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# Overcoming the implementation gap: everyday barriers and enablers of urban climate governance

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This article investigates the persistent implementation gap in urban climate governance through an ethnographic study of Los Angeles's municipal climate planners. While cities are increasingly cast as climate leaders, celebrated for their innovation and proximity to communities, their climate plans often remain symbolic and aspirational. Drawing on two years of participant observation and interviews inside Los Angeles City Hall, this article develops a typology of nine categorical barriers that obstruct implementation, spanning institutional, political, bureaucratic, epistemic, scalar, economic, infrastructural, social, and legal domains. These barriers are dynamic and compounding forces that emerge through specific institutional, political, and material configurations, often shifting roles across contexts and over time. The article illustrates how bureaucrats and planners navigate fragmented systems, shifting mandates, and regulatory constraints through informal coordination, relational labor, and *ad hoc* improvisation. In addition, the article identifies enabling conditions that temporarily stabilize action under constraint, often arising from fragile alignments of actors, mandates, resources, and informal practices. These enabling mechanisms emerge contingently and unevenly, often through fragile alignments of actors, tools, and opportunity. By shifting attention from plan design to everyday governance practice and implementation, this article contributes to critical debates on the limits of urban climate leadership, the politics of municipal capacity, and the infrastructural labor of implementation. The case of Los Angeles illustrates how implementation gaps are expressions of deeper structural tensions between climate ambition and municipal constraint.

## KEYWORDS

implementation barriers, Los Angeles, policy implementation, polycentric governance, urban climate governance

## 1 Background: cities as climate leaders

Over the past decade, municipal governments and their leaders have often been cast as the vanguards of global climate action. Mayors and municipal leaders, bolstered by transnational municipal networks and their policy advocates, have embraced a narrative that situates municipalities as the central locus for confronting the climate and broader ecological crises. This framing draws legitimacy from widely deployed data on urbanization: cities are where a majority of people currently and in the next century

will inhabit (UN Habitat, 2024), where the majority of emissions are generated (Wei et al., 2021), and where some of the most severe climate impacts are often experienced (Kumar, 2021). In contrast to the long stagnating inertia of climate multilateralism or the national politics underpinning them, the city is positioned as nimble, grounded, and the most proximate government to the people, a democratic counterpoint to the gridlocked statecraft that, 30 years on, has failed to achieve the promised pathways for more sustainable futures.

Academic and policy literatures have largely reinforced this view, arguing that cities are overcoming scalar rigidities through experimentation, networked partnerships, and other novel modes of governance (Acuto and Rayner, 2016; Gordon and Johnson, 2018). Indeed, urban governance is increasingly presented as the most hopeful arena for climate problem-solving by municipal leaders, policy advocates, and transnational governance networks, who frame cities as sites of pragmatic action capable of bypassing national gridlock and delivering measurable climate outcomes. However, as Van Der Heijden (2019) notes, it is easy to be drawn in by this heroic framing of the archetypal heroes (selfless mayors) overcoming the wicked problems of the city (the climate crisis). Who would not welcome their city stepping into the vacuum left by flailing states?

And yet, the gap between rhetoric and reality is increasingly difficult to ignore, challenging the depth and durability of municipal climate action. In most cities around the world, climate plans remain either non-existent or aspirational at best (Van Der Heijden, 2019). Even among the ostensible frontrunners, progress tends to be symbolic, performative, and uneven. The very governance architectures celebrated for their dynamic polycentric flexibility are often marked by entrenched fragmentation, or the durable institutional silos, disjointed time horizons, symbolic planning, and bureaucratic reproduction of inaction that have served as key barriers to substantive and effective climate action, especially as they become firmly established and difficult to change (Boehnke et al., 2023; Fünfgeld et al., 2023; Hamin et al., 2014; Kristianssen and Granberg, 2021; Measham et al., 2011; Moser and Ekstrom, 2010; Rogers et al., 2023; Jensen et al., 2016; Lindbergh et al., 2022; De Ruschi et al., 2024). In many cases, these are not pathologies of urban climate governance but their very foundational characteristics. Rather than treating this gap as a failure of policy design alone, this article approaches municipal climate governance as an implementation process shaped by interacting institutional arrangements, political incentives, administrative routines, and situated forms of agency.

Despite the growing literature on urban climate governance, much existing work continues to rely on policy documents or elite interviews that privilege formal plans and stated intentions over the everyday realities of implementation. As a result, we still know comparatively little about how municipal climate action unfolds in practice: through informal routines, workarounds, interpersonal dynamics, and the procedural frictions that shape what can and cannot be done inside city bureaucracies. This article addresses the gap by foregrounding the lived, relational, and uneven nature of municipal climate implementation, drawing attention to how governance barriers are experienced, reproduced, and occasionally contested in everyday administrative work, rather than treated as static constraints or discrete variables.

To probe these barriers, this article draws on two years of embedded ethnographic fieldwork conducted within Los Angeles's municipal government and among climate policy stakeholders. Los Angeles, considered by many to be a climate policy "pioneer," is the largest city of the State of California, itself often presented as a pioneering government leading on climate action. Since its initial climate planning efforts in the early 1990s, the municipal government of Los Angeles, not to be confused with the County of Los Angeles, has adopted a series of climate strategies under successive mayoral administrations to ostensibly reduce emissions, create lower-carbon energy systems, reduce pollution, and encourage sustainable development. These efforts culminated most recently in the 2019 Green New Deal, crafted by the Mayor's Office of Sustainability as a comprehensive "greenprint" for the city's climate goals.<sup>1</sup> Yet, half a decade into its implementation, and amidst a new mayoral administration, questions remain: What are the dominant barriers to implementation in Los Angeles? How are these barriers reproduced or challenged across governance scales? What enabling conditions can be identified?

The article begins with a brief overview of the ethnographic methodology shaping the analysis of this case. I then outline the specific characteristics of climate governance in Los Angeles, a city at once unique in its city council-mayor relationship and position within the state's governing bodies, but nevertheless reminiscent of other American and global cities in the barriers, strategies, and solutions proposed to address its climate governance crisis. Next, I introduce a typology of municipal climate governance barriers, focusing on institutional, epistemic, bureaucratic, political, and spatial barriers. Finally, I identify a set of enabling conditions and mechanisms that have, in some instances, empowered climate action. I conclude by discussing limitations of this case and broader implications for the burgeoning literature on barriers and enablers to effective climate governance in cities.

## 2 Methodology

This article is based on a two-year case study built on sustained ethnographic encounters with Los Angeles's municipal climate actors. From September 2021 to August 2023, I collected primary and secondary data through participant observation of closed-door city activities and semi-structured interviews with government actors, green policy elites, and climate activists, all of whom provided verbal informed consent. Ethnographic subjects and interviewees were selected through a combination of purposive and snowball sampling, beginning with individuals occupying formal climate-related roles within the Mayor's Office and key municipal departments, and expanding outward through

<sup>1</sup> The Los Angeles Green New Deal is not a policy package but rather a sustainability plan crafted by the former Mayor's Office of Sustainability in line with C40's Climate Action Planning Framework and the Mayor's Executive Directive No. 7, which mandated major sustainability plans every four years and yearly updates. The 2019 Green New Deal represents the Garcetti Administration's second major sustainability plan, enumerating 144 climate and sustainability targets and milestones for the city's departments.

professional networks, interdepartmental collaborations, and recommendations from interlocutors.

Attuned to what Knox (2020) models as “thinking like a climate,” I bring into focus the situated practices of climate planners in their bureaucratic settings. In Los Angeles, as in other municipal governments located in climate policy epicenters where support for climate policy among the general public and policy innovation are strong, the routine challenges faced by civil servants and professionals working on climate initiatives often present more substantial obstacles to emissions reductions than overt denialism or skepticism about climate change (Knox, 2020, p. 14). This study similarly focuses on the difficulties of managing material transformations within bureaucratic, institutional, and social frameworks (Knox, 2020, p. 14).

Over the course of hundreds of hours of fieldwork, I observed the largely private routines, meetings, and informal encounters that shape municipal climate governance. This included scrutinizing the everyday tasks of municipal technocrats both within and beyond their formal organizational settings—their “coffee talk,” email writing, partnership outreach, internal presentations, and relational negotiations with individuals whose work ostensibly contributes to the project of climate action, as defined and bounded by these actors. Saturation was assessed pragmatically, as recurrent patterns of barriers, coordination failures, and workarounds appeared consistently across departments, roles, and moments of political transition.

My ethnographic sample centers “green policy elites” (Cohen, 2017), predominantly from a professional class. To gain access, I granted individuals—including higher-ranking political officials—anonymity; therefore, all interlocutors are reported anonymously. These climate planners have largely attended a cluster of elite universities on the west and east coasts, predominantly live in wealthier neighborhoods characterized by Davis (2018) by their “fortress architecture,” and largely drive higher-end electric vehicle models as their predominant mode of transportation to and from work. I also followed these actors as they work and travel with transnational municipal networks for climate action, including C40 (Cohen, 2017, p. 147; Bulkeley and Kern, 2006).

