

EXPERT NOTE

Credibility of nationally determined contributions

THE ROLE OF TRANSPARENCY AND PROGRESS REPORTING

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Summary

In 2025, Parties to the Paris Agreement are preparing new and enhanced nationally determined contributions (NDCs) outlining their efforts to respond to the climate crisis. In light of the collective inadequacy of previous NDCs to put the world on track to limit the global temperature increase to 1.5°C (UNEP 2024; UNFCCC 2024), the international community is expected to closely scrutinize this next round of NDCs. With progress on climate action desperately needed (Boehm et al. 2023), credible mitigation targets in NDCs are paramount.1

This note seeks to answer the question: how does reporting under the Paris Agreement inform the credibility of NDCs? To answer this question, this note focuses on the mitigation components of NDCs and identifies several components of credibility. This note then describes how biennial transparency reports (BTRs), which are a central feature of the Paris Agreement's enhanced transparency framework (ETF), provide essential information shaping the credibility of NDCs. Finally, this note elaborates on how information reported in BTRs can impact the credibility of future NDCs.

Components of NDC credibility

The Paris Agreement is a bottom-up mechanism relying on mutual trust among governments. Several studies have acknowledged that Parties must be confident in each other's commitments (Averchenkova and Bassi 2016; Victor et al. 2022; Schroeder et al. 2024). Central to this issue is whether Parties' NDCs are credible, or simply, whether there is confidence in a Party's ability to implement and achieve its NDC target. According to the literature, confidence, and thus credibility, can be gained through four components:

- 1. Target clarity
- 2. Capacity and institutional arrangements for implementation
- 3. Policy adoption
- 4. Policy outcome

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While no single one of these components guarantees credibility, they are critically linked. For example, it is necessary to have the required capacity (component 2) for policy adoption and implementation (components 3 and 4). All four components contribute to credibility in meaningful ways.

At the outset, it is important to acknowledge the significance of ambition and its interplay with credibility, because NDCs need to be both credible and ambitious. A tension may exist between the two, as an unambitious NDC target, which would be easier to fulfill, could be seen as more credible due to greater confidence in a country's ability to achieve the target. By contrast, a Party could present a more ambitious target with less certainty in its achievement, which could result in lower confidence in implementation if a country is unable to meet the more difficult target. However, for the purposes of this discussion, these two concepts are intentionally decoupled since this note focuses exclusively on the credibility of NDCs, regardless of their ambition.

An NDC's credibility can be shaped by how clearly the NDC's mitigation target is communicated. Greater clarity and transparency around the scope and details of the target² will reduce uncertainty and enable a more accurate assessment of progress and achievement. While an ambiguous target could be seen to make the achievement easier to claim and facilitate unilateral compliance, a more precise target will reduce doubt about the country's cooperative intent, facilitate external verification, and in turn potentially improve credibility (Tørstad and Wiborg 2024). Essentially, it is important to understand exactly what the target is to have confidence that it can be both implemented and achieved.

Confidence in a country's capacity to achieve its target is influenced by the strength of the political and institutional processes associated with a country's climate policy (Averchenkova and Bassi 2016; Victor et al. 2022; Tørstad and Wiborg 2024). Research has found that countries perceived to have high-quality legislative or executive institutions, with a high degree of administrative capacity and political insulation, are seen as more credible (Victor et al. 2022).

Demonstrating progress in implementing the NDC target is also central to credibility. When setting an ambitious target, countries will have an "implementation gap," or the "gap between a country's future emissions under [a] target and under its current policies" (Fransen et al. 2023). The size of the implementation gap may influence how important credibility is, and thus the importance of a country's institutions. The smaller the gap, the more credible a target may be. However, the larger the gap, the more important it is to have confidence in a country's capacity to close the gap. This implementation gap consists of two components essential to credibility: policy adoption and policy outcomes.

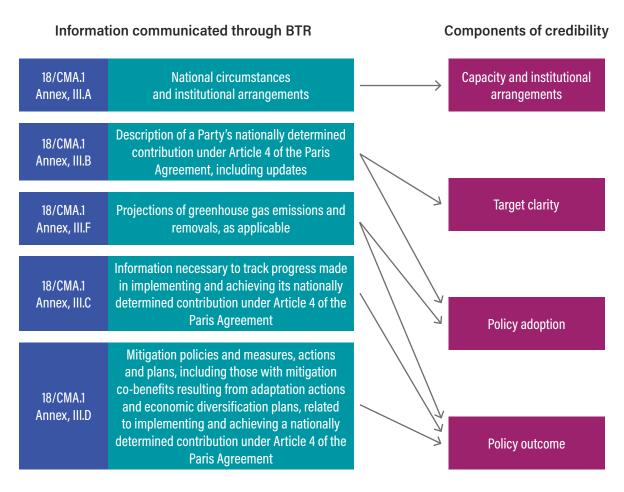
If the emission reductions expected from adopted policies do not match the target, a "policy adoption gap" occurs. This gap is essentially the difference between the emission reductions the NDC target implies and the policies already adopted (Fransen et al. 2023). Demonstrating that current policies should lead to reducing the emissions necessary to meet the target increases the NDC's credibility, while any lingering gap may raise questions around how the country will meet the target and reduce credibility. This gap should decrease over time, as the country gets closer to the target year and adopts additional policies.

