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Ambition for action: a framework for assessing NDCs

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Nationally Determined Contributions (NDCs) are expected to be both ambitious and actionable. To date, ambition is primarily assessed based on emission targets, while actionability is often judged by references to existing regulations, plans, and stakeholder engagement in policy development. While these are important elements, another perspective must be integrated for NDCs to drive meaningful action on the ground: they must include short-term actions which directly address the drivers of emissions—not just emission targets—based on a long-term development perspective that identifies systemic transformations. This requires a shift in how NDCs are perceived: from ambition-binding commitments to strategic instruments that demonstrate differentiated leadership and enable international collaboration. Ultimately, this would make them more relevant to the implementation agenda.

In this context, this *Policy Brief* does not aim at prescribing the content of NDCs, but provides a framework to assess new NDCs as they come out.

KEY MESSAGES

The ambition of this round NDCs should be assessed based on their ability to drive short-term action aligned with system transformations toward prosperous, resilient, and carbon-neutral societies. This requires a focus on emission drivers and adopting a long-term perspective.

Key transformations expected to be addressed by robust country strategies are: (1) transformations to support a relentless decrease of fossil fuel use, (2) transformations to support land use as a carbon sink and for non-CO_2 agriculture emissions reduction, (3) strategies to address inertia across infrastructure and technology, governance and institutions, lifestyle and behaviours, and (4) considerations of the socio-economic effects of the energy/ecological transition.

Ultimately, NDCs should not be seen only as ambition commitments with emission targets but also as strategic instruments that do address the current political economy of a country thanks to the explicit and granular mention of transformative action as a useful basis for domestic policymaking and fostering international collaboration.

The focus on transformations can reinforce a sense of constructive differentiation across countries, allowing them to pursue strategies that are beneficial for their economy while supporting climate ambition (and keeping them accountable to those) and providing a clearer picture of global transformation trends—particularly across G20 countries.

By prioritizing achievable, conservative targets to avoid overcommitment, countries may limit their ambition, with their capacity to act influenced by the signals they send, ultimately shaping expectations and driving investments. Instead, focusing on transformations would strengthen global action and ambition by sending critical signals to economic actors, shaping actions and global cooperation.

POLICYBRIEF

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1. INTRODUCTION

The preparation of the next round of Nationally Determined Contributions (NDCs) is a key milestone for the international climate discussions in 2025. The submission deadline was set for 10 February, 2025, with few countries having submitted before or in the deadline,[1] and others expecting to do so in the course of the year.

NDCs are central to the Paris Climate Agreement and the achievement of its long-term goals. As outlined in Article 4, paragraphs 2 & 3, each Party is required to prepare, communicate, and update successive NDCs outlining its intended contributions, and representing a progression from previous commitments. NDCs are a key policy document called for by an international treaty, designed to support the achievement of the collective global goals of the Paris Agreement in a country-driven manner.

NDCs should therefore (1) serve as a clear representation of a country's strategy for meeting global climate goals, while taking into account its specific circumstances and adhering to the principle of Common but Differentiated Responsibilities (CBDR).[2] This acknowledges both the right and the necessity for countries to develop in a way that reflects their unique contexts. Furthermore, (2) NDCs must demonstrate the country's continued commitment to the overarching objectives of the Paris Agreement. Lastly, (3) NDCs should help clarify how a country's strategy aligns with those of others, providing insight into the broader international landscape that enables cooperation.

As highlighted in IPCC (2022), limiting warming to around 1.5°C requires global greenhouse gas emissions to peak before 2025 at the latest, and to be reduced by 43% by 2030. The Sustainable Development Goals (SGDs), which address key issues such as poverty and inequality reduction, or access to energy, are also to be achieved by 2030. These timelines are all within the time range of the NDCs currently being drafted and submitted.

This calls for NDCs to be recognized as a crucial policy tool that drives on-the-ground action, complementing the functions mentioned above. While NDCs should not be expected to address all implementation-related challenges, efforts should focus on exploring ways to enhance their effectiveness in supporting implementation. For this to work, and to align with the Paris Agreement goals, it is necessary to focus on the drivers of the emissions, rather than the emissions themselves, understanding how NDCs prepare for the system transformations as identified by the IPCC.[3]

In order to have a system transformations approach when developing NDCs, it is crucial to adopt a long-term perspective. This allows countries to develop a vision of their future development, hence the short-term actions will be aligned to broader socio-economic objectives of the country, not solely responding to emission reduction strategies. As highlighted in Pérez Català *et al.* (2024), the elements contained in Long-Term Low Emission Development Strategies (LT-LEDS) are uniquely positioned to serve as a reference for national transformations aligned with the long-term global carbon neutrality goal.