The social positioning of these subjects stands in sharp contrast to much of Los Angeles’s population, particularly low-income and racialized communities who experience climate impacts most acutely through heat exposure, air pollution, housing precarity, and infrastructural neglect, yet remain structurally underrepresented in the institutions and professions shaping urban climate policy. My own positionality—as a researcher embedded within municipal governance spaces through a formal fellowship role—both enabled access to otherwise closed institutional settings and shaped the relationships through which data were generated, requiring ongoing reflexivity regarding proximity, power, and the partiality of elite-centered perspectives.

Fieldnotes and interview materials were coded inductively in ATLAS.ti using iterative thematic analysis, moving between empirical observations and existing literatures on urban climate governance, policy implementation, and institutional capacity. Coding focused on identifying recurring forms of obstruction, coordination, and improvisation, as well as moments where

barriers overlapped or were temporarily mitigated through informal practices.

Beyond the immediate field of municipal government, I also conducted 24 months of participant observation with local climate social movements at organizing meetings, protests, and trainings in Los Angeles. While not the core focus of this article, this ethnographic engagement provided insight into how youth and frontline communities experience and contest climate governance, often reframing barriers as manifestations of deeper political, racial, and socio-spatial inequalities. It allowed for an understanding of the informal practices, resistance, and bottom-up initiatives that complicate official narratives of local climate leadership, offering a counter-perspective to the often-flattened typological models of climate governance. This direct observation captured the granular procedural and emotional dimensions of climate action from the ground up, complementing the formal analyses of municipal plans and policy actor interviews by revealing the contested nature of authority and the lived realities of climate implementation.

This article engages further with collected evidence from secondary sources, including policy and planning documents provided by interviewees or accessed in public or private municipal databases. Interviews and observations—cross-checked to verify findings—provide insights into the social construction and operation of local climate politics in Los Angeles.

Doing ethnography in the Anthropocene also demands that we pay attention to the entanglements of human and non-human forces, including technical and material infrastructures like data, models, graphs, and digital systems that climate planners routinely engage with (Knox, 2020). Understanding how municipal officers respond to climate change demands an ethnographic practice that goes beyond conventional reflexivity rooted in cultural relativism. Rather than centering narrative and belief alone, the task of my ethnography attends to how social life emerges through its co-constitution with planetary processes, material artifacts, and technological devices. My ethnographic practice ultimately observes the situated encounters between people and the materialized forms of climate knowledge that mediate how climate is made intelligible and actionable, including objects, measurements, and representations.

Knox (2020) further proposes the method of “thinking like a climate” as an orientation that resists predefining what counts as climate change a priori. Instead, climate change takes shape in specific settings through data, visuals, models, and instruments. The ethnographer must then explore how these forms circulate and exert influence. This approach does not presume that climate change is always about sustainability, green politics, or ecological discourse; instead, these associations should be treated as ethnographic findings themselves rather than starting assumptions. Climate change is not inherently a fixed hyperobject but a contingent and relational formation that becomes visible through its effects and affiliations with other processes and materials. What I identify here in this article as climate action emerges from the field, manifesting through proxy objects and fluctuating relationships. This ethnographic work is thereby attuned to the layered and unstable ways that climate change is made present in institutional and bureaucratic life.

### 3 Barriers to municipal climate action

In adopting the above orientation, this article endeavors to uncover not just what constitutes a barrier to municipal climate action, but how these impediments are socially constructed, operated, and emerge from the entangled human and non-human forces that define climate change and actions to redress or adapt. This view complements and extends the extensive scholarly work. The literature on barriers to municipal climate action has expanded considerably over the past two decades, mapping an array of obstacles that hinder the transition from agenda-setting to planning to implementation. Much of this work emerged from a foundational concern with the clear gap between ambitions and substantive outcomes.

Barriers are understood here as context-specific impediments that obstruct particular actors from pursuing particular forms of action (Eisenack et al., 2014; Moser and Ekstrom, 2010). This formulation highlights the relational and contingent nature of barriers: what hinders action in one municipality may not in another, and barriers are not experienced or valued uniformly across actors or institutions. They may impede action by raising costs, delaying implementation, or reducing the overall effectiveness of a climate plan, for example through fragmented departmental mandates, unstable funding streams, or misaligned regulatory timelines.

Importantly, barriers and enablers are not treated as opposing or fixed categories. Following insights from policy implementation theory (Hudson et al., 2019), the same institutional arrangements, actors, or practices may function as barriers in some moments and enabling conditions in others, depending on political alignment, resourcing, and timing. The typology developed in this article therefore serves as an analytic heuristic rather than a causal model, designed to illuminate how implementation is shaped through interaction, contingency, and institutional friction. Barriers are dynamic, shaped by social and institutional configurations, and often entangled with one another. They can emerge from actors themselves, the systems they operate in, or the socio-material environments they seek to govern, and they may be rooted in longer histories of structural inequality, dispossession, or policy failure. Barriers can in principle be reduced or overcome through political will, creative institutional arrangements, shifts in resource allocation, or new governance practices.

A range of typologies have since categorized climate governance barriers under broad categories, from institutional, economic, political, social, and informational, among others (Moser and Ekstrom, 2010; Biesbroek et al., 2013). Institutional barriers dominate many accounts, focusing on the challenges of fragmented multilevel governance, limited mandates, siloed bureaucracies, and path dependencies within municipal administration (Araos et al., 2016; Boehnke et al., 2023; Burch, 2010; Hamin et al., 2014; Kristianssen and Granberg, 2021; Lindbergh et al., 2022; Measham et al., 2011; Rogers et al., 2023; Jensen et al., 2016). Political barriers are also frequently invoked, identifying the lack of sustained leadership, shifting priorities across election cycles, and the political risks of ambitious climate action (Anguelovski and Carmin, 2011; Uittenbroek,

2016; Fünfgeld et al., 2023; Hamin et al., 2014; Kristianssen and Granberg, 2021; Measham et al., 2011; Rogers et al., 2023; Jensen et al., 2016). These barriers are faced both in municipalities that are developing climate action plans for the first time, as well as in “pioneer cities” facing difficulties in mainstreaming climate policies and upscaling pilot projects.

Economic and financial barriers also recur across cases, highlighting how a lack of funding mechanisms, financial autonomy, or budgetary flexibility can constrain municipal abilities (Fünfgeld et al., 2023; Hamin et al., 2014; Measham et al., 2011; Rogers et al., 2023; Jensen et al., 2016; Lindbergh et al., 2022; Bick, 2025). Whether small or large, having formal climate strategies or not, municipalities often rely on external grants and other levels of government for resources (Anguelovski et al., 2014). Limited staff capacity and competing priorities within departments, such as municipal climate action plans coming into tension with master plans, further compound these barriers. Municipal employees are also often asked to mainstream climate action without sufficient training or resources (Runhaar et al., 2018; Fünfgeld et al., 2023; Measham et al., 2011; Rogers et al., 2023; Kristianssen and Granberg, 2021; Jensen et al., 2016). Knowledge and informational barriers thereby persist, including uncertainties around climate risks, difficulties in downscaling data, or a lack of internal expertise on strategies (Eisenack et al., 2014; Fünfgeld et al., 2023; Hamin et al., 2014; Measham et al., 2011; Rogers et al., 2023; Jensen et al., 2016). Some studies highlight how local officials rely on *ad hoc* and external consultants, as well as self-selecting community volunteers, to fill such knowledge gaps. However, this practice raises questions around continuity, legitimacy, and the embeddedness of knowledge within municipal systems.

The established literature often distinguishes between generic vs. context-specific or place-based constraints, and between barriers internal or external to municipal government (Biesbroek et al., 2013). There is also recognition that barriers can interact with one another in recursive and mutually reinforcing ways. For instance, limited institutional capacity may reduce a municipal government’s ability to secure external funding, which can in turn hamper implementation and weaken political will. Despite this growing complexity, much of the literature continues to treat barriers as obstacles to be removed through better planning, improved coordination, or capacity building. However, this technocratic framing can sideline more structural critiques, including the roles of neoliberal governance reforms, austerity, and broader political economies of urban development (Bulkeley et al., 2014; Castán Broto and Westman, 2020).

Alongside the literature on barriers to municipal or urban climate governance is a more recent body of literature rooted in interstate climate policy focusing on the implementation or ambition gap. This literature, and its deployment in policy settings such as the UNEP’s annual emissions gap report, identifies the failure to meet inter-state climate targets into multiple forms of slippage: between the goals set by leaders and the policies they adopt, and between adopted policies and their actual outcomes. While this work primarily examines inter-state and national level mitigation commitments, its core insights are relevant to the municipal and urban scale, even though they remain somewhat detached from municipal climate research.

The implementation gap, as often deployed in this literature, generally comprises two components: a policy adoption gap (the distance between pledged targets and policies on the books) and a policy outcome gap (the distance between adopted policies and the real-world effects they produce) (Fransen et al., 2023; De Ruschi et al., 2024). Both components speak directly to municipal challenges, particularly when municipalities publicize ambitious goals or climate plans that are not matched by enforceable, well-resourced, or institutionally supported action.

