

Who leads and who follows? A study of norms in global city climate governance

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Abstract

I study three phenomena: how cities become norm entrepreneurs and norm leaders within the regime of global urban climate governance, patterns of norm adoption, and the impacts of norm adoption behaviors on vulnerable populations within cities. Traditional approaches to understanding norm life cycles obscure the impact of superstructures, like the political economy or hierarchies within the international system, in shaping who becomes a norm entrepreneur, which norms survive versus fail, and how cities rationalize trade-offs for vulnerable populations when adopting norms. To address these gaps, I use a critical approach to norms theory, which integrates postcolonial, coloniality, and neo-Gramscian perspectives to account for the material, historical, and social processes involved in shaping governance and actor behaviors. I use data collected across four cities – Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul – to empirically study these themes. The three methods I use to analyze these data include: semi-structured and background interviews with government agencies, activists, experts, journalists, NGOs, and residents; process tracing of norm adoption behaviors; and grounded visualization (visual ethnography) of norm implementation.

I argue that power, history, and international financial structures combine to shape which cities become urban climate governance norm entrepreneurs and norm leaders. I argue that cities can pursue norm leadership through hegemonic challenge (becoming a norm entrepreneur) or hegemonic assimilation. Second, I identify and describe select clusters of norms in three categories of urban climate governance: climate action plans (CAPs), mobility, and greenspaces. Finally, I show that not all norms are good and that some norms which become internalized and adopted by global urban climate governance actors may, in fact, harm frontline communities.

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Preface: Puzzling Palm Trees in Postcolonial Places



Figure 1: A palm tree in the middle of Eva Duarte de Paron Park, taken by author in May 2024

“Why are there so many palm trees in Buenos Aires?” I asked the resident I was walking around the city with that afternoon.

In the weeks since I arrived in Buenos Aires, I had visited dozens of greenspaces across the city and noticed that palm trees were quite prominent. This was puzzling to me because palm trees, to my knowledge, were plants more typically associated with tropical locations (and indeed, they are considered tropical trees by experts (Emilio 2020)). While Buenos Aires could certainly have its warm days, it could not be mistaken for tropical by any stretch of the imagination. So, I wondered, how did these palm trees not only get to the city, but become a prominent feature of the greenspace here?

She gave a light chuckle and responded, “well, colonialism.”

This response, of course, was not the *complete* answer to this question. However, it did provide a starting point to upend our conventional understandings of norms within the existing literature on urban climate governance. As our conversation went along, I learned that these palm trees were first introduced, along with many of the other prominent trees and features of Buenos Aires' greenspace, through General Juan de Garay. Juan de Garay was a Spanish colonial settler who played a substantial role in founding the modern city of Buenos Aires in 1580 (García Lerena et al. 2024). Despite the region in which Buenos Aires is located, Río de la Plata, having plentiful flora and biodiversity, this landscape was not aligned with European visions for spatial design (García Lerena et al. 2024). Juan de Garay's role in founding Buenos Aires also involved importation of colonial botany—especially palm trees, along with magnolias and cedars – because he simply liked the aesthetic of these ornamental trees (García Lerena et al. 2024).

While this explanation of colonial-era botany certainly helps us understand how these trees arrived in Buenos Aires to begin, colonialism is not the *entire* reason why these trees continue to line the city to this day. Indeed, the answer is far more complex, involving a combination of historical, political, and cultural factors. The city has continued to build on and expand from Garay's design at the core. Additionally, there remains a sense of nostalgia regarding the regal aesthetics of colonial designs among many leaders and residents of Buenos Aires. This nostalgia, combined with a desire to align Buenos Aires' image to that of its chosen peers—mostly European cities—has also created a political and cultural argument in favor of maintaining Garay's botanical installations. In contrast, I learned in background conversations with landscape architects for this project that cities are being increasingly encouraged to consider the appropriateness of species to environments in their planning decisions. For instance, municipalities often consider species that are compatible with available water resources, bear

population activity, and fire risks. Trees like those Garay installed are increasingly resource-intensive for urban communities and incompatible with changing climates of regions. So, the continued inclusion of palm trees in Buenos Aires' city planning is much better explained as a combined product of colonial history, nostalgia, and investment in European botanical aesthetics than it is of the city simply carrying out best practices.

The case of Buenos Aires is far from unique. In the chapters that follow, I discuss examples of how colonial planning in Mexico City and Ho Chi Minh City has similarly led to the introduction of specific greenspace designs during their respective colonial periods, yet despite incentives to modernize these designs, the colonial designs remain. In these cases, the colonial greenspace design norm remains dominant through a combination of cultural, political, and economic factors. Scholars like Jonathan Silver have attempted to understand how these factors join together to form “power geometries” that shape modern planning and networking processes for cities in areas like infrastructure development (Silver 2023, 14). Throughout this monograph, you will see examples of how power geometries not only shape infrastructure, as Silver observed, but also shape urban norms around climate governance. Essentially, although we typically think of norms as best practices adopted by actors, that is not always the case. Instead, I argue that the origin, success, and impacts of norms in urban climate governance are negotiated through geographies, power, and the political economy.

Though the examples I have provided here relate to greenspace, I observe, document, and analyze similar patterns across other categories of norms such as climate action plans (CAPs) and mobility. Through these examples, we will explore how various norms such as bike share programs, pedestrianized green pathways, and CAPs themselves came to be in the first place and the impact these norms have on local residents. Ultimately, this text allows us to ask critical

questions of norms within the urban climate governance space and trace power relationships across this regime.

Chapter 1: The Role and Presence of City Actors in Global Climate Governance

Typically, international climate agreements like the Paris Agreement and Kyoto Protocol have focused only on state-level actors. At the same time, new institutions and transnational organizations have emerged to support subnational actors becoming parts of the formal infrastructure for these institutions. For instance, starting in 2015, subnational actors, including substate and non-governmental actors, have been invited to annual meetings of the Conference on Parties (COP) to participate in “side events” to share knowledge and coordinate transnational plans for climate action. In addition to knowledge sharing, these side events have been a venue for subnational actors to signal their legitimacy to state-level and international actors within the international system. Furthermore, initiatives like the Sustainable Development Goals (SDGs) have explicitly written roles for city and subnational actors in state development (ex: SDG Goal 11¹), which overlap with climate change. Cities offer a tantalizing opportunity to reach emissions reduction goals, given the estimate that cities contribute to 80% of global greenhouse gas (GHG) emissions (UN Climate Change News 2020). Indeed, with just 25 cities accounting for 52% of total global GHG emissions and a small handful of cities across Australia, China, Europe, and Australia producing the lion’s share of per capita (consumption) based GHG emissions, addressing mitigation within cities feels much more attainable than national-level efforts (Wei, Wu, and Chen 2021). The formal inclusion of subnational actors in climate governance spaces is a somewhat recent phenomenon and has garnered more attention from the public and researchers studying the climate crisis. Networks like the C40 Cities Climate Leadership Group² and the

¹ SDG 11 is “make cities and human settlements inclusive, safe, resilient, and sustainable” (United Nations Department of Economic and Social Affairs, n.d.)

² C40 Cities Climate Leadership Group is a transnational municipal network focused on promoting global city climate governance leadership. Though they have a limited membership of just 97 cities (as of September 2025),

Global Covenant of Mayors for Climate and Energy have made large claims about the ability of cities to combat the climate crisis (Regan 2017) and some researchers have also maintained optimism about the efficacy of city climate action policy (Acuto and Leffel 2021; Schwartz and Arias 2022). Given the contemporary attention towards city climate action, it is worth studying what influences who produces and leads norms among cities, how these decisions cascade to other cities regarding climate action, and the impacts of these norms on urban residents.

To understand what influences city actors and the reach of city climate action policies, we need to understand more about the social ecosystem of values, norms, and conditions that city actors are operating in. Let us take city greenspace initiatives as an example. As we start to peel back the layers on policies surrounding greenspaces, we are likely to find that there are a variety of factors that have caused the policy to look a certain way, to be implemented at a particular point in time, and to impact some groups of individuals more than others. Some of these factors may be economic (private sources of funding, grants, budget priorities, etc.), while others may be social (i.e., shared goals or outcomes through membership in a program or becoming a signatory to an initiative). A city may also want to imitate the greenspace initiatives of other cities (norm adopting) or perhaps be one of the first to take on a particular greenspace model within their region or country (norm entrepreneurship). Norms can also shape what greenspace physically looks like. Cities may choose to install greenery to signal “greenness” and market the appeal of green space development as a norm entrepreneur with little regard for installing naturally compatible greenery or installing greenery in strategic areas. For instance, cities may place green spaces in areas that help fewer vulnerable people but where strategically important businesses reside to encourage more investment. Cities could prioritize greenspace policies based on what

they are widely considered to be one of the leading organizations on urban climate governance by practitioners and scholars.

they had external funds available to support or because it crosses over with other city-level or national priorities. The method of how greenspace is installed and maintained can also be driven by economic factors. Due to restraints in city budgets and pressure to increase green spaces for health, environmental, and aesthetic reasons, cities may turn to public-private partnerships (PPPs) to finance the installation and maintenance of green spaces. In short, as illustrated in the example of urban greenspace, cities may lead, adopt, or even reject city climate governance norms. Additionally, the strength of those norms may be moderated by the cities' political, social, historical, and material conditions. This leads me to focus on three phenomena: 1) how cities become entrepreneurs within the regime of global urban climate governance; 2) power dynamics related to norm adoption; and 3) the impacts of norm adoption behaviors on frontline communities in cities.

I explore four case studies using a critical norm theory approach to unpack the phenomenon of norms in city climate governance: Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul. These four case studies capture a spectrum of unique circumstances for cities navigating climate action decisions and allow me to provide both breadth and depth in answer to my research questions. I make two main substantive contributions to the literature through my dissertation: First, I highlight different pathways for successful urban climate governance in cities outside of Europe, Canada, and the United States. Although we have some understanding of successful cases of urban climate governance in Europe, Canada, and the United States, these findings have limited application to cities in other regions, given differences in access to resources, power, and agency. Continuing to use policy norms constructed by European, Canadian, and US cities may lead to the pursuit and implementation of maladaptive and mismatched solutions in urban environments outside of this context. Broadening our

understanding of the different ways climate governance can play out in urban settings is now much more urgent given the accelerating impacts of climate change. These dangerous conditions include heat island effects, flooding, vector-borne diseases, declining air quality, and myriad other impacts (Kumar 2021). Given that urban environments are rife with social inequity, understanding how some norms may impact vulnerable populations in cities may assist members of the international community and organizations in addressing maladaptation issues.