2. KEY TRANSFORMATIONS TO CONSIDER

This section outlines key transformations identified in the report "Making it Happen: National Pathways to Net Zero" (DDP, 2024) that should be addressed in robust country strategies that can drive change on the ground. These issues share a common feature: they stem from long-term perspectives, yet necessitate immediate action in the short term.

2.1. Designing sector-specific transformations to support a relentless decrease of fossil fuel use

According to the report, net-zero pathways entail a relentless decrease of fossil fuel use. Although the trends will vary across countries, depending on the starting point in terms of development and national carbon neutrality target dates, all countries experience a significant decrease in the share of fossil fuels in final energy consumption, in parallel with a decrease in absolute values of fossil fuel use.

To support this evolution, rather than focusing solely on "fossil fuel production," countries should have a clear understanding of where fossil fuels are being used across different subsectors in order to put the emphasis on the concrete actions that can reduce their reliance on fossil fuels through moderation of energy demand and shifting away from fossil fuels use in final uses. This requires targeted planning measures adjusted to each subsector.

For example, the decarbonization of the power sector is critical to achieve national pathways to net zero, as it is the highest energy-related emitting sector in most countries. However, the adoption of low-carbon technologies often falls short due to market and policy constraints, such as the organization of the power market, in terms of management and distribution.

The report also highlights that carbon capture & storage (CCS) is not the most effective solution for decarbonizing the power sector due to significant technical, geological, and economic constraints, which are clearly identified when assessed at a country level. However, it could play a role in decarbonizing industry, where sectors like cement, steel, and chemicals face major challenges in reducing emissions. The country-driven assessment revealed that many countries can achieve net zero without any reliance on CCS, or a very minor role for this technology.

1 https://unfccc.int/ndc-3.0

2 https://www.iddri.org/en/publications-and-events/blog-post/cbdr-principle-climate-negotiations-deadend-or-new-start

3 In the IPCC Sixth Assessment Report (AR6), "system transformation" is defined as a profound change in the structures and functions of systems—such as energy, transport, and land use—that is necessary to achieve substantial reductions in greenhouse gas emissions and enhance resilience to climate impacts. These system transitions involve a significant upscaling of a broad portfolio of mitigation and adaptation options. (See Section 4.5, IPCC AR6, 2023)

Another example would be passenger mobility, which is also amongst the main emitting sectors in most countries. Current trends fall short of necessary progress due to infrastructure, behavioral inertia, and the affordability gap of electric vehicles, requiring rapid implementation of targeted measures.

2.2. Designing system transformations to support land use as a carbon sink and for non-CO_2 agriculture emissions reduction

Countries must recognize the land use sector as essential for carbon sequestration and addressing challenges like biodiversity loss, rural employment, and food security. With measures like reforestation and improved forest management, it can generate negative emissions without relying on extra technologies. Therefore, this sector is crucial for offsetting emissions from energy, industry, and agriculture. However, its future capacity as a carbon sink depends on supporting food security, rural employment, and ecosystem resilience, with solutions tailored to local conditions. This requires effective policy implementation, with clear responsibilities, adequate resources, and monitoring, and also the development of additional policies and increased financing.

Agriculture is a major source of greenhouse gas emissions, especially methane (CH_4) and nitrous oxide (N2O). Unlike CO_2, these emissions come from sources like manure management and rice cultivation, requiring targeted policies to reduce non-CO_2 emissions. Transforming agriculture involves changes in demand, production methods, and crop and livestock diversity, while considering impacts on rural livelihoods, food security, and employment, especially in low-income countries.

2.3. Addressing the sources of inertia across infrastructure and technology, governance and institutions, lifestyle and behaviors

Rapid emission reductions are crucial for achieving carbon neutrality, but focusing solely on immediate cuts risks overlooking essential mitigation actions that drive long-term structural changes in infrastructure, organizations, and systems. These changes, though vital for deeper reductions by mid-century, face significant inertia and resistance, creating a time lag between decisions and their effects on emissions. Short-term actions should be assessed not only for their immediate impact but also for their potential long-term consequences, such as the creation of carbon lock-ins. Prioritizing actions that address sources of inertia—whether in infrastructure, governance, or lifestyles—can offer significant positive impacts on future emissions.

2.4. Considering the socio-economic effects of the transition

National pathways to net zero require significant structural changes in economic and industrial systems, driven by the decline of carbon-intensive activities and the rise of low-carbon technologies. While these transitions may pose economic challenges, especially for countries reliant on fossil fuel exports, they also present growth opportunities. To ensure a smooth transition, short-term, country-specific measures are needed to prevent delays and support vulnerable populations, combining emission reduction strategies with social and economic policies that ensure an equitable, sustainable shift tailored to each country's unique needs.