This work on the implementation gap draws attention to how political incentives, institutional capacity, and interest group dynamics shape whether climate policies are adopted and whether they succeed in practice. The literature points to strategic pledging, public pressure, and domestic institutional features such as bureaucratic autonomy and state capacity as key factors influencing policy follow-through (Fransen et al., 2023). These dynamics are not exclusive to national governments. Municipal governments, too, often set aspirational climate targets to build legitimacy or attract investment and votes while lacking the political or bureaucratic means to realize them. The distinction between adoption and outcomes is particularly resonant at the municipal level, where mayoral climate plans often exist without corresponding legal mandates, enforcement mechanisms, or budgetary allocations. This framework helps clarify why so many municipal climate action plans remain partially implemented or stall after initial momentum.

This literature often resists the technocratic assumption that policy design alone determines outcomes. Instead, it highlights the role of feedback loops, political backlash, and the coevolution of policy and its constituencies. For example, even well-crafted municipal policies may be undermined by developer opposition, inter-agency conflict, or shifting political leadership, echoing national-level analysis of interest group politics and institutional fragmentation (Fransen et al., 2023).

Bridging the implementation gap literature into municipal climate barrier scholarship encourages a shift in emphasis from describing barriers in static typologies to analyzing dynamic processes of political and institutional (mis)alignment. It also encourages researchers to pay attention to the divergence between municipal commitments and their materialization, and to the structural forces that shape such divergences. Rather than focusing exclusively on the presence or absence of plans, this perspective asks whether policies are being designed to survive contestation, adapt to new conditions, and produce outcomes both measurable and impactful to residents on the ground.

These perspectives remain underrepresented in the barriers literature. While some work has interrogated how power relations shape what is seen as a barrier and whose interests are served or excluded in local climate processes (Culhane et al., 2021; Basseches et al., 2022; Diezmartínez and Short Gianotti, 2022; Bick, 2025), the uneven geography of climate governance between cities with different capacities, or even between elite and marginalized urban communities within a given city, is often flattened in typological models. Similarly, there is limited engagement with climate justice frameworks that might reframe barriers not simply as implementation inefficiencies but as manifestations of deeper political, racial, and socio-spatial inequalities (Anguelovski et al.,

2016; Hughes and Hoffmann, 2020; Fünfgeld et al., 2023; Rogers et al., 2023). Fewer studies examine how frontline communities experience or contest these barriers, or how resistance, conflict, or bottom-up initiatives complicate official narratives of local climate leadership. The result is a literature that often centers the sole perspective of municipal governments as rational actors facing technical or managerial challenges, rather than sites of contested authority operating within broader structural constraints.

Many empirical studies also continue to rely on interviews with policy actors or document analysis of formal plans, offering limited ethnographic or embedded insights into the informal practices, workarounds, and frictions that characterize everyday municipal climate governance. As a result, many accounts remain detached from the granular procedural and emotional dimensions of implementation work, including the role of burnout, interpersonal dynamics, or bureaucratic inertia. Addressing these gaps requires methodological shifts that can capture the lived, uneven, and relational nature of municipal climate implementation.

## 4 Municipal climate governance in Los Angeles

Before analyzing how these barriers manifest in practice in Los Angeles, it is essential to first understand the intricate and fragmented governance structure of the City of Los Angeles, as this structure profoundly influences how barriers are encountered, contested, and potentially overcome. Municipal climate governance in Los Angeles, like other cities across the world, is a patchwork of polycentric governing agents not simply confined to the municipal government. While the Los Angeles Mayor's Office, namely the Mayor's Office of Energy and Sustainability (formerly the Mayor's Office of Sustainability), has long orchestrated the mayor's climate initiatives, the network of governing agents is long and complex. As just one of 88 incorporated cities and approximately 140 unincorporated areas of Los Angeles County, many siting in neighboring proximity to the city's borders, the City of Los Angeles is the largest municipality in the area and often serves as a trendsetter for the greater metropolitan region, which expands to neighboring counties and cities.

The governance structure of the City of Los Angeles is shaped by its status as a charter city, a system designed to centralize executive authority while distributing legislative and administrative powers across multiple entities. The Mayor, as the Chief Executive Officer, holds limited power over city management, encompassing the authority to appoint and remove General Managers or department heads (subject to City Council confirmation), issue executive directives, and represent the city in intergovernmental affairs. The Mayor also oversees the preparation of the city's annual budget, which must be submitted to the Council and can be modified by it; however, the Mayor retains the power to veto individual line items, subject to override by a two-thirds Council majority.

The City Council, comprised of 15 members elected by district and representing nearly four million residents and millions more workers, commuters, and tourists, exercises legislative power, oversees city departments through committees, and can override

certain mayoral actions, but does not have direct administrative authority over departments, which are led by General Managers appointed by the Mayor, subject to the confirmation of Council, and removed by the Mayor, with the right to appeal through Council. City Council is key for passing legislation, especially that which requires significant funding beyond the Mayor's Office's relatively small budget. While the Mayor can veto actions of the City Council like ordinances, resolutions, and budget-related items, the veto can be overridden with two-thirds vote.

Meanwhile, the city governs three proprietary departments—Airports, Harbor, and Water and Power—through autonomous boards of commissioners, each acting as head of their respective department. These departments are granted significant independence, including control over their assets, funds, operations, and general management. Each board is empowered to appoint and evaluate its general manager, control departmental revenues via special funds, and exercise broad authority over franchises, permits, leases, and infrastructure development related to departmental purposes. While subject to certain checks—such as Council oversight for long-term leases and bond issuance and Mayor/Council confirmation of general manager appointments and removals—the proprietary departments operate with a high degree of operational and fiscal autonomy. This structure was designed to enable specialized, efficient management of essential infrastructure systems while maintaining public accountability through Charter-defined procedures and periodic reporting to the City Council. However, like much of the city's unique structure, the efficiency and accountability of these proprietary departments remain contested.

Further complicating the governance landscape is the fragmented relationship between the City and County, with overlapping responsibilities in areas such as public health, social services, and even climate planning, and additional interdependencies with the state and federal governments authorized by charter provisions that permit the consolidation or delegation of services across levels of government. This complex institutional system, while designed for flexibility and local control, frequently creates coordination challenges that constrain coherent and equitable responses to climate change.

Amidst this complex governance framework, the City of Los Angeles began its formal engagement with climate governance in 1995, when the City Council voted to join ICLEI (Local Governments for Sustainability). Subsequently, the Council approved the City's entrance into ICLEI's Cities for Climate Protection Campaign, committing to reduce fossil fuel use and develop a local greenhouse gas reduction plan. In 1999, LADWP customers were provided the options to directly purchase energy from more renewable resources, with a goal of reaching 10% of energy from renewables. In 2001, Council adopted its first Climate Action Plan aiming to reduce municipal emissions by 30% from 1990 levels by 2010, alongside other commitments including purchasing 10% green energy, retrofitting buildings, and using alternative fuel vehicles. In 2005, RENEW LA, a 20-year waste management strategy, shifted the city's waste disposal to a resource recovery goal. This effort was followed in 2005 by the LADWP Renewable Portfolio Standard and goal to increase the share of renewables to 20 percent by 2010 and 35 percent by 2030. This was followed by Council's motion to plant one million new trees, and

to participate in the California Climate Action Registry in 2006, enabling the city to establish emissions baselines and align with Kyoto Protocol methodologies.

In 2007, Mayor Villaraigosa's office released the Green LA Action Plan, which set a goal of reducing citywide GHG emissions 35% below 1990 levels by 2030. The plan quantified emissions and outlined sector-specific sustainability strategies. Executive Directive No. 7 soon after required city departments to develop sustainability policies. In 2008, the Mayor's Office then introduced ClimateLA, a departmental implementation strategy. After further greenhouse gas emissions reductions and building codes, the next Mayor, Eric Garcetti, issued Executive Directive No. 7 alongside the Sustainable City pLAN with more stringent greenhouse gas reductions, renewable energy goals for LADWP, a climate action plan, and the installation of Departmental Chief Sustainability Officers to better coordinate the city's fragmented departments under a singular plan. Only after Council passed a motion committing the city to a 80% reduction in emissions below 1990 levels by 2050 did these goals become more legally binding. 2008 was also an important year for buildings and transit, as the Council passed the Green Building Ordinance requiring LEED certification for larger new projects, and voters agreed to expand the transit system via a countywide sales tax. Finally, the 2019 Mayor's Office's Green New Deal and the 2020 LA100 report and 2023 LA100 Equity Strategies commissioned by LADWP furthered the city's climate commitments and orchestration. The Green New Deal, for instance, set further 50% GHG reductions by 2025, 100% renewable electricity by 2035, and net-zero buildings by 2050, alongside over one hundred broader sustainability commitments.

While the city's climate governance is often characterized by its proponents as heroic and pioneering, many initiatives have struggled to overcome a host of entrenched barriers, from institutional fragmentation, uneven implementation capacity, and enduring reliance on fossil-fuel systems. While emissions reductions have been recorded, it is hard to determine whether they reflect trends at the city, state, or utility level, or elide the broader mechanisms shifting emissions out of boundary altogether, rather than the result of coherent local governance. Ongoing legal battles over the status of oil drilling bans and budget struggles over climate initiatives like building decarbonization or even the City's Climate Emergency Mobilization Office, responsible for resilience and heat strategies, reveal the disjuncture between symbolic climate leadership and the slow structural transformations compounded by interjurisdictional complexity. Coordination gaps with county, regional, state, and federal authorities, funding gaps, and more exemplify the tensions of urban climate governance that persist despite policy innovations that have led to characterizations of Los Angeles as a pioneering climate city (Boehnke et al., 2023; Lindbergh et al., 2022; Fransen et al., 2023). The following section offers a typology of barriers to urban climate governance observed during participant observation within City Hall.

