools like the LEAP in technical analysis for NDC development.
- Knowledge of the various mitigation goals, targets, and key initiatives in the context of NDCs.
- Identification of challenges faced during NDC development and the corresponding lessons learned.

Key Messages from the Fishbowl discussion among panellists and audience:

- **Mozambique:** NDC development consultations considered views from different stakeholders including the youth as they were part of the team who went around all the provinces of the country. After that process, they developed a position paper which was presented to the minister. The proposals in the position paper were included in the budget as well as gender aspects.

- **Zimbabwe** is currently working on developing a national emission factor for livestock, QA QC tools, and also capacity building for local businesses with the GHGMI and the University of Zimbabwe.
- **Ghana:** has gone a step ahead to develop indicators for NDCs and then in addition to that also developed an NDC tracking tool. They have also had training for the local government level on this tool.

3.3 NDC mitigation section, and ongoing or planned implementation initiatives- Lesotho

Workshop element		NDC mitigation section, and ongoing or planned implementation initiatives- Lesotho				
Presenter		Hlabaki Khalala and Kabelo Lebohang Ministry of Defence, National Security and Environment Department of Meteorology, Lesotho				
A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√	√	√			
Summary						
NDC-Mitigation Overview						
<ul style="list-style-type: none"> • Lesotho's NDC-mitigation aligns with their National Strategic Development Plan (NSDP-II). • Various policies and strategies are in place, including National Climate Change Policy, Lesotho Energy Policy, National Forestry Policy, National Sustainable Energy Strategy, Renewable Energy and Energy Efficiency Strategy and Action Plan, and Environment Act. • Lesotho's mitigation targets: 10% GHG emissions reduction by 2030 compared to BAU and up to 35% with conditional factors. • Ongoing initiatives include the LREBRE Project, 20MW Solar Facility, Save80 Cookstoves, and DEWATS. 						
Process and Modelling Tools						
<ul style="list-style-type: none"> • Lesotho used a bottom-up approach for NDC development, comparing policies and measures against the BAU scenario. • Emission reduction projections were made using the GACMO model (2015). • Stakeholder engagement and consultation of national policies across all sectors were part of the process. • Validation of the NDC was carried out with the National Climate Change Committee (NCCC). 						

Scenarios and Decision-making

- Unconditional mitigation scenario is based on already funded or in-progress projects.
- Conditional scenario considers additional actions from 2015-2030.

Challenges Faced and Lessons Learned

- Challenges included technology transfer needs, limited financial resources, and data availability.
- Lack of well-defined indicators or an implementation strategy.

Key messages

The presentation highlighted the following.

- **Guiding rationale for the development of mitigation component in NDC** to identify and improve national resilience to climate change and increasing clean energy production capacity and environment-friendly production methods.
- **Overview of mitigation goals, targets, and key initiatives** the mitigation targets are set against a Business as Usual (BAU) projection Emissions reduction in 5 sectors: Energy, Industrial Processes, Agriculture (livestock and soil), Land-Use, Land-Use Change and Forestry (LULUCF) and Waste. Unconditional target: 10% reduction in GHG emissions compared to business as usual (BAU) by 2030. Conditional target: An additional 25% reduction under certain conditions which would bring the total GHG reduction to a sum of 35%
- **Process and Modelling Tools Methodology and modelling tools used in NDC development and National GHG inventory (2016) under BUR-1.** Bottom-up approach (modelling of policies and measures one by one and comparison to the BAU scenario Projections to 2030 were developed for each individual source category for CO₂, CH₄, and N₂O. GACMO model (2015) the emission reduction is the projection of GHGs and abatement potential and corresponding investment requirement. Following a prioritization of all possible mitigation actions, emission reduction projections were made based on assumed economic growth, changes in population, energy supplies, and prices, as well as the adoption of new technologies and the impacts of government policies.
- **Stakeholder Engagement and Consultation Process.** National institutional arrangements that include all relevant stakeholders for the purpose of data collection Consultations of national policies and strategies of all sectors by the consultant. Validation workshop carried out in collaboration with NCCC.
- **Scenarios and Decision-making.** The unconditional mitigation scenario is based on the implementation of the already scheduled or in-progress projects, all of whose funding has been defined. The conditional scenario assumes the implementation of additional actions over the period 2015-2030

3.4 Experiences in tracking mitigation initiatives – South Africa

Workshop element	Experiences in tracking mitigation initiatives – South Africa
Presenter	Malebo Seeletse, South Africa

