



ACEG

Climate Action &
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Association

Insight A.1: Nationally Determined Contributions as Instruments of Credibility and Engines of Institutional Transformation

Table of Contents

1. Introduction	1
2. Credibility Dimensions of NDCs	2
2.1 Ambition	2
2.2 Transparency	2
2.3 Finance	3
2.4 Fairness	3
3. NDCs as Catalysts of Institutional Change	3
3.1 Policy Diffusion and Isomorphism	4
3.2 Transparency and Legitimacy Gaps	4
3.3 Institutional Layering	4
4. Theoretical Integration	5
5. Conclusion	5
References	6

Abstract

Nationally Determined Contributions (NDCs) under the Paris Agreement have evolved from diplomatic pledges into instruments that test and shape the credibility of national climate governance. This paper consolidates insights from climate governance scholarship to argue that NDCs are simultaneously diagnostic tools of institutional strength and catalysts of governance transformation. Credibility is determined by ambition, transparency, finance, and fairness, while institutional change is driven by processes of policy diffusion, isomorphism, and layering. Together, these dynamics reveal that NDCs are not merely symbolic commitments but central mechanisms through which states embed climate action into governance systems, mobilize resources, and build legitimacy. As the Global Stocktake intensifies pressure on countries, the ability to produce transparent, finance-ready, and socially legitimate NDCs will determine which nations emerge as credible leaders in climate governance.

1. Introduction

The Paris Agreement marked a decisive shift in global climate governance by institutionalizing a bottom-up architecture centered on NDCs. Unlike earlier treaty frameworks that relied on top-down targets, the Paris system empowers states to define their own contributions, thereby balancing sovereignty with collective responsibility (Keohane & Victor, 2016). This design reflects a pragmatic recognition of political diversity and varying national

capacities, while also embedding an expectation of progressive ambition over time. In this sense, NDCs are not static documents but evolving instruments intended to bridge the gap between pledges and implementation.

From a theoretical perspective, NDCs embody the tension between symbolic and substantive governance. On one hand, they serve as diplomatic signals of intent, projecting ambition and aligning national positions with international norms. On the other, they increasingly function as diagnostic tools that reveal the strength of domestic institutions, financial systems, and political legitimacy (Rogelj et al., 2016; Höhne et al., 2020). The credibility of NDCs thus depends not only on the ambition of their targets but also on the robustness of the governance systems that underpin them. This dual role situates NDCs at the intersection of international cooperation and domestic institutional change.

The evolution of NDCs also reflects broader dynamics of institutional transformation. The act of preparing and submitting NDCs compels governments to coordinate across ministries, engage stakeholders, and integrate climate considerations into development planning (Roeser et al., 2019). These processes resonate with theories of policy diffusion and institutional isomorphism (DiMaggio & Powell, 1983), as states adopt similar governance practices within shared international frameworks. Yet the uneven depth of these changes underscores the heterogeneity of climate governance, with some countries embedding NDCs into long-term planning while others treat them as isolated artifacts.

Finally, the growing emphasis on credibility highlights the multidimensional nature of NDCs. Ambition, transparency, finance, and fairness interact to determine whether NDCs function as genuine commitments or remain symbolic gestures. At the same time, processes of institutional layering and regime complexity illustrate how NDCs catalyze incremental but transformative changes in governance architectures (Mahoney & Thelen, 2010). Taken together, these dynamics suggest that NDCs are evolving into central instruments of climate governance—both testing the credibility of national commitments and driving institutional innovation.

2. Credibility Dimensions of NDCs

2.1 Ambition

Ambition is the cornerstone of NDC credibility. Without ambitious targets, the Paris Agreement's collective goal of limiting warming to 1.5°C cannot be achieved. Yet ambition alone is insufficient; it must be accompanied by credible pathways for implementation. Early analyses revealed that even full implementation of initial NDCs would fall short of keeping warming well below 2°C (Rogelj et al., 2016). This ambition gap underscores the need for stronger domestic systems that embed NDCs into laws, budgets, and institutions (Höhne et al., 2020). Ambition thus functions as both a signal of intent and a test of institutional capacity. Moreover, ambition must be dynamic, evolving in response to scientific updates, technological advances, and shifting political economies (UNEP, 2024).

