

Diversity in Climate Negotiations: Lessons for Inclusive Urban Planning and Smarter Mobility

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Abstract

This paper examines the evolving role of stakeholder diversity in United Nations climate negotiations, with a particular focus on the Conferences of the Parties (COP) under the UNFCCC. Using a qualitative comparative case study method, it analyzes documentation from six key COPs (2009-2024) and three urban planning cases. The study identifies how the inclusion of civil society, youth, indigenous groups, and private sector actors has shaped negotiation dynamics and contributed to broader climate discourse. A key finding is that while stakeholder diversity enhances legitimacy and knowledge sharing, its impact on emission outcomes remains limited without stronger institutional linkages. Drawing on COP documentation and selected case examples, the study identifies key mechanisms of engagement and governance that can inform urban planning and transport strategies. The analysis reveals that structured stakeholder constituencies, as seen in the UNFCCC, offer a transferable model for urban governance. The paper proposes a transferable governance model that adapts multilateral negotiation principles - such as inclusive decision-making, transparency, and knowledge sharing - to local climate resilience efforts. It introduces a conceptual Knowledge Management Framework designed to support cross-sectoral collaboration and evidence-based planning in urban contexts.

Keywords: Stakeholder diversity, climate change negotiations, multilateralism, Conference of Parties, inclusive urban planning, resilient mobility, Knowledge Management, multilevel governance, UNFCCC

Introduction

The evolution of global climate governance has increasingly emphasized the role of diverse stakeholders in shaping multilateral agreements, with direct implications for local implementation challenges, particularly in urban areas. From the early days of the United Nations Framework Convention on Climate Change (UNFCCC), climate negotiations were primarily state-driven. However, the progressive inclusion of non-governmental actors - such as civil society organizations, media, academia, and the private sector - has transformed the negotiation landscape, enhancing transparency, legitimacy, and public engagement (Olbrisch, 2012; Bodansky, 2016). Landmark agreements like the Kyoto Protocol (1997) and the Paris Agreement (2015) illustrate how stakeholder involvement, both formal and informal, contributed to consensus-building and broader societal support (Held et al., 2018).

COP15 in Copenhagen marked a turning point in stakeholder visibility, drawing unprecedented media attention and civil society mobilization. Although the summit fell short of delivering a binding global agreement, it catalyzed a shift toward more inclusive climate diplomacy. Subsequent IPCC reports have reinforced the urgency of coordinated mitigation and adaptation strategies, calling for strengthened international collaboration and more equitable policy frameworks to limit global warming to 1.5°C (IPCC, 2023). Despite these efforts, global CO₂ emissions continue to rise, and the gap between commitments and implementation remains significant. While over 110 countries pledged enhanced climate action by 2020, the effectiveness of these pledges is constrained by governance challenges, conflicting interests, and limited enforcement mechanisms (Stockwell et al., 2021). Recent COPs, including those in Egypt and the UAE, have highlighted persistent tensions between ambition and action, underscoring the need for more robust stakeholder integration and accountability mechanisms (UNFCCC, 2021). This paper argues that stakeholder diversity, while not a panacea, offers a strategic entry point for improving climate governance and local implementation.

The UNFCCC's institutional architecture - established at the 1992 Earth Summit in Rio - has gradually evolved to accommodate a wider array of actors. Yet, the formal negotiation spaces (Blue Zones) often remain disconnected from grassroots advocacy and technical expertise found in the informal zones (Green Zones). This division reflects broader challenges in translating global climate commitments into local action, particularly in urban

contexts where the impacts of climate change are most acutely felt. Urban systems, especially transport and land use planning, are increasingly recognized as critical interfaces for climate adaptation and mitigation.

Urban planning and transportation systems are critical arenas for climate adaptation and mitigation. Cities account for over 70% of global CO₂ emissions and are disproportionately vulnerable to climate risks such as heatwaves, flooding, and air pollution (UN-Habitat, 2022). However, urban governance often suffers from fragmented decision-making and limited stakeholder engagement. Drawing lessons from inclusive climate negotiations, this paper explores how multilateralism and stakeholder diversity can inform more resilient and equitable urban and transport planning. It proposes a framework for stakeholder-informed urban governance, emphasizing co-production of knowledge, participatory design, and multilevel coordination.

