

DOI: 10.5281/zenodo.11032556

TRANSNATIONAL NETWORKS AND GLOBAL GOVERNANCE: THE IMPACT OF NON-STATE ACTORS ON MULTILATERAL ENVIRONMENTAL NEGOTIATIONS

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Received: 29/07/2025

Accepted: 03/08/2025

ABSTRACT

This article examines how transnational networks of non-state actors (NSAs) – businesses, cities and regions, NGOs, indigenous peoples, academia, and investors – influence the architecture of environmental governance and, in particular, multilateral negotiations such as those on climate change (UNFCCC) and biodiversity (CBD). Based on a narrative review and documentary analysis of sources published between 2021 and 2025, we identified three mechanisms of influence: (1) data provision and monitoring, which feeds processes such as Global Stocktake (GST); (2) orchestration and ambition loops through the Marrakech Partnership and the Climate High-Level Champions; and (3) polycentric mobilization through voluntary initiatives that interact with state goals. We found evidence of increasing density and visibility of NSAs at COPs (e.g., COP28 was the largest in history, with more than 25,000 NSA delegates), of the institutionalization of its role in recent GST and CBD decisions (Decisions 15/4 and 15/6), and of differential impacts: NSAs can accelerate implementation and raise ambition, although access asymmetries and risks of capture by corporate interests persist. We conclude with methodological proposals to causally assess their negotiating influence and with policy recommendations to ensure meaningful participation, transparency, and accountability.

KEYWORDS: Polycentric Governance; Non-State Actors; UNFCCC; CBD; Transnational Networks; Global Stocktake; Marrakech Partnership.

1. INTRODUCTION

In recent decades, the dynamics of environmental governance have been profoundly transformed, moving from an almost exclusively state-centric approach to a polycentric architecture in which multiple non-state actors (NSAs)—non-governmental organizations, multinational corporations, subnational governments, social movements, indigenous peoples, and epistemic communities—play an active role in the production and implementation of norms, as well as in the provision of knowledge and resources (Huitema *et al.*, 2024; Schoenefeld, 2023). This change responds to two main factors: the inadequacy of states to address complex global challenges such as climate change and biodiversity loss, and the increase in transnational interdependence, which allows NSAs to exert influence beyond national borders (van Asselt, 2024).

The field of climate change offers a paradigmatic example. Since the signing of the Paris Agreement in 2015, the United Nations Framework Convention on Climate Change (UNFCCC) has institutionalized spaces for participation for NSAs through mechanisms such as the Global Climate Action Portal, the Marrakech Partnership and the Climate High-Level Champions, which seek to amplify non-state commitments and link them to Nationally Determined Contributions (NDCs) (Hale *et al.*, 2022; UNFCCC, n.d.-a). The first Global Stocktake (GST) experience in 2023 demonstrated how NSAs can provide scientific and technical information, mobilise sectoral networks and lobby States to raise climate ambition (Le Quéré *et al.*, 2023; Nature Climate Change, 2023).

In parallel, the Convention on Biological Diversity (CBD) adopted the Kunming-Montreal Global Biodiversity Framework (GBF) in 2022, which explicitly recognizes the role of "other actors" in planning, monitoring, and submitting voluntary commitments (CBD, 2022). This development consolidates a hybrid governance approach, in which state policies are complemented by transnational and local initiatives that promote environmental action.

However, the increasing openness to NSAs also poses policy and policy challenges. The massive presence of corporate representatives at summits such as COP28 in Dubai (2023), the largest in history with more than 25,000 non-state delegates, has reignited the debate on conflicts of interest and legitimacy (Associated Press, 2023; Nature HSS Communications, 2025). In addition, while many NSAs contribute sustainable data, innovations, and practices, others seek to preserve business models

that are incompatible with global sustainability goals, leading to tensions on the direction and credibility of multilateral processes (IISD, 2024).