Ambition also interacts with fairness and finance. Countries are encouraged to raise ambition, but without equitable burden-sharing and predictable finance, ambition risks being politically unsustainable (Springer Nature, 2025). Ambition must therefore be understood as a multidimensional construct, requiring integration into governance systems that can deliver results while maintaining legitimacy.

2.2 Transparency

Transparency is essential for transforming ambition into credibility. Without standardized baselines, indicators, and accounting methodologies, progress cannot be reliably measured (Jeffery et al., 2018). Ambiguities in land-use accounting further undermine trust, as methodological choices can obscure whether emissions reductions are real

(Fyson & Jeffery, 2019). The Enhanced Transparency Framework (ETF) seeks to address these challenges, but capacity constraints in many developing countries highlight structural weaknesses in data systems (Pauw et al., 2018; Weikmans et al., 2019). Transparency thus functions as both a technical requirement and a political determinant of legitimacy.

Transparency also plays a role in international trust. Countries that fail to provide clear and verifiable data risk undermining collective credibility, eroding reciprocity, and weakening ambition cycles (Holz et al., 2018). Aligning national monitoring systems with the ETF is therefore essential for transforming NDCs into reliable instruments of accountability.

2.3 Finance

Finance constitutes another pillar of credibility. Many developing countries condition their NDCs on predictable and accessible climate finance, reflecting the reality that ambition cannot be implemented without resources. Yet persistent gaps between pledges and disbursements undermine trust (Pickering et al., 2015). Complex fiduciary requirements further limit access to funds (Schalatek & Bird, 2020). NDCs must therefore evolve into finance-ready documents, with costed measures, investment pipelines, and alignment with national financial management systems. Finance thus functions as both an enabler of ambition and a determinant of equity.

Finance also interacts with transparency. Countries with robust data systems are better positioned to access finance, as donors increasingly demand measurable outcomes (Pauw & Klein, 2020). The credibility of NDCs therefore depends on the ability to demonstrate both ambition and financial readiness.

2.4 Fairness

Fairness shapes both domestic legitimacy and international trust. Equity-based assessments reveal that many pledges are misaligned with a 1.5°C pathway (Robiou du Pont & Meinshausen, 2018). Perceived unfairness erodes willingness to increase ambition, undermining reciprocity and compliance (Holz et al., 2018). Integrating just transition principles, distributional impact assessments, and social protection measures strengthens both credibility and legitimacy. Fairness thus functions as both a normative principle and a practical determinant of political durability.

Fairness also interacts with ambition and finance. Countries are more likely to raise ambition when they perceive others as contributing fairly and when finance is distributed equitably (Springer Nature, 2025). Fairness therefore underpins the political durability of the Paris Agreement’s bottom-up architecture.

Table 1: Credibility Dimensions: Ambition, Transparency, Finance, Fairness

Dimension	Description	Impact
Ambition	Ambitious targets, evolving pathways	Raises climate action standards globally
Transparency	Standardized baselines, data systems, trust	Enables monitoring, builds trust, unlocks finance
Finance	Predictable, accessible climate finance	Supports investment pipelines for mitigation/adaptation
Fairness	Equity, just transition, legitimacy	Ensures social inclusion and legitimacy

Source: ACEG, 2026

3. NDCs as Catalysts of Institutional Change

3.1 Policy Diffusion and Isomorphism

NDCs exemplify processes of policy diffusion and institutional isomorphism (DiMaggio & Powell, 1983). Governments adopt similar practices through coercive pressures (international frameworks), mimetic tendencies (borrowing models), normative influences (expert networks), and competitive dynamics (avoiding reputational loss). These processes explain the convergence of governance practices while highlighting uneven institutionalization (Roeser et al., 2019). NDCs thus function as vehicles of institutional learning and adaptation, compelling governments to adopt practices that align with international expectations.

Policy diffusion also interacts with ambition and transparency. Countries often raise ambition or adopt transparency measures after observing positive experiences elsewhere (Pauw et al., 2018). This dynamic illustrates the mutually reinforcing relationship between credibility and institutional change.