Theoretical Framework

This study draws on theories of multilevel governance, stakeholder theory, and participatory planning to examine how inclusive climate negotiations can inform urban policy. It posits that multilateral climate processes - particularly those under the UNFCCC - offer valuable lessons for urban and transport planning, especially in contexts requiring coordination across diverse actors and interests. The framework emphasizes co-production of knowledge, institutional learning, and the role of non-state actors in shaping policy outcomes. It also engages critically with comparative urban studies literature that highlights governance failures and transport equity challenges, suggesting that the transfer of negotiation models must account for local power dynamics and institutional capacity. A summary of these theoretical linkages is provided in Table 1.

Table 1: Theoretical linkages between climate negotiations and urban planning

<i>Theoretical Concept</i>	<i>Application in Climate Negotiations</i>	<i>Potential Application/Challenge in Urban Planning</i>
Multilevel Governance	Coordination between UNFCCC, states, and non-state actors.	Coordinating city, regional, and national transport policies; often leads to fragmentation.
Stakeholder Theory	Formal constituencies (e.g., NGOs, Indigenous Peoples) within the UNFCCC.	Often ad-hoc engagement; equity concerns if powerful lobbies dominate planning decisions.

<i>Theoretical Concept</i>	<i>Application in Climate Negotiations</i>	<i>Potential Application/Challenge in Urban Planning</i>
Participatory Planning	Input via stakeholder submissions and side events.	Participatory budgeting, community workshops; can be tokenistic without real power transfer.

Methodology and type of analysis

The study employs a qualitative approach based on a targeted literature review and comparative analysis of COP documentation, stakeholder engagement models, and urban planning case studies. While not exhaustive, the literature review focuses on key sources from UNFCCC records, climate governance theory, and urban planning frameworks. The methodology includes:

- Review of official COP decisions and stakeholder submissions from six COPs (COP15, 21, 22, 26, 27, 29), selected for their landmark decisions or focus on urban mobility;
- Analysis of stakeholder roles and influence in negotiation outcomes, using thematic coding of primary documents and secondary literature to identify engagement mechanisms;
- Mapping of governance mechanisms and knowledge-sharing platforms;
- Identification of transferable principles for urban planning and mobility through comparative analysis with three urban cases (Bogotá, Paris, Nairobi) chosen for their documented use of inclusive planning.

The paper introduces the concept of “negotiated urbanism”, a model that adapts stakeholder-inclusive practices from climate diplomacy to urban planning. It argues that the structured inclusion of civil society, private sector, and technical experts - common in climate negotiations - can be replicated in urban governance to improve legitimacy, innovation, and resilience. The study also proposes a Knowledge Management Framework for urban planning, inspired by the UNFCCC’s transparency and reporting mechanisms, to facilitate cross-sectoral collaboration and data-informed decision-making. The analysis is both thematic and comparative. It examines stakeholder roles in climate negotiations - NGOs, media, indigenous groups, youth, and private actors - and maps their influence on key outcomes such as the Paris Agreement. It then compares these dynamics to urban planning processes, identifying gaps in participation, transparency, and institutional capacity. The study evaluates how inclusive governance models can be adapted to local

contexts, particularly in transport planning, where coordination across agencies and sectors is critical.

Results

Stakeholder influence in COP Negotiations: Stakeholder participation has expanded significantly over the past two decades. Youth constituencies at COP26 influenced the inclusion of intergenerational equity in final declarations, while indigenous groups at COP27 shaped adaptation finance discussions. Despite broader participation, conflicting interests, limited enforcement mechanisms, and institutional inertia often dilute the impact of stakeholder contributions on emission outcomes. This disconnect is starkly illustrated by the persistent rise in atmospheric CO₂ concentrations recorded at the Mauna Loa Observatory (Figure 1). While stakeholder engagement mechanisms have expanded, the fundamental trend of increasing emissions remains unbroken, highlighting a critical limitation of participation without robust implementation frameworks.