## 5 Typology of urban climate governance barriers

Based on inductive coding of field notes capturing climate governance practices within Los Angeles City Hall, I have organized

TABLE 1 Typology of urban climate governance barriers.

Category	Barriers	Examples	Endogenous vs. Exogenous
Institutional	Silos	Weak cross-sectoral coordination across city departments	Endogenous
	Short-termism	Political and budget cycles favoring short-term actions over long-term goals	Endogenous
	Lack of cross-sectoral mandates	Departments not structurally required to collaborate	Endogenous
	Turnover	Frequent leadership/staff changes eroding continuity and institutional memory	Endogenous
	Capacity gaps	Insufficient staffing, technical expertise, grant-writers, or leadership	Endogenous
	Policy incoherence	Overlapping or conflicting mandates within and across agencies	Endogenous
Political	Administrative transitions	Administrative changes, such as a new leader, that disrupt continuity and policy priorities	Hybrid
	Multilevel conflicts	Political tensions between city, state, and national agendas	Exogenous
	Lack of political will	Weak enforcement or symbolic climate commitments	Endogenous
	City council opposition	Legislative barriers to climate policy passage	Endogenous
Economic	Unstable/Insufficient funding	Inadequate or short-term financial support for climate programs	Endogenous/Exogenous
	Finance access	Difficulty obtaining federal or state grants	Hybrid
	Market dependencies	Urban economies reliant on carbon-intensive sectors	Exogenous
	Cost-shifting	Climate/energy transition costs passed on to low-income residents without protection	Hybrid
Scalar	Jurisdictional fragmentation	Overlapping mandates among municipal, regional, and state agencies	Exogenous
	Vertical misalignment	Lack of integration between city plans and state or federal policy/funding	Exogenous
	Coordination failures	Poor information sharing and alignment across governance scales	Hybrid
	Devolution issues	Increasing responsibility in the face of national resignation without adequate power or resources	Exogenous
Bureaucratic	Misaligned budgeting cycles	Annual budgets not fit for long-term climate timelines	Endogenous
	Slow regulatory procedures	Codes and permitting processes lag behind technological change	Endogenous
Epistemic	Data gaps	Incomplete or incompatible information on emissions, risks, or impacts	Hybrid
	Technocratic dominance	Overreliance on quantitative models, often excluding social context	Endogenous
	Marginalization of community knowledge	Exclusion of community and activist insights, traditional ecological knowledge	Hybrid
	Lack of reflexivity	Failure to reassess core assumptions, past policy outcomes, path-dependencies	Endogenous
Social/Cultural	Behavioral inertia	Difficulty shifting daily habits (driving, energy use)	Exogenous
	Public mistrust or over-trust	Low engagement due to institutional distrust or disillusionment, or too much trust/illusionment	Exogenous
	Equity in participation	Limited inclusion of marginalized communities in planning processes	Hybrid
	Perceived trade-offs	Fears over affordability, displacement, or job loss due to climate actions	Exogenous
Infrastructural/Technological	Legacy systems	Outdated systems not designed for climate adaptation or decarbonization	Hybrid
	Technological lock-in	Investments in carbon-intensive systems (e.g., natural gas) hard to reverse	Hybrid
	Regulatory lag	Building codes and standards unable to accommodate emerging technologies	Endogenous
Legal/Regulatory	Legal preemption	State or federal laws limiting or overturning local climate action	Hybrid
	Litigation threats	Fear of lawsuits deterring bold climate decisions	Hybrid
	Lack of legal standing for city action	Lack of jurisdiction over key emissions sectors or land use controls	Hybrid

the key governance barriers into a typology of nine categories found in [Table 1](#): (1) institutional barriers are rooted in organizational structure, mandates, and internal operations; (2) political barriers stem from political dynamics, power relations, and shifting priorities; (3) economic barriers are rooted in structural and resourcing challenges that limit funding and equity; (4) scalar barriers relate to coordination failures across jurisdictional levels; (5) bureaucratic barriers deal with administrative constraints that delay or obstruct implementation; (6) epistemic barriers emerge from the operationalization of different information, expertise, and the legitimacy of different knowledge systems; (7) social and cultural barriers stem from normative, behavioral, and relational constraints to public engagement or equity; (8) infrastructural and technological barriers are rooted in physical and systemic limitations embedded in the built environment and technological systems; and finally, (9) legal and regulatory barriers stem from the risks of overstepping jurisdictional authority.<sup>2</sup>

Within each category, I identify particular barriers to the implementation of climate policies and goals that planners face on a daily basis. I try to make no normative claims about the efficacy or content of the policies or practices themselves here. That would be a rather different article, but one that warrants equally critical attention. Instead, this article focuses more empirically on how these impediments arise and are experienced in the daily work of municipal climate governance, particularly as they reflect and perpetuate the deeper political, racial, and socio-spatial inequalities that shape whose interests are served or excluded in local climate processes, whether in the informal stages of policy conception, the deliberation period prior to adopting motions, or the practices of execution and enforcement once entered into law or practice.

Together, these practices constitute municipal climate planning, distinct from the broader field of urban climate planning, which unfolds across a wider array of actors and networks including businesses, NGOs, and other entities operating beyond the formal apparatus of the state. Although my position within City Hall, indeed the institutional nexus of urban governance, afforded me access to this wider network, this article primarily foregrounds the municipality itself as the principal site of orchestration, coordination, and contestation in climate planning. Nonetheless, this typology remains attentive to the ways municipal planning intersects with, responds to, and is shaped by this broader constellation of actors, including social movements.

The barriers to implementation faced by municipal climate planners also exist along a continuum between two ideal types: endogenous barriers (internal to the municipal apparatus) and exogenous barriers (external to municipal government). As heuristic constructs, ideal types serve to clarify complex realities by accentuating distinguishing features; in this case, helping to identify which barriers may be addressed in-house and which require coordination with actors beyond the municipality. While this typology maintains broad analytic categories, it also emphasizes that many barriers emerge from

hybrid dynamics that blur the boundary between internal and external forces.

Rather than detailing each barrier individually, which would exceed the scope of this article, the following section presents cross-cutting cases, grouped into condensed categories, to illustrate the layered complexities of everyday climate governance. While the typology analytically distinguishes among categories of governance barriers, the empirical analysis that follows demonstrates how these barriers frequently overlap and compound in practice, particularly across institutional, political, bureaucratic, and scalar domains.

## 5.1 Institutional barriers

These barriers emerge from organizational structure, conflicting mandates, internal operations, and gaps in institutional capacity. Among the most significant barriers faced by municipal climate planners is siloed governance, which renders coordination among the many departments responsible for climate action inordinately complex ([Boehnke et al., 2023](#); [Measham et al., 2011](#); [Kristianssen and Granberg, 2021](#); [Rogers et al., 2023](#)). These institutional challenges are further complicated by infrastructural and technological constraints, such as legacy systems and regulatory lag, and by legal and regulatory limitations such as preemption and lack of jurisdiction.

Prior to 2015, few structural mechanisms in Los Angeles enabled municipal climate planners to easily collaborate across departments and levels of government. While previous administrations maintained deputy mayors for energy and environment or chief sustainability officers, institutional structures formalized into the City Charter remain absent. To address this fragmentation and the lack of structural mandates to collaborate across sectors, Mayor Eric Garcetti issued Executive Directive No. 7 in 2015, instructing 22 city departments and bureaus, including the Departments of Water and Power, Airports, Recreation and Parks, Sanitation, Transportation, and others to designate Department/Bureau Chief Sustainability Officers (known colloquially as DCSOs). These officers were directed to implement the Mayor's Office's Sustainable City pLAN, including its 2019 Green New Deal. These officers were directed to collaborate closely with the Mayor's Chief Sustainability Officer on policy decisions and major programs to align with the Mayor's non-binding goals.

Since 2015, these DCSOs, their relevant staff members, and the Mayor's Office of Sustainability have met once a month to share updates, host in-depth presentations on specific departmental initiatives, and brainstorm areas of collaboration. Initially meeting in person, the monthly meetings moved to Zoom for two years during the COVID-19 pandemic. Many participants, including the Mayor's Chief Sustainability Officer and DCSOs, often offered praise to the Mayor's Office for orchestrating monthly meetings and ensuring a space for DCSOs to meet one another, learn about city-wide and department-specific initiatives, and stay up-to-date with many personnel changes. The hour long meetings were structured by the Office of Sustainability team each month to focus on departmental wins, Mayor's Office updates, and a 30 minute presentation and Q+A session with an expert from a department.

<sup>2</sup> This typology draws on and extends existing typologies from [Moser and Ekstrom \(2010\)](#), [Biesbroek et al. \(2013\)](#), [Rogers et al. \(2023\)](#), [Boehnke et al. \(2023\)](#), [Measham et al. \(2011\)](#), [Fünfgeld et al. \(2023\)](#), and [Kristianssen and Granberg \(2021\)](#).

