

Unpacking NDC Tracking Chapter of the BTR in Anglophone Africa Transparency Network

Identification of indicators to track NDC targets under Article 4 of the Paris Agreement

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NDC targets and Indicators

- Last webinar we focused in NDC targets, now in indicators to track these NDC targets
- They are connected, since once NDC targets are defined, necessary to select indicators for tracking purposes



Indicator for implementation and achievement: values

An initial definition of an Indicator

“A quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.” (OECD 2010)

OECD (2010). Glossary of Key Terms in Evaluations and Results Based Management.

Progress indicators

Quantitative Progress Indicators:

Based on **quantitative measurements or statistics** (units, prices, proportions, rates of change and ratios) of a certain condition tracked over time. These often relate to the inputs for the mitigation initiatives, the activities carried out, and their intermediate or along the way effects.

- Measuring aggregate emissions reduction from mitigation actions;
- Identifying co-benefits of mitigation actions, policies and measures for sustainable development and for economic and social growth.

Qualitative Progress Indicators:

Qualitative indicators can also be used to track the progress of mitigation initiatives. These include **non-numerical or subjective assessments** (Words: in statements, paragraphs, case studies and reports) of progress towards a specific impact goal. They tend to be useful where parameters are difficult to quantify, often the case for non-GHG effects.

Qualitative indicators

- Use of **qualitative indicators** for tracking progress could be expected in cases where Parties have their NDCs in the form of mitigation actions or adaptation actions, or other policies and measures or projects. In such cases the focus will be on tracking progress how and when planning, adoption, and implementation phases were carried out without specific quantification of the outcomes of such actions, policies and measures or projects.

(UNFCCC, 2023)



Important questions to ask relative to indicators

Data collection process:

Is the process to collect information for the indicator already defined?

What are the data sources identified in the process above?

Is data likely to be accurate and realistic?

How often is it needed to collect it?

Does it require baseline information? If so, can you get this information?

Resources:

Do you have staff to perform the job? Number, skills

How much will it cost to get the data (staff time, beneficiary time and money)?

Will resources be permanent on time?



Similarities between targets and indicators

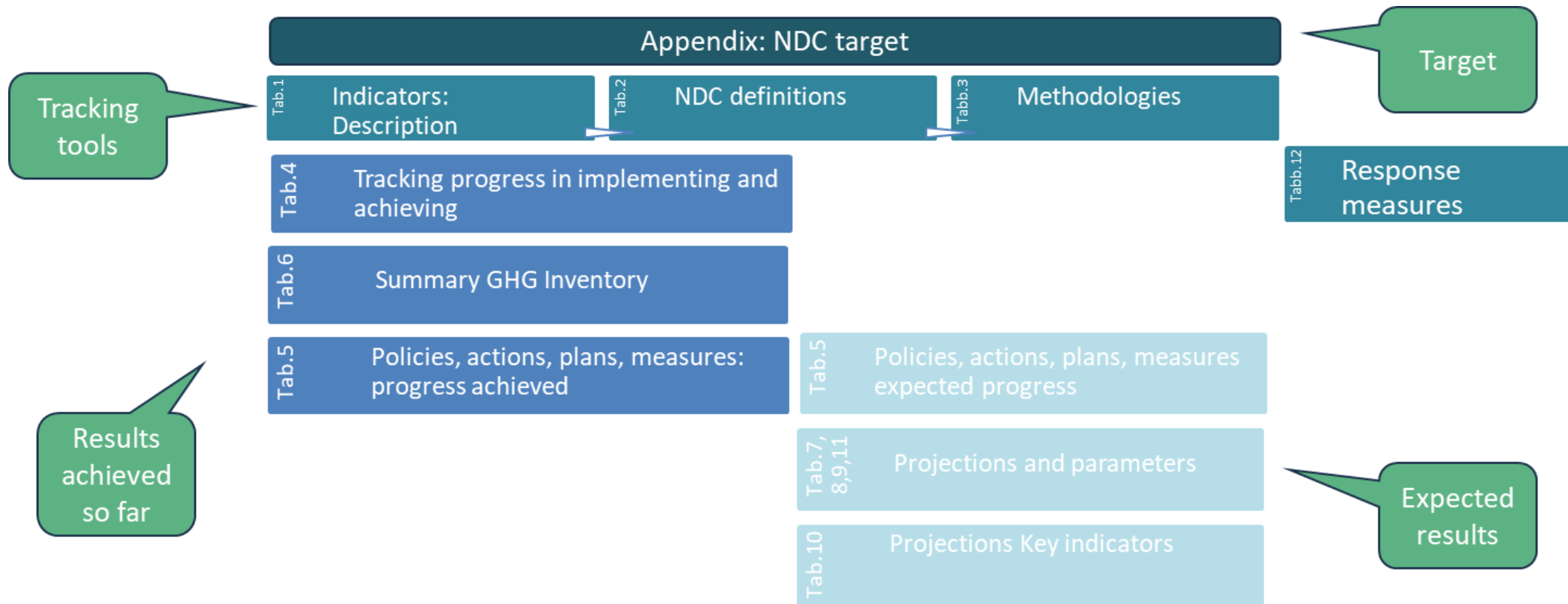
- Good Indicators also need to be SMART
- Same metrics (units)
- Same methodology (hypothesis, considerations)
- Same scope

