

Deep-dive into preparation and reporting of results of national GHG inventories under the ETF of the Paris Agreement

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Presentation:

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

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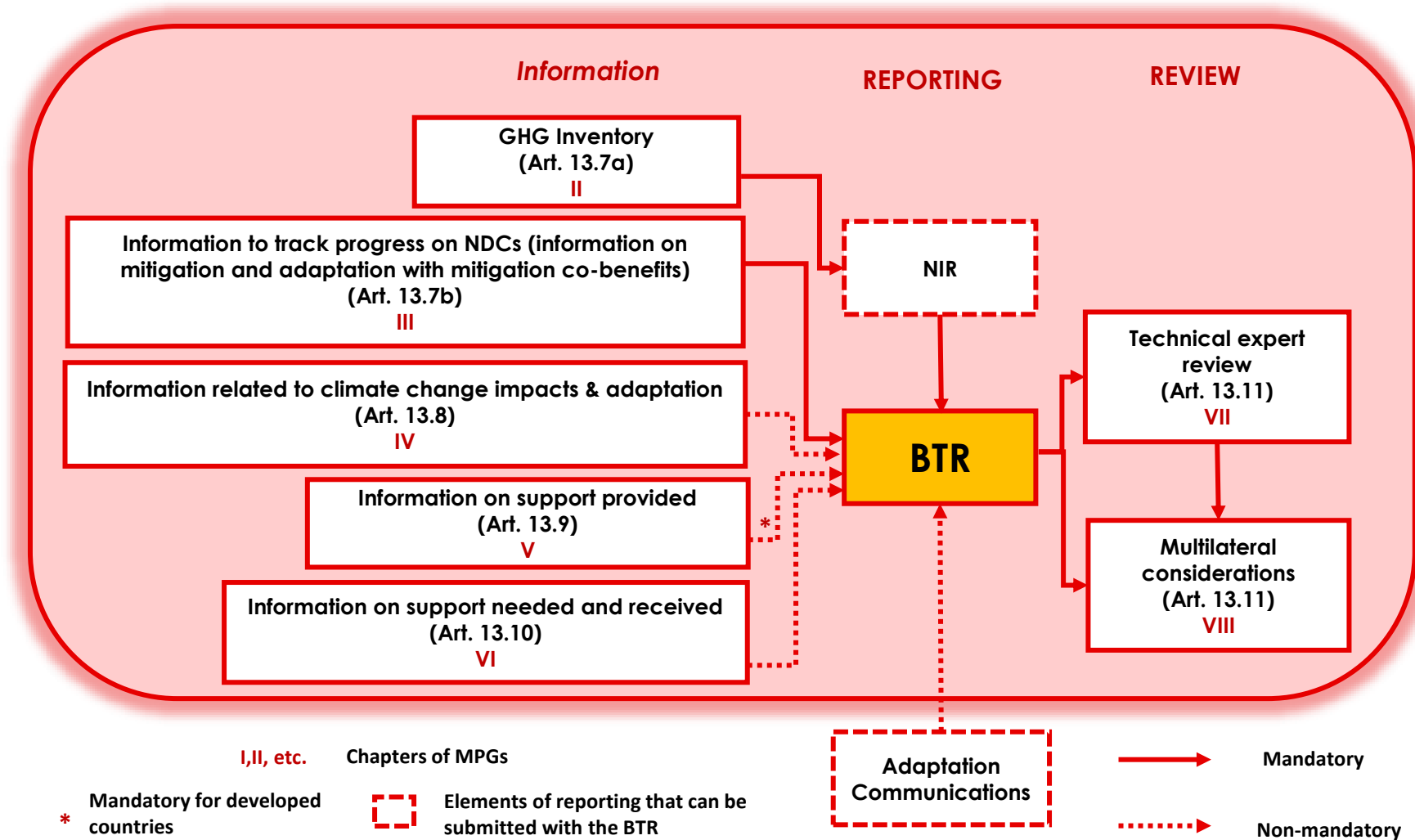
Reporting mitigation assessments

Reporting on the estimated and registered impacts of mitigation initiatives are 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)**

Reorganization of information for submission to the UNFCCC



Source: ICAT-UNEPDTU Partnership (2019)

Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement

I. Introduction

II. National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases

III. Information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement

IV. Information related to climate change impacts and adaptation under Article 7 of the Paris Agreement

V. Information on financial, technology development and transfer and capacity-building support provided and mobilized under Articles 9–11 of the Paris Agreement

VI. Information on financial, technology development and transfer and capacity-building support needed and received under Articles 9–11 of the Paris Agreement



Comparing National Inventory reporting and NDC tracking reporting

Topic	GHG National Inventory	NDC tracking	Source of information
BTR chapter	I. National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases	II. Information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement (of the MPGs)	MPGs 18/CMA.1
MPGs	paras. 17–58	paras. 59–103	MPGs 18/CMA.1
Tabular format for reporting	Common Reporting Tables (CRT)	Common Tabular Format (CTF)	MPGs 18/CMA.1
Number of Tables to fill	61 tables	12 tables and 1 appendix	5/CMA.3
Software to support filling the tables	Yes, in preparation by UNFCCC, and IPCC working on interoperability	Yes, in preparation by UNFCCC	
Source	Based in the Inventory reporting of UNFCCC Annex I Parties	Based partially in the BR of UNFCCC Annex I Parties	MPGs 18/CMA.1
Main new feature		Includes the concept of indicators for reporting	MPGs 18/CMA.1

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

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.

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	→ <i>This table is to be used by Parties on a voluntary basis, however information items are shall</i>
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	→ Parties with both unconditional and conditional targets in their NDC may add a row to the table to describe conditional targets
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	→ This information overlaps with NDC/ICTU, ensure consistency or explain changes/updates
Any updates or clarifications of previously reported information, as applicable	

* *Examples of target types:* economy-wide absolute emission reduction, emission intensity reduction, emission reduction below a projected baseline, mitigation co-benefits of adaptation actions or economic diversification plans, policies and measures, etc.

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, IPCC guidelines, metrics, etc*]
- all this information in a **structured summary** to track progress:

Each Party with an NDC that consists mitigation co-benefits from adaptation actions and economic diversification plans, shall provide

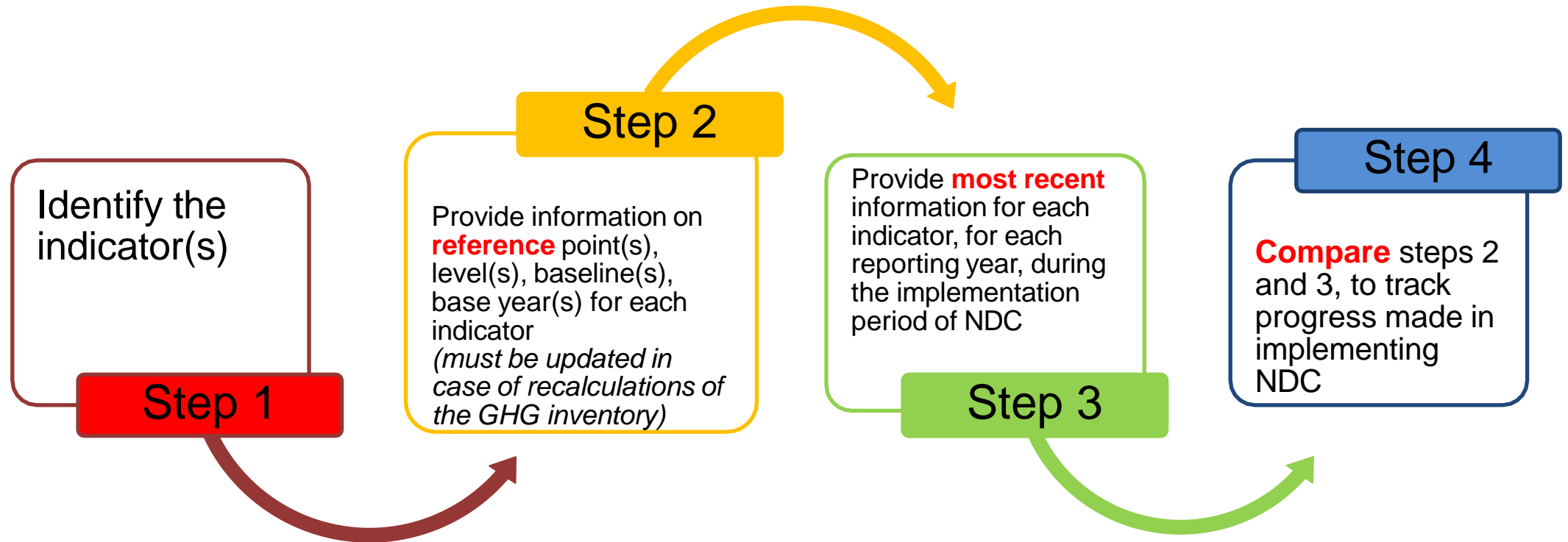
- information on domestic policies and measures implemented to address social and economic consequences of response measures.



