

Training on preparation and reporting of results of national GHG inventories under the ETF of the Paris Agreement

Kigali, Rwanda 25-27 June 2024

Presentation: Links between the national inventory data and CRTs with NDC tracking reporting and CTFs

Khetsiwe Khumalo

Advisor – Climate Transpaprency UNEP-Copenhagen Climate Center Khetsiwe.khumalo@un.org













# **Reporting Mitigation Assessment**

Reporting on the estimated and registered impacts of mitigation initiatives is a key requirement for effective national transparency systems, as well as reporting as part of the Enhanced Transparency Framework.

The Modalities, Processes, and Guidelines (MPGs) of the Enhanced Transparency Framework (ETF) also call for tracking progress in the implementation of a country's NDC once the mitigation initiatives are under implementation.

Similarly to the information related with the National GHG Inventory, the NDC tracking information must be part of the Biennial Transparency Report (BTR)

















### Outline of the BTR (Decision 5/CMA.3, Annex IV)

#### **BTR**

**National GHG inventory\*** 

Progress made in implementing and achieving NDCs\*

Climate change impacts and adaptation (as appropriate)

Financial, technology transfer and capacity-building support

Additional information when NCs and BTRs submitted jointly

Flexibility

Improvements in reporting

**ANNEXES** 

#### **Overview of chapters**

- 1. National inventory report of anthropogenic emissions by sources and removals by sinks of GHGs (MPGs, para. 17-58)
- I. Information necessary to **track progress made in implementing and achieving NDCs** under Article 4 of the Paris Agreement **(MPGs, para. 59-103)**
- III. Information related to **climate change impacts and adaptation** under Article 7 of the Paris Agreement **(MPGs, para. 104-117)**
- IV. Information on financial, technology development and transfer and capacity-building support **provided and mobilized** under Articles 9–11 of the Paris Agreement **(MPGs, para. 118-129)**
- V. Information on financial, technology development and transfer and capacity-building **support needed and received** under Articles 9–11 of the Paris Agreement **(MPGs, para. 130-145)**
- VI. Information to be reported **when NCs and BTRs are submitted joi**ntly every four years **(1/CP.24, para. 43)** (vulnerability assessment, cc impacts and adaptation measures-if not reported in section III; RSO; education, training and public awareness)
- VII. Information on **flexibility (MPGs, para. 6)** (Indication of (1) reporting provisions to which self-determined flexibility is applied, (2) capacity constraints in relation to the application of flexibility and (3) self-determined estimated time frames for improvements in relation to those capacity constraints)
- **VIII. Improvements in reporting** over time **(MPGs, para. 7-8)** (areas of improvement, how these will be addressed, which areas are related to flexibility provisions, reporting-related CB support needs)
- IX. Any other information the Party considers relevant to the achievement of the objective of the Paris Agreement, and suitable for inclusion in its BTR

Annexes: (i) Technical annexes for REDD+, as applicable; (ii) CRTs for electronic reporting of NIR; (iii) CTFs for electronic reporting of tracking progress in NDCs, FTC support provided/mobilized and/or needed and received; (iv) Information in relation to the Party's participation in cooperative approaches, as applicable



















# Contents of the BTR Chapter: Information to track progress implementing and achieving NDCs under Article 4 of the Paris Agreement

#### A. National circumstances and institutional arrangements

 The aim is to paint a comprehensive picture of a country's unique situation that might impact their progress towards NDCs. This includes understanding the institutional framework that supports climate change initiatives.

# B. Description of a Party's NDC under Article 4 of the Paris Agreement, including updates

 This section aims to provide a detailed account of a country's NDC, including all its parameters and any updates since the last report. The intent is to ensure a clear understanding of the country's climate commitments and any changes therein.

#### C. Information necessary to track progress

 The goal of this section is to outline how a country tracks its progress towards meeting its NDCs. It involves detailing the specific indicators used and sharing the most recent data related to these indicators.

#### D. Mitigation Policies, Actions, and Plans

 This part aims to present a detailed account of the country's efforts to mitigate climate change, including policies, actions, and plans.
 The goal is to highlight the measures being taken to reduce GHG emissions and the effectiveness of these measures.

#### **E. Summary of GHG Emissions and Removals**

 This section's goal is to provide a succinct summary of a country's GHG emissions and removals. This information is especially important for countries submitting a stand-alone national inventory report.