Second, I provide explanations of how climate change governance norms are created and shared between scales of governance as well as between different groups of subnational actors. Within the urban climate policy research community, there is little insight into where norms originate from and from whom the norms originate in the city climate change governance regime. Through this project, I demonstrate examples of how norm entrepreneurs rise, distinctions between behaviors of norm leaders and norm entrepreneurs in the creation of urban climate governance norms, how the norms they promote eventually become internalized horizontally (city-to-city) and vertically (multi-scalar) through historical, political, and economic structures, and how these norms may impact residents of cities.

Bridging Norms Life Cycles and Urban Climate Governance

In this project, I bring two sets of literature into conversation with each other: the literature on global norm life cycles and urban climate governance. In addition to the theoretical contribution offered by bridging these two literatures, I also discuss the unique methodological contributions of this project.

Mitigation, Adaptation, and Power in Urban Climate Governance

The study of norm life cycles requires there to be both identified institutions and identified norms. In this research, I identify the institution as urban climate governance, while the norms studied are the distinct types of behaviors exhibited by cities. There has been a substantial amount of scholarship exploring the institution of urban climate governance, including how capacity and structure impacts efficacy (T. M. P. Nguyen, Davidson, and Gleeson 2018) and agency in decision-making (David J. Gordon 2018); alternative governance structures to sidestep governance challenges which involve private sector engagement (van der Heijden 2021; Nielsen and Papin 2020); and how some of these governance structures have changed or modified over time (Patterson and Huitema 2019; Wolfram et al. 2019). While the largest concentration of this literature focuses on the Global North, other researchers have paid attention to differences in governance structures and capacities in driving mitigation and adaptation outcomes in the Global South (Fatti and Patel 2013; Rana et al. 2022; Fünfgeld 2015; Gueye, Fall, and Tall 2015). Currently, there is an assumption in the city climate governance literature that networks play various roles in shaping urban climate governance efforts and that cities participate in these climate governance networks as a method of achieving a variety of climate governance goals (Bäckstrand et al. 2017; Leck and Roberts 2015; David J. Gordon 2016; 2018; Acuto and Leffell 2021; Haupt and Coppola 2019; Leffell 2022).

Even though we have developed a substantial set of knowledge about individual city climate governance practices and how networks and multi-level governance relationships shape and support cities in governing climate, there are still many questions yet to be explored and settled within this literature. First, scholars' primary focus and interest within climate governance

research for the past two decades has been on the mitigation aspects of climate governance. However, adaptation has become a more significant component of climate governance in recent years. This pattern in research of shifting from a mitigation focus to gradually larger consideration of adaptation mirrors how the global community has turned their attention to these areas of governance over time. Until the Paris Agreement, the United Nations Framework Convention on Climate Change (UNFCCC) had a much stronger emphasis on mitigation, despite parts of the Kyoto Protocol working to assist countries with responding to the effects of climate change and establishing an Adaptation Fund (UNFCCC, n.d.). However, the conversation around adaptation during the Kyoto Protocol was more voluntary while the Paris Agreement has formalized goals around adaptation through the expectation that adaptation is included in the Nationally Determined Contributions (NDCs) of each signatory. Thus, given the focus on mitigation in the early era of the UNFCCC, many actors overlooked adaptation. In tandem, there was less scholarship on adaptation during this time. There is a need to ensure that research agendas focus on adaptation in city climate governance. Still, there is also a need for normative evaluation of adaptation plans and how urban agendas are shaped (Sara Hughes 2015, 25). Normatively evaluating adaptation plans involves building a better understanding of who is in charge of these agendas (both literally and as a norm entrepreneur) and where power should lie (Sara Hughes 2015, 25). For example, even well-meaning processes for climate adaptation could result in maladaptive results if norm entrepreneurs for adaptation policy lack holistic input (ex: saturating vulnerability assessment teams with engineers and no professionals with a social science or human development perspective) (Sara Hughes 2015, 24). Put another way, policy outputs result from who leads the conversations and who controls the resources. Currently,

scholars have not produced studies on what types of policy outputs emerge from specific city actors when they act as norm entrepreneurs.

Second, we know very little about the power dynamics of who gets to shape city climate governance at a global scale and the dynamics of how that shaping occurs. We need to know “who has [power], on what is it based, how is it used, can it be resisted (Johnson, 2018; Okereke et al., 2009)” (David J. Gordon 2018, 9). Studying contestation of power within city climate governance will tease out some understanding of these questions (David J. Gordon 2018, 2). Specifically, we need to understand how different interests and ideas are contested across lines of power and who gets to shape these conversations. We need to explore “the politics [...] that shape how cities govern climate change, to what end, and in the service of whose interests.” (David J. Gordon 2018, 8). Presently, the study of city climate action and network relationships is only scratching the surface of questions of power and governance. Climate Action Plans (CAPs), which communicate city climate action intention and policies are *political documents*. Therefore, taking these statements and actions at the word of the cities without unpacking the political context of these documents means that we are potentially ignoring or miss critical information about the effects of these political choices on residents (David J. Gordon 2018, 8). In understanding who has power within urban climate governance networks we can better understand how this power intersects with material conditions to shape norm dynamics.

Norm Diffusion in Urban Climate Governance

Researchers within urban climate governance must also refine our understanding of how different contextual conditions, including institutional, relational, and material, shape norms and policy. Andonova, Hale, and Roger argue that “the field needs a much better understanding of

how specific national policies and institutional conditions matter for different types of transnational initiatives” (2017, 265). One possible answer to this line of inquiry is that there may not be clear norms within the global city climate governance system. Early research on norms in global environmental politics found that city actors were making policy in an institutional environment with “few rules norms, and best practices to guide them in their effort” (Anguelovski and Carmin 2011, 169). However, given the growth of research on city climate governance as well as the expansion and formalization of many network groups like C40 and ICLEI in the last decade, it is important to verify whether norms that have made their way to the later stages of the norm life cycle and now guide climate policy behaviors for cities.

Norm life cycles in international relations originate from the work of Finnemore and Sikkink (1998). Finnemore and Sikkink (1998) define norms as “single standards of behavior” while institutions are comprised of *multiple* behavioral rules (891). Norms go through “life cycles,” including emergence, cascading, and internalization (Finnemore and Sikkink 1998, 896). Finnemore and Sikkink argue that in the emergence phase, norms are created and promoted by norm entrepreneurs (who also leverage their organizational platforms and status) (896). Once entrepreneurs have persuaded enough actors (these become norm leaders) to adopt the norm they are pushing, this reaches a tipping point (901). After the tipping point, a process of socialization happens where actors are pressured to conform (norm adopters) to the norms of their peers and avoid disapproval or ostracization (904). Finally, after a period of sufficient uptake of a norm by actors, these norms become second nature and nearly automatic (904).

Many scholars have also expanded Finnemore and Sikkink’s model to add more precision (Savarimuthu and Cranefield 2009; 2011) as well as add additional steps like contesting (Wiener 2019), forgetting (Hollander and Wu 2011), and removal (Mahmoud et al. 2014). There have

also been extensions of Finnemore and Sikkink's norm life cycle model that theorizes the process as a recurring vs. linear process (Hollander and Wu 2011; Frantz and Pigozzi 2018). Building on this, I deconstruct the institution of urban climate governance to understand how norms emerge, how they are internalized, and how they shape the regime of urban climate governance in response.

Although norm life cycles provide a useful framework for unpacking the phenomenon of norms in urban climate governance, some aspects of the theory miss or conceal elements of norms in the context of urban climate governance. First, Finnemore and Sikkink have not turned much attention in their theory to how norm entrepreneurs or norm leaders are created. While they provide examples of norm entrepreneurs and leaders and even discuss why norm entrepreneurs and norm leaders may be motivated to promote norms, it remains unclear how norm entrepreneurs step into that role, to begin with. Understanding who evolves into or becomes norm entrepreneurs and norm leaders could provide more insight into why certain norms emerge, cascade, and internalize. For example, suppose norm entrepreneurship is more fixed (i.e., Global North cities). In this case, we may expect similar patterns of cascading and internalization for multiple norms in the institution because it would be a small set of entrepreneurs pushing the norms. Whereas, if the process of becoming a norm entrepreneur and norm leader is more fluid, we may expect to see more variance in how climate governance norms cascade and internalize. I explore how the norm entrepreneurs and norm leaders in urban climate governance emerge.

Briefly, I discuss both norm entrepreneurs and norm leaders throughout this project. I make a distinction between norm leaders and norm entrepreneurs primarily through actors' temporal relationship within the life cycle of a norm. What I mean by this is that norm entrepreneurs are the first actors to launch or adopt a norm whereas norm leaders are early

adopters of the norms that norm entrepreneurs have brought forth. In some instances, especially where the timeline between launch and early adoption of a norm is quite short, the distinction between a norm entrepreneur and a norm leader may be a bit fuzzy.

There is a popular conception across urban climate governance that there are cohorts of cities who are “leaders” and “laggards.” Though it may be true that some cities often find themselves launching or leading norms, one essential claim that I make is that norm entrepreneurs and norm leaders vary from norm to norm. Being a norm leader or entrepreneur is not a set identity, though in some cases, being a norm leader in one area can lend legitimacy or power to a city in another norm. But as I will demonstrate in chapter 5, that is not always the case. In chapter 6, I will also share how, in some instances, norm entrepreneurs may play a role in getting a norm created but have a relatively small role in the norm life cycle otherwise. Instead, norm leaders (who may also be norm entrepreneurs) often hold more power within urban climate governance regimes. However, in both cases, it is an intersubjective process to be recognized for norm entrepreneurship and norm leadership. That is to say, innovation and action are necessary but not sufficient condition to gain these statuses. Other actors—primarily other cities and organizations—must recognize a city’s entrepreneurial or leadership actions.

Additionally, I push back on the assumption that norm entrepreneurs are motivated to promote a norm due to “altruism, empathy, [ideation], and commitment” (Finnemore and Sikkink 1998, 898). In many cases, urban leaders may be motivated to adopt climate governance norms as posturing against state-level or domestic-level politics. For example, during the first Trump administration, New York City and other U.S. cities became aggressive advocates of climate policies partially to set themselves apart from the national government’s position on

climate and other social issues. This theme is explored more in depth throughout chapters 4 through 7.