3. HOW CAN NDCS BE ASSESSED?

The Paris Agreement and subsequent decisions outline the information that NDCs should include, including to facilitate clarity, transparency, and understanding. These requirements remain intentionally broad to accommodate the varying circumstances and capacities of countries. New NDCs also have to incorporate the outcomes of the Global Stocktake (GST), in accordance with Article 4.9 of the Paris Agreement. In this context, this *Policy Brief* does not intend to prescribe the content of NDCs, which is defined in a country-driven manner, following the guidance agreed in the UNFCCC. However, it argues that, if NDCs are to represent national strategies aiming at facilitating mobilization of actors, domestic planning and international collaboration and support, and therefore bringing change on the ground, they should address transformations such as the ones outlined in section 2.

NDCs' assessments should go beyond emissions targets, and look for:

— **Signs of the systems approach with a long-term perspective**

It is important to note that if an NDC is developed to primarily define a short-term emissions target, the consideration of system transformations will be inherently complex. Some countries may have decided to develop long-term strategies or visions along with NDCs, which is a coherent way to incorporate the long-term (climate and development) nationally relevant perspective into the identification of short-term action, either through modelling assumptions or overarching narratives. When these strategic processes are captured in LT-LEDS submissions to the UNFCCC, they can complement NDCs in their role to show leadership, mobilize government and economic actors, and help structuring international cooperation. Therefore, assessments of NDCs should be extended to LT-LEDS when they exist.

By examining system transformations at the country level, nations can better understand how to translate the signals outlined in the GST process and its outcomes. The key transformations emerging from country-level pathways (DDP, 2024) illustrate how countries progress towards the end goals and as a result, how they contribute to global GST goals. The information on collective progress against the GST outcome is critical to inform action and support. To facilitate this assessment, various actors have developed toolkits and guides on how to structure this information into NDCs, such as the Global Renewables

Alliance (2025), on incorporating renewable energy targets, or the Climate Change Expert Group, on incorporating more broadly the mitigation signals (see Jeudy-Hugo *et al.*, 2024).

— How countries apply differentiation principles

When it comes to differentiation, the challenge lies in upholding the principle of CBDR without undermining the universality at the heart of the Agreement, one of its key innovations and considered a success to maintain the Agreement strong over the years (Hege, 2025). Differentiation in the Paris Agreement assumes that countries will pursue strategies that are beneficial for their economy while supporting climate ambition, rather than merely fulfilling a requirement set by the UNFCCC; it also recognizes that there is a differentiation in countries' capacities. The key focus should therefore not be on the specific details provided in an NDC, but on whether countries engage with the critical questions to their circumstances in a forward-looking manner.

The Paris Agreement needs to uphold differentiation while driving meaningful engagement for mitigation and adaptation. As for G20 countries, there are specific expectations since they represent 75% of global greenhouse gas emissions. Global mitigation depends on their action, as well as the capacity of most developing countries to achieve sustainable development goals. G20 countries should therefore show the way on how to tackle the transformations outlined in section 2 (and how to be supported for this, where necessary), calibrated according to their relevance for their national reality and to each country's distinct responsibilities and capabilities. For specific transformations, it is essential for those who can make a difference to take charge; for instance, for the transition away from fossil fuels, all big fossil fuel producers and consumers should highlight their pathways to transition in their NDCs.

— The balance achieved between opportunity and accountability

Although NDCs are often perceived as narrow documents primarily focused on greenhouse gas emission reduction targets, they frequently fail to reflect the full potential ambition of a country, representing more conservative, achievable targets, driven by concerns about being held accountable for more ambitious commitments.

Today, the balance in NDCs heavily tilts towards accountability, creating a risk of a negative spiral where the emphasis on achievable targets results in lower ambition, which in turn translates into less transformative action and slower progress toward global climate goals. COP30 Brazilian president André Corrêa do Lago referred to this challenge in his letter to all Parties[4] as "NDCs that privilege quality as a follow-up to legal obligations under the Paris Agreement".

Countries may choose not to overcommit in order to ensure performance, but this choice carries consequences. They should also understand that their capacity to act depends on the signals they send through their NDCs. These signals shape the expectations of other actors—governments, subnational authorities, and the private sector—and drive investments in clean technologies and innovations, both nationally and internationally. This mechanism was deliberately designed under the Paris Agreement, in contrast to the Kyoto Protocol's rigid quantitative targets. Ultimately, NDCs should contribute to the global spirit underpinning the Agreement's goals, which are not defined solely by emission targets but by the broader transformations they aim to achieve.

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4 https://unfccc.int/documents/645947

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