#### F. Projections of GHG Emissions and Removals

 The goal here is to present projections of a country's future GHG emissions and removals, based on current mitigation policies and measures. This helps to identify the potential future trajectory of a country's GHG emissions.

#### G. Other Information

 This section provides a platform for countries to share any additional relevant information that helps understand their progress in implementing and achieving their NDCs. This could include any unique initiatives, challenges, or plans that are relevant to their NDC progress.



















## **Common Tabular Formats - Tables**

MPG Section III	Related Tables from the Common tabular formats (CTF)	Reporting requirement Paragraph of the	Flexibility, for Parties that need flexibility in the light of their capacities (self-determined)
B. Description of a Party's NDC	Appendix: Description of a Party's NDC	MPGs 64	
C: . Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4 of the Paris	<b>Table 1:</b> Structured summary: Description of selected indicators	65	Parties can have their latest reporting year as three years prior to the submission of their national inventory report
Agreement	<b>Table 2.</b> Structured summary: Definitions needed to understand NDC	73	, .
	<b>Table 3.</b> Structured summary: Methodologies and accounting approaches – consistency with Article 4, paragraphs 13 and 14 of the Paris Agreement and with decision 4/CMA.1	71-77d	
	<b>Table 4.</b> Structured summary: Tracking progress made in implementing and achieving the NDC under Article 4 of the Paris Agreement	77a -77dii	
	<b>Table 12.</b> Information necessary to track progress on the implementation and achievement of the domestic policies and measures implemented to address the social and economic consequences of response measures	78	
CPIT-GSD (C) IN(a)	Partnership on Transp	arency PEANA	



















## **Common Tabular Formats - Tables**

MPG Section III:	Related Tables from the Common tabular formats (CTF)	Reporting requirement	Flexibility, for Parties that need flexibility in the light of their capacities (self-determined)
D: Mitigation policies and measures, actions and plans, including those with mitigation co-benefits resulting from adaptation actions and economic diversification plans, related to implementing and achieving a nationally determined contribution under Article 4 of the Paris Agreement	<b>Table 5.</b> Mitigation policies and measures, actions, and plans, including those with mitigation co-benefits resulting from adaptation actions and economic diversification plans, related to implementing and achieving a nationally determined contribution under Article 4 of the Paris Agreement	82-85	Encouraged to report estimates of expected and achieved GHG emission reductions for its actions, policies, and measures
E. Summary of greenhouse gas emissions and removals	<b>Table 6.</b> Summary of greenhouse gas emissions and removals in accordance with the common reporting table 10 emission trends – summary	91	
F. Projections of greenhouse gas emissions and removals, as applicable	Table 7. Information on projections of greenhouse gas emissions and removals under a 'with measures' scenario  Table 8. Information on projections of greenhouse gas emissions and removals under a 'with additional measures' scenario  Table 9. Information on projections of greenhouse gas emissions and removals under a 'without measures' scenario	92-101	encouraged to report projections. Can instead report using a less detailed methodology or coverage.
	Table 10. Projections of key indicators  Table 11. Key underlying assumptions and parameters used for projections	97 96 c	



















CTF tables for the electronic reporting of the information necessary to track progress made in implementing and achieving NDCs

#### NDC definition and methods

- Appendix: Description of a Party's NDC
- Table 1: Description of selected indicators
- Table 2: Definitions needed to understand the NDC
- Table 3: Methodologies and accounting approaches

### Current mitigation status and tracking progress

- Table 4: Tracking progress
- Table 5: Mitigation policies, measures, actions and plans (Achieved)
- Table 6: Inventory summary

#### Projections and expected emissions reduction

- Table 5: Mitigation policies, measures, actions and plans (expected)
- Table 7: Projections "with measures" scenario
- Table 8: Projections "with additional measures" scenario
- Table 9: Projections "without measure" scenario
- Table 10: Projections of key indicators
- Table 11: Key underlying assumptions and parameters of projections

### Response measures

• **Table 12.** Information necessary to track progress on the implementation and achievement of the domestic policies and measures implemented to address the social and economic consequences of response measures