Second, Finnemore and Sikkink clearly refer to states as actors who engage in these norm life cycles. States have much more agency in their actions than subnational actors. Thus, while Finnemore and Sikkink point to empirical studies that indicate that international pressure can help states overcome domestic level political pushback on norm adoption (902), this may not play out in the same way for subnational actors. Subnational actors may be constrained more by domestic level politics or the broader engagement of the state other international actors on issues unrelated to climate (Hsu et al. 2020; S. Hughes, Miller Runfola, and Cormier 2018; Roger, Hale, and Andonova 2017; Valente de Macedo, Setzer, and Rei 2016; Beermann et al. 2016; Jørgensen, Jogesh, and Mishra 2015; Fuhr, Hickmann, and Kern 2018). Additionally, larger superstructures, such as the political economy, may shape and constrain norm life cycles. For example, in the cases of Johannesburg and Hyderabad (i.e., two Global South cases), both pursued their chosen environmental projects in the hopes of attracting foreign direct investments into the respective cities—environmental projects the citizens of that city were largely unable to benefit from, including the development of new clean water sites due to the projects being designed in a way that maximized investor potential but minimized considerations for equity and access (Nastar 2014). Cases like this compel me to look at the impact of political economy on actor decision-making and policy norms. I introduce this political economy element in chapter 2.

Urban Climate Governance Norms

I identify and delve into norms within three categories of urban climate governance throughout this text: CAPs, mobility, and greenspaces. For each category, I trace the emergence

of global norms, including where these norms came from and the norm entrepreneurs and leaders who have promote and socialized these norms among global cities, and unpack what these norms look like within my case study cities. Within the urban climate governance literature, there has been little accounting of which norms have been internalized (if any) at this juncture. I argue that one norm that has reached this phase is climate action plans (CAPs). CAPs now exist in most cities engaging in climate governance and are a top priority initiative of the C40 Cities Climate Leadership Group (C40). Cities within C40 have been explicitly told to make a CAP in alignment with one of C40s two active CAP frameworks. In addition to understanding which norms have been internalized, we as researchers also need to continue discussing the relationship between urban climate policies and how they impact vulnerable populations. If cities internalize norms that ignore equity concerns, this has serious implications for environmental justice outcomes. Findings like this would indicate a need for transformative change in urban climate governance norms. Cases where there is some sort of counter-hegemonic discourse against this norm internalization could model pathways for changing or undoing harmful aspects of norms. I offer one example of counter-hegemonic discourse in the case of Seoul and Transit Oriented Development (TOD) in chapter 4.

Roadmap of Chapters

In chapter 2, I introduce my theoretical lens for this project as well as alternative framings. In chapter 3, I discuss my methodological approach and data collection process. In chapter 4, I introduce a theory of pathways to norm leadership (hegemonic assimilation and hegemonic challenge) and apply it to the cases of Buenos Aires and Seoul. In chapter 5, I examine Mexico City's failed attempt to become a norm leader in the space of C40 Climate Leadership group and

carbon inventory systems through the use of hegemonic challenge. This example is juxtaposed against Seoul, who has had success in hegemonic challenge related to the areas of mobility and greenspace policy. Chapter 6 is where I discuss a selection of norms in three categories (CAPs, mobility, and greenspaces) and how these norms manifest in all four cities. Additionally, I examine how these norms came to be and how these norms spread. I argue that the success and diffusion of urban climate governance norms are shaped by challenges to the hierarchy of global city leadership within the global political economy. Chapter 7 focuses on greenspaces and the case of HCMC specifically. While equity impacts in all four cities are featured, this chapter is largely driven by my visual ethnographic work in Ho Chi Minh City where I highlight how vulnerable residents are disproportionately exposed to urban heat island effects, flooding, and vector borne illnesses because of adaptation and mitigation norms adopted by city leaders.

Chapter 2: Theorizing Norms in Urban Climate Governance

Introduction

At the heart of this project, I explore how and why cities become norm entrepreneurs. Specifically, I am interested in how and where city climate governance norms come into existence, how entrepreneurs emerge within these norms to champion them, how these norms eventually become vertically (multi-scalar) and horizontally (city-to-city) internalized, and the impacts of these norms on urban climate governance as a regime structure as well as impacts of these norms on individuals. Essentially, I am interested in telling the story of how current norms in urban climate governance came into being and the co-constructive impacts of these norms within the regime of urban climate governance. I focus on telling the stories of norms within three domains (1- climate action plans (CAPs); 2- mobility; and 3-greenspaces,) across four global megacities (Buenos Aires; Ho Chi Minh City; Mexico City; and Seoul). To tell this story, I utilize a critical theoretical approach to the study of norms which includes attention to historical, cultural and economic factors.

In this chapter, I explore the theoretical work that has been done on norm theory related to my research questions. Following this, I explore how norm theories and governmentality have addressed questions of power and urban climate governance and where the explanatory power of these approaches fall short for this project. I then explore where insights from postcolonial scholarship, writings on coloniality, and neo-Gramscian approaches to IR can combine with existing norm theory research to craft a critical theoretical approach to the study of norms.

I conceptualize the idea of a norm using Finnemore and Sikkink's definition, which is "a standard of appropriate behavior for actors with a given identity" (Finnemore and Sikkink 1998, 891). This inherently requires three components: a specific behavior or action, a specific actor who must take this action, and general agreement that this action has a moral imperative or "oughtness" (Jurkovich 2020, 495). Michelle Jurkovich has built on Finnemore and Sikkink's conceptualization of norms by establishing the analytic utility of these definitions. Importantly, Jurkovich discusses how norms are distinguished from what she calls "supererogatory standards"³ or laws (Jurkovich 2020). This distinction is of particular importance to urban climate governance for two reasons. First, there are many environmental or climate policies in which cities or urban governments can receive great accolades for taking on—for example, an innovative electric vehicle (EV) strategy—but, arguably, no social costs or shaming incurred by cities who take a passive position and fail to implement EV policies. Cities without EV policies do not typically receive shunning, especially if they have other progressive transportation policies. To be clear, I am not talking about cases like the province of Alberta, Canada, where the province has implemented a norm in the direct opposite direction (a tax on EV owners) and has faced some social costs as a result. EV policies, by the general public standard, are *good but not required* for cities to engage with as an urban climate governance norm. These types of policies thus should be categorized as supererogatory and not considered as part of urban climate governance norms discourse. Second, cities are part of multi-scalar governance systems and therefore subject to multiple layers of laws related to climate and environmental policy. Jurkovich introduces an interesting dilemma relevant to this reality—laws can be ignored or go unenforced absent an actor's commitment to enforcement. Although laws should technically

³ Jurkovich describes these as actions that are "morally good or appropriate to follow but not morally bad or inappropriate to not (i.e. socially nonobligatory)"

obligate actors to enact (or not enact) particular behaviours, they do not require any type of internalization to exist nor any belief that a behavior is morally right or good (Jurkovich 2020, 703). Thus, we regularly see laws broken with little to no shunning or social costs to actors breaking these laws. Similarly, with environmental laws and climate policies, the existence of a norm to enforce the morality and encourage internalization of the norm cannot be assumed. Countries have entered into the Paris Agreement and are legally bound to reduce emissions, submit updated nationally determined contributions (NDCs) regularly with increased emissions reduction goals, and, in the case of Global North countries, contribute towards the mitigation and adaptation efforts of Global South countries (United Nations, n.d.). Inevitably, countries must set domestic level policies to meet emissions reduction targets and many of these obligate cities to take on specific actions towards these goals. Thus, policies that cities are directly obligated to participate in by states yet not internalized nor established as a moral policy or practice among urban climate governance actors, would fall outside of norm theorization.

Power and urban climate governance

Studying why and how cities become norm entrepreneurs within urban climate governance requires an understanding of power dynamics within the international system. Scholars studying environmental and urban climate governance policy have utilized a variety of theories to explain the distribution of power within global urban climate policy, including aspirational politics (Finnemore and Jurkovich 2020; Nastar 2014), governmentalities (Vanessa Castán Broto 2017; V. Castán Broto 2020; Lövbrand and Stripple 2013), orchestration (D.J. Gordon and Johnson 2017; T. M. P. Nguyen, Davidson, and Coenen 2020; van der Heijden, Certomà, and Bulkeley 2019). I

turn to each of these in turn to take stock of how existing theoretical work may apply to the questions I pose and where they fall short of rising to fully guide this project.

At a cursory glance, the explanatory power of aspirational politics would seem to describe much of the power dynamics within urban climate governance. Finnemore and Jurkovich explain aspirational politics as incorporating three features: lofty goals, a temporal or process element, and a transformational character to the goal that “engages our imaginations” (Finnemore and Jurkovich 2020, 760). Much of the work taken on by global city climate action networks, such as the Global Covenant of Mayors, 100 Resilient Cities, and C40 Cities Climate Leadership group could be categorized as aspirational. These organizations have set audacious goals. For example, C40 has committed to “halve the emissions of its members cities within a decade” (C40 Cities, n.d.-a). This goal is also future oriented and emphasizes the need for capacity building as well as collaboration over time to achieve these outcomes. Finally, C40 emphasizes how the collective efforts of the networks will transform the climate crisis and “build healthy, equitable and resilient communities” (C40 Cities, n.d.-a). Finnemore and Jurkovich’s conceptualization of aspirational politics also seem to explain phenomena commonly observed within urban climate governance: challenges with holding cities accountable for their goals, aspiration fatigue, rhetoric replacing action, and the manipulation of urban climate goals for political gain (Finnemore and Jurkovich 2020, 765). However, there are several components of this project that cannot be explained with aspirational politics.

First, Finnemore and Jurkovich clearly note that aspirational goals are not themselves norms (Finnemore and Jurkovich 2020, 765). They argue that aspirations are often expressed without a clear agent in mind and that norms apply in the present, while aspirations apply in the future. In

the case of this project, we have a clear actor: cities. Additionally, while cities do set aspirational goals related to climate mitigation and adaptation, they are expected to conform to a particular set of behaviors in the present. To understand *current* urban climate governance, aspirational politics provides a very limited frame.