Additionally, once current policies are underway, emission reductions can be measured ex-post to determine their impact. If a "policy outcome gap" exists, which occurs when current policies do not achieve the anticipated emission reductions, this gap may impact the credibility of the NDC (Fransen et al. 2023). Similar to the policy adoption gap, the policy outcome gap should get smaller over time with adjustments to implementation. Confidence in a country's ability to close its implementation gap (in terms of both policy adoption and policy outcomes) adds to the NDC's credibility. Credibility may steadily increase as the country implements current policies, adopts new policies, or closes the policy adoption gap and policy outcome gap over time. However, a lack of progress may have the opposite effect on credibility.

How reporting can inform assessments of an NDC's credibility

National reporting on NDCs is required under the ETF³ and is a key source of information to understand the credibility of NDCs. The Paris Agreement is clear the ETF's purpose is to "provide a clear understanding of climate change action" in an effort to "build mutual trust and confidence and to promote effective implementation" (UNFCCC 2015, Art. 13.1). Reporting in BTRs can inform assessments of an NDC's credibility, with sections of the BTR supporting the four components of an NDC's credibility, as described above. Figure 1 illustrates how reported information in BTRs may support the different components of NDC credibility.

FIGURE 1 | The relationship between information communicated in BTRs and the components of NDC credibility



Source: WRI authors

Target clarity

Parties are required to include the information necessary for "clarity, transparency, and understanding" in their NDC, as outlined in Decision 4/CMA.1. This information includes quantifiable information on the NDC reference point, time frames, and greenhouse gas (GHG) emissions' scope and coverage. This detail is essential to fully understand the extent of a country's intentions to reduce GHG emissions. If a target lacked detail in an NDC, it can be clarified in the BTR as countries are required to specify indicators, assumptions, and methodological approaches to account for their NDCs. This clarity may be especially relevant for Parties with targets based on baseline scenarios, per capita targets, efficiency targets,

or other targets where multiple variables are needed to understand the emission levels associated with the target. Greater clarity increases the credibility of the NDC, while more opaque targets or hidden assumptions reduce credibility by making targets more difficult to accurately estimate.

Capacity and institutional arrangements for implementation

In BTRs, countries are to include information on their national circumstances and institutional arrangements (UNFCCC 2018, Annex, para. 62). It is important that Parties report clear details on the institutional arrangements and governance structures for implementing the NDC and how the country will ensure it follows through on implementation. Sectoral or financial approaches to facilitate implementation may strengthen the credibility of the country's NDC.

National circumstances and arrangements provide information about a Party's capacity to implement policy and achieve its target. Strong institutions indicate a Party has greater capacity to meet its goals, leading to greater confidence and thus credibility of the NDC. By contrast, weak institutions have the opposite effect, introducing doubt about a Party's ability to implement its NDC.

Implementation progress

Several BTR sections detail progress in implementation toward NDC targets, including information reported directly on this progress and NDC achievement. Implementation progress also includes the policies and measures that "have the most significant impact on GHG emissions or removals and those impacting key categories in the national GHG inventory" (UNFCCC 2018, Annex, para. 80), and on "projections of greenhouse gas emissions and removals, as applicable" (UNFCCC 2018, Annex, para. 92). This information can be used to determine if there is a policy adoption gap and/or policy outcome gap. A critical point is that determining both the policy adoption gap and policy outcome gap requires common units to measure progress. For example, when evaluating GHG emissions, it is crucial to provide adequate information about the NDC target to perform a like-for-like analysis. If the NDC target is given in a less decipherable form, such as a percentage reduction, sufficient clarity is needed to convert the target into the equivalent GHG emissions to facilitate a comparison with projections.

Policy adoption

The policy adoption gap can be measured as the difference between emission reductions implied by the NDC target and implied by current policies. Relevant information to understand the target(s) may be found in the NDC itself and in the BTR, including sections that describe the NDC and track progress toward the NDC. Parties are also invited to include "to the extent possible, estimates of expected and achieved GHG emissions reductions" (UNFCCC 2018, Annex, para. 85). While Parties do not need to report on every policy that may contribute to reducing emissions, for countries that include this information, reporting on the status of key policies and the expected emission reductions anticipated may highlight how the country is approaching policy implementation. In addition, implied emission reductions from current policy may be provided through "with existing measures" (WEM) projections. The reporting guidelines explicitly note that projections "are indicative . . . and shall not be used to assess progress towards the implementation and achievement of a Party's NDC ..." (UNFCCC 2018, Annex, para. 93). However, including WEM projections is helpful to understand if a policy adoption gap exists.