Urban planning implications: Urban and transport planning strategies informed by these findings suggest that inclusive governance and multilateral cooperation can foster more sustainable and resilient urban environments. Examples include Bogotá's BRT system, Paris's cycling infrastructure, and Nairobi's participatory transit planning - all informed by inclusive governance principles; Table 2 summarizes the stakeholder engagement models observed.

Knowledge Management (KM) framework proposal: The proposed KM Framework draws inspiration from UNFCCC's transparency mechanisms and platforms like C40 Knowledge Hub. It would include modules for data sharing, stakeholder mapping, and policy benchmarking, designed to facilitate collaboration between global and urban actors. A schematic of the proposed framework is presented in Table 3.

Table 2: Observed stakeholder engagement models

<i>Model</i>	<i>Description</i>	<i>Example from analysis</i>
Formal Constituency	Recognized groups with focal points for negotiation access.	UNFCCC NGO constituencies (Youth, Indigenous Peoples).
Multi-stakeholder Platform	Structured dialogues for knowledge co-production.	Marrakech Partnership for Global Climate Action.
Public Mobilization	Grassroots advocacy and awareness campaigns.	Civil society actions in COP Green Zones.

Table 3: Knowledge Management (KM) framework for urban climate Action

<i>KM framework for urban climate action</i>	
Core Principle: Facilitate data-driven, multi-stakeholder collaboration	
CENTRAL DATA HUB Integrated repository for urban, transport, and climate data (e.g., emissions inventories, transit maps, vulnerability assessments)	
[STAKEHOLDER MODULE] Mapping tool for actors Contact & expertise database Conflict of interest logs	[POLICY MODULE] Benchmarking Dashboard Best practice repository Policy impact simulations
[COLLABORATION MODULE] Secure communication channels Co-editing tools for plans Virtual meeting spaces	[MONITORING MODULE] Tracking of implementation KPI dashboards (e.g., from conclusion table)
OUTPUT: EVIDENCE-BASED, STAKEHOLDER-INFORMED DECISIONS for Climate-Resilient Urban and Transport Planning	

Discussion on Stakeholders' diversity and the architecture of Climate negotiations: lessons for Urban Planning and Mobility

The connection between climate summits and urban planning policies is increasingly relevant. Mechanisms such as stakeholder mapping, participatory budgeting, and climate councils can translate global governance principles into actionable urban strategies. Challenges include power asymmetries, resource disparities, and political constraints. Specifically, power asymmetries can lead to the dominance of well-resourced private actors, while institutional inertia in city governments can resist inclusive models. Furthermore, a digital divide may exclude marginalized communities from new knowledge platforms. Strategies to overcome these include capacity-building, legal safeguards, and inclusive design processes. COP decisions increasingly align with the 2030 Agenda, particularly in areas like climate finance and stakeholder inclusion. However, gaps remain in implementation and accountability. Best practices include the use of open-access dashboards (e.g., UNFCCC NDC Registry), multilingual media briefings, and stakeholder focal points for structured dialogue.

This study reinforces the notion that integrating diverse stakeholders into climate negotiations enhances multilateral cooperation and knowledge exchange. Lessons from UN climate summits indicate that urban planning and transport policies can benefit from a similarly inclusive approach, leveraging multi-actor governance for effective decision-making. The findings demonstrate that while stakeholder engagement can drive climate action, it must be accompanied by institutional reforms and clear implementation strategies to yield tangible outcomes.

Over the past decade, the growing presence of accredited media outlets and non-governmental stakeholders at UNFCCC climate negotiations has

significantly expanded global awareness of climate issues. New communication technologies - social media, mobile platforms, and open-access data - have enabled climate knowledge to reach audiences across continents (Vihma et al., 2013). Yet, critics argue that the proliferation of COP meetings has led to increasingly complex processes with limited tangible implementation, particularly in developing regions. The UNFCCC is often perceived as distant and bureaucratic, with insufficient progress toward concrete climate solutions.