Second, although Finnemore and Jurkovich acknowledge the aspirational nature of norm entrepreneurs, aspirational politics can provide few answers about why particular norms emerge, who these norm entrepreneurs are, where the norm entrepreneurs and leaders emerge from, and how these norms shape urban climate governance as a regime. In short, aspirational politics may help explain a subset of politics within urban climate governance norms but lacks explanatory power for the core questions of this project. One example of this that I explore in more depth is the shift in C40 from the Climate Action Planning Framework (CAPF) to the Cities Climate Transition Framework (CCTF). The existence of any type of CAP could arguably be an aspirational norm that creates other forms of aspirational norms at city levels through each CAP. However, to understand how we ended up in shifts of frameworks from CAPF to CCTF, this requires attention to the power dynamics of the organizational politics, an examination of the two different committees of cities which created these frameworks, as well as how the processes of creating, drafting, and diffusing these frameworks as norms have also, in turn, shaped C40 and the regime of urban climate governance as a whole.

Although governmentality has also been a popular theoretical frame used to study urban climate governance, it also presents limitations for my work around the questions I have posed. Governmentality, originating from Michel Foucault, is an analytical framework which focuses on “how” questions of government (Löwbrand and Stripple 2013, 32). For example, Foucauldian

governmentality scholars often explore how the state is repackaging itself within new forms, such as private and substate actors, thus changing understandings the state, civil society, and public spaces. Applied to the study of climate governance, governmentality centers on the *how* of climate governance—"how the climate is conceptualized and construed as a domain of government, how climate governance is accomplished in practical and technical terms; and how agent categories and subjectivities are constituted through the practices of climate government" (Lövbrand and Stripple 2013, 34). As such, governmentality provides an avenue for expanding scholarly understanding of climate governance to non-state and substate actors and how climate can become a domain governable by the state through these different forms. Furthermore, governmentality "highlights power as relational, that is, as emerging from the interactions between the actors and things that need govern and are governed" (V. Castán Broto 2020, 248). Vanesa Castán Broto further argues that in addition to orchestrating ideas, governmentality can also link material and social contexts into urban climate governance infrastructure (V. Castán Broto 2020, 248). However, even though governmentality can account for the organization of materials and how these materials become envisioned through urban futures, Castán Broto acknowledges that governmentality lacks explanatory power for the transformations of specific policies, projects, or norms in urban areas over time. This limitation is particularly tricky in the study of norms, which transform over time. Thus, governmentality cannot explain the process of norm emergence and the evolution of these norms over time.

Similarly, scholars of urban climate governance have embraced orchestration as a theoretical lens to explain policy dynamics between cities. Orchestration refers to a framework "in which global objectives are pursued through the use of governance intermediaries rather than by the direct imposition of rules on target audiences" (D.J. Gordon and Johnson 2017, 695) or, put

another way, how an ungoverned set of relationships work around a common goal (T. M. P. Nguyen, Davidson, and Coenen 2020, 9). Orchestration scholarship contributes to understanding why certain norm entrepreneurs may engage in different modes of orchestration and the objectives of those modes of orchestration. For example, David Gordon and Craig Johnson argue there are three typologies of orchestration: complementary, concurrent, and emergent (D.J. Gordon and Johnson 2017, 703). Each typology has a primary orchestrator (such as the UNFCCC or World Bank) and an intermediary (C40, ICLEI, Green Climate Fund, etc). Additionally, each of these modes of orchestration have specific objectives. Complementary orchestration seeks to bolster regime capacity and legitimacy, concurrent orchestration works to augment governance capacity and political capital, finally, emergent orchestration aims to enhance the return on investment and impact of capital investments (D.J. Gordon and Johnson 2017, 703). Additionally, orchestration accounts for the presence of norm entrepreneurs as “steering actors” (D.J. Gordon and Johnson 2017, 700). Although orchestration can answer questions such as why certain norms appear and even who some of these norm entrepreneurs may be, orchestration theory does not answer the question of how norm entrepreneurs and norm leaders come about in the first place, as well as which norms become internalized and why. Further, the modes of orchestration neatly segment urban climate governance behavior into neat boxes. Applied to norms, there are likely to be orchestrators and intermediaries from multiple categories. Furthermore, the motivations of cities throughout these norm life cycles are likely to evolve or change with the surrounding social and material circumstances.

Postcolonial and Coloniality Research

While all these theories I have introduced offer possible explanations for the dynamics of power within norm life cycles, the use of a critical theoretical approach integrates within existing norm theories using components of theory on postcoloniality, coloniality, and neo-Gramscian IR. In doing so, it offers the best theoretical approach to tackle the questions of this project.

First, postcolonial (K. Goh 2020; Robin and Broto 2021) and coloniality discourses (Sultana 2022) highlight power hierarchies within global urban governance. Decolonial work in urban climate research highlights the bias exhibited by researchers towards North American and European cities, with “few recurring examples in South America and Asia” (Robin and Broto 2021, 870). This bias, as explained by Enora Robin and Vanesa Castán Broto, obscures “ambiguous, incremental, and radical” challenges to neoliberal urban climate policy and embrace a pluralized theorization of responses to urban responses (Robin and Broto 2021, 870). Further, scholars such as Farhana Sultana explain that climate coloniality is “perpetuated through mundane and institutionalized ways of *subalternization* of non-Eurocentric, non-masculinist, and non-capitalist understandings of climate, ecology, and nation-society relations” (Sultana 2022, 9). In short, this mode of theorization offers critique about how the Global South has been studied and conceptualized within urban climate governance, urban climate governance scholars have ignored larger structural processes of dispossession and exploitation, and an orientation towards climate justice for urban residents most severely impacted by climate coloniality. The attention towards global power hierarchies through this theorization is of particular importance to my ontological orientation, as is the commitment towards climate justice. Additionally, this theoretical lens has strong explanatory power as to why particular actors may emerge as norm entrepreneurs and even explain how and why urban climate governance norms transform over

time. Further, postcolonial and coloniality scholarship provides a compelling analysis for what these norms *ought to be*. However, I find this theoretical frame is *too* structural in many places. In many of the norms I discuss, there are both fluid (referring to ideas of agency or identity) and structural (referring to concepts of path dependency and materiality) elements. In contrast, neo-Gramscian theory captures many of the strengths of postcolonial and coloniality theories while also accounting for the social processes that offer an important explanation for the transformation of norms over time.

Thus, in addition to postcoloniality and coloniality theory, to understand subnational actors within the international system we must turn to a theory that explicitly recognizes the important role played by non-state actors (Cox 1983). Second, a neo-Gramscian framework acknowledges historical and material factors that make social relationships and identities more rigid. Although the degree of fluidity that exists for actors' identities and interests is a site of debate within constructivist literature, a neo-Gramscian framework better accounts for the more static and material conditions undergirding the social relationships of city actors. The political economy of states and subnational actors is an important structure which orders and shapes norms and discourse of cities in the international system (Cox 1983). Third, neo-Gramscian theory has been used in many research projects related to global environmental politics as well as environmental justice to help explain linkages between the political economy and climate policy (Bulkeley and Schroeder 2012; LeQuesne 2019; Levy and Egan 2003; Levy and Newell 2002; Newell and Paterson 1998; Paterson 2013; Routledge 2015). The ubiquity of neo-Gramscian theory in this subarea of research suggests this is a sensible approach. Furthermore, the research tradition of neo-Gramscian analysis to study power in urban environments in Argentina, Mexico, South Korea, and Vietnam highlight that this is a contextually appropriate choice (Buchanan 1997;

Engel 2008; Fernández Álvarez 2012; Ngũ 2022; Willis 2020). In the next section, I explain the basic tenets of neo-Gramscian theory as well as three core concepts within this theory I integrate into my theoretical approach to studying urban climate governance norms.

Neo-Gramscian theory

Neo-Gramscian theory factors the importance of political economy and the social and historical contexts of actors. My research in Buenos Aires, Ho Chi Minh City, Seoul, and Mexico City has produced evidence that the structure of the global political economy, specifically modern capitalism, shapes norms. Applying a neo-Gramscian lens to analyzing city-state, city-city, and city-international organization relationships through a lens of political economy in this project illuminates important power relationships that structure pathways for climate adaptation and mitigation in urban environments of the Global South.

Neo-Gramscian theory is an offshoot of Marxist political analysis based on the ideas of Antonio Gramsci, detailed in a series of notebooks written while imprisoned by Benito Mussolini (Okereke 2015). Neo-Gramscian theory argues that class formation and social relations of production, mediated by cultural hegemony of ideas and discursive practices of Western capitalists, have shaped political institutions and struggles (Okereke 2015, 128). A key distinction between neo-Gramscian theory and conventional Marxism is that for the former, world order is maintained not just through the coercion of the state but also through these components of cultural hegemony (Okereke 2015, 128). Furthermore, Okereke et al argue that Gramsci identifies civil society as “key sites” for stabilizing and reproducing hegemonic norms (Okereke 2015, 129). As an important note, there is no single volume of Gramsci’s work⁴ which

⁴ Unless you consider the Prison Notebooks a single volume

provides a general, synthesized form of his ideas (Hall 1986, 6). This means that most of the understandings of Gramsci have come through interpretations by scholars and not Gramsci's writings directly. Though I am arguably contributing to this issue of "watering down" Gramsci, so to speak, I do believe that his insights about sites of power and the various institutions by which power is established and maintained provide a valuable contribution to deepening our collective understanding of urban climate governance within IR literature. I discuss two broad concepts in neo-Gramscian theory which I find to be of particular importance to this project: cultural hegemony (Cox 1983) and the distinction between critical and ahistorical theory (Cox 1986).

Hegemony

First, in this project, I draw most of my Gramscian insights from a variation of neo-Gramscian theory popularized by the work of Robert Cox (Cox 1983; 1986). In Cox's creation of neo-Gramsci theory, he expands Gramsci's writings on hegemony, which had an explicit focus on the rise of fascism in Italy, to include a broader set of social, structural, and "world order" components. These components were meant to counter what realists typically construct as a unipolar hegemonic ordering process (Bieler and Morton 2003). The social elements of hegemony center on the "social relations of production," which includes both material production processes and knowledge production (Cox 1987). Structural components refer to the ways that the state is configured. While realists have a very limited conception of what constitutes the state, how the structural and social components relate, and how power is expressed between them, Cox's interpretation of the state under a neo-Gramscian framework includes both public (government bodies and agencies, military forces, political parties) and private (civil society including NGOs, churches, corporations) formations (Bieler and Morton

2003). Finally, three central components construct what Cox calls “world order”: ideas, institutions, and material capabilities (Cox 1987). World order establishes intersubjective meanings by combining resources with the constructed “collective images” and stabilizes these perceptions to create ordering in the international system (Bieler and Morton 2003). In short, Cox’s approach to neo-Gramscian theory allows for a more fluid understanding of hegemony and power beyond the state and military capabilities. This expanded application of hegemony will allow me to interrogate other structures that contribute to ordering and power dynamics within the international system, such as the underlying political economy. One instance in which this explicitly comes to light is the power that C40 has gained within the urban climate governance regime through creating and policing the CAP frameworks cities use. Specifically, I detail how many international organizations, such as the Green Climate Fund and the World Bank, now implicitly or explicitly require CAPs that meet the framework conditions established by C40. Without the requirement to do so from organizations like this, actors like C40 may not have as prominent of a role within the international order and CAPs may have had less hold as a norm.