For instance, sanitation department team members presented their work on creating the city's municipal and community greenhouse gas inventories. Another presentation on state and federal sustainability funding opportunities by the Mayor's Chief of Intergovernmental Affairs and Director of Governmental Affairs based in Washington, D.C. drew numerous questions from DCSOs. Their inquiries focused on whether there are specific funding opportunities for environmental justice communities, capacity building, operations and maintenance costs, and compensation for volunteer community members. Further questions addressed the role of the Mayor's Office, departments, and the City Administrative Office in coordinating grant applications, proactively planning for future appropriations and budget cycles to align with federal funding opportunities, long term staffing additions, value in building cross-city and inter-agency coalitions to advocate collectivity, and tracking and coordinating with external agencies. Many questions were met with indeterminate answers since the Intergovernmental Affairs team deals not just with sustainability or climate issues but a broad spectrum of city-relevant affairs.

The current Mayor's Office of Energy and Sustainability has created an additional venue to address fragmentation—a Climate Cabinet which hosts monthly meetings of the municipal government's climate leaders. These meetings, like the DCSO meetings, remain private for city-staff only. City staff participants have shared positive sympathies about the Climate Cabinet similar to DCSO meetings. The creation of these meetings can be understood as an institutional attempt to address long-standing coordination failures and departmental silos within municipal climate governance. However, its structure and operation suggest that it functions primarily as a venue for information-sharing rather than as a body with agenda-setting authority or enforcement capacity. As such, the Climate Cabinet exemplifies a familiar pattern of symbolic coordination in the absence of formal cross-sectoral mandates, budgetary control, or legal authority, serving as an institutional response that attempts to mitigate fragmentation while leaving underlying governance barriers intact.

This limitation became particularly visible during the January 2025 fires. Despite the scale and urgency of the event, the Climate Cabinet was neither publicly invoked nor visibly positioned as a coordinating authority, reinforcing perceptions of fragmented crisis response and limited political leadership. The subsequent establishment of the [Blue Ribbon Commission on Climate Action and Fire-Safe Recovery \(2025\)](#) by a Los Angeles County Supervisor and university partners can thus be interpreted as an exogenous intervention prompted by the absence of a clearly empowered municipal coordinating body. This body, stepping in amid perceived city disorganization, issued 60 public recommendations to guide climate-ready wildfire recovery, filling a governance vacuum as the municipal apparatus appeared unable to address the crisis visibly or coherently.

These internal and external efforts, while symbolically valuable, only provide once-a-month structured opportunities for staff, or a limited duration report, to exchange updates and ideas. It then falls upon the will of staff and their climate networks to continue collaborations beyond these meetings. Numerous staff interviewed described some of the challenges of maintaining connections that fall beyond their immediate job scope.

For example, in order to keep track of the Green New Deal Sustainability pLAn, which contains over 140 of targets and milestones, the Mayor's Office of Sustainability created a tracker in Google Sheets designed to monitor progress across municipal departments for each quarterly reporting period. Each initiative was assigned a unique code that corresponds to its target and milestone number, with these identifiers pre-populated alongside the target year, lead department, and any additional departments involved in implementation. For milestones with more than one designated lead department, staff were expected to coordinate to determine which department would submit the relevant information. If a department was not responsible for reporting on a given milestone, it was still expected to confirm that the appropriate reporting department completed the entry.

Assigned staff were required to report on several fields. These included identifying the reporting department and assessing the overall progress status of the initiative using a standardized dropdown menu: On Track, Falling Behind, Needs Attention, or Don't Know. When selecting either Falling Behind or Needs Attention, the reporting department had to provide a written explanation of the barriers or challenges that are delaying or obstructing implementation. The tracker also required a funding progress update, selected from a dropdown menu indicating whether funds have been identified, received, spent, or not yet secured. Staff had to estimate the implementation status as a percentage complete, based on available information, and describe any notable accomplishments that have occurred during the reporting period. If measurable outcomes were being tracked, such as infrastructure installed, people trained, or area covered, these data should have been reported with the relevant units, sources, and timeframes. Finally, each reporting entry had to include the name and contact information of the staff member responsible for completing the report to allow for follow-up or clarification.

However, the capacity burden of quarterly reporting and coordination proved a difficult barrier to both the coordinating Office of Sustainability as well as respective municipal staff assigned to specific Green New Deal initiatives. Many of the data points in the tracker remained empty as each quarter reporting period passed, and measurements remained vague as the City Controller similarly argued in his report "This is Not Fine: Hottest Summer on Record Calls for a Reboot of LA's Climate Plan" (Mejia, 2023). As staff constantly turned over, the responsibility to complete this reporting was also passed along, without adequate training, as described by team members.

Nevertheless, some staff took it upon themselves to respond to such institutional failures. To better organize state and federal grant opportunities related to sustainability, two staff members from the Mayor's Office of Sustainability decided, of their own accord, to begin collating a living spreadsheet tracker of funding opportunities. The tracker included separate tabs for state, federal, and private funding opportunities. Each week, during the Sustainability Team meeting, new funding opportunities would be reviewed and team members would decide whether to reach out to particular departments and individuals to encourage applications to the programs. This strategy resulted in numerous collaborations and submitted applications. However, within the first year of the program's creation, administrative restructuring and staff turnover

disrupted the continuity of funding coordination, contributing to a short-lived period of sustained cross-unit work.

Short-termism is another recurring institutional barrier. Political and budgetary timelines often truncate the planning horizon. As one senior climate advisor remarked, “Should we think ahead? Well then it becomes outside of the Mayor’s term.” Councilmembers, Mayors, and political-appointed staff faced their own electoral imperatives, including 4-year terms, electoral politics, term limits, fundraising demands, and pressing constituent concerns such as housing, immigration, and policing (Fünfgeld et al., 2023; Measham et al., 2011; Kristianssen and Granberg, 2021). In practice, many officials in Los Angeles have treated these concerns as politically and temporally distinct from climate action, viewing climate policy as abstract, long-term, or electorally risky, while housing, immigration, and policing are framed as immediate, visible issues tied to voter responsiveness, crisis management, and short electoral cycles. These more visible, immediate issues often eclipse long-horizon climate initiatives, especially when the latter do not offer short-term political returns. The result is a policymaking environment in which even mayoral priorities are vulnerable to legislative inertia.

However, short-termism is not zero-sum. Certain actions have sought to institutionalize long-term climate planning into municipal code, governance structures, and budgets. The Climate Emergency Mobilization Office, for instance, championed by Mayor Garcetti’s Office, was ultimately passed and instituted by City Council to ensure that climate planning will outlive singular mayoral administrations. However, in the 2025 budget cycle, amidst a large deficit, the Mayor’s Office’s first budget proposal eliminated the Office’s funding. City Council and community members, however, defended the Office and prevented the cuts from passing by moving it to another department.

Another example is the LA100 study commissioned for LADWP to accelerate the department’s decarbonization efforts. This study and its concomitant decarbonization plan is set to outlast numerous mayoral administrations. This is in no small part due to the continuation of LADWP’s former Chief Sustainability Officer Nancy Sutley as now Deputy Mayor of Energy and Sustainability. Major infrastructure projects announced under one Mayoral administration, such as the Hyperion Wastewater Treatment Plant, must be completed far beyond their administration. In the case of wastewater reuse, the reuse would not be operable until between 2035 and newer estimates of 2056. Mayor Garcetti’s-appointed LADWP Board of Commissioners originally commissioned the Pure Water Los Angeles Master Plan in 2021, which was only released in 2024 after his administration.

These examples show that short-termism is not inevitable, but resisting it requires sustained political will and leadership continuity, both of which remain fragile. This fragility is particularly acute given institutional capacity and insufficient staffing, technical expertise, and leadership, often leaving funding unused because of a lack of staff to implement. For years, the City has held a high vacancy rate, between hundreds to thousands of vacant positions across departments. As budgets fluctuate between surplus and crisis deficits, even those employed face layoffs, including the 2025 crisis during which 600–1,600 employees were being considered for layoffs to balance the \$1 billion deficit. The

Mayor’s Office of Energy and Sustainability, for instance, has around a dozen staff members at any given point, most tasked with extensive job descriptions that employees generally agree could use more positions to spread the workload.

Exemplifying this barrier in a meeting between a major legacy Big Green environmental organization and the Mayor’s Office, one of the NGO’s staff, who works on oil and gas issues in Southern California, explained how “our governments are not super equipped to handle the climate crisis, to engage in these things quickly. We’ve passed motions quickly but the implementation, making sure departments don’t just pass the buck to others because there isn’t a clear department to solve this—the bureaucracy of this, managing it, making sure we do what we set out to do, making sure our staff is empowered.” Both parties acknowledged that while motions can be passed quickly, implementation often falters due to bureaucratic inertia and unclear departmental ownership.

Compounding the issue is the loss of institutional memory due to frequent staff turnover. Knowledge critical to climate governance—relational, procedural, political, technical—is often concentrated in a handful of senior staff. When municipal government employees leave, especially those involved in long-term, complex policy projects in climate planning, critical forms of institutional memory are lost (as also discussed in the literature: Kristianssen and Granberg, 2021; Fünfgeld et al., 2023). Each week, during the Mayor’s Cabinet meetings and the Mayor’s Office of Sustainability team meetings, as well as monthly DCSO meetings, personnel changes were shared with the team to a chorus of “Oh I’ll miss her” to “Who is that again?”