## **Description of a Party's NDC including updates**

### Each Party **shall** provide a **description of its NDC**, against which progress will be tracked:

	Description
Target(s) and description, including target type(s)*, as applicable	
Target year(s) or period(s), and whether they are single- year or multi-year target(s), as applicable	
Reference point(s), level(s), baseline(s), base year(s) or starting point(s), and their respective value(s), as applicable	
Time frame(s) and/or periods for implementation, as applicable	
Scope and coverage, including, as relevant, sectors, categories, activities, sources and sinks, pools and gases, as applicable	
Intention to use cooperative approaches that involve the use of ITMOs under Article 6 towards NDCs under Article 4 of the Paris Agreement, as applicable	
Any updates or clarifications of previously reported information, as applicable	

- → This table is to be used by Parties on a voluntary basis, however information items are shall
- → Parties with both unconditional and conditional targets in their NDC may add a row to the table to describe conditional targets
- → This information overlaps with NDC/ICTU, ensure consistency or explain changes/updates





















# Information necessary to track progress in implementing and achieving NDC

- Each Party **shall** identify **indicator(s)** (*quantitative or qualitative; relevant to the NDC*) to track progress towards implementation and achievement of its NDC
- Each Party **shall** provide:
  - the information for each selected indicator for the reference point(s), level(s), baseline(s), base year(s);
     and the most recent information for each reporting year; and compare these
  - description of each methodology and accounting approach used for its NDC target, construction of baseline, and each indicator identified; [key parameters, assumptions, definitions, data sources, models, IPPC guidelines, metrics, etc]
  - all this information in a structured summary to track progress:
    - ✓ Information on indicators [reference level; most recent; at the reporting years in between]
    - ✓ GHG emissions and removals consistent with the scope of its NDC, where applicable;
    - ✓ Contribution from the LULUCF sector for each year of the target period or target year, as applicable;
    - ✓ Information on use of ITMOs, as applicable;
- Each Party with an NDC that consists mitigation co-benefits from adaptation actions and economic diversification plans, shall provide information on <u>domestic policies and measures implemented to address</u> social and economic consequences of response measures.











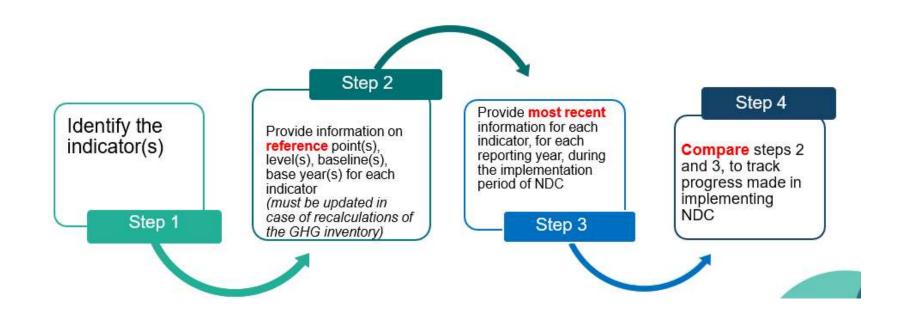








# **Steps for Parties to track progress of their NDCs by indicators**



> For the first BTR that contains information on the end year of NDC, provide assessment of whether target is achieved.



















## Mitigation policies and measures, actions and plans

- Each Party shall provide information on policies, actions and measures that support implementation of its NDC, focusing on those that have the most significant impact on GHG emissions or removals and those impacting key categories in the national GHG inventory
  - To the extend possible, Parties **shall** organize reporting of actions **by sector** (energy, transport, IPPU, agriculture, LULUCF, waste, other), in a tabular format, including relevant information on mitigation co-benefits, as applicable:





Objectives

Type of instrument (regulatory, economic, other)

Status (planned, adopted, implemented)

Sectors affected

Gasses affected

Start year of implementation

Implementing entity

- Each Party <u>may</u> also provide information on related costs, non-GHG mitigation benefits and how these actions interact with each other, as appropriate
- Each Party shall provide information on estimates of expected and achieved GHG emission reductions [FX: encouraged]; and methodologies and assumptions used, to the extent possible
- Each Party <u>should</u>: identify PAMs no longer in-place and explain why; provide information on how its PAMs are modifying longerterms trends in GHG emissions and removals



















# **Summary of GHG emissions and removals**

- Each Party, that submits a stand-alone national inventory report, shall provide a summary of its GHG emissions and removals.
- This information shall be provided for those reporting years corresponding to the Party's most recent national inventory report, in a tabular format.
  - > the common reporting table 10 emission trends summary