In this framework, it is crucial to systematically analyse how NSAs organised in transnational networks influence multilateral environmental negotiations, what mechanisms enhance or limit their impact, and what implications this participation has for global governance and democratic legitimacy. This article addresses these issues based on a review of recent literature and official documents from the climate and biodiversity negotiations between 2021 and 2025, in order to contribute to the understanding of a central phenomenon for the future of international cooperation in environmental matters.

2. THEORETICAL FRAMEWORK

2.1. *Polycentric Governance and Environmental Complexity*

International environmental governance has been characterized by a transition from hierarchical structures, based on interstate agreements, to a polycentric model in which multiple centers of authority coexist and interact. According to Huitema *et al.* (2024), this approach recognizes that international cooperation is sustained not only by binding treaties, but also by horizontal coordination mechanisms between cities, regions, companies, and NGOs. Polycentricity expands the capacity to respond to complex problems such as climate change, but it also introduces challenges of coordination, coherence, and accountability (van Asselt, 2024).

2.2. *Transnational Networks of Non-state actors*

Transnational networks are flexible and distributed forms of organization that connect actors across borders, allowing the dissemination of norms, practices, and data (Schoenefeld, 2023). In the climate field, alliances such as the Race to Zero or the Under2 Coalition show how NSAs can generate collective commitments and put pressure on states by building "ambition bubbles" (Hale *et al.*, 2022). These networks function as soft infrastructures that generate social legitimacy and mobilize financial and technological resources towards environmental action (IISD, 2024).

2.3. *Orchestration and Ambition Loops*

The concept of orchestration describes the role of international institutions as facilitators that convene, align, and amplify voluntary NSA initiatives (Hale *et*

al., 2022). At the UNFCCC, the Marrakech Partnership and the Climate High-Level Champions act as orchestrators that integrate subnational and private commitments to Nationally Determined Contributions (NDCs). This process gives rise to loops of ambition, in which NSA actions motivate States to raise their commitments and vice versa (Nature Climate Change, 2023).

2.4. Legitimacy, Transparency and Fairness

ANE's involvement raises questions about legitimacy and transparency. Recent studies show divergent perceptions between organizations from

the Global North and the Global South about the quality of participation in COPs, evidencing asymmetries in resources, access, and advocacy capacity (Nature Humanities & Social Sciences Communications, 2025).

In addition, the growing presence of corporate representatives in multilateral processes has sparked debates about conflicts of interest and the need for clear accreditation and monitoring rules (Associated Press, 2023). Recent literature emphasizes that for NSA participation to be perceived as legitimate, it must be accompanied by accountability and independent verification mechanisms (Le Quéré et al., 2023).

Table 1: Main Theoretical Approaches to Transnational Networks and Global Governance.

<i>Approach</i>	<i>Definition</i>	<i>Recent Authors (2021–2025)</i>	<i>Contribution</i>
<i>Polycentric governance</i>	A multiplicity of centers of authority that interact relatively autonomously.	Huitema et al. (2024); van Asselt (2024)	It explains the coexistence of state institutions and NSAs in environmental regimes.
<i>Transnational networks</i>	Horizontal structures that connect NSAs across state borders.	Schoenefeld (2023); IISD (2024)	They disseminate standards, mobilize resources and put pressure on States.
<i>Orchestration</i>	A coordination mechanism through which IOs facilitate and align voluntary initiatives.	Hale et al. (2022); Nature Climate Change (2023)	He explains how NSAs are linked to state goals and generate "ambition loops".
<i>Legitimacy and transparency</i>	Conditions for acceptance of NSA participation in multilateral processes.	Nature HSS Comm. (2025); Le Quéré et al. (2023); AP (2023)	It highlights tensions due to conflicts of interest, inequality and the need for accountability.

2.5. Summary

The theoretical framework suggests that global environmental governance cannot be understood solely from the point of view of interstate diplomacy. NSAs and their transnational networks act as knowledge intermediaries, catalysts for climate and biodiversity action, and sometimes as lobbyists with conflicting interests. The integration of these approaches makes it possible to analyse how NSAs influence not only the implementation of agreements, but also the very dynamics of multilateral negotiations.