Turnover in the municipal government was frequent and impactful, eroding continuity and institutional memory. This memory includes relational knowledge (personal relationships with other departments, external agencies, and community partners, trust built over time to facilitate collaboration and community engagement), process memory (understanding bureaucratic bottlenecks and workarounds, internal tensions, unwritten rules), policy context and history (past failures and successes with measures tried, grants secured or lost), political and strategic insight (effective language framing, insight into political dynamics, timing of announcements, etc.), and last but not least, technical and tacit expertise (familiarity with software systems, planning tools datasets, regulatory interpretation). As the organizational literature emphasizes, turnover is not merely the loss of individual personnel but a fundamentally relational process that dissolves networks of trust, informal coordination, and social embeddedness through which work is actually accomplished (Jo and Ellingson, 2019).

These losses were often visible in cases where staff had to rebuild community relationships, given longstanding feelings of mistrust, cooptation, and marginalization among many community-based organizations. The most senior team members (of which there were few) retained the most institutional knowledge—who to turn to for particular questions, where to direct funding opportunities, etc. Meanwhile, newer staff faced extensive learning curves that were often cut off entirely by mayoral transitions. This turnover often stalled momentum, severed lines of trust, and fragmented policy continuity,

especially with work that requires long time horizons, cross-departmental cooperation, and social buy-in. When these individuals leave, collaborative relationships must be rebuilt, bureaucratic workarounds rediscovered, and technical expertise reacquired. This disrupts continuity and stalls momentum, particularly in long-horizon planning domains like climate action.

## 5.2 Infrastructural, legal, and regulatory barriers

Policy incoherence further compounds institutional dysfunction. One of the most impactful instantiations of climate policy incoherence is the case of oil drilling bans in Los Angeles, which span the policy and regulatory apparatus of municipal, county, and state authorities. This case also highlights legal and regulatory barriers including litigation threats, legal preemption, and the limits of local authority in relation to state and federal governance.

The city's oil drilling ordinance 187709 ([Los Angeles City Council, 2022](#)) was the landmark legacy of Mayor Garcetti's climate efforts, signed into law unanimously by City Council and then the Mayor in December 2022, just days before his mayoral tenure came to a close, "to prohibit new oil and gas extraction and make existing extraction activities a non-conforming use in all zones," requiring the discontinuation of the city's 26 existing oil and gas fields and drilling operations after 20 years.

The same year as this municipal ordinance, California state lawmakers banned new oil wells within 3,200 feet of homes, schools, and other populated areas. In January 2023, the Los Angeles County Board of Supervisors also unanimously passed the Oil Well Ordinance to ban new oil wells in the country, which includes the City of Los Angeles, and phase out drilling over the next 20 years.

However, oil and gas companies immediately filed suit against the government, namely the city. Warren Resources, an oil and gas operator of a 10-acre extraction site in Wilmington, argued that the city failed to conduct adequate environmental review of the ordinance's impacts, adding further that the ordinance constitutes a violation of the California Environmental Quality Act, the city's General Plan, and state and federal constitutions. The California Superior Court's ruling on September 6, 2024 declaring that state law preempts the City of Los Angeles's ban on new oil drilling decided that only the state agency CalGEM maintains the authority to regulate "methods and practices" of oil drilling, while acknowledging that cities have the right to regulate where oil drilling occurs within city limits. The City of Los Angeles rescinded its ordinance.

To address the issue of state preemption, the [California State Assembly \(2024\)](#) then passed AB 3233, signed into law by the Governor in September 2024, which clarifies that local governments do have the authority to ban and phase out oil drilling. In April 2025, following the state's passing of AB 3233, the County then proposed a Revised Oil Well Ordinance to clearly establish and apply local regulatory authority granted by Assembly Bill 3233, which explicitly authorizes local governments to limit or prohibit oil and gas operations within their jurisdictions. The LA County

Board of Supervisors aims to reintroduce its oil well phaseout in early 2026. The City of Los Angeles has yet to publicly announce efforts to reintroduce its oil drilling ban. The decades (and indeed over a century) of opposition to and organizing around urban oil drilling, years of policy development and leadership alignment, and years of litigation have highlighted the grave dangers of policy incoherence rooted in overlapping and conflicting mandates within and across jurisdictional agencies that renders climate planning inordinately difficult. This policy incoherence, marked by overlapping authorities and shifting interpretations, exemplifies a central barrier to long-term climate strategy.

These institutional and legal barriers are compounded by infrastructural and technological limitations, including outdated water systems, public transit constraints, inadequate EV infrastructure, and flood-prone urban areas not adapted for climate change impacts. Building stock and port operations remain deeply embedded in carbon-intensive systems, revealing the long-standing effects of technological lock-in. Moreover, regulatory lag in building codes and zoning has obstructed projects such as zero-emission loading zones and other emerging technologies, delaying implementation even when political will and funding are present.

## 5.3 Political and economic barriers

Political and economic barriers are also intertwined, shaped by shifting leadership priorities, unstable funding streams, jurisdictional conflicts, and structural inequities. Together, they form a complex web that constrains implementation capacity, limits long-term planning, and reinforces uneven accountability across governance levels.

A major political barrier stems from the volatility of mayoral transitions and the resulting discontinuities in policy prioritization. While the Garcetti administration's Green New Deal plan remains the legally binding sustainability plan under mayoral Executive Directive with clear orders for annual updates and major updates every four years, unless formally canceled by new mayoral executive directive, the current Bass administration has yet to release any updates nearly three years into office. Shifting political priorities, such as the Bass administration's campaign promise and hyperfocus on ameliorating homelessness, have also pushed climate concerns to the sidelines as described by numerous current climate planners, stalling momentum and hindering the institutionalization of long-term goals despite clear cobenefits of housing and climate justice.

However, these disruptions do not originate solely within City Hall. Conflicting priorities across levels of government present an additional obstacle. For instance, with the current federal administration now deprioritizing climate mitigation and adaptation, and in some cases retaliating against jurisdictions that adopt "Green New Deals" (ambiguously coded for climate plans), many municipality leaders are questioning whether climate priorities need to be rebranded or canceled to avoid the federal administration's threats of funding revocations. Even federal funding already allocated under the previous administration has been canceled. Municipalities are left at the whim of competing levels of government.

Even when political mandates exist, given that an estimated 60% or six million Los Angeles metro area adults think their local officials should do more to address global warming (Marlon et al., 2025), the absence of meaningful enforcement mechanisms or follow-through reinforces a pattern of symbolic rather than substantive action. Many of the city's climate commitments, from food access initiatives to decarbonization goals, have been accompanied by press releases, reports, and public-facing targets that, while rhetorically powerful, lack institutional or budgetary backing, as decried by both municipal staff and social movement activists.

At the legislative level, climate policy often fails to gain traction unless adopted into law by the City Council. However, Councilmembers face their own electoral imperatives, including four-year terms, fundraising demands, special interest groups, and pressing constituent concerns such as housing, immigration, and policing. These more visible, immediate issues often eclipse long-horizon climate initiatives, especially when the latter do not offer short-term political returns. The result is a policymaking environment, much a feature of American government, in which leadership priorities are vulnerable to legislative inertia.

Economic constraints further entrench this dynamic. Despite growing international interest in "climate budgeting," the City of Los Angeles has no official framework to link annual budgets to long-term climate goals. The Mayor's Office of Sustainability had hired a staff member to begin developing a climate budgeting approach tailored to the city, aligned with protocols from organizations like C40's Climate Budgeting Programme, to monitor long-term climate goals within yearly targets and budgets. However, that staff member was laid off during the administrative transition, and the effort never became institutionalized. Without formalized climate budgeting practices, departments continue to negotiate budget lines piecemeal through the Mayor's Office and City Councilmembers, competing with other pressing priorities and often losing out.

Compounding the lack of climate budgeting is the city's limited access to climate-specific finance (Bick, 2025). While it's municipal structure includes special funds, access to particular bonds, and a general fund, the city's access to and alignment of these mechanisms with climate goals is complex. Under the Garcetti Administration, the Mayor's Office attempted to coordinate annual sustainability budget proposals across departments, but these efforts remained highly dependent on individual leadership and have not been systematized. Even a large city like Los Angeles faces significant barriers due to limited grant-writing capacity, making the city less competitive for external funding streams.

Market dependencies also exert powerful constraints on implementation. Despite enthusiasm from city staff around using public procurement to drive decarbonization, large infrastructure projects frequently run over budget and behind schedule due to inflation, labor shortages, and supply chain disruptions. The Los Angeles International Airport's People Mover project, for instance, experienced repeated delays and cost overruns. Similarly, efforts to rebuild after wildfires have been hampered by skyrocketing insurance premiums, as national insurers withdraw from high-risk areas.

Finally, economic burdens are often passed down to low-income residents without adequate protection. The transition to electrified and decarbonized homes, while essential for long-term sustainability, frequently involves upfront costs that residents are expected to bear. Programs like the city's Comprehensive Affordable Multifamily Retrofits Program (CAMR), championed in the Mayor's Office of Sustainability by an employee on loan and paid by a major environmental organization, were created to ease these burdens by offering technical assistance and subsidies to property owners. Yet the need for more expansive, equity-focused funding mechanisms beyond small pilot programs and at the heart of local climate justice movement demands remains unmet. Rate increases and retrofit requirements, when imposed without sufficient support, risk exacerbating existing inequalities and undermining public support for climate initiatives.