GREENHOUSE GAS EMISSIONS AND REMOVALS	Reference year/period for NDC (1)	(2)	1990 (1)	(Years 1991 to 2019)	(Years 1991 to 2019)	2020	(Years 2021 to latest reported year)	(Years 202' to latest reported year)	1 (Years 202' to latest reported year)	year][re n ce[year] io d]] lates reporte	ase fere [per to t						
CO <sub>2</sub> emissions without net CO <sub>2</sub> from LULUCF CO <sub>2</sub> emissions with net CO <sub>2</sub> from LULUCF CH <sub>4</sub> emissions without CH <sub>4</sub> from LULUCF CH <sub>4</sub> emissions with CH <sub>4</sub> from LULUCF N <sub>2</sub> O emissions without N <sub>2</sub> O from LULUCF N <sub>2</sub> O emissions with N <sub>2</sub> O from LULUCF HFCs PFCs		CO <sub>2</sub> equiva	ellents (kt) (3)		GREENHO SINK CAT		OURCE AND	Referenc e year/perio d for NDC <sup>(1)</sup>	Base year	1990	(Years 1991 to 2019)	(Years 1991 to 2019)	2020	(Years 2021 to latest reported year)	(Years 2021 to latest reported year)	(Years 2021 to latest reported year)	Change from 1990[bas e year][refer e nce[year][ p eriod]] to latest reported
Unspecified mix of HFCs and PFCs									CO <sub>2</sub> equivale	nts (kt) (3)							year (%)
SF <sub>6</sub>					4 =					` '							()
NF <sub>3</sub>					1. Energy												
Total (without LULUCF)					Industria use	l processes	and product										
Total (with LULUCF)					3. Agricultu	ro											
Total (without LULUCF, with indirect)					_												
Total (with LULUCF, with indirect)					4. Land use forestry	e, iand-use d	change and										
CBIT-GSP	<b>y</b> UN	<b>(1)</b>	UI	N @	5. Waste 6. Other												
CLIMATE TRANSPARENCY GE	<b>f</b> program	nme climate	centre envi	ronment ramme	Total (with I	LULUCF) (8)											





### **Common Tabular Formats**

Common tabular formats for the electronic reporting of the information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement

### **Decision 5/CMA.3**

Guidance for operationalizing the modalities, procedures and guidelines for the enhanced transparency framework referred to in Article 13 of the Paris Agreement

















#### FCCC/PA/CMA/2021/10/Add.2

#### Annex II\*

Common tabular formats for the electronic reporting of the information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement

[English only]

#### 1. Structured summary: Description of selected indicator

District James 1, Description of Statetical Indianates								
Indicator(s) selected to track progress*	Description							
{Indicator}								
Information for the reference point(s), level(s), baseline(s), base year(s) or starting point(s), as appropriate <sup>6</sup>								
Updates in accordance with any recalculation of the GHG inventory, as appropriate $^b$								
Relation to NDC <sup>c</sup>								
V								

Notes: (1) Pursuant to para. 79 of the MPGs, each Party shall report the information referred to in paras. 65–78 of the MPGs in a narrative and common tabular format, as applicable. (2) A Party may amend the reporting format (e.g. Excel file) to remove specific rows in this table if the information to be provided in those rows is not applicable to the Party's NDC under Article 4 of the Paris Agreement, in accordance with the MPGs. (3) The Party could add rows for each additional selected indicator and related information.

Each Party shall identify the indicator(s) that it has selected to track progress of its NDC (para. 65 of the MPGs)

b Each Party shall provide the information for each selected indicator for the reference point(s), level(s), baseline(s), base year(s) or starting point(s), and shall update the information in accordance with any recalculation of the GHG inventory, as appropriate (para. 67 of the MPGs).

Each Party shall describe for each indicator identified how it is related to its NDC (para. 76(a) of the MPGs).