A key evolution in stakeholder engagement has been the formal recognition of NGO constituencies within the COP framework. Initially dominated by business and industry lobbies, these groups have diversified to include environmental advocates, youth, indigenous peoples, and scientific communities. Each constituency now operates through designated focal points, facilitating structured communication with the UNFCCC Secretariat and negotiators (UNFCCC, 2021). This model of organized stakeholder interaction offers valuable insights for urban governance, where fragmented communication often hinders effective planning and implementation.

Despite increased participation, a persistent disconnect remains between stakeholder engagement and climate outcomes. For example, when comparing annual atmospheric CO₂ concentrations - such as those recorded at the Mauna Loa Observatory - with COP milestones, no clear correlation emerges between negotiation success and emission trends (Jancovici, 2019; NOAA, 2022). This underscores the limitations of stakeholder inclusion without corresponding institutional reforms, enforcement mechanisms, and local implementation strategies.

NGOs and scientists are consistently ranked among the most trusted sources of climate information, surpassing even media outlets. Their credibility stems from rigorous methodologies, field-based expertise, and advocacy for marginalized communities. STEM-focused NGOs, in particular, play a critical role in translating global climate goals into local resilience strategies. Their contributions to UN agencies such as the WMO, ITU, and UNESCO highlight the importance of technical knowledge in shaping actionable policies. However, the uneven distribution of capacity - evident in the limited number of Clean Development Mechanism (CDM) projects in Africa - reveals the need for stronger institutional support and inclusive governance frameworks (Vihma et al., 2013).

The spatial architecture of COPs - divided into Blue Zones (formal negotiations) and Green Zones (public engagement) - symbolizes the broader challenge of integrating diverse voices into decision-making. While the Blue Zone facilitates high-level diplomacy, its restricted access limits civil society influence. Conversely, the Green Zone fosters innovation, dialogue, and public mobilization, but lacks direct policy leverage. Bridging this divide is

essential for multilateralism to translate into meaningful climate action. Urban planning and mobility systems, which face similar governance silos, can benefit from adopting this dual-zone model to balance technical expertise with community engagement.

For instance, participatory transit design, climate-informed infrastructure investment, and open data platforms in cities like Paris, Bogotá, and Nairobi reflect the potential of stakeholder-inclusive planning. These approaches mirror the collaborative ethos of successful COP constituencies and offer scalable models for smarter transportation and resilient urban development.

Ultimately, the lessons from UNFCCC negotiations - structured stakeholder engagement, transparent communication, and multi-actor governance - can inform a new paradigm for urban planning. By integrating these principles, cities can move beyond fragmented decision-making toward inclusive, adaptive, and climate-resilient systems.

Table 4: Summary of COP Decisions Since 2009 related to urban planning and mobility

<i>UNFCCC COPs (Conferences of Parties)</i>	<i>Year</i>	<i>Key Climate Decisions</i>	<i>Urban Planning & Mobility Implications</i>
COP15	2009	Copenhagen Accord; emphasis on adaptation finance	Raised visibility of cities as climate actors, but lacked concrete urban mobility strategies
COP21	2015	Paris Agreement adopted	Cities and subnational actors formally recognized; led to increased urban climate action plans
COP22	2016	Launch of Marrakech Partnership	Introduced frameworks for non- state actors, including urban planners and transport authorities
COP26	2021	Glasgow Climate Pact; emphasis on net-zero	Highlighted role of cities in achieving net-zero; some NDCs began including urban transport targets
COP27	2022	Focus on loss and damage; mixed progress on mitigation	Urban resilience discussed, but limited integration of mobility strategies
COP29	2024	Transport Thematic Day; Avoid-Shift- Improve framework promoted	Public transport and active mobility emphasized as key to halving urban transport emissions by 2030

From the Table 4 inserted above, we can highlight a few key points:

- COP29 emphasized that only two-thirds of countries include public transport in their Nationally Determined Contributions (NDCs), despite its potential to reduce emissions by up to 50%;
- Promoted by the UNFCCC Climate Champions, this approach encourages cities to avoid unnecessary travel, shift to sustainable modes (walking, cycling, public transport), and improve vehicle efficiency;
- Since COP22, this initiative has supported collaboration between national governments and non-state actors - including urban planners - to scale climate solutions in cities;
- COPs increasingly serve as platforms for cities to share best practices in sustainable mobility, such as Bogotá's BRT system or Paris's expansion of cycling infrastructure;
- Despite growing recognition, urban mobility remains underfunded and underrepresented in global climate finance mechanisms. This gap limits the scalability of local solutions.