A. National Circumstances and Institutional Arrangements	B. Description of a Party's NDC under Article 4 of the Paris Agreement	C. Information Necessary to Track Progress	D. Mitigation Policies, Actions, and Plans	E. Summary of GHG Emissions and Removals	F. Projections of GHG Emissions and Removals	G. Other information
	√	√	√			
Summary						
Key messages						
<p>Tracking mitigation initiatives include Renewable Energy Independent Power Producer Programme (REIPPP), Section 12L Energy Efficiency Tax Incentive, Fuel Switch- Natural Gas, Municipal Energy Efficiency Programme, Electric Vehicles, Bus Rapid Transit System, Recycling Enterprise Support Programme and Green Hydrogen Projects (Planned)</p> <p>Systems and national challenges</p> <p>Monitoring and reporting processes in place</p> <ul style="list-style-type: none"> • South Africa developed the online National Climate Change Response Database (NCCRD) to track all climate change initiatives in the country. • NCCRD is publicly available although a free registration is required to obtain more detailed information about projects. • NCCRD contains information provided by individual participants (government, business, non-government organizations, and academia). • NCCRD is envisioned to be linked with Provincial Climate Change Databases, currently only Mpumalanga Climate Change Response Database is linked to NCCRD. • In consultation with data providers of key mitigation actions, South Africa developed a set of climate change mitigation indicators to monitor the implementation, tracking of greenhouse gas (GHG) effects and non-GHG effects. The information was used to develop the mitigation quantification tool, which incorporates ex-post assessment. • South Africa has upgraded the South African Greenhouse Gas Emissions Reporting System to integrate the submissions and annual reporting of mitigation plans by industries. • South Africa developed the Climate Change Tracking Indicators Report to communicate the progress and lessons learned in tracking South Africa’s transition towards a climate-resilient society and a lower carbon economy. The resultant Indicators are intended to track and communicate the causes and effects of climate change to the domestic audience. The indicators are aligned with South Africa’s NDC and SDGs. <p>Main challenges faced in implementing tracking systems.</p> <ul style="list-style-type: none"> • Hosting Infrastructure and system maintenance. • Lack of funding for continuous maintenance and IT support system. • Lack of funding to develop provincial sub-systems. • Human capacity: Currently the existing personnel for system administration support is on contract. • Lack of a centralized system to maintain and update the offline tracking tools. <p>Capacity and resource constraints</p> <ul style="list-style-type: none"> • The provision of data by both provincial and local remains a challenge due to capacity constraints. • Reporting fatigue. • Some data providers require DFFE to pay a membership fee to get access to the data. • Institutional personnel constraints due to high professional staff turnover. 						

- Capacity building constraints in preparation for reporting under the ETF.

Data availability and quality issues

- Information received on NCCRD includes the implementing agency, program description, and budget, but information on emission reductions is incomplete for some of the projects.
- Accuracy and verification of the information reported by individuals in NCCRD.
- For some mitigation actions, there is a delay in the approval of reports which then affects the timing and availability of the data.
- Some data providers require DFFE to pay a membership fee to get access to the data.
- Good mitigation initiatives are being implemented but implementing agencies have no monitoring system in place incorporating climate change indicators.

Key Messages from the Fishbowl discussion among panellists and audience:

- **South Africa:** Strategies and approaches to overcome challenges having Memoranda of Understanding (MoUs) with data providers, developing Provincial Climate Change Database and linking it to the National database to reduce reporting fatigue, linking NCCRD to another project database that is in DFFE and ensuring that personnel maintains and update tracking tools on SharePoint.
- **South Africa: Next steps in tracking and reporting mitigation initiatives include** securing funding to develop provincial systems for other provinces and linking them to the National Climate Change Response Database. Secure funding to employ personnel, develop of reporting template for monitoring Sectorial Emission Targets (SETs), and review existing tools and align them to support the enhanced transparency reporting.

4 Evaluation

Over the three consecutive workshop days, 43 country representatives from 20 African countries participated in the workshop. The participants evaluated the workshop on average with 4.3 points out of 5 points, 5 points meaning strongly agreeing that the sessions were useful to the participant. 33% of the participants were female.

5 Related Links

PATPA and FAO [Biennial Transparency Report Guidance and Roadmap Tool \(transparency-partnership.net\)](https://transparency-partnership.net/)

PATPA [NDC Transparency Nexus Explainer Video // PATPA 2023 - YouTube](#)

FAO [The Nationally Determined Contributions Tracking Tool user manual \(fao.org\)](https://fao.org/)

FAO [Methodologies and guidelines on nationally determined contributions in the agriculture sectors - Technical guidance for the Nationally Determined Contribution Expert Tool \(NEXT\) - Resources on Climate Change \(fao.org\)](#)

6 Contact

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