#### Custom footnotes:

Documentation box:

### **CTF tables related to the Inventory**

**Appendix:** Parties 'NDC generally include mitigation targets and actions in terms of GHG emissions

**Table 1:** The **Indicators** selected to track the Party´s NDC can be defined in terms of national or sectoral GHG emissions, following the mitigation targets and actions included in the NDC

**Table 4: Tracking progress** of indicators in previous years, using data extracted from the Inventory (national or sectorial GHG emissions)

**Table 5: Achieved mitigation policies, measures, actions and plans,** if they are quantitative, their impact in terms of GHG emissions can be estimated using the Inventory

Table 6: Summary of greenhouse gas emissions and removals

**Table 7-9: Projections of greenhouse gas emissions and removals** 

















### **Examples of use of the CTFs**

• Appendix: Description of Party's NDC (Rwanda, 2022)

	Description
Target(s) and description, including target type(s), as applicable (b, c)	<b>Rwanda's unconditional contribution</b> is an emission reduction below a projected baseline target, consisting of a reduction of 16% relative to BAU in the year 2030; equivalent to an estimated mitigation level of 1.9 million tonnes of carbon dioxide equivalent by 2030. This unconditional target is based on domestically supported and implemented mitigation measures and policies.
	<b>Rwanda's conditional contribution</b> is an emission reduction below a projected baseline target, consisting of an additional reduction of 22% relative to BAU in the year 2030; equivalent to an estimated mitigation level of 2.7 million tonnes of carbon dioxide equivalent by 2030. This conditional target represents an additional target, based on the provision of international support and funding. The combined unconditional and conditional contribution is a 38% reduction by 2030, equivalente to an estimated mitigation level of up to 4.6 million tonnes of carbon dioxide equivalent emissions
Target year(s) or period(s), and whether they are single-year or multi-year target(s), as applicable	Target year: 2030, single year target
Reference point(s), level(s), baseline(s), base year(s) or starting point(s), and their respective value(s), as applicable	Reference level: 5.33 million tCO2eq, Base year: 2015, same for the BAU and extracted from the last version of the Party GHG Inventory, compared to a value of the BAU by 2030 of 12.1 million tCO2eq



















## **Examples of use of the CTFs**

	Description
Time frame(s) and/or periods for implementation, as applicable	2015-2030
Scope and coverage, including, as relevant, sectors, categories, activities, sources and sinks, pools and gases, as applicable	The sectoral scope of the contribution covers all emissions sources described in the IPCC 2006 Reporting Guidelines (IPCC, 2006), including emissions from the categories of energy; industrial processes and product use (IPPU); waste; and agriculture, forestry, and other land use (AFOLU) but excluding sources from forestry and other land use. The coverage of the contribution includes the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. (It was not found in the NDC the GWP used for the calculations of CO2eq).
Intention to use cooperative approaches that involve the use of ITMOs under Article 6 towards NDCs under Article 4 of the Paris Agreement, as applicable	Rwanda intends to meet its conditional contribution through the use of climate finance and international market mechanisms where appropriate, building upon the experience of the Clean Development Mechanism (CDM) and other existing market mechanisms. These include the potential involvement in international cooperative approaches under Article 6 of the Paris Agreement. The full implementation of the strategic mitigation actions is conditional on the support of international stakeholders. Implementing the prioritized policies and actions assumes the continued use of existing and planned national and international financial sources.
Any updates or clarifications of previously reported information, as applicable	The TNC recalculations were considered for NDC for 2006-2015 which included the emissions from Land Use and Land Use Change, livestock (with the use of Tier 2 for Dairy cows), manure management systems, biomass burning, direct and indirect N2O emissions from agriculture land, and indirect N2O emissions from manure management.



















### **Examples of use of the CTFs - Tunisia**

• 4. Structured summary: Tracking progress made in implementing and achieving the NDC under Article 4 of the Paris Agreement

		Reference point(s), level(s), baseline(s), base	Impleme		n pe DC	erioc	d of the	Target level		Target	Progress made towards the NDC	
	Indicator, unit		2021	2022	•••		End Year	iaiget	ievei	year or period		
Indicator(s) selected to track progress		(year 2010)										
{Indicator}	Total CO2 eq emissions in the Energy sector (Mt CO2eq)	29.00	30.60					17% above base year uncondition al	base year	2030	6% above reference level	
	Emissions intensity in the energy sector (t CO2 eq/1000 TND 2010)	0.46	0.44					lincondition	44% below base year condition al	2030	4% below reference level	
	GDP (Millions TND at 2010 prices)	63,055.00	69,633.00									
	GDP as considered in the NDC (Millions TND at 2010 prices)	63,055.00	70,026.00									
CBIT-GSP CLIMATE TRANSPARENCY	UN (no environment programme climate centre climate	Tederal Visitory   Federal Favings Office   Tederal Favings Office	A A			n Transp eement		REM OUR ENVIRONMENT OU	A R FUTURE		17	





Thank you for your attention!













