



ERC

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Tracking progress

Policy brief

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1) Background

Nationally determined contributions (NDCs) are a central feature of the Paris Agreement. Countries decide domestically what they can contribute to the global effort. There is no hard legal obligation to achieve the mitigation targets in NDCs; rather, the system relies on transparent reporting and review to encourage countries to comply. Hence tracking progress in implementing and achieving NDCs is central to the Paris transparency framework and for effective climate action.

The rules that outline how tracking progress should happen are part of the “Paris rule-book” – more formally the modalities, procedures and guidelines (MPG) of the Enhanced Transparency Framework.⁽¹⁾ The MPG were agreed at COP 24 in Katowice (December 2018). In this policy brief, we focus on “tracking progress” and on chapter III of the MPG, which relates to the mitigation components of NDCs. This involves tracking mitigation targets in NDCs, using self-selected indicators as well as reporting domestic mitigation measures that contribute significantly to reducing emissions. This also relates to accounting for NDCs under Article 4.13.^(2,3) Support is important and key to enabling more ambitious mitigation, but this is not the focus of this policy brief.

The MPG generally have language that suggests mandatory reporting (“shall”), but then add qualifiers (“as appropriate” or “as applicable”, etc). This means that transparency depends on countries finding transparency appropriate and helpful, and that they will report the very significant details. We assume that countries, including South Africa, will track progress to the best of their abilities. If this proves to be true, common practice may at a later stage be codified in law.

2) Why track progress?

There are two sets of good reasons to track progress: It is an international requirement, and it has benefits domestically.

The Paris Agreement⁽⁴⁾ outlines its enhanced transparency framework in Article 13. One purpose is clear understanding of climate action (Art 13.5), for which tracking progress is essential. The key requirement to track progress is in Article 13.7, which requires that all Parties regularly provide GHG inventories and “information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4”. This information is reviewed technically (Art 13.11-12) and politically, as well as informing a global stock-take.

All countries need to take action, in order not to suffer worse impacts. So, increasingly, countries will understand that it is in their national interest to have effective climate action. We need to track action to see whether we are collectively and individually meeting our goals, as set out in Article 2.

There are significant domestic benefits from tracking progress of NDCs. One benefit is continuous improvement of domestic reporting, supporting learning by regular review. Another is informing policy and decision-making around climate change response. The transparency framework will provide for technical experts, who as part of their review will identify improvements and assist with capacity building needs, for free. Since reporting is required every two years (“biennially”), countries can improve in their next report. This will strengthen institutional arrangements for transparency over time. The skills of government officials and other involved in providing data for reporting will improve. Better understanding of how a country is doing will promote climate actions, many of which have developmental

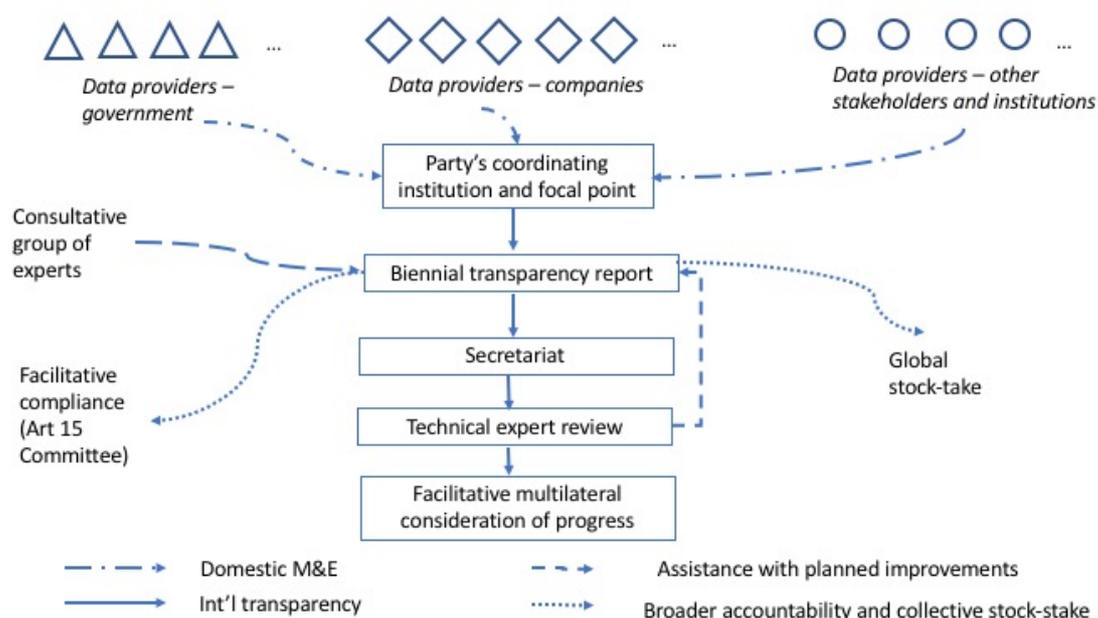
co-benefits. Last but not least, transparency promotes trust, building the confidence of funds and investors and promoting access to finance at scale.