The political and economic barriers faced by the City of Los Angeles reveal a deep misalignment between ambition and institutional reality. Climate planning exists in a precarious space, pushed forward by moments of political momentum such as UNFCCC COP summits or elections (D'Amico, 2024; Weinger, 2023, 2025), but routinely undermined by budgetary volatility, leadership turnover, and structural inequalities in both governance and finance. Addressing these barriers requires not only technical reforms but a reconfiguration of political accountability and economic justice at every level of government.

## 5.4 Scalar and bureaucratic

Barriers at the scalar level stem from fragmented jurisdictional authority, misaligned agendas across government tiers, and the increasing devolution of responsibility to cities without commensurate power or resources. These governance challenges severely constrain municipal abilities to implement climate action effectively.

Jurisdictional fragmentation remains a core impediment, with overlapping mandates between municipal, regional, and state agencies generating confusion and bottlenecks. A clear example lies in the protracted battle over oil and gas regulation examined above. Beyond fragmentation, vertical misalignment in climate funding has further entrenched uneven outcomes. Many grant programs are competitive and structured without mechanisms to support cities with limited staff or capacity. As one city official explained, better-resourced cities often "win out" in these funding races, simply because they can dedicate more personnel to tracking opportunities and writing tedious and compelling applications. This intra-urban competition, rooted in Nixon's New Federalism block grants, is often heralded by the federal government as a positive enabling mechanism under a competitive market rationale, and clauses that enable cities to apply for funding rejected by state governments. However, in practice, this competition can often reinforce inequalities and divert energy toward chasing funds to plan and pilot rather than implement and institutionalize (Lowe et al., 2016). Climate planners also decry how this funding is disproportionately earmarked for planning and pilot efforts rather than for implementation or sustained infrastructural and programmatic needs.

At the heart of these challenges is the asymmetrical devolution of responsibility. The federal government, following decades of delayed action within interstate arrangements like the UNFCCC, increasingly relies on local governments to implement climate goals, such as clean energy adoption, electrification, and emissions reductions, without providing sufficient support. For example, in a session created by philanthropic and NGO organizations for municipal officials on “Leveraging Federal Funding for Climate Action and Resilience,” a representative from a major philanthropic organization described this dynamic as a “herculean lift on behalf of local governments.” This particular NGO stepped in to create a search and tracking tool and training that the federal government failed to provide, serving as intermediaries for cities scrambling to meet rising expectations of the federal government’s Bipartisan Infrastructure Bill funding flood.

Meanwhile, cities like Los Angeles are symbolically elevated on the global stage, as seen when the Mayor’s team had to “fight tooth and nail,” as described by the Mayor’s climate advisor, to secure speaking time at COP, while being substantively excluded from decision-making within the UNFCCC’s state-based apparatus (Weinger, 2021). As the same advisor put it, the image of cities having major roles in global climate governance is “just a PR line,” masking the real constraints they face on the ground. These gaps in coordination, mandate, and power-sharing undermine implementation and strain the already limited capacity of municipal governments.

Bureaucratic and procedural barriers further reflect how internal administrative practices, often rigid, outdated, or disconnected from the temporalities of climate change, can delay or obstruct meaningful action. These barriers often intersect with scalar ones, particularly around budgeting and regulatory timelines.

A central issue is the misalignment between climate timelines and budget cycles. Los Angeles’s municipal budget operates on annual timelines that prioritize short-term planning, while climate projects typically require sustained, long-term investments. In one discussion with DCOSOs, the City’s Chief of Intergovernmental and Legislative Affairs acknowledged the “perennial issue of ongoing vs. one-time funding,” explaining that one-time budgets are easier to secure but rarely meet the needs of long-term climate initiatives. The City’s Department of Transportation Chief Sustainability Officer then raised the alarm about implementation capacity, noting a citywide staff vacancy rate of roughly 20% and calling for a coordinated strategy with the City Administrative Officer to build staffing capacity. He proposed analyzing projected funding over the next six years compared to a ten-year baseline to justify hiring increases. While the Intergovernmental Affairs lead agreed in principle, he also underscored the chicken-and-egg dilemma: the city must compete for most funds, making proactive planning difficult in the absence of guaranteed revenues.

These temporal mismatches are exacerbated by slow regulatory adaptation. Processes that should be straightforward, such as trimming trees, installing EV chargers, or updating streetlights, are mired in lengthy review procedures across multiple departments. The permitting process in Los Angeles is notoriously slow, shaped by discretionary reviews, state mandates like the California Environmental Quality Act (CEQA), and requirements from agencies such as Public Works and Geotechnical Engineering. Although environmental protections are essential, especially for

vulnerable communities historically burdened by pollution, the bureaucratic inertia surrounding CEQA and other permitting requirements often stands in the way of implementing urgent climate policies. This creates numerous subsequent issues. By the time a project has received permits, for example, costs from inflation can be much higher than initially budgeted. On the flip side, following the 2025 fires in Los Angeles, city and state authorities relaxed environmental regulations to accelerate rebuilding, eliminating key requirements that had required new buildings to be fully electrified in line with climate goals.

Another illustrative case was the Green New Deal goal to launch a healthy food cart program by 2021 and establish Good Food Zones by 2025 to increase food access in low-income areas. A Mayor’s Office staff member tasked with this goal soon discovered that the effort entailed navigating multiple overlapping and sometimes contradictory codes—state retail food laws, county public health enforcement, city policing regulations, and zoning constraints. In meetings, staff debated whether the main obstacles were regulatory or political. “These rules have so many owners,” the official noted, asking whether the state, county, or city bore primary responsibility. The answer, it turned out, was all three, and none definitively.

Community advocates urged a systemic approach in meetings, pointing to translation gaps in public health materials, discretionary criminalization of vendors, and the underfunded budget (only recently increased from \$300,000 to \$1 million) as structural impediments. Yet, without a coordinated strategy and prioritization at the highest levels, the program stalled. The staffer ultimately concluded that the issue was not the absence of will, but the absence of systemic change to cut through the procedural and “performative” fog, as community advocates charged.

Together, these bureaucratic and scalar barriers reveal a striking paradox: while cities are being asked to lead the climate transition, the procedural systems through which they operate remain largely unfit for the scale, speed, and integration required. They face the dual burden of performing leadership on the international stage and fighting inertia in their own backyard.

## 5.5 Epistemic, social, and cultural barriers

Across both planning and implementation, municipal climate governance is shaped by persistent epistemic, social, and cultural constraints that structure whose knowledge counts, how legitimacy is assigned, and which publics are seen as governable. Epistemic limitations in Los Angeles, not unlike other cities, often begin with technical data gaps, particularly around Scope 3 emissions—the upstream and downstream emissions associated with supply chains and consumption. While Scope 1 emissions (direct, within-city emissions) and Scope 2 emissions (purchased electricity or waste dislocation) are comparatively straightforward to measure, Scope 3 remains fragmented and methodologically inconsistent, complicating mitigation planning. The prevailing protocols prioritize what is measurable, foreclosing attention to qualitative impacts or systemic drivers that are not easily reducible to emissions inventories. Technocratic dominance reinforces this limitation, as institutional authority continues to hinge on quantitative models that frame climate planning through emissions

accounting and infrastructure benchmarking. Even within Scope 3 accounting frameworks, the thought experiment of attributing emissions responsibility across boundaries rarely gains traction, as it exceeds the normative metrics allowed by conventional policy paradigms.

Efforts to incorporate community expertise often relied more on rhetoric than on a substantive redistribution of influence. Grassroots knowledge in Los Angeles typically took the form of experiential, presentational, and practical insights (Heron and Reason, 1997)—accounts of everyday exposure to heat and pollution, informal strategies for coping with energy insecurity, and grounded observations about implementation barriers in specific neighborhoods. These forms of knowledge stood in tension with the types of propositional and technical expertise prioritized by municipal leaders, who relied on carbon inventories, scenario modeling, and budgetary or regulatory analyses to guide decision-making. City initiatives such as the Climate Emergency Mobilization Office (CEMO) or the Mayor's Youth Council on Climate Action were frequently cited by community groups and activists as symbolic efforts to signal inclusivity while withholding actual influence. Behind closed doors, the Mayor's Office often clashed with CEMO, which lacked formal authority, staffing, or budgetary resources and was expected instead to maintain soft influence across departments. Several staff noted that the office functioned more as a liaison than a body with authority over policy or implementation. In one instance, a city official privately discouraged appointing a community member affiliated with a social movement to an advisory council seat on a Mayoral council, expressing concern that they might “push back too hard.” Such incidents reveal how grassroots knowledge is welcomed only to the extent that it does not unsettle the propositional, managerial frames through which the city governs climate action.

A broader lack of institutional reflexivity compounds these barriers. While municipal staff acknowledge the need for sweeping federal and state reforms, responsibility for implementation is often placed squarely on city departments. As one senior city climate official remarked during a staff meeting, “We do need massive state and federal change. But what happens in these conversations comes down to each of you, committing departments.” This moral burdening of municipal staff without corresponding structural changes creates a form of internalized governance fatigue, where departments are tasked with addressing systemic issues using constrained tools, as described by numerous staff members.