3.2 Transparency and Legitimacy Gaps

The absence of methodological rigor in many NDCs reflects legitimacy gaps (Bernstein, 2001). ETF requirements expose structural weaknesses in data systems, particularly in the global South (Jänicke, 2017). Conditionality on finance further illustrates dependency dynamics, constraining implementation irrespective of ambition (Pauw et al., 2019a). Domestic political economy factors—sectoral interests, distributional conflicts, and institutional inertia—compound these challenges (Holz et al., 2023). NDCs thus reveal the structural vulnerabilities of climate governance systems, highlighting the need for institutional strengthening.

Transparency gaps also undermine fairness. Countries that fail to provide clear data risk being perceived as free riders, eroding reciprocity and weakening collective ambition (Holz et al., 2018). Addressing transparency gaps is therefore essential for both credibility and legitimacy.

3.3 Institutional Layering

NDCs also embody potential for transformative governance. When embedded in planning systems and budgetary processes, they function as strategic instruments that align climate action with development priorities (Pauw & Klein, 2020). This reflects theories of institutional layering (Mahoney & Thelen, 2010), whereby incremental changes reshape governance architectures over time. Countries that invest in transparency, data systems, and technical expertise are better positioned to access finance and raise ambition. NDCs thus catalyze mutually reinforcing dynamics of institutional strengthening and global credibility.

Institutional layering also interacts with fairness. Countries that integrate just transition principles into NDCs strengthen domestic legitimacy, ensuring that climate action does not exacerbate inequality (Springer Nature, 2025). This process highlights how NDCs can evolve from symbolic commitments into engines of institutional transformation, embedding climate action into the fabric of governance systems. Over time, layering produces cumulative effects, gradually reshaping governance architectures and enhancing resilience against political and economic shocks.

Finally, institutional layering underscores the importance of inclusivity. Embedding NDCs into governance systems requires participation from diverse stakeholders, including civil society, private sector actors, and marginalized communities. Inclusive processes not only strengthen legitimacy but also enhance the effectiveness of implementation by ensuring that policies reflect diverse needs and perspectives (Holz et al., 2023). In this way, NDCs can catalyze both institutional innovation and social transformation.

4. Theoretical Integration

The dual framing of NDCs as instruments of credibility and engines of institutional transformation highlights their evolving role in global climate governance. Keohane and Victor's (2016) concept of "regime complexes" situates NDCs within fragmented yet interlinked institutions, while theories of legitimacy and reciprocity explain how credibility shapes compliance and ambition cycles (Holz et al., 2018). At the same time, theories of institutional change—diffusion, isomorphism, and layering—illustrate how NDCs catalyze incremental but transformative shifts in governance architectures (DiMaggio & Powell, 1983; Mahoney & Thelen, 2010).

This theoretical integration underscores the multidimensional nature of NDCs. They are simultaneously diagnostic instruments that reveal the strength of governance systems and catalysts of institutional innovation. Credibility dimensions—ambition, transparency, finance, and fairness—determine whether NDCs function as genuine commitments or remain symbolic gestures. Institutional dynamics—diffusion, isomorphism, and layering—explain how NDCs reshape governance systems over time. Together, these perspectives highlight the central role of NDCs in bridging the gap between pledges and progress.

Moreover, the integration of credibility and institutional change highlights the mutually reinforcing relationship between domestic governance and international cooperation. Countries that strengthen their institutions are better positioned to raise ambition and access finance, while credible NDCs enhance trust and reciprocity in international negotiations. This dynamic illustrates how NDCs function as both national governance instruments and global cooperation mechanisms, embodying the shift from discursive ambition to operationalized climate action.

5. Conclusion

NDCs are no longer merely diplomatic signals of intent. They are diagnostic instruments that reveal the strength of national governance systems and catalysts of institutional transformation. A credible NDC is measurable, financeable, and fair, embedded within institutions capable of coordination and learning. As the Global Stocktake intensifies pressure on countries, the ability to produce transparent, finance-ready, and socially legitimate NDCs will determine which nations emerge as credible leaders in climate governance.

Ultimately, NDCs embody the shift from discursive ambition to operationalized climate action, bridging the gap between pledges and progress. Their evolution demonstrates that climate governance is not only about setting targets but about building institutions capable of delivering them. By integrating ambition, transparency, finance, and fairness into governance systems, and by catalyzing institutional change through diffusion, isomorphism, and layering, NDCs can transform climate commitments into credible pathways for action. In this way, NDCs represent both a test of national credibility and a driver of global transformation.

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