3. METHODOLOGY

3.1. Research Design

This study adopts a qualitative design of narrative review and desk analysis, which is relevant to examine emerging phenomena in global governance, in which there is a diversity of actors, discourses, and institutional arrangements (Snyder, 2022). Narrative review allows academic evidence to be articulated with normative documents and synthesis reports, while documentary analysis facilitates the identification of patterns, mechanisms of influence,

and normative tensions (Page et al., 2021).

3.2. Sources of Information

The sources were divided into three broad categories:

1. Academic literature: peer-reviewed articles in high-impact journals (e.g., *Global Environmental Politics*, *Nature Climate Change*, *One Earth*) published between 2021 and 2025.
2. Official documents: decisions of the UNFCCC (Global Stocktake, Marrakech Partnership, Champions) and the CBD (GBF, Decisions 15/4 and 15/6).
3. Reports and media: IISD, UN synthesis reports, and investigative news coverage documenting legitimacy controversies (Associated Press, 2023).

This mixed approach allows for the triangulation of academic, normative, and practical perspectives (Le Quéré et al., 2023; Huitema et al., 2024).

3.3. Inclusion and Exclusion Criteria

To ensure the quality and relevance of the reviewed material, inclusion and exclusion criteria

were applied (Table 2).

Table 2: Criteria for Inclusion and Exclusion of Sources.

INCLUSION CRITERIA	EXCLUSION CRITERIA
Published Between 2021 And 2025 (Last 5 Years).	Studies prior to 2020 without republication or update.
Thematic Relevance: Polycentric Governance, Nsas, Networks.	Dissemination texts without academic or institutional support.
Peer-Reviewed Publications, Official Documents, Reports.	Personal opinions on blogs or unverifiable sources.
Full Access To Text For Analysis.	Abstracts without full body of the document.

3.4. Search Strategy

The search was carried out in academic databases (Scopus, Web of Science, Google Scholar) and in official repositories of the UNFCCC and the CBD.

Combinations of keywords in English were used, such as:

- Polycentric governance
- Non-state actors
- Transnational networks
- Global stocktake
- Marrakech Partnership
- Kunming-Montreal Global Biodiversity Framework

This strategy responds to the methodological recommendation to construct multilingual and thematic search equations to encompass both academic and institutional literature (Braun & Clarke, 2022).

3.5. Analysis Procedure

A thematic analysis was applied in three phases, following the model proposed by Braun and Clarke (2022):

Table 3: Phases of the Applied Thematic Analysis.

PHASE	DESCRIPTION	APPLICATION IN THIS STUDY
FAMILIARIZATION WITH THE DATA	Exploratory reading of selected documents and articles.	Identification of mentions of NSAs, networks and polycentric governance.
INITIAL CODING	Assigning codes to relevant fragments.	Classification of passages related to monitoring, orchestration, and legitimacy.
TOPIC GENERATION	Grouping of codes into larger categories.	Three-dimensional construction: data/monitoring, orchestration/ambition, legitimacy/transp.
REVIEW AND DEFINITION	Comparison of categories between academic literature and normative documents.	Synthesis between academic evidence and institutional practice.
OUTPUT PRODUCTION	Final writing of systematized findings.	Inclusion of tables and narratives that articulate key findings.

3.6. Methodological Limitations

- Dependence on secondary sources: limits the possibility of contrasting direct perceptions of the actors involved.
- Difficulty in establishing causality: the analysis identifies correlations and mechanisms of influence, but does not prove direct causal impacts (van Asselt, 2024).
- Access bias: official documents tend to make informal dynamics and conflicts of interest invisible, which can underestimate tensions (Nature HSS Comm., 2025).

3.7. Ethical Considerations

The study, being based on secondary and public sources, does not involve contact with human participants. Criteria of transparency, responsible citation, and respect for intellectual authorship were ensured, following the standards of the American

Psychological Association (2020).