Ahistorical versus critical theory

Second, neo-Gramscian approach aligns well with my methodological approach to answering my research questions. Cox argues that there are two forms of research within IR: “problem-solving theory” (ahistorical) and “critical theory” (historical materialism) (Cox 1986, 208). Cox describes problem-solving theory as aiming to fix challenges in the existing world order without questioning the institutions and order itself (208). On the other hand, critical theory often attempts to understand how institutions and order came about and power dynamics from a social

and political perspective (208). Put another way, while problem-solving theory focuses on fixing specific problems and institutions within a system as parts, critical theory is concerned with the whole system, including the parts and the structure of the system itself. Much of the existing IR research on norm life cycles (Finnemore and Sikkink 1998; Stimmer 2019; Hoffmann 2003; Percy 2014; Fry 2020; Hadden and Seybert 2016) can be understood as a problem-solving theory, given that it does not seek to question the system of ordering and does not study how states or actors step into positions of authority as norm entrepreneurs or norm leaders. Norm life cycle theory is thus also ahistorical in that once a norm reaches the internalization state, it is essentially permanently embedded in the institution until another norm supercedes the existing norm. Thus, my approach combines critical approaches and neo-Gramscian theory to address the challenge of ahistoricism and also seeks to provide normative insights about these norms.

By using neo-Gramscian theory as a lens to study norm life cycles in urban climate governance, I interrogate how certain urban actors become entrepreneurs, how the ordering of power in urban climate governance came to be and discuss how these power dynamics may be shifting in the present at a structural level. In exploring the actions of Mexico City and Seoul, I showcase stories of how cities attempt to challenge existing norms with counter-hegemonic approaches, resulting in structural transformation. Given that literature on environmental justice suggests that the current world order is producing suboptimal outcomes for the populations of people most vulnerable to climate change, I argue that attention to these counter-hegemonic patterns as they relate to residential vulnerability to climate change is indeed positive. Among the four cases that I have chosen, adding in elements of historical materialism to inform my critical approach allows me to consider how legacies of colonialization, exploitation, imperialism, and counter-hegemonic movements impact the dynamics of norm creation,

internalization, and diffusion, as well as the ability for cities to resist these norms and put forth counter-hegemonic frames. For instance, in chapter 7, I discuss how Ho Chi Minh City's historical, colonial design of greenspaces has continued to act as the foundation for greenspace planning in the city, despite negative impacts on residents. I argue that this is partially due to Ho Chi Minh City's status as a norm adopter in this area, subject to whatever resources are available to carry out greenspace development plans. In this case, Ho Chi Minh City's high reliance on foreign direct investment and the pressure to engage in the norm of private-public-partnership (PPPs) lead it to continue greenspace development unevenly and to the detriment of communities on the frontlines of risk for flooding and urban heat island (UHI) impacts.

In conclusion, this chapter has demonstrated that while existing theoretical frameworks offer valuable insights into urban climate governance dynamics, they fall short of adequately explaining the emergence, evolution, and power structures underlying norm entrepreneurship in cities. By integrating postcolonial and coloniality scholarship with neo-Gramscian theory, this project develops a critical theoretical approach that accounts for both the structural constraints of global political economy and the agency of urban actors within historical and material contexts. This framework enables a deeper understanding of how cities like Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul navigate, negotiate, and sometimes challenge hegemonic norms in CAPs, mobility, and greenspace governance. Crucially, this approach moves beyond problem-solving theory to interrogate the systemic power dynamics that determine which cities become norm entrepreneurs, how colonial legacies continue to shape urban climate governance, and how counter-hegemonic movements can emerge to transform existing norms. By centering questions of climate justice and recognizing the complex interplay between material conditions and social relations of production, this theoretical framework provides the analytical tools necessary to

understand urban climate governance not merely as a technical challenge, but as a contested terrain where global power hierarchies are both reproduced and potentially transformed through the everyday practices of city governance. In the following chapter, I discuss my methods for answering the questions of this project.

Chapter 3: Methods

In this chapter, I outline my methodological approach to studying my research questions. I begin with a description of each of my three methods before providing a brief overview of each of my four case studies. I study three key phenomena in this project: (1) how cities become norm entrepreneurs and norm leaders within the regime of global urban climate governance; (2) patterns of norm adoption; and (3) the impacts of norm adoption behaviors on communities of residents within cities. To explore these phenomena, I used multiple methodological tools: semi-structured phenomenological interviews, grounded visualization, and process tracing. First, to explore research related to city climate action planning, I conducted semi-structured phenomenological interviews⁵ (Burch 1990; Soss 2015; Schaffer 2015) with sub-state level climate actors (city-level planners, representatives from local organizations, community climate activists, etc.) to understand more about the resources, involved actors/relationships, and considerations for climate justice during the planning and implementation process for city climate policies. Second, I used grounded visualization (Knigge and Cope 2006) to provide a more holistic picture of equity practices in climate action resource distribution and policy enactment. This method uses GIS to visualize qualitative data collected on environments and social interactions within them. Neo-Gramscian theory's emphasis on ideology as an intersubjective expression of power, as well as to the economic, structural, and infrastructural conditions that shape social norms and behaviors means that attention to the physical space in the methodological analysis is necessary to understand the full scope of the relationship between social, material, and political dynamics. Third, I employed process tracing to inductively

⁵ Phenomenological interviews are a method of exploring experiences or phenomena with interviewees through conversation. For example, how a city planner experienced the process of selecting a climate initiative, getting policy approval, and implementing the initiative. The focus is on the *experience* of this policy process, not the actual policy itself.

determine different pathways for policy adoption and implementation in each of my four case study cities (Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul). I conducted these methods simultaneously as iterative processes (i.e., I conducted stages of the research processes multiple times throughout this project).

Each methodological component fits together to tackle a different conceptual aspect of the research problem. The semi-structured, phenomenological interviews allowed me to dig at the how/who of norm entrepreneurs and norm leaders by focusing on the experience of different actors choosing, advocating (or opposing), and implementing different climate policies. The grounded visualization illuminates which patterns of norm leadership (including norm entrepreneurship) in urban climate governance play out materially within cities. The process tracing highlights why, when, and how these patterns of norm entrepreneurship appear within city planning and implementation processes. A diagram of this relationship can be seen in Figure 1 below. While I began the project with initial ideas to frame the direction of my dissertation and what anticipated finding, the reality of interpretive research is that new context or phenomena emerged throughout my research processes and required me to adjust the research and data collection processes (Calarco 2022). Below, I discuss each method and field site in more depth.

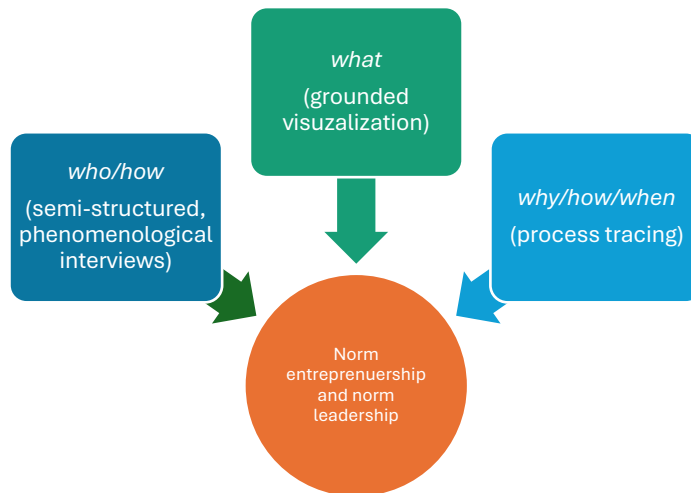


Figure 2: Methodological Design

Semi-Structured Interviews

I conducted semi-structured phenomenological interviews with formal (planners, decision-makers, official representatives of agencies) and informal (NGO representatives, community-level climate activists, local researchers with contextual expertise) actors.⁶ In these interviews, I focused on understanding three key areas of phenomena in city climate action planning and implementation: resources, relationships with external actors, and environmental justice.

Interviews can take on a variety of formats, including structured/survey, semi-structured, and open-ended/phenomenological. I chose a combination of semi-structured and phenomenological approaches to interviewing for several reasons. First, since my interview participants came from various professional expertise, I was less interested in a direct comparison of answers to questions in the interviews. The rigidity of highly structured approach to interviewing would have constrained me from probing for additional clarification when new or different information

⁶ Note: this is in progress, will update with the total number of people I updated in each city when I'm wrapped up where.

appeared. Second, the purely open-ended/phenomenological approach to interviewing was too broad for my research questions. I wanted to ensure that a basic set of themes or topics (resources, relationships, justice) are discussed across all the interviews. These needs have resulted in me adopting a semi-structured approach that is phenomenologically focused. I established the three themes within the interview plus some basic/general questions. I treated these questions as a “bank” to draw from and direct the interview. However, the semi-structured approach allowed me to dig deeper into some areas where appropriate or skip questions that are not relevant to some participants. My semi-structured interview questions can be found in Appendix A.

In each city, I identified a list of organizations and environmental leaders (including those discussed in the formal and informal actor categories above) for initial email and WhatsApp contact. I continued interviews in each site until I reached a point of saturation (i.e., the point where interviews are no longer producing novel themes or data). In total, I interviewed 14 participants. A table with additional information about each of the interviews can be found in Appendix B.

I used verbal consent processes for these interviews. Although these interviews were low-risk, and I was not working with vulnerable populations, I wanted to ensure that the responses were as confidential as possible. In cases where the interview was conducted in a language other than English, two transcripts were created- one in the original language and one as an English translation.