With the growing number of accredited media outlets working alongside governments and key stakeholders at the COP negotiations, global knowledge has been able to reach people on every continent over the past decade, in particular through new communication technologies, including social media, the Internet and mobile devices. However, critics have argued against the large number of UNFCCC meetings that become increasingly complex over time, without sufficiently concrete implementation, especially for developing regions, and more difficult communication to a wide audience: the UNFCCC is seen from afar, making very little tangible progress towards an effective solution (Vihma et al. 2013).

In the context of the UNFCCC negotiations, NGOs admitted as observers by the COP have gradually organized themselves into various interest groups. Initially, these groups were mainly composed of business and industry lobbies. Subsequently, increasingly active environmental groups emerged, setting up structured communication mechanisms with official negotiators. This led to the recognition of "constituencies," each with its own focal points. The cooperation of these focal points is essential for the Secretariat to maintain effective interaction with relevant stakeholders (UNFCCC, 2021).

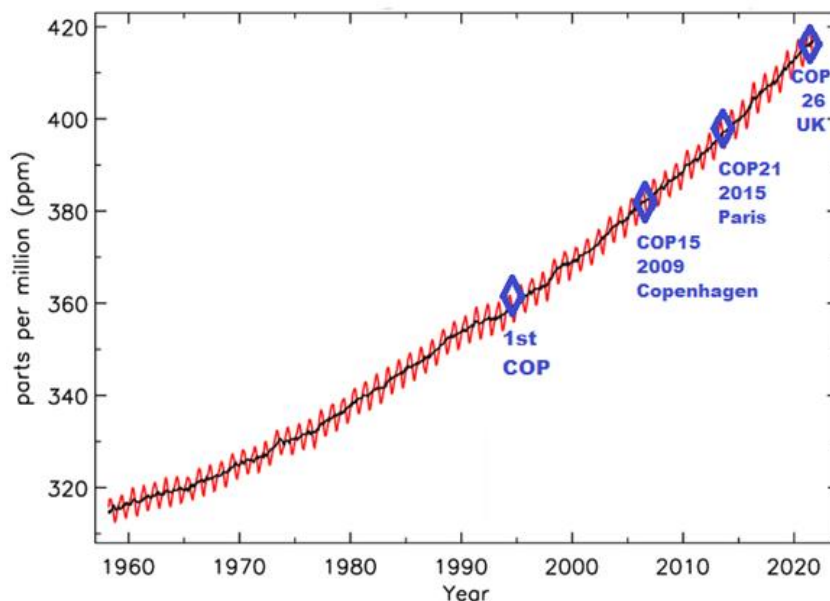
Correlation between the increased number of stakeholders at the COPs and CO2 concentration?

When we compare the atmospheric CO2 measured each year by scientists (see Figure 1) and adapt the figure to key COP dates, we realize that

the results seem to be independent of each other: do the negotiations that take place during the COPs intervene in the outcome of the experiment? This is not proven, because since 1995, the measurement of CO₂ at each COP shows no variation in the readings, whether the COP is described in the media as a success or a failure. (Jancovici, 2019).