S	M	A	R	T
Specific	Measurable	Ambitious	Relevant	Time-bound
The indicator is clearly defined, so there cannot be different interpretations of it	The indicator value can be measured quantitatively or qualitatively	Achieving the target requires ambitious action	The indicator relates to a relevant impact of a mitigation action	The indicator relates to a point in time of timeframe

Differences between targets and indicators

- Target is the objective to accomplish Indicator is the tool to assess advance and achievement
- Target is fixed in time
- Indicator is evolving in time establishing a time-series,
- Target is reported in the Appendix of the CTF
- Indicator is defined in CTF Table 1 and reported in CTF Table 4

Indicators in the MPGs of the Paris Agreement



Indicators in the MPGs of the Paris Agreement

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

65. Each Party shall identify **the indicator(s)** that it has selected to track progress towards the implementation and achievement of its NDC under Article 4. Indicators shall be relevant to a Party's NDC under Article 4, and may be either qualitative or quantitative.

Indicators in the MPGs of the Paris Agreement

- Indicators are part of the structured summary, described in paragraph 77 of the MPGs;
- The key components of the structured summary are, as applicable to each NDC:
 - Information on each indicator used to track progress, including:
 - reference information,
 - any updated data from previous years, and
 - the latest available value for the indicators;
- Relevant information should be provided for each indicator, and
- The importance of consistency between the data sources and assumptions used in the NDC and the information presented in the BTR should be considered.

Indicators in the MPGs of the Paris Agreement

- MPGs do not provide a definition of indicator.
- Specific features for Indicators: should be self-determined by Parties, must be relevant for the NDC, and may be qualitative or quantitative.
- Indicators should have a Description (to be included in Table 1 of the CTF) and a Definition (to be included in Table 2 of the CTF). A Description could include an aim/objective and/or the source of data, whereas a Definition could express how the indicator should be estimated (numerically, for a quantitative indicator) or reported (status?).

Indicators in the BTR1 (2024)

- in the BTR1 (2024), many countries used a simple indicator: **Total national GHG emissions**, with data extracted from the National GHG Inventory
- This is in line with the Article 4 of the Paris Agreement: *...Developing country Parties are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances...*

Tables 1 and 2 of the CTF (BTR1 Serbia)

1. Structured summary: Description of selected indicators

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<i>Indicator(s) selected to track progress^a</i>	<i>Description</i>
Total GHG emissions in CO ₂ eq	Total GHG emissions (without LULUCF) in CO ₂ eq
Information for the reference point(s), level(s), baseline(s), base year(s) or starting point(s), as appropriate ^b	Base year: 2010 - During the revision of the first NDC, the calculation of the greenhouse gas inventory and quality assurance and quality control (QA/QC) processes identified the 2010 as the base year. In order to make comparisons with the first and the second NDC and changes in the greenhouse gases (hereinafter: GHG), the GHG emission is expressed compared to 1990. The reference level in the base year (2010) is 63 800 ktCO ₂ eq considering NDC target is expressed also as emission reduction compared to 1990, the reference level in 1990 is 82 667 ktCO ₂ eq
Updates in accordance with any recalculation of the GHG inventory, as	NA (The reference level for the base year 2010 and year 1990 are consistent with the level reported in 3rd
Relation to NDC ^c	The indicator is defined in the same metric, methodology, scope and unit as the target of the NDC.

2. Structured summary: Definitions needed to understand the NDC

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	<i>Definitions^a</i>
<i>Definition needed to understand each indicator:</i>	
Total GHG emissions in CO ₂ eq	Total GHG emissions correspond to the annual totals reported in CO ₂ equivalents excluding LULUCF in the latest national GHG inventory. The totals comprise all sectors and gases listed in the CTF table entitled 'Reporting format for the description of a Party's nationally determined contribution under Article 4 of the Paris Agreement, including updates'
<i>Any sector or category defined differently than in the national inventory report:</i>	NA
<i>Definition needed to understand mitigation co-benefits of adaptation actions and/or economic diversification plans:</i>	NA
<i>Any other relevant definitions</i>	NA

Table 4 of the CTF (BTR1 Lebanon)