3) Who tracks ?

Skilled people and well-functioning institutions are essential to track progress, nationally and internationally. The MPG addresses institutional arrangements in chapter III.A. So what national systems are required?

Skilled people include the government officials tasked with implementing NDC tracking systems. In South Africa, this responsibility is centred in the Department of Environmental Affairs (DEA), and internationally reporting roles commonly are held by ministries of environment. So officials need skills to report information that is transparent, accurate, complete, consistent and comparable – the “TACCC principles”. Since data comes from many sources, significant coordination is needed. The DEA, as the coordinating entity, has to liaise with other government departments, such as Energy, Transport, and Trade and Industry. The DEA has established a Project Steering Committee for the development of international climate change reports, comprising officials from the national Departments of Environmental Affairs, Energy, Transport, Agriculture Forestry and Fisheries, Mineral Resources, Basic and Higher Education, Human Settlements, Economic Development, Public Enterprises, National Treasury, Health, Rural Development, Water Affairs, Cooperative Governance, Science and Technology, Trade and Industry, and International Relations. The Climate Change Bill⁽⁵⁾ being considered by the Parliament of South Africa may establish for statutory bodies, i.e. institutions with a strong legal basis. Furthermore, a Presidential Climate Change Coordinating Commission is to be established to oversee the Just Transition.⁽⁶⁾ Tracking progress also requires reporting by companies. The information asymmetry between government and business does not always work in favour of TACCC reporting. The data providers themselves also need skilled personnel to contribute to tracking progress. Figure 1 shows how domestic monitoring and evaluation (M&E) feeds into international transparency; with links to broader accountability and the collective global stock-take, and assistance with improvements planned by the country.

Figure 1: Illustration of some key elements of tracking progress



Internationally, tracking progress feeds into an international system. Information by countries on tracking progress forms part of their biennial transparency reports (BTRs), which are received by the UNFCCC Secretariat. They undergo technical expert review (TER), with teams of experts either visiting the country or undertaking desk-top reviews. And the reports from those reviews form part of a “facilitative multilateral consideration of progress” (FMCP). This is a process within the negotiations – and countries have an incentive to present their case carefully. The information in the BTRs is also a key source of input to the global stock-take (GST), which is a five-yearly assessment of progress. The GST is a collective assessment, whereas FMCP looks at individual countries (or groups, in some cases). The last part of the system of accountability is the Article 15 Committee. The Committee facilitates compliance – and in the Katowice decision, has the right to initiate consideration, for example if a Party has not participated in FMCP. It can also, if the Party agrees, “engage in a facilitative consideration of issues in cases of significant and persistent inconsistencies” in the information – which might include information on tracking progress. The Consultative Group of Experts (GGE) will be important to provide facilitative guidance, training and sharing of experiences – including on how to track progress. Support from the CGE and feedback during TER will help with continuous improvement in areas identified by the country. Taken together, these elements of the Paris Agreement and its rule-book provide for accountability.

In South Africa, significant experience has been gained with the existing system of measurement, reporting and verification (MRV) of mitigation actions. National systems to track progress should build on the MRV system. This also makes sense as the Department of Performance Monitoring and Evaluation runs a M&E system for the Presidency. So MRV at international level can dove-tail with domestic M&E, informing key outcomes. The Capacity-Building Initiative for Transparency assists with strengthening national institutions, provides tools and generally assist in improving transparency over time. The time to transition from MRV to the Paris transparency system was defined in Katowice: it will happen in 2024.

4) What is to be tracked?