- 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;

Information necessary to track progress in implementing and achieving NDC

Overview of 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.

Assessing and tracking progress following the MPG

NDC Progress tracking


MPG: Section III.C (para 59-79)



Based on the National
GHG Inventory data

Mitigation policies and measures, actions and plans' tracking

MPG: Section III.D (para 80-85)



Based on BTR
Mitigation Chapter
results

focusing on those PMA&P that have the most significant impact on GHG emissions or removals and those impacting key categories in the national GHG inventory.

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 extent 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:

Name	Description	Objectives	Type of instrument (regulatory, economic, other)	Status (planned, adopted, implemented)	Sectors affected	Gasses affected	Start year of implementation	Implementing entity
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- Each Party may 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 should: identify PAMs no longer in-place and explain why; provide information on how its PAMs are modifying longer-terms 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

GREENHOUSE GAS EMISSIONS AND REMOVALS	Reference year/period for NDC ⁽¹⁾	Base year ⁽²⁾	1990 ⁽¹⁾	(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][base year][reference year][period] to latest reported year (%)
CO ₂ equivalents (kt) ⁽³⁾										
CO ₂ emissions without net CO ₂ from LULUCF										
CO ₂ emissions with net CO ₂ from LULUCF										
CH ₄ emissions without CH ₄ from LULUCF										
CH ₄ emissions with CH ₄ from LULUCF										
N ₂ O emissions without N ₂ O from LULUCF										
N ₂ O emissions with N ₂ O from LULUCF										
HFCs										
PFCs										
Unspecified mix of HFCs and PFCs										
SF ₆										
NF ₃										
Total (without LULUCF)										
Total (with LULUCF)										
Total (without LULUCF, with indirect)										
Total (with LULUCF, with indirect)										
GREENHOUSE GAS SOURCE AND SINK CATEGORIES										
CO ₂ equivalents (kt) ⁽³⁾										
Reference year/period for NDC ⁽¹⁾										
Base year ⁽²⁾										
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[base year][reference year][period] to latest reported year (%)										
CO ₂ equivalents (kt) ⁽³⁾										
1. Energy										
2. Industrial processes and product use										
3. Agriculture										
4. Land use, land-use change and forestry ⁽⁴⁾										
5. Waste										
6. Other										
Total (with 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 indicators

<i>Indicator(s) selected to track progress^a</i>	<i>Description</i>
{Indicator}	<p>Information for the reference point(s), level(s), baseline(s), base year(s) or starting point(s), as appropriate^b</p> <p>Updates in accordance with any recalculation of the GHG inventory, as appropriate^b</p> <p>Relation to NDC^c</p>

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.

^a 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).

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

Contents of CTFs and tables related to the Inventory

In total, the Common tabular formats comprise **12 Tables** and one Appendix, covering the **7 parts** of Section III of the MPG:

Section III: Information necessary to track progress made in implementing and achieving NDC

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 social and economic consequences of response measures