Policy outcome

The policy outcome gap reflects the difference between projected emission reductions due to policies and measures and the reductions those policies and measures actually achieved. The former may be provided through BTRs as WEM projections and estimates of expected emission reductions due to policies. The latter may be reported as information on current progress toward implementing and achieving the NDC target. This progress and the NDC target need to be communicated in GHG emission terms (or allow for a conversion to GHG emissions) to facilitate a comparison to WEM projections. A smaller

policy outcome gap (i.e., a minor difference between current emission reductions and expected reductions) enhances NDC credibility by illustrating implementation progress and providing greater confidence in the Party's ability to achieve its NDC. However, a large policy outcome gap may reduce credibility.

How reporting strengthens future NDCs

Preparing NDCs can be both a political and technical exercise, with each Party using a unique process to set and define its targets. As part of BTRs, reporting on progress naturally creates a moment for decision-makers to reflect and learn from Parties' efforts, then use those reflections as inputs for their next NDC. Building on how BTRs can inform the assessment of current NDC credibility, BTR reporting may also impact the credibility of future NDCs in different ways.

Improving a mitigation target's clarity in a future NDC can enhance an NDC's credibility by potentially increasing understanding of the target and facilitating more precise measurement of progress toward the target. BTR reporting experience can help with clarity and influence the selection of subsequent mitigation targets. In its BTR, each Party has to identify indicators for tracking progress toward its NDC, such as total net GHG emissions, and provide information about the indicators, including baseline(s) (UNFCCC 2018, Annex, paras. 65, 67). After reporting on progress toward their current NDCs, Parties will have experience with monitoring indicators and understand how their target selection impacts indicator options and the effort needed to monitor progress. To improve clarity, Parties may opt for more straightforward targets for future NDCs. In its 2035 NDC, Andorra shifted its mitigation target type from a reduction from a business-asusual (BAU) scenario to an absolute emission reduction goal, citing the uncertainty inherent in BAU projections as a reason for the switch. Andorra also acknowledged this change allowed for a more transparent assessment of progress (Govern d'Andorra 2025). This improvement clarified Andorra's mitigation target and enhanced its NDC's credibility by providing greater insight into the country's intention to reduce emissions.

Confidence in the commitment to and capacity for implementing and achieving an NDC is central to an NDC's credibility, so the progress reported in a recent BTR may impact the credibility of future NDCs. A lack of progress toward an existing NDC target may indicate the government is struggling with implementation (for political, technical, or capacity reasons), thereby calling into question whether the Party is committed to and capable of implementing and achieving subsequent NDCs. A 2035 NDC target will be seen as less credible—even if more ambitious—without the confidence the 2030 target could be met. However, the opposite can be true. A current BTR showing a Party is making substantial progress toward its 2030 target can provide confidence in the Party's ability to meet future targets.

Furthermore, a feasible pathway to meet future targets may also impact NDC credibility. Similar to the discussion on projections with regard to the policy adoption and policy outcome gaps, projections included in BTRs can impact the credibility of future NDCs if the time frame extends beyond the end date of the Party's next NDC. For example, BTRs submitted in 2024 (ahead of NDCs communicated in 2025) included GHG data from 2022 (2021, if exercising flexibility⁴) and projections to 2040. BTRs submitted in 2028 (ahead of NDCs communicated in 2029–2030) should include projections to 2045. If the projections align with the emission reductions the future NDC target implies, they can provide confidence that the future target is realistic and achievable. On the other hand, if the projections show that a large implementation gap remains, they may reduce confidence in progress made toward implementing and achieving the target.

Discussion

Unless paired with the Paris Agreement's ETF and regular reporting from Parties in BTRs, an NDC risks being a mere target on paper. While NDCs receive significant attention in international policy discourse, the ETF and BTRs, by impacting NDC credibility and how well they are understood, are foundational to climate ambition and action. As Parties begin regular reporting in BTRs, these reports and the ETF deserve greater attention and emphasis from the international community. At the same time, it is critical for countries to provide clear and transparent information in their reports. While complicated target types and incomplete information may shield a country from scrutiny, these shortcomings undermine

the ETF's effectiveness and inhibit potential credibility that could be gained from showcasing positive progress. This note also identifies the following areas where greater study would be valuable: further assessments of NDCs' credibility, further reflections on how BTR reporting informs NDC development, further consideration of the relationship between an NDC's ambition and its credibility, and further analysis on adaptation and finance components of an NDC and these components' relationship to credibility.

Endnotes

- 1. While the credibility of NDCs is more broadly relevant, this expert note focuses exclusively on the issues of mitigation and GHG emission reductions.
- 2. This includes all information for clarity, transparency, and understanding of the target (1/CP.21, paragraph 28 and 4/CMA.1 Annex 1), including base year, target year, emission intensity metrics, sectors and gases, etc. Failing to provide all relevant information, or partial information, can make it difficult to understand what the target represents in terms of the expected change in emissions.
- 3. Under the ETF, Parties are to report on their actions and support every two years; the first reports were due by the end of 2024. Least developed countries and small island developing states may report at their discretion.
- 4. Developing country Parties that need flexibility in the light of their capacities can instead have their latest reporting year as three years prior to the submission (Decision 18/CMA.1, Annex, para. 58).

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