I used two primary methods of analyzing interview data: patterning and narrative analysis. Patterning comes from Lee Ann Fujii and describes an iterative, interpretive coding process where the researcher focuses on looking at patterns of words, phrases, ideas, names, and

concepts to identify key themes and findings (Fujii 2018). The second method, narrative analysis, is a process described by Shel Shenhav as tracing story, text, and narration within a piece of media (Shenhav 2015). Combining these two methods of analysis allowed me to elucidate flows of power and influence in and among the cities that I study. Additionally, I was able to adapt my analysis by using an inductive process for coding versus a coding process with pre-determined words and themes. Using a fixed coding method may have limited my construction of important themes that emerged in the coding process. In other words, the questions are written to explicate evidence to evaluate the assumptions I have about city climate action norms, how they develop, and how they play out in implementation.

Multiple sources of training and experience prepared me for this research method. During my master's degree, I conducted short-term research trips to Ho Chi Minh City, Seoul, Mexico City, and Buenos Aires to gather pilot data and assess the feasibility of this type of research. I also conducted interview research in Seoul using an interpreter for a project on Korean attitudes toward immigration in 2018. While English is quite common in all four of these cities, my interviews contained a mix of English, Spanish, and Vietnamese. I have intermediate fluency in Vietnamese after studying the language for six years and continue my study of Vietnamese by working with a private tutor. I have beginner-level fluency in Spanish and do not speak Korean. However, during my pilot visits to Mexico City and Buenos Aires, I established local connections and investigated the availability of translators for my research in those cities. For my research in Korea, I built a relationship with a professor at Seoul National University (SNU), who agreed to assist me with conducting and translating interviews with Korean officials if needed. In the end, I did not conduct any formal interviews with Korean officials and only spoke with participants in English for this portion of my research.

My site visits occurred as follows:

- Seoul: May to July 2018; December 2021 to January 2022
- HCMC: December 2019; March 2022 to September 2022
- Buenos Aires: March 2019; May 2024 to June 2024

During these site visits, I primarily concentrated on collecting grounded visualization data, meeting and speaking with local residents and government officials to obtain background, and accessing policy documents that were harder or impossible to obtain via online methods. A small number of interviews were conducted in the field, however, almost all interviews were conducted over Zoom, before, during, or after field site visits.

Though I would have liked to include more interviews, I ran into two specific challenges related to interviews in Seoul and Ho Chi Minh City. For Seoul, city officials declined to participate in interviews but offered supplemental materials related to their CAP and approach to climate policy. Ultimately, policy documents and artifacts ended up allowing me a full enough picture to conduct a final analysis.

As for Ho Chi Minh City, there were a series of political circumstances that limited participants' willingness to participate in formal interviews. Primarily, during the time that I was in the field in 2022 and in subsequent years, the government of Vietnam has arrested several Vietnamese environmental activists. This has created a bit of a chilling effect for environmental groups activity overall but an additional layer of hesitancy in speaking with an American researcher based in Canada about these topics. Instead, I have integrated insights from these more informal conversations I had with interviewees and interlocutors during fieldwork into my analysis as background information which I confirmed with secondary sources.

Overall, the limited number of interviews (especially in the cases of Ho Chi Minh City and Seoul) present some limitations within this project. First, the fact that two case studies in particular have fewer interviews means that there are some limitations within this work in understanding the internal political development of mitigation and adaptation initiatives beyond information that is publicly available. For instance, my analysis of Ho Chi Minh City's inclusion of residents in the CAP creation process was limited, as I could not formally interview anyone within the municipal government during this project to learn more about whether or how the city carried out participatory governance processes. Second, I lacked formal interviews with residents—specifically residents who are part of frontline communities. This has somewhat limited my assessment of equity in urban climate governance norms. Though I could infer the impact of some of these norms (such as suboptimal green space placement) on residents through other methods of data collection (i.e. grounded visualization), the perspective of residents themselves, in their own words, is a valuable source of data that is underrepresented in this project in its current form.

Grounded Visualization

Grounded visualization is a relatively novel method for international relations and political science research. It combines GIS with grounded theory to elucidate the social relationships between space and people (Knigge and Cope 2006). This method is very similar to qualitative GIS, a popular method used in geography and urban planning (Mennis, Mason, and Cao 2013). Knigge and Cope explain that combining GIS and qualitative data to represent results is not necessarily a novel concept (p. 2021). However, using the combination as a form of analysis is unique and is particularly useful for exploratory stages of analysis (Knigge and Cope 2006,

2028). This approach is iterative, pays attention to the particular and general at the same time, and leaves room for multiple interpretations of the data (Knigge and Cope 2006, 2028).

Although the field of political science's attention to spatial analysis is sparse, grounded visualization has been effective in geography and urban planning at demonstrating the relationship between social, political, and spatial elements. Absent one study on Social Science Research Network (SSRN) exploring the relationship between urban spatial design, social ordering, and governance (Guenova 2014), as well as a very recent IR piece analyzing the public architecture in shaping ontological security (Jackson and Subotic 2024), there does not appear to be any additional work in IR or political science that uses grounded visualization as a method.

I used grounded visualization to socially analyze the material conditions, such as structures, designs, and geographic features, within cities related to the effects of climate change. Additionally, this method allowed me to map the physical presence of efforts to mitigate emissions or adapt to climate impacts and how individuals socially interact with those material structures. As opposed to just pure GIS analysis, this method allows me to overlay the social patterns and impacts of those spaces. For example, in Ho Chi Minh City and Seoul, I created a GIS map that shows the concentration of greenspaces in combination with photographs. These visualizations and spatial analysis highlight who specifically benefits from climate action plans in cities. These maps are also tools I use to show how norms have been embodied in implementation by other cities, from other cities, or in contrast to other cities.

For example, in some cases, like Mexico City, city leaders have directly cited their desire to replicate the urban climate initiatives of specific cities. For instance, one case I explore in more depth in chapter 6 is Mexico City's bikeshare program, which was designed to closely mimic Barcelona's, right down to the branding, color, and bike rack placements across the city.

In visually comparing these programs alongside the secondary source interview data, I identify how Barcelona acted as a norm leader for bike share programs. Another example, which I also expand on in chapter 6, compares images of greenspace design of Ho Chi Minh City and Buenos Aires to colonial greenspace design of France and Spain to demonstrate that despite modernizations of policies, the structure, plant biodiversity, and placement of greenspaces across both cities still resemble colonial greenspace designs. I use historical data and publications on colonial botany to support my analysis of the visual similarity of these spaces as they relate to colonial garden design.

Grounded visualization has also allowed me to analyze equity impacts related to city climate governance. Using visual data mapped onto neighborhoods, I demonstrate how different social groups of residents are differently (and disproportionately) impacted by climate impacts such as urban heat island effects, flooding, and vector borne illnesses due to the spatial design. These differences in norms are most starkly seen in the analysis of greenspaces within and across my case studies. Combined with my field note data about the social use of these spaces as well as historical and policy document analysis of these sites, I communicate a narrative of how climate governance norms put into action impact residents' daily lives as they relate to climate vulnerability. The power dynamics of norm creation and adoption mean that cities have incentives beyond just addressing a need or problem in their selection or promotion of certain urban climate governance policies or practices. In some cases, norms become so because they are a best practice for addressing an urban climate governance problem. One example of this is Transit Oriented Development (TOD), which I introduce in discussing Seoul. This approach to urban design is considered a best practice for climate governance because it reduces individual carbon footprints of residents while also allowing for more efficient planning of transit systems.

On the other hand, the proliferation of public-private partnerships (PPPs) to maintain urban greenspaces has reinforced uneven access to the spaces and availability of amenities in these spaces for residents.

Process Tracing

The third part of my analysis aims to understand how norms are established and how these norms shift over time. I explore this through process tracing. Process tracing is defined as “the systematic examination of diagnostic evidence selected and analyzed in light of research questions and hypotheses posed by the investigator” (Collier 2011, 823). This method is appropriate for the analysis of this question because it provides a way of temporally isolating the effect of norms on city climate planning. Once I identified the norms of global city climate action and who creates these norms, I focused on why, when, and how patterns of norms appear within city planning and implementation processes. I did not use any singular process for identifying norms. This, like the other two components of my methodology, was also iterative. I used combinations of historical accounts, governance documents, interviews, and media coverage to identify norms. One important note here is that there are potentially dozens of urban climate governance norms I have excluded from my analysis. For the purposes of this project, I selected categories and norms that seemed to appear most frequently over my collection of research artifacts. For instance, CAPs were not only frequently referenced but also had major significance for C40 in its governing documents, proposals, and cities referenced these in their own materials. When tracing the norm of CAPs, there was public signaling of policies by norm entrepreneurs (primarily C40) which were championed by norm leaders (such as Oslo), closely followed by attempts to adopt those policies or values shortly after, driven by CAPs being written in as a C40 membership criteria and reinforced by various development and climate

funds as prerequisite documentation that needed to be in place to receive financial support or technical assistance.

Process tracing required me to identify a starting point —such as a narrative or a particular type of policy and accompanying timeline—and then explore the possible causal events in the narratives or outcomes, types of evidence to confirm or reject those events as causal, and identification of the tests I would use to evaluate that evidence (Collier 2011, 829).⁷ One gap in this method is that it does assume the mutual exclusivity of each hypothesis (Zaks 2017). Zaks offers a modification to the process tracing methodology—Relationships Among Rivals (RAR). While traditional process tracing as described by Collier and Bennett assumes mutual exclusivity, Zaks adds three additional typologies that can be used to explain relationships: coincidence, congruence, and inclusiveness (348). In the case of trying to trace norms in urban climate governance, it is exceedingly rare that researchers would be able to produce evidence that would confirm one hypothesis (ex: that a city adopting a specific bike share model was due to economic constraints) that would undermine alternative hypotheses (ex: that a particular bike share model was due to popularity among peer cities). Thus, evidentiary mutually exclusive process tracing has limited application to projects like mine. Instead, I used a combination of coincident and congruent process tracing approaches. Some norms, such as the bike share example, are best explained through a coincident process tracing approach, in which evidence for one explanation does not corroborate or undermine the other. This type of process tracing was most common throughout my analysis in this project. The other typology was congruent process tracing, where two (or more) explanations may need to work together to fully explain a norm emergence or adoption. An example of this is in norms related to greenspaces in

⁷ Adapted from (Bennett 2009)

cities. As I will demonstrate through chapters 4, 6, and 7, placement, design, and amenities are jointly explained by colonial design elements, PPPs, and cultural identity.