The atmospheric CO₂ curve at the Mauna Loa Observatory, often referred to as the "Keeling curve," represents the concentrations of carbon dioxide (CO₂) in the atmosphere that have been continuously measured since 1958. This curve shows the gradual increase in CO₂ levels over the years, reflecting the impact of anthropogenic greenhouse gas emissions. This curve signifies several things: on the one hand, it shows an upward trend in CO₂ concentrations, indicating a continuous increase in CO₂ emissions due to human activities, such as the burning of fossil fuels and deforestation. The curve also shows seasonal fluctuations, with higher CO₂ levels in the winter and lower in the summer, mainly due to plant photosynthesis absorbing CO₂ during the growing season. In summary, this curve is one of the most important indicators of climate change, providing clear evidence of the increase in greenhouse gases in the atmosphere and their role in global warming. In summary, the Mauna Loa CO₂ Curve is a crucial tool for understanding and monitoring changes in atmospheric CO₂ concentrations, highlighting the urgency of taking action to reduce greenhouse gas emissions. (Keeling et al, 1976) and (NOAA Global Monitoring Laboratory, 2022)

Figure 1: Atmospheric CO₂ at the Mauna Loa Observatory, measured annually. Adapted by Ramos. Data from NOAA Global Monitoring Lab and SCRIPPS Institute of Oceanography, UC San Diego, February 2022



Source <https://www.co2.earth/monthly-co2>

Increased need for non-governmental actors in climate change discussions and negotiations:

NGOs and scientists are perceived as the most reliable sources of information on climate change, just ahead of the media. This underscores the importance of their role in disseminating accurate and relevant information. This is indeed crucial, especially in the context of the climate negotiations at the COP for different reasons, including scientific credibility, as scientists provide data and analysis based on rigorous research and proven methodologies. Their expertise is essential to understanding the impacts of climate change and possible solutions. Engagement of NGOs as they play a key role in raising public awareness and advocating for ambitious climate policies. They often represent the voices of local communities and marginalized groups, bringing diverse perspectives to the negotiations. Unlike the media, which can sometimes be influenced by commercial or political interests, scientists and NGOs tend to be more objective and transparent in their communications. Influencing public policy: the information provided by scientists and NGOs can influence policy decisions by providing robust evidence and shedding light on urgent climate needs.

At COPs, accredited delegates can access first-hand information and participate in crucial discussions. Understanding the role of scientists and NGOs helps to navigate these spaces and contribute effectively to negotiations. The trust placed in scientists and NGOs reflects their ability to provide reliable information and to play a central role in climate negotiation processes.

For years, international NGOs in the fields of Science, Technology, Engineering and Mathematics (STEM) have been participating in high-level dialogues with specialized agencies such as the UNFCCC, WMO, ITU, UNDRR and UNESCO. They make recommendations based on lessons learned in the field. Engineers and technicians in developing regions, passionate about finding solutions, face local and regional challenges to ensure the safety of people and property.

The complex outcomes of COPs are difficult to implement without trained specialists. For example, few Clean Development Mechanism (CDM) projects have taken place in Africa, highlighting the difficulties of poor countries (Vihma et al. 2013).

It is crucial to include NGO experts in STEM issues to build resilience with local communities. These NGOs help negotiators modernize institutions and raise awareness of the importance of humanitarian intervention. Each stakeholder has its own interests, such as oil companies, which can pose obstacles to the success of COPs due to governance issues. Sustainability requires creative ideas and innovative techniques.

The United Nations must partner with governments, the private sector, development agencies and NGOs to support universities and research institutions in various fields such as education, agriculture and information technology. This must be supported by appropriate legal frameworks and strict enforcement of regulations to ensure compliance with the sustainable development agenda (Mensah, 2019).

Limiting global warming requires strengthening governance, institutional capacity, policy instruments, technological innovation, financial mobilization and behavioural change. These measures must be organized before the annual UNFCCC negotiations to prepare all stakeholders for a smooth and acceptable transition (IPCC, 2022).

Actions by non-governmental stakeholders are underway to strengthen collaboration and ensure better communication, so that their voices are heard and help increase climate action. In addition to listening to scientists and taking IPCC reports seriously, parties agreed to bring together key stakeholders to discuss capacity-building challenges and catalyze action in key areas.