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

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Indicator(s) selected to track progress of the NDC or portion of NDC under Article 4 of the Paris Agreement (paras. 65 and 77(a) of the MPGs):	Unit, as applicable	Reference point(s), level(s), baseline(s), base year(s) or starting point(s), as appropriate (paras. 67 and 77(a)(i) of the MPGs)	Implementation period of the NDC covering information for previous reporting years, as applicable, and the most recent year, including the end year or end of period (paras. 68 and 77(a)(ii–iii) of the MPGs)				Target level ^b	Target year or period	Progress made towards the NDC, as determined by comparing the most recent information for each selected indicator, including for the end year or end of period, with the reference point(s), level(s), baseline(s), base year(s) or starting point(s) (paras. 69–70 of the MPGs)
			2011	2020	2021	2022			
1) Total greenhouse gas emissions (without LULUCF and F-gases)	kt CO ₂ equivalent	19194.00	23,488.24	19,545.84	18,863.20	31,159.91	2030	Lebanon total emissions in 2022 (excluding LULUCF and F-gases) is 18,863 Gg CO ₂ eq., which is 33% under the reference BAU level in 2022 (28,362 Gg CO ₂ eq.)	
BAU emissions baseline scenario (measured as kt CO ₂ equivalent)	kt CO ₂ equivalent		12.00	29.00	33.00				
Difference: BAU emissions baseline scenario - Total greenhouse gas emissions	kt CO ₂ equivalent		26,669.35	27,401.73	28,362.69				
BAU emissions baseline scenario (measured as kt CO ₂ equivalent)	%		3,181.11	7,855.89	9,499.49				
Where applicable, total GHG emissions and removals consistent with the coverage of the NDC (para. 77(b) of the MPGs)	kt CO ₂ equivalent		23,488.24	19,545.84	18,863.20				
Contribution from the LULUCF sector for each year of the target period or target year, if not included in the inventory time series of total net GHG emissions and removals, as applicable (para. 77(c) of the MPGs)	kt CO ₂ equivalent		-2,896.00	-3,018.00	-3,243.00				
Each Party that participates in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4 of the Paris Agreement, or authorizes the use of mitigation outcomes for international mitigation purposes other than achievement of the NDC, shall provide (para. 77(d) of the MPGs):			NA	NA	NA				

Case study on Indicators: Rwanda

Rwanda has been working for several years on the identification of a solid group of mitigation indicators to use for its MRV system and to report under the Paris Agreement. The NDC MRV system of Rwanda includes indicators for:

- Total aggregated GHG-related mitigation impacts,
- Aggregated impacts at sectoral level,
- Indicators relating to the progress of mitigation measures and helping to estimate their impacts,
- Qualitative indicators related to the progress of mitigation measures, policy frameworks or infrastructure.

Case study on Indicators: Rwanda

In Rwanda, the Agriculture sector provides the highest share of GHG emissions. Indicators considered in this sector include:

Rwanda's Agriculture sector related indicators

Headline indicators	Supporting indicators	
<ul style="list-style-type: none"> • BAU GHG emissions (MtCO₂e) • Current GHG emissions (MtCO₂e) • Crop production (total t crop biomass) • Livestock production (# population) 	Crops:	
	Nutrient use Efficiency	Compost application (ha)
		Deep fertiliser and biomass use in rice production (kg/t rice)
	Soil and water conservation	Terraced land (ha)
		Crop rotation (ha)
		Banana and coffee multi-crop production (ha)
		Conservation tillage (ha)
	Livestock:	
	Livestock husbandry and species	New fodder species production (ha)
		New fodder use (# cows)
New species (# cows replaced with crossbreeds)		
Manure management	# new kraals	
	Manure yields (t/cow)	

Qualitative and quantitative indicators in Zimbabwe

Zimbabwe included in its BTR1 a table with quantitative (GHG and Non-GHG) and qualitative indicators for each of the most relevant mitigation measures scheduled for the coming years

Qualitative and quantitative indicators in Zimbabwe

In the case of the measure with the target: “inclusion of 2% of biodiesel fuel by 2030”, the tracking table, with associated indicators read as follows:

SECTOR: ENERGY	
Mitigation measure:	2% biodiesel in fuel by 2030
Indicators	<ul style="list-style-type: none"> Area under biodiesel feedstock in Ha Number of biodiesel processing plants Capacity of biodiesel processing plants Annual feedstock production Amount of biodiesel produced Percentage of biodiesel blended in fuel Policies and Strategies GHG emissions
Reference year	2020
Overview	2% biodiesel in fuel by 2030 is projected to reduce annual GHG emissions by 189 Gg CO ₂ eq.
Unit of Measure	Amount of biodiesel produced, Percentage of biodiesel blended in fuel, ktCO ₂ eq
Type of Indicator	Quantitative/Qualitative/GHG/Non-GHG
Data requirements	<ul style="list-style-type: none"> Area under biodiesel feedstock in Ha Number of biodiesel processing plants Capacity of biodiesel processing plants Annual feedstock production Amount of biodiesel produced Percentage of biodiesel blended in fuel
Data sources	ZETDC and ZERA Annual reports
Frequency of data collection	Annually
Limitations	Data availability.
Observations	Data not yet available.



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Thank you for your attention!

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