Although process tracing is not a common method for urban research projects, there are some examples I am able to draw from in my research design. For example, Hannah Lebovits' piece on restorative revitalization in inner-ring suburban communities in Ohio uses process tracing to identify causal events that led to the revitalization outcomes (Lebovits 2022).

Process tracing offers two valuable benefits to this dissertation. First, it allows me to communicate the importance of norms (or lack thereof) in global city climate governance. If norm entrepreneurs have a substantive impact on the types of policy considered, adopted, and implemented by cities globally, that may indicate possible methods of diffusing climate policy. Second, understanding pathways for city climate governance decisions (both planning and implementation) is something that researchers have identified as an important focus for research. A 2018 report from the Intergovernmental Panel on Climate Change (IPCC) Conference on City Climate Governance urged the study of different pathways for city climate action planning due to Global South cities' vast array of differences when it comes to resources and governance capacities (Cities IPCC 2018). What works for Global North urban environments likely cannot be directly transferred to or implemented by Global South cities due to technological, economic, social, and/or historical distinctions between these city environments. Furthermore, it is questionable whether the climate action planning behaviors of cities in the Global North are even desirable to implement across Global South urban environments, given the rife social and economic inequalities traditionally perpetuated in Global North urban planning. Although not all my cases are situated in the Global South, and this dissertation will have limitations in the types of causal inferences or generalizable findings that I can make, the research I collect and process

tracing I conduct can be combined with other case study research over time to create more complete pathways of city climate governance overall, including cities in the Global South.

Fieldwork Reflexivity

To collect the interview, grounded visualization, and process tracing data necessary to carry out my analysis, I conducted fieldwork in Mexico City, Buenos Aires, HCMC, and Seoul. My time in these sites varied from several weeks to 6 months in each case. Although long-term embedded fieldwork in political science and other social science fields can produce a substantial volume and depth of analysis, short-term immersion in the field for all four of my cases should still yield rich data that can be used to answer my research question. I received two external grants to help support two of the case studies, including funding from the Korea Foundation for the fieldwork in Seoul and a U.S. Student Fulbright Fellowship to conduct research in HCMC. I also received fieldwork support from the University of Ottawa Faculty of Social Sciences to complete my Argentina fieldwork.

Given the interpretive nature of this research, addressing my positionality is important for research transparency and ethical considerations. I consider my positionality within three domains of power: power with, power to, and power over (VeneKlasen and Miller 2007). I am drawn to this research question and these four city cases through the power I have *with* communities. I want to use the knowledge that I gain from my research to help strengthen advocacy for environmental justice, share knowledge about how to distribute limited adaptation resources more equitably to those most vulnerable to climate impacts, and highlight the powerful work that various actors are doing to improve the social conditions of people within cities.

The type of work that I am doing and my focus on adaptation and mitigation outcomes at the city level represent the power *to* change X by pushing against growing nihilistic perspectives on climate change. That is, my research will help highlight practical things that individuals and cities can do that will materially change the living conditions of others for the better.

And finally, it is important to acknowledge the potential *power over* communities where I am researching—i.e., the possible coercive aspects of power dynamics I will need to consider and navigate. I am a white US citizen with a Canadian research affiliation. Although I come from a historically low-income background in a US context where our family fell well under the federal poverty threshold, I have not experienced poverty on any measure of health, education, or standard of living used by the United Nations Development Programme in their Multidimensional Poverty Index (UN Development Programme 2021). My lived experience may mean that my perception of environmental justice for frontline communities in these cities may be skewed by my lived experience of a base standard of living in the US and Canada. My gender, language, and racial identities also play roles in what data and spaces I can access and how I may interpret my data. In some cases, these identities may have contributed to having power over communities where I conducted research; in other cases, they might have undermined my power. One example of where my identities may have contributed to having power over communities came in the form of my level of access during my Fulbright fellowship to Vietnam. I was able to easily gain access and connections with a variety of organizations and meetings to do background research because I had a high-level, government visa and connections to a globally recognized and respected program. Therefore, I was likely afforded a level of access in some cases that I may not have received access to otherwise. As I mentioned in the interviews section,

this aspect of identity may have also cut off my access to some spaces and research connections due to a fear of government responses to perceived or actual participation in this project.

Cases

My research was carried out in four cities: Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul. I use a diverse case selection method “intended to capture the diversity of a subject” (Gerring 2007). As such, the selection of cases is chosen using a purposive, comparative approach and is a non-random selection. Though all four of these cases are different in many ways, they are all cities with substantial global and regional leadership. For example, all four are part of the C40 Cities Climate Leadership Group, which requires that members be “world-leading” (C40 Cities, n.d.-a, 40). Though I explain that status as norm entrepreneur, norm leader, and norm adopter vary by the norm in question, on the whole in the categories of norms I analyze in this project, one of my case studies regularly falls into the category of “norm entrepreneur” (Seoul), two of the case studies often appear as “norm leaders” (Buenos Aires and Mexico City), while the last falls into the category of “norm adopter” in all three categories of norms (Ho Chi Minh City). I discuss these cases and classifications I have assigned in more depth in each city section below, respectively. These do not represent the entire universe of phenomena related to global cities and climate action policy norms, but they do highlight different pathways for how these norms may originate, how cities can shift between entrepreneur and adopter status, and who may occupy entrepreneur and adopter statuses.

Seoul

The case of Seoul, South Korea, allows me to explore the phenomena of historical and material conditions shaping modern politics of climate action in cities. Seoul has some of the strongest evidence of intentionally counter-hegemonic design in this collection of four cases, which contrasts against cases like Buenos Aires and Mexico City, where there was more intentional alignment to existing hegemonic values in city climate planning and urban design. My archival research demonstrates evidence of a counter-hegemonic urban planning philosophy throughout the 70s and 80s. For example, one of the urban planners most influential for the modern design of Seoul, Professor Byong-kee Kahng, engaged in a development project in Kuwait where the apartments constructed led to unexpected social behaviors from residents. He concluded that this was because the planning he implemented “had been observed and developed from a western perspective” (Appendix C) and that his urban planning perspectives had been influenced by western hegemonic norms of city planning. In response, Kang advocated that “urban planning and design in Korea should start with an oriental thinking system and seek a way to maintain order while coexisting with Western urban ideas” (Appendix C). Thus, Seoul’s post-war reconstruction and urban development have roots in a counter-hegemonic movement against Western urban planning techniques.

I argue that this counter-hegemonic philosophy in Seoul’s city planning, as well as the material organization of the city space, has led to social implications for the modern adoption of climate mitigation and adaptation policies. One focus of research in Seoul will be understanding if the types of participatory processes still present in the city extend into other climate adaptation and mitigation planning. Additionally, I study the relationship between the material and

historical conditions of the city and how it shapes the norms that Seoul embodies regarding climate action.

Buenos Aires

One of the two cases of norm leaders is found in Buenos Aires, Argentina. This case is one of the most straightforward. It focuses on the process of becoming a norm entrepreneur and the possible negative outcomes that norm entrepreneurship has on addressing climate justice and equity within cities. I explore three phenomena related to my research question with this case. First, I trace the process of rising to the status of norm entrepreneur. Buenos Aires has engaged in consistent actions over the past two decades to build up its status as a norm entrepreneur. These steps will highlight one pathway for cities that want to move from adopter to entrepreneur status. Second, I can explain why cities may be motivated to carve out substantive roles for themselves in climate governance. Climate governance issues, dating all the way back to before the Brundtland Report (Brundtland Commission 1987), have been considered the domain of “rich countries” that have met the otherwise basic needs of their population. For cities hoping to be seen as peers of US and European cities, asserting a role as a leader in climate governance may be a signaling technique to achieve that end. In that way, cities may be motivated to pursue norm entrepreneurship status in city climate governance as a strategy for maintaining or gaining power. In this case, I focus on investigating whether Buenos Aires is intrinsically motivated to take on climate governance or whether they merely see it as a strategy for changing the global order. Third, this case allows me to measure the relationship between norm entrepreneurship and equity in climate planning and implementation. Buenos Aires is a major player in climate governance yet has mixed evidence of being able to provide for the most vulnerable within their

city, especially in the face of new national and city leadership with competing priorities to a previously robust climate change governance leadership. The additional data I collected in the field through interviews and grounded visualizations allowed me to make a more empirically sound assessment of that relationship.

Mexico City

The second case of norm leadership in my dissertation is Mexico City (CDMX), Mexico. The case of CDMX presents a narrative of direct fights for norms and global status within city climate governance and how norms transition over time. Notably, CDMX has occupied both a norm entrepreneur and norm adopter role among global city governments regarding climate governance. The story of CDMX's attempts to position itself as a norm entrepreneur and how it has subsequently settled into a norm adopter position highlights that norm statuses are not static and that cities, just like states, engage in social ordering processes. Finally, I discuss how CDMX's attempt to establish and maintain a status of norm entrepreneurship among global cities resulted in significant equity gaps on climate metrics like air pollution.

The case of Mexico City within this dissertation centers on three phenomena. First, the history of Mexico City's engagement with other global cities highlights the fickle nature of relationships and norm influence across cities. As CDMX attempted to rise in the global order on the issue of climate governance, they faced direct pushback from US city leadership and the C40, led by western leadership at the time. This dynamic illustrates that norms are not static within the global city climate governance world and that challenges to ordering may be met with resistance.

Second, this case also demonstrates that we should not default to assuming that western cities are the norm for climate leadership. While at least one CDMX mayor admitted to having

overlapping policies and focuses with European cities, as well as close relationships with western and Global North led institutions like OECD and the World Bank, there was also a belief by the city leadership (and the international community) that Mexico City was a norm entrepreneur of its own right for over a decade. However, this alignment with European urban planning responses to climate may have negative consequences for the most vulnerable within Mexico City. While the mayors chased recognition for themselves and their city, equity gaps persisted across the city for those most vulnerable. Although the CDMX Resilience Strategy paints an optimistic picture of funneling needed resources to the most vulnerable in the community, the question of efficacy in implementing this vision remains. Interviews and process tracing elucidate the alignment between planning and implementation of this resilience strategy. Finally, I draw causal connections between norm leadership and equity implementation, given the wealth and social inequality in the city. This will be an important contribution because it will examine the question of whether norms in global city climate leadership are incompatible with an environmental justice framework.