At COP 21, there was an urgent need to mobilize stronger and more ambitious climate action to achieve the goals of the Paris Agreement. The commitments of all actors, including the "climate champions", were recognised to ensure a sustainable link between the Convention and voluntary and collaborative actions. Since then, global climate action has been fostered with closer partnership among stakeholder groups (UNFCCC, 2021).

Toward Inclusive Governance: Lessons from COP29 for Urban Planning and Mobility

Inclusive governance is not merely about co-designing climate solutions - it requires managing diverse knowledge systems, perceptions, and power relations among stakeholders. As the IPCC (2022) emphasizes, adaptation to climate change hinges on enabling conditions such as political will, institutional capacity, impact-based knowledge, and participatory decision-making. These principles are equally vital in urban planning and transport policy, where fragmented governance and unequal access often hinder sustainable development.

The February 2022 IPCC report underscores that inclusive governance enhances climate resilience by embedding equity and justice into project design and implementation. This involves addressing systemic inequalities - related to gender, ethnicity, disability, age, geography, and income - through stakeholder engagement at all levels. Optimized governance emerges when governments, civil society, academia, media, and the private sector collaborate from the earliest stages of planning through implementation and evaluation.

These dynamics, often visible in UNFCCC negotiations, offer a transferable model for urban systems facing climate stress.

However, recent developments at COP29 in Baku, Azerbaijan, reveal tensions in stakeholder inclusion. The decision to restrict NGO participation to one delegate per organization sparked concern across civil society. While intended to streamline logistics and improve negotiation efficiency, many NGOs feared it would dilute the diversity of voices and limit grassroots representation (UNFCCC, 2024). Governments and institutions were divided - some welcomed the move as a way to focus discussions, while others warned of reduced transparency and legitimacy.

This controversy highlights a broader challenge: balancing efficiency with inclusivity in multilateral processes. The treatment of civil society at COP29, including reports of activist detentions and media restrictions (Amnesty International, 2024), underscores the fragility of participatory governance in politically sensitive contexts. Yet, despite these constraints, COP29 featured robust engagement from established environmental NGOs like Greenpeace and WWF, alongside youth groups, indigenous representatives, and academic institutions. Media coverage ensured global visibility, and coalitions helped amplify voices from underrepresented regions, including small island states and least developed countries (UNFCCC, 2024; EESC, 2024).

These dynamics mirror challenges in urban governance, where marginalized communities often lack access to planning processes. Just as COPs must navigate stakeholder diversity to achieve climate goals, cities must adopt inclusive frameworks to design equitable mobility systems and resilient infrastructure. The lessons from COP29 - on representation, transparency, and coalition-building - can inform urban planning models that prioritize stakeholder engagement, especially in transport systems that affect daily life and environmental outcomes. Inclusive governance is not an abstract ideal - it is a practical necessity. Whether in global climate negotiations or local urban strategies, stakeholder diversity must be embedded in institutional design, supported by legal frameworks, and reinforced through transparent communication. Only then can multilateralism deliver on its promise of sustainable and just development.

At COP30, a concrete outcome could be the formal launch of a Global Knowledge Management (KM) Framework for Urban Solutions, designed to bridge data, expertise, and innovation across governments, civil society, academia, and the private sector. This initiative would establish a centralized digital platform to facilitate evidence-based decision-making, enhance transparency, and optimize resource allocation in urban planning. By integrating climate data, urban resilience indicators, and best practices from cities worldwide, the KM Framework would support the implementation of

the Paris Agreement and accelerate progress toward the Sustainable Development Goals (UN-Habitat, 2022; UNFCCC, 2015). As emphasized by C40 Cities, empowering subnational actors with tools for climate accountability - such as climate budgets and integrity-based reporting - can catalyze transformative urban action (C40 Cities, 2024). The Bonn Dialogues further underscore the importance of multilevel governance and inclusive knowledge-sharing to scale climate solutions effectively (UNFCCC, 2021). In Brazil, where over 86% of the population lives in urban areas, the framework could be piloted in vulnerable communities to support locally led adaptation, equitable finance, and disaster risk reduction strategies (UN-Habitat, 2022). Such a KM system would not only institutionalize learning across COP cycles but also ensure that urban voices are central to global climate governance.