These epistemic dynamics are entangled with deeper social and cultural impediments to climate engagement. Behavioral inertia remains a challenge in a city where daily practices, especially around driving and energy consumption, are shaped by decades of infrastructural dependency. Government attempts to promote public transit, for example, confront not only logistical constraints but also social norms. Public participation is further undermined by a dual condition of disillusionment and misplaced trust: some residents disengage from climate politics due to institutional mistrust, while others fail to hold leadership accountable precisely because they assume the city is acting in good faith. These dynamics can reinforce a political culture of complacency.

Participation itself is also far from equitable. Marginalized communities are often excluded from formal planning processes, either through inaccessible formats such as community surveys

that lack language translation or serve to check off the box of community engagement as well as more subtle mechanisms of prioritization that favor already-resourced constituencies. Even institutionalized fora for marginalized communities, such as CEMO's community workshops, face critiques by community members that they yield no clear influence or change. Fears around affordability, displacement, and job loss—particularly in relation to climate adaptation, just transition, and green infrastructure development—have further disincentivized engagement, especially among labor communities. While climate planners attempted to bring together these actors in a Just Transition Task Force, organized by a team member funded by a private fellowship, it required tense negotiation, trust building, and resources that did not always fall into place.

Together, these epistemic, social, and cultural constraints reinforce one another, producing a governance landscape where technical ambition outpaces political inclusion, and where symbolic gestures toward equity are not matched by structural transformation.

## 6 Enabling conditions and mechanisms for unlocking climate action

While the barriers to municipal climate governance in Los Angeles are numerous, dynamic, and often overlapping, fieldwork also revealed specific conditions and mechanisms that enabled or facilitated action—albeit unevenly. These enablers did not necessarily resolve underlying structural contradictions, but they mitigated frictions, built institutional memory, and created footholds for more effective coordination. Below, I identify several key enabling conditions that, when present, allowed staff to move from policy aspiration toward implementation, often by improvising within and beyond formal mandates.

First, adaptive coordination structures were crucial to circumventing institutional silos. Although the monthly DCSO and Climate Cabinet meetings were limited in frequency and scope, they served as rare, institutionalized venues for cross-departmental climate coordination. When sustained by staff initiative, these meetings helped maintain continuity amid turnover, clarified points of contact across agencies, and allowed departments to anticipate overlapping timelines or funding opportunities. Its success, however, relied less on formal authority and more on consistent participation, staff willingness to follow up outside the meetings, and the informal labor of relationship maintenance. These networks of trust and habitus functioned as critical infrastructure for collective action (Burch, 2010; Aylett, 2015; Jensen et al., 2016; Kristianssen and Granberg, 2021).

Second, instances of embedded institutional memory and staff continuity proved decisive in maintaining momentum across political transitions. Longstanding staff, particularly those who spanned multiple mayoral administrations, acted as de facto stewards of climate goals. Their retention of relational, procedural, and tacit knowledge allowed them to translate broad mandates into operational strategies, to navigate bureaucratic bottlenecks, and to reconstitute institutional alliances disrupted by

turnover. These individuals often became informal mentors and institutional repositories, connecting new staff to relevant histories and collaborators.

Third, certain policy alignment mechanisms helped bridge scalar and temporal mismatches. These included efforts to synchronize city planning with state and federal timelines—most visible in the strategic framing of budget proposals and grant applications to match federal funding cycles. In cases where departments conducted scenario analysis or long-range planning (such as LADWP's LA100 study), forward-looking policy instruments became vehicles for aligning short-term decisions with long-term objectives. These instruments were most effective when paired with sustained leadership and political cover, protecting them from administrative disruption.

Fourth, several staff members leveraged community knowledge and activist monitoring as tools of accountability. In cases where formal processes lacked enforcement mechanisms or where political will wavered, partnerships with community-based organizations and climate justice advocates kept pressure on departments to follow through. One city official explicitly described activist groups as “shadow governance,” maintaining attention on climate commitments and shaping public narratives around equity. While these relationships were fraught and often asymmetrical, and had the potential to lead only to performative action, they functioned as counterweights to bureaucratic inertia and as sources of epistemic legitimacy beyond technocratic metrics.

Finally, interstitial and informal labor emerged as an underacknowledged but essential enabler. This included the behind-the-scenes curation of spreadsheets, translation of policy documents, *ad hoc* strategy sessions, and emotional labor required to maintain morale in underfunded departments amidst turnover and politically uneasy periods. Such labor, while rarely institutionalized or compensated appropriately, often determined whether action was operationalized or languished.

Together, these enabling conditions point less to singular “best practices” applicable to every city than to situated practices of navigation, improvisation, and alliance-building within a particular fractured governance environment. They suggest that unlocking climate action in municipal contexts requires an ongoing cultivation of relationships, memory, and political strategy across institutional, scalar, and social divides. Recognizing and supporting this labor, particularly through stable staffing, long-term funding, and legally binding mandates with commensurate resources, may offer more durable paths forward than reliance on voluntary collaboration or commitments alone.

## 7 Conclusion

This article has examined the numerous and overlapping barriers that constrain the implementation of urban climate governance in Los Angeles. In doing so, it addressed three questions: what barriers most shape municipal climate implementation in Los Angeles, how these barriers are reproduced or challenged in everyday governance practice, and under what conditions action nevertheless becomes possible. Drawing on two years of participant observation within the city's municipal government, it offers a grounded typology of institutional, political,

economic, scalar, procedural, epistemic, social, infrastructural, and legal obstacles. While based on a single-city case study, particularly in the better-resourced “climate core” of the Global North, the analytical framework presented here is intended to clarify patterns that may resonate across cities, especially those operating within fragmented, under-resourced, and politically volatile governance regimes. It is my hope that this article contributes to the burgeoning work taking stock of municipal governance, which taken as a whole, will contribute to a broader comparative mapping of urban climate governance barriers and enablers across diverse geographies and institutional contexts.

This study demonstrates that climate governance must move beyond setting ambitious targets or adopting progressive plans to understanding the political economy and institutional architecture in which such aspirations are embedded. The case of Los Angeles reveals how city governments often operate under the dual burden of symbolic leadership and material constraint, expected to act decisively while lacking sufficient authority, capacity, or coordination mechanisms.

While much of the existing literature focuses on barriers in the abstract or at the policy design level, this article highlights how obstruction unfolds in practice: in backstage meetings, frontstage press releases, memos, delays, leadership turnover, and performative gestures that fail to be translated into institutional change. Attending to the everyday practices of governance reveals how authority, knowledge, and responsibility are unevenly distributed, and why cities so often appear simultaneously active and constrained. Recognizing these dynamics shifts analytical attention away from plan design toward the political and institutional conditions under which climate action becomes possible, or stalls, in practice. The typology developed here may serve as a diagnostic tool for other researchers or city officials seeking to identify and address similar constraints in their own contexts.

This case also calls attention to the limitations of city leadership discourses that frame urban governments as agile, ambitious agents of climate transformation without recognizing the many barriers that exist. While such narratives may be politically expedient, they risk obscuring the structural constraints that cities, and even policy pioneers like Los Angeles, face: chronic understaffing, fiscal volatility, jurisdictional fragmentation, legal vulnerability, and dependence on higher levels of government that often defer responsibility downward without adequate support. These dynamics are not unique to Los Angeles. They are emblematic of a broader pattern of state restructuring under climate crisis.

Several limitations of this study warrant attention. As a single-city case located in a comparatively well-resourced climate policy context in the Global North, the findings cannot be generalized wholesale across cities with different political economies or governance capacities. Moreover, the ethnographic focus on municipal institutions necessarily foregrounds state actors and does not fully capture how barriers are experienced or contested by frontline communities outside City Hall.

Future research would benefit from extending this focus on implementation in several directions. Comparative analyses across cities—especially in the Global South—could further illuminate how barriers manifest under different political, economic, and institutional conditions. Equally important is the need for more

robust scholarship on enablers: the strategies, coalitions, and institutional innovations that have allowed some cities to overcome or work around these barriers. Finally, this study invites reflection on the paradox of municipal climate governance itself: cities are compelled to act but rarely given the tools or mandate to do so effectively. Each local government is left to reinvent models of coordination, community engagement, and climate financing, often in isolation and with limited capacity. Recognizing these barriers are a necessary first step toward building the kinds of multilevel solidarities and both structural (endogenous) and systemic (exogenous) reforms required to meet the scale of the climate crisis.

## Data availability statement

The datasets presented in this article are not readily available because of the sensitive and confidential nature of ethnographic data. Requests to access the datasets should be directed to Benjamin Kaplan Weinger, [bweinger@ucla.edu](mailto:bweinger@ucla.edu).

## Ethics statement

The studies involving humans were approved by the UCLA Office of the Human Research Protection Program (OHRPP). The studies were conducted in accordance with the local legislation and institutional requirements. The ethics committee/institutional review board waived the requirement of written informed consent for participation from the participants or the participants' legal guardians/next of kin because oral consent was obtained from research participants.

## Author contributions

BK: Writing – original draft, Formal analysis, Project administration, Writing – review & editing, Data

curation, Methodology, Conceptualization, Investigation, Funding acquisition.

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