The main elements within NDCs that are to be tracked are targets, and policies and measures (PAMs). The MPG outline come details on each of these elements: how targets are to be described in chapter III.B, indicators in several parts of III.C, and PAMs in III. D.⁽¹⁾ Here is where it gets technical.

a) Mitigation targets in NDCs

Article 4.2 of the Paris Agreement contains two obligations of conduct. In the first sentence, each Party is required to “prepare, communicate and maintain successive nationally determined contributions that it intends to achieve.” Often assumed that this is the main ‘commitment’. Yet NDCs are documents, and so tracking progress in implementing and *achieving* NDCs needs to consider the mitigation targets contained in NDCs. Tracking progress starts with describing the mitigation target, including the elements in Box 1 (drawn from para 64 of the MPG). By providing this information about its target, a country specifies the target against which it will track progress.

Box 1: Elements to describe mitigation targets in NDCs (from para 64 of MPG)

- Target(s) and description
- Target year(s) or period(s)
- Reference point(s) and their respective value(s)
- Time frame(s)
- Scope and coverage
- Intention to use internationally transferred mitigation outcomes towards NDCs
- Any updates or clarifications of previously reported information

b) Tracking domestic mitigation measures

The second sentence of Article 4.2 requires that “Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives” of their NDCs. Here the obligation is to “pursue”. The notion is that the measures help achieve the mitigation targets which are contained in the NDC. So to really know what a Party is doing, it will report on its domestic mitigation measures. Section III.D of the MPG provide details on tracking mitigation policies and measures (PAMS). The focus is on those PAMS that have the most significant mitigation effect.

5) How to track?**a) Targets**

The MPG refer to indicators as a tool to track progress of mitigation targets. Paragraph 66 gives examples of indicators:

net GHG emissions and removals, percentage reduction of GHG intensity, relevant qualitative indicators for a specific policy or measure, mitigation co-benefits of adaptation actions and/or economic diversification plans or other (e.g. hectares of reforestation, percentage of renewable energy use or production, carbon neutrality, share of non-fossil fuel in primary energy consumption and non-GHG related indicators)

The examples (see Box 2) suggest that the indicator depends on the kind of mitigation target included in a country’s NDC. Regardless of type, each country must provide reference points and levels. Progress is tracked by when the country reports both initial levels (at the starting point or base year) and most recent information. Indeed, comparing the levels against a benchmark is accounting.

Box 2: Examples of tracking progress, given different target types

- For a base year target, the country would report its recent emissions level in relation to 1990 levels, enabling tracking of progress to x% reduction below base year.
- For a fixed level target, recent emissions levels would be compared, enabling assessment whether emissions are below the target level – or on track to be there. The emissions level in the target year might be at 614 Mt for 2025, so the recent emissions levels would be compared to that level. Note, however, that information in the BTR would be for a historical year, given that inventories are x-3. During the period of implementation, the trends in emissions would have to be considered, for the country to say whether it considers itself to be on track. Only by 2028, in this example, could it definitively be said that the target has been achieved. We elaborate this example, as it is South Africa’s mitigation target type; other types tend to be more complex.
- For emissions intensity targets, tracking progress would report recent levels of emissions per GDP, and track progress against a target of y% reduction in emissions intensity from a historical emissions intensity.
- For baseline targets, emission projections become relevant, as provided for in paragraph 93. While emissions projections are generally voluntary for developing countries under the MPG, tracking progress is not viable without a stated emission projection. The country would report its recent emission levels, and whether they were z% below the projection.
- Where PAMs are the mitigation target, the implementation of the policy can be tracked. If the PAM is to result a quantified outcome, as in the examples for “other” indicators, then these can be tracked.

b) Tracking PAMs

The MPG provide for a tabular format, in which basic parameters of a PAM are listed – naming and describing the PAM, its objectives, the type of policy, when it is to be implemented, status, progress, and which institution is responsible for implementation. Voluntary information on costs and non-GHG benefits can be added. Key are the estimated mitigation outcomes – and the methodologies and assumptions used to calculate reductions.

c) Structured summary

The MPG require each Party to provide the information in paragraphs 65 to 76 in a structured summary to track progress (para 77). This is a similar concept to the GHG NDC balance sheet proposed by South Africa.⁽³⁾ Essentially, the structured summary presents information from the GHG inventory, separating out net emissions and removals which would not be needed if already in inventory) and then cooperative approaches. More specifically, the tabular format for the structured summary is illustrated in Table 1.