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: Inventory summary

NDC description

Annex II, appendix

Table 1: Indicators

Structured summary

Table 2: Definitions

Structured summary

Target: 30% reduction below BAU

Type: Emission reduction below a projected baseline

Year: 2030

Reference: BAU emissions 2030: 215 Mt CO₂e

Time frame: 2020-2030

Scope: Economy-wide; all sectors; CO₂, CH₄, N₂O

Indicator: GHG emissions

Reference: Starting point 2019: 169 Mt CO₂e
BAU 2030: 215 Mt CO₂e

Updates: No recalculation conducted

Relation to NDC:
The indicator directly relates to the NDC target

Indicator: GHG emissions using AR5 GWPs

Differences to inventory:
Exclusion of emissions from HFCs

Co-benefits: N/A

Table 3: Methodologies

Structured summary

Accounting approach:
See BTR section XYZ: inventory methodology

Consistency with Article 4:
Through use of IPCC 2006 GL

Para 74(b): See BTR section XYZ: projections methodology

Others: NA

Table 4: Tracking progress

Structured summary

Indicator: GHG emissions

Unit: Mt CO₂e

Reference: Starting point 2019: 169,1
BAU 2020: 173,2, target: 167,3
BAU 2021: 177,4, target: 165,6
BAU 2030: 215, target: 150,5

Year 2020: 159,7

Year 2021: 174,5

Target level: 150,5

Target year: 2030

Progress 2021: Reduction of 1.6% below BAU

Table 10: Indicator projections

Key indicator:
GHG emissions using AR5 GWPs

Unit: Mt CO₂e

Value for most recent year from inventory:
169,1

Projections:

2020:	159,7
2025:	172,3
2030:	159,6
2035:	148,0

Examples of CTF
Tables 1, 2, 3, 4
and 10

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)	<p>Rwanda's unconditional contribution 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.</p>
	<p>Rwanda's conditional contribution 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, equivalent to an estimated mitigation level of up to 4.6 million tonnes of carbon dioxide equivalent emissions</p>
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 tCO ₂ eq, 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 tCO ₂ eq

Examples of use of the CTFs

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

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 CO ₂ eq).
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 N ₂ O emissions from agriculture land, and indirect N ₂ O 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

	<i>Indicator, unit</i>	Reference point(s), level(s), baseline(s), base year(s) or starting point(s){MPGs, p. 67, 77(a)(i)}	Implementation period of the NDC						Target level	Target year or period	Progress made towards the NDC
			2021	2022	End Year			
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 unconditional 9% below base year conditional	2030	6% above reference level	
	Emissions intensity in the energy sector (t CO2 eq/1000 TND 2010)	0.46	0.44					28% below base year unconditional 44% below base year conditional	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								

Example of a CTF table 4 for tracking progress

- Party does not participate in cooperative approach
- Reported with the first Biennial Transparency Report
- Adapted from “Accounting for National Determined Contributions” (Partnership on Transparency in Paris Agreement)

	Unit, as applicable	Reference point(s)	Implementation period of the NDC						Target level	Target year or period	Progress made towards the NDC
			2021	2022				2030			
Indicator(s) selected											
GHG emissions covered by the NDC	Mt CO2eq.	100	88	86					80	2030	<i>14% below the reference level</i>
Where applicable, total GHG emissions consistent with the coverage of the NDC	Mt CO2eq.	100	88	86							
Contribution from the LULUCF sector											
Each Party that participates in cooperative approaches...											
[...]	Relevant for Parties using cooperative approaches										
Assessment of the achievement of the Party's NDC under Article 4 of the Paris Agreement											
Restate the target of the Party's NDC:											
[...]	Relevant after the end of the NDC period.										

Example of a completed common tabular format: Tracking progress (after the end of the NDC period)

	Unit, as applicable	Reference point(s)	Implementation period of the NDC					Target level	Target year or period	Progress made towards the NDC	
			2021	2022							2030
Indicator(s) selected											
GHG emissions covered by the NDC	Mt CO ₂ eq.	100	88	86				79	80	2030	21% below the reference level
Where applicable, total GHG emissions consistent with the coverage of the NDC	Mt CO ₂ eq.	100	88	86				79			
Contribution from the LULUCF sector											
Each Party that participates in cooperative approaches...											
[...]	Relevant for Parties using cooperative approaches										
Assessment of the achievement of the Party's NDC under Article 4 of the Paris Agreement											
Restate the target of the Party's NDC:											
Information for reference point(s) [...]	Mt CO ₂ eq.	100									
Final information for the indicator [...]	Mt CO ₂ eq.		88	86				79			
Comparison	The level in the target year is 79 Mt CO ₂ e. It is 21% below the reference level and it is below										
Achievement of NDC	Yes. The target has been achieved because the level in the target year is below the target level.										

Thank you for your attention!

For more information:

<https://climate-transparency-platform.org/>