4. RESULTS

4.1 Increasing Participation of Non-state Actors in COPs

The participation of non-state actors (NSAs) in climate summits has reached historic levels. During COP28 in Dubai (2023), 83,884 participants were registered, of which 25,360 were NEA delegates, representing almost a third of the total and the largest presence in the history of the UNFCCC (UNFCCC, 2023; Nature HSS Communications, 2025).

This trend confirms a densification of transnational networks, which allows for greater information sharing and political pressure, but also reveals asymmetries of access between NSAs with high resource capacity (large corporations and international NGOs) versus community organizations and organizations from the Global South (Associated Press, 2023).

4.2. Impact on Data Provision and Monitoring

The Global Stocktake (GST), concluded in 2023, institutionalized the incorporation of data produced by NSAs, including subnational inventories, company reports, and voluntary commitments (Le Quéré et al., 2023). **According to Nature Climate Change (2023), NSAs provided four key types of inputs:**

1. Emissions data and sectoral progress (e.g. city networks and transport alliances).
2. Independent monitoring methodologies that complement state metrics.
3. Risk assessments and scientific scenarios from think tanks and academia.
4. Digital tracking platforms (e.g. Climate Action Data Portal).

These inputs facilitated a more complete balance, although challenges persist in data verification and traceability, especially in corporate commitments (van Asselt, 2024).

4.3. Orchestration and "Loops of Ambition"

The Climate High-Level Champions and the Marrakech Partnership were consolidated as orchestration mechanisms between NSAs and States. In 2022, more than 11,000 voluntary commitments were registered on the Global Climate Action Portal, linking cities, regions, and companies to sectoral decarbonization goals (Hale et al., 2022; UNFCCC, n.d.-a). This process generated "loops of ambition" in key sectors: energy, transport and financing, where non-state commitments were used as references to pressure States to update their NDCs (Breakthrough Agenda Report, 2024).

4.4. Biodiversity: Institutionalization of NSAs in the CBD

Within the framework of the Kunming-Montreal Global Biodiversity Framework (GBF), adopted in 2022, NSAs were formally invited to register commitments aligned with the 23 goals for 2030 (CBD, 2022). Decision 15/6 established a planning, monitoring, reporting and review (RRM) mechanism that includes NSA commitments together with those of States, to avoid double counting (CBD, 2024). According to IISD (2024), by the beginning of 2024, more than 300 non-state commitments had already been registered in national biodiversity platforms.

4.5 Benefits and Risks Identified

- Benefits:
 - Accelerating the implementation of global agreements through local and private initiatives (Huitema et al., 2024).
 - Greater diversity of solutions, including technological innovation and green financing (Schoenefeld, 2023).
 - Construction of social legitimacy in sectors where state action is insufficient (IISD, 2024).
- Risks:
 - Agenda capture by corporate interests, especially fossil fuels (Associated Press, 2023).
 - Inequality in representation, with a predominance of actors from the Global North over indigenous peoples and local communities (Nature HSS Communications, 2025).
 - Lack of accountability mechanisms, which weakens the credibility of voluntary commitments (Le Quéré et al., 2023).

Table 4: Main Results on the Impact of NSAs in Multilateral Environmental Negotiations.

DIMENSION	KEY FINDINGS	RECENT SOURCES
PARTICIPATION IN COP	COP28: 83,884 participants, 25,360 NNA (31%). Higher network density, but access asymmetries.	UNFCCC (2023); AP (2023); Nature HSS Comm. (2025).
DATA PROVISION AND MONITORING	Contribution of subnational, corporate and academic data to the GST. Challenges in traceability and verification.	Le Quéré et al. (2023); Nature Climate Change (2023).
ORCHESTRATION AND AMBITION	More than 11,000 commitments on the climate portal. Champions facilitate "loops of ambition".	Hale et al. (2022); UNFCCC (s. f.-a).
BIODIVERSITY (CBD)	GBF invites ANE to formal commitments. More than 300 commitments registered in 2024.	CBD (2022, 2024); IISD (2024).
PROCEEDS	Accelerated implementation, technological innovation, social legitimacy.	Huitema et al. (2024); Schoenefeld (2023).
RISKS	Agenda capture, inequality of representation, lack of accountability.	AP (2023); Nature HSS Comm. (2025)