Corresponding adjustments are a matter being negotiated in the SBSTA under Article 6.¹ The table above would be for a single BTR, the adjustments would correspond to achieve ‘net zero’ when looking at ITMOs: the ‘plus’ cancels the ‘minus’ by corresponding adjustment (see previous technical and policy briefs).^(2,7) An overall mitigation goal could become negative by

¹ A decision on Article 6 in Katowice “Notes that information provided in a structured summary referred to in decision -/CMA.1, paragraph 77(d), is without prejudice to the outcomes on these matters”

retiring, discounting or other means – to be negotiated for both Article 6.4 and 6.2.⁽⁷⁾ ITMOs should contribute to the share of proceeds to fund adaptation in developing countries.

Table 1: Illustrative format of a structured summary

		<i>Units required</i>	<i>Optional: other units</i>	<i>1 (start year)</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 (end year)</i>	<i>End year + 2</i>
				<i>Time-frame and /or period of implementation</i>					
A	Indicator(s) selected								
B1	Base year or other reference point								
B2	Respective value								
C	Most recent level								
D	Compare most recent indicator level to base year / reference level								
E	Emissions and removals in GHG inventory	Gg CO ₂ -eq							
F	Net land sector emissions and removals (if not in inventory)	Gg CO ₂ -eq							
G	ITMOs transferred for achievement of NDCs (+) ITMOs transferred for other int'l mitigation purposes (+) ITMOs received (-) Net ITMOs (+ or -)	Gg CO ₂ -eq							
H	Accountable emissions	Gg CO ₂ -eq		<i>E+F+G</i>	<i>E+F+ G</i>	<i>E+F+ G</i>	<i>E+F+ G</i>	<i>E+F+ G</i>	
J	Restate mitigation target(s) in NDC	Gg CO ₂ -eq	Units in NDC						
	On track?			<i>On track / not</i>		<i>On track / not</i>		<i>On track / not</i>	
	Achieved?								Yes / No

The structured summary is a key tool for tracking progress. The quality of information depends on methodologies – which to a large extent are specified elsewhere, for different components. In completing the first rows of the table, a country will summarise information already produced. For example, the values in row E will be calculated by applying methodologies for GHG inventories, section III.B of the MPG. Baseline methodologies are reflected in the same section as well as the mitigation decision. Land is covered in the NDC decision, Annex II paragraph 1, and paragraph 75 of the MPG. The key element remaining to be agreed are detailed rules for markets.

Progress is tracked by reporting the structured summary every two years. During the implementation period, it can be seen whether the mitigation targets are *likely* to be met. There may be two or three BTRs during a five-year period of implementation – either years 1, 3 and 5 or years 2 and 4. So there would be two or three data points in that period to track progress towards the target.

But only after the end of the period can achievement be accounted for. The accountable emissions in row H are the sum of rows E, F and G. That sum total is compared against the benchmark of the mitigation target(s) in the NDC (as described upfront).

Resources and further reading

1. UNFCCC (United Nations Framework Convention on Climate Change) 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. Document FCCC/PA/CMA/2018/3/Add.2 Katowice Published, 2018) https://unfccc.int/sites/default/files/resource/cma2018_3_add2%20final_advance.pdf
2. Winkler, H. & Marquard, A. Mitigation accounting under the Paris Agreement. ERC research report series. (2018). <https://bit.ly/2yR0un1>
3. RSA (Republic of South Africa) Accounting across Articles 4, 6 and 13 of the Paris Agreement. Submission by South Africa to the Ad Hoc Working Group on the Paris Agreement and Subsidiary Body for Scientific and Technological Advice. 31 August United Nations Framework Convention on Climate Change, Bangkok Published, 2018) <https://bit.ly/2wJzT75>
4. UNFCCC (United Nations Framework Convention on Climate Change) Paris Agreement. Annex to decision 1/CP.21, document FCCC/CP/2015/10/Add.1, 29 January 2016 United Nations, Paris, France Published, 2015) <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=2>
5. DEA (Department of Environmental Affairs) Climate Change Bill: For public comment. Government Gazette No. 41689, 8 June, Pretoria Published, 2018) https://www.environment.gov.za/sites/default/files/legislations/climatechangebill2018_gn41689.pdf
6. RSA Presidential jobs summit: Framework agreement. 4 October Published, 2018) https://www.gov.za/sites/default/files/gcis_documents/Job_Summit_Framework_Agreement.pdf
7. Winkler, H., Marquard, A. & Motshwanedi, S. The balance sheet summary: An essential tool for transparency and robust accounting in mitigation and markets. (2018). <https://bit.ly/2XDpd1u>