Conclusions

This paper has examined how stakeholder diversity within UN climate negotiations - particularly through the COP process - can inform inclusive urban planning and smarter mobility strategies. By analyzing engagement mechanisms, governance challenges, and knowledge-sharing practices, the study proposes a transferable framework for enhancing local climate resilience. The integration of stakeholder-informed approaches into urban systems can improve transparency, equity, and effectiveness in addressing climate challenges.

The evolution of stakeholder participation has reshaped global environmental governance. While Europe and North America continue to dominate COP representation, efforts to include underrepresented regions - via virtual access, targeted funding, and coalition-building - are gradually shifting the balance (Chan, 2020). Nonetheless, disparities persist, and logistical failures, such as those at COP15 in Copenhagen, continue to limit meaningful civil society engagement (Markiewicz et al., 2024).

Recent COPs, including Glasgow and Sharm el-Sheikh, have seen expanded participation, yet the integration of non-state actors into formal decision-making remains uneven. Although the UNFCCC framework promotes public participation, innovation, and market-based mechanisms, political fragmentation and digital infrastructure gaps still hinder inclusive governance (IPCC, 2022).

This paper argues that stakeholder diversity is not only central to effective climate negotiations - it offers a replicable model for urban planning and mobility reform. Structured engagement mechanisms such as constituency focal points and the dual-zone architecture of COPs (Blue and Green Zones) provide valuable lessons for cities facing climate stress, mobility challenges, and social inequities.

Looking ahead to COP30 in Belém, Brazil, the global focus is expected to shift toward implementation, equity, and nature-based solutions. As the Pact for the Future gains momentum, COP30 presents a critical opportunity to reinforce the 2030 Agenda through inclusive, locally grounded climate action. To translate these lessons into actionable urban policy, the following structured recommendations and key performance indicators (KPIs) are proposed, summarized in Table 5 below, aligning with key priorities such as strengthening the role of cities and subnational actors in climate governance, enhancing transparency and accountability in stakeholder engagement, mobilizing climate finance for adaptation and urban resilience and integrating indigenous knowledge and community-led planning into global frameworks.

Table 5 : Policy Recommendations and Key Performance Indicators for Inclusive Urban Planning

<i>Policy recommendation</i>	<i>Key Performance Indicator (KPI) for urban authorities</i>
Adopt a formal constituency model	Number of established, recognized stakeholder constituencies (e.g., for youth, residents, businesses) with formal consultation rights.
Implement a dual-zone engagement process	Percentage of major urban planning projects that include both technical working sessions (Blue Zone) and public innovation forums (Green Zone).
Utilize the proposed Knowledge Management Framework	Annual publication of a "Stakeholder Integration Report" tracking diversity of participants, data sharing metrics, and policy influence.

To support these goals, this paper advocates for a multidisciplinary, systems-based approach to climate governance and urban transformation. The principles of meta-governance (Meuleman, 2013) - authority, justice, transparency, trust, and equity - should guide both international negotiations and local planning processes.

Key Takeaways

- *Embedding stakeholder diversity in urban sustainability decisions:* the growing participation of civil society in COP negotiations underscores the need to reflect social equity, environmental priorities, and local realities in urban planning and transport policies. Success should be measured by KPIs such as the diversity index of participants in planning committees and the percentage of projects co-designed with community stakeholders.

- *Fostering multidisciplinary collaboration for smarter mobility*: a holistic approach - drawing from urban planning, transportation, political science, and environmental science - is essential for designing low-carbon, resilient cities. Effectiveness can be gauged by the number of inter-departmental task forces and the integration of climate risk assessments into all transport infrastructure approvals.
- *Establishing a global Knowledge Management framework for urban solutions*: A KM tool connecting governments, NGOs, academia, and the private sector can enhance transparency, coordination, and evidence-based decision-making in urban planning. Adoption should be tracked via metrics like the number of cities using shared data platforms and the frequency of cross-city policy benchmarking.

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