5. CONCLUSIONS

The findings of this study allow us to affirm that

global environmental governance is going through a process of increasing institutionalization of the role of non-state actors (NSAs), who are no longer

peripheral observers, but co-producers of implementation, monitoring and political pressure. Both the UNFCCC and the CBD have generated formal arrangements to integrate transnational networks, recognizing that States, on their own, do not have sufficient capacity to address complex problems such as climate change and biodiversity loss (Huitema *et al.*, 2024; Schoenefeld, 2023).

5.1. Progress Observed

First, NSAs are consolidated as providers of data and evidence that enrich global balance sheets and strengthen the transparency of the regime, as observed in the first Global Stocktake (Le Quéré *et al.*, 2023; Nature Climate Change, 2023). Second, orchestration mechanisms such as the Marrakech Partnership have created "ambition loops" that link voluntary commitments to the state agenda, influencing the updating of NDCs and the orientation of climate investments (Hale *et al.*, 2022; UNFCCC, n.d.-a). Third, the Kunming-Montreal Global Biodiversity Framework (GBF) represents a milestone by formally inviting NSAs to submit commitments and to integrate into monitoring, reporting, and review mechanisms (CBD, 2022, 2024).

5.2. Persistent Challenges

However, three critical tensions remain:

1. Legitimacy and equity: the overrepresentation of corporations in the Global North contrasts with the difficulties of access for indigenous communities and actors in the Global South, generating perceptions of inequality (Nature HSS Communications, 2025).
2. Conflicts of interest: The strong presence of fossil fuel-linked actors at recent COPs has reignited criticism of agenda capture and risk of diluting ambition (Associated Press, 2023).
3. Accountability: the proliferation of voluntary commitments faces the lack of clear standards of verification and follow-up, which weakens the credibility of these contributions (van Asselt, 2024; Le Quéré *et al.*, 2023).

5.3. Implications for Global Governance

The structural integration of NSAs confirms the transition to a polycentric governance model (Huitema *et al.*, 2024), in which States no longer monopolize authority, but share spaces with

multiple interdependent actors. This raises the need to redesign multilateral regimes so that NSA participation is not only symbolic, but also representative, transparent, and effective (Schoenefeld, 2023).

5.4. Recommendations

- Strengthen transparency: establish common standards for disclosure and verification of non-state commitments, following recent climate science proposals (Le Quéré *et al.*, 2023).
- Ensure equitable inclusion: enable financial and logistical support mechanisms for the participation of actors from the Global South, indigenous peoples, and local communities in multilateral processes (Nature HSS Communications, 2025).
- Regulate conflicts of interest: implement accreditation criteria and safeguards that limit the disproportionate influence of sectors with models incompatible with the ecological transition (Associated Press, 2023).
- Enhance sectoral orchestration: consolidate platforms that align private and subnational commitments with national and global goals, particularly in critical sectors such as energy, transport, and agriculture (Hale *et al.*, 2022).
- Measure the impacts of NEAs: promote research with mixed methodologies (quantitative and qualitative) that allow causally evaluating the impact of NEAs on negotiation outcomes and the implementation of agreements (van Asselt, 2024).

5.5. Final Thoughts

In short, NSAs do not replace States, but they expand, stress and reconfigure global environmental governance. Their role will continue to grow as progress is made towards more decentralised, multisectoral and polycentric climate and biodiversity action. The central task in the coming years will be to balance the transformative potential of these networks with safeguards of legitimacy and transparency, to ensure that openness to participation effectively contributes to environmental justice and the fulfilment of global goals.

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