Ho Chi Minh City

The final case I explore in this project is Ho Chi Minh City (HCMC), Vietnam. This case centers on two phenomena. First, it is the sole norm adopter within this set of cases. I find that the material conditions of the city are ultimately too large of a barrier for the city to currently overcome right now to secure a spot as a true norm entrepreneur within the global city climate community. Second, HCMC is a case where I explore how the policies promoted by norm entrepreneurs harm equity and justice on climate within the entrepreneurial cities and in the cities that are forced into the role of norm adopters. Ultimately, even though HCMC aspires to address

climate vulnerability and highly values policies that tackle these inequities, structures like funding availability and technical support chip away at the fidelity of those values and plans when it comes to implementation. Furthermore, the pressure for Vietnam and HCMC to continue building the economy (and now restarting that growth in the aftermath of shutting down for two years during COVID-19) encouraged HCMC to ignore its role in facilitating human-caused environmental impacts such as coastal erosion and water shortages. This case engages deepest with the idea that norms are necessarily sets of behaviors or policies that are best for residents. Instead, urban climate governance norms may use the framing of “best practices” to exert social pressure for norm adoption. As a result, other practices or policies that may provide more positive benefit for residents may never be taken up as a norm within the urban climate governance regime because they may not serve other political, economic, or cultural interests.

The legacy of exploitation, colonization, and imperialism has accelerated climate vulnerability for many countries in the Global South and many cities within their jurisdiction (Intergovernmental Panel on Climate Change (IPCC) 2022). Many cities and countries that we consider to be norm entrepreneurs have created the very necessity for climate mitigation and adaptation in the first place by extracting and displacing in service of the goals of global capitalism. Additionally, norm entrepreneurs have been put in charge of the funding mechanisms that norm adopters will depend on to implement urgent climate adaptation measures. For example, Canada and Germany were recently appointed to restructure the Climate Finance Delivery Plan, the mechanism under the Paris Agreement that will provide over \$100 billion annually to developing countries for adaptation (Canada 2021). As things are currently organized within international organizations, norm entrepreneurs and norm leaders will set the funding priorities, criteria, and administration of these funds for norm adopters. Interrogating the norms

that are set by these entrepreneurs (and norm leaders) around adaptation governance and implementation is critical to identifying where there may be systematic shortcomings for global equity. The case of HCMC can help demonstrate where ideological commitment falls short in achieving equity in urban climate governance. Specifically, I examine how economic factors like market conditions of financing adaptation or constrained city budgets may force equity to be overlooked.

My methodological approach represents a deliberate attempt to expand beyond traditional IR research paradigms. By combining semi-structured, phenomenological interviews with grounded visualization and process tracing across four diverse urban contexts, I seek to capture both the structural dynamics of norm entrepreneurship and norm leadership as well as understand the everyday impacts of climate governance on urban residents. The iterative nature of these methods allows for the emergence of unexpected findings while maintaining analytical rigor, particularly important given the complex power relationships that shape urban climate governance across Global North and Global South contexts. Ultimately, the methodological framework presented here aims not simply to document how norms emerge and spread within urban climate governance, but to illuminate the justice implications of these processes—revealing how the pursuit of global recognition and norm entrepreneurship status can both advance and undermine the climate resilience of the communities these policies are ostensibly designed to serve. In doing so, this approach contributes to a more critical and equity-centered understanding of urban climate governance that centers the experiences of those most vulnerable to climate impacts while interrogating the global power dynamics that shape local policy outcomes. In the next chapter, I explore two models of how cities may navigate global power dynamics related to urban climate governance through the cases of Buenos Aires and Seoul.

Chapter 4: A Tale of Two Norm Entrepreneurs: Buenos Aires and Seoul

How do cities successfully become norm leaders? How does norm leadership differ from norm entrepreneurship? In this chapter, I explore two cases of cities who⁸ have become successful norm leaders – Seoul and Buenos Aires – and analyze the pathways that led to their rise in status. I compare Buenos Aires’ status-seeking behaviors within international and regional networks against Seoul, where I demonstrate how historical and economic structures created a pathway for Seoul to emerge as a norm entrepreneur in transportation infrastructure and greenspace design. Together, these two cases highlight two different, viable pathways for norm leadership within the space of urban climate governance.

The two pathways illustrated by Buenos Aires and Seoul are represented in Table 1.

Table 1: Two pathways for the rise of city norm leadership

	Name	Description
Pathway 1	Hegemonic assimilation	Cities conform and strive to achieve excellence within existing hegemonic norm structures.
Pathway 2	Hegemonic challenge	Cities break away from existing hegemonic norm structures and attempt to create new visions or new types of norms.

I argue that Buenos Aires represents pathway 1 while Seoul represents pathway 2. As a point of clarification, I do not believe these are the *only* pathways to becoming a norm leader or norm entrepreneur. Rather, I am attempting to demonstrate two ways that cities *can* become norm entrepreneurs or norm leader. Similarly, not every norm entrepreneur has done so through hegemonic challenge. I argue hegemonic challenge is just one pathway that cities can use to

⁸ I refer to cities as “who” throughout this text to highlight how these actors have agency and identity which become factors for their decisions, policies, and practices

become a norm entrepreneur in this space. I begin this chapter with a discussion of each case study. I conclude this chapter with a discussion about the implications of these two pathways for global urban climate governance and norms.

Buenos Aires (Pathway 1: Hegemonic Assimilation)

Buenos Aires represents a prototypical case of one method that cities can use to become norm leaders within global urban climate governance: hegemonic assimilation. Specifically, Buenos Aires has leveraged leadership within respected international organizations, shaped its urban aesthetic to align with hegemonic ideals, and closely pursued policies and projects within the urban governance zeitgeist.

First, participating and leveraging leadership roles within international organizations provides a strong foundation for cities to become norm leaders. Buenos Aires holds a prominent role in both region and global urban climate governance organizations. Previously, Buenos Aires has held a role on the Steering Committee for C40. Buenos Aires has also been regularly recognized through C40 in the organization's "Good Practice Guides" and Cities100 case study series.

Within the C40 Climate Leadership group, Buenos Aires has joined 17 of the 18 sub networks within the organization. The city with the next highest number of network memberships is Rio de Janeiro, who is a member of 15 out of 18 of these networks. These networks

are private and meant to facilitate peer exchanges and each focus on different areas of urban climate governance. The degree of involvement and activity vary greatly from network to network. Some networks develop collective shared goals towards outcomes that member cities to that network informally agree towards. Others produce more informal peer support through creating resources, reports, and best practice guides. Recently, C40 has launched an accelerator program which requires cities to commit to public, high-ambition targets and which overlap with the goals of some of these networks. In some cases, accelerators have been an outcome of work in networks.

To put Buenos Aires' participation in networks into perspective, the average number of networks that C40 member cities are part of within the organization is 5.5 and the modal number of networks is 5. In short, Buenos Aires' level of activity is within C40 is greater than the vast majority of other cities in this group. In 2022, Buenos Aires held the first C40 World Mayors Summit since the start of the COVID 19 pandemic. This summit not only sent a message that Buenos Aires was a serious actor within the C40 network with the capability of hosting and leading the network's largest annual gathering but also allowed the city to have a platform to feature their work on climate action with a captive international audience.

The involvement of Buenos Aires in C40 plays a major contributing role to its perception of its international leadership among global cities, both of itself and by others. In its CAP, Buenos Aires documents the start of its membership in 2009, followed by the city's role in hosting the First Latin American Forum for C40 Mayors on climate change in cities in 2015 (Government of the City of Buenos Aires 2020, 27). The 2020 published CAP notes the term of the Head of Government for Buenos Aires as the Vice-President of the C40 Steering

Committee.⁹ In addition, this membership is mapped as a “main milestone” for the city and included in their graphics of important climate action achievements (Government of the City of Buenos Aires 2020, 29). Furthermore, Buenos Aires notes that it has continuously provided annual reports to the Carbon Disclosure Project (CDP) since 2011 and has achieved “the highest grades by this organization” since it began issuing awards in 2018 (Government of the City of Buenos Aires 2020, 27). Buenos Aires has been named to CDP’s City A-List for six consecutive years (2018-2023) (CDP 2023).

The city also notes its internal leadership role within Argentina. Buenos Aires explains in its CAP “we took a leading role in the country when passing the Mitigation and Adaptation to Climate Change law,” which requires all agencies within Buenos Aires to include the Climate Change Cabinet when dealing with issues that concern climate change (Government of the City of Buenos Aires 2020, 40). Though this initiative is specific to Buenos Aires’ government operations, it has been taken on by other cities across Argentina (Interview 14 2025). This piece of legislation and structure is a particularly unique aspect of Buenos Aires climate action planning and positions Buenos Aires as a standout nationally, regionally, and within C40. Buenos Aires’ high-level climate change policy coordination positions it to better lead on climate issues and has raised the leadership profile of the city (Interview 14 2025).

A second strategy for assimilating into the hegemonic urban climate governance order is aligning the aesthetics of city design and urban planning with existing urban norm entrepreneurs. However as much as cities wish to break away from their past, there are structural and cultural factors that thread through to the present. Put another way “imagined futures must proceed from

⁹ At the time of writing this in 2025, Buenos Aires has transitioned off the Steering Committee

existing social conditions” (Kian Goh 2021, 20). Many scholars have explored variations of this concept, including James Holston’s “ethnographic present” (as discussed in Goh, p. 20), which refers to the paradox in planning of needing to maintain a “productive tension” between “state-directed futures,” which may be utopian in nature, and a socially embedded form of the present, which may restrain imagination and possibilities for the future (Leonie Sandercock and James Holston 1998). Another way this phenomenon has been explained is that there is “no blank space futuring” for cities constructing urban futures (Berbés-Blázquez et al. 2023; Selin and Sadowski 2016).

One area of city design where we can most starkly observe aesthetic assimilation is green spaces. Buenos Aires quite literally brands itself as “the new green city” in the byline of its city website (Figure 3). In addition to the city framing green space as part of its urban brand, the green space of Buenos Aires also pays homage to the city’s attempt to align with European aesthetics and norms. One excellent artifact of this point is in the design of Parque Micaela Bastidas, one of the newest parks in Buenos Aires. Parque Michaela Bastidas is in the Puerto Madero neighborhood, a “regenerated portside neighborhood” according to the city’s website.¹⁰ This neighborhood also has several high-end retail stores and restaurants in addition to hosting an 865-acre nature reserve. These factors all contribute to the fact that Puerto Madero is considered one of the most upscale, exclusive, and most recently developed neighborhoods in the city.

¹⁰ <https://turismo.buenosaires.gob.ar/en/recorrido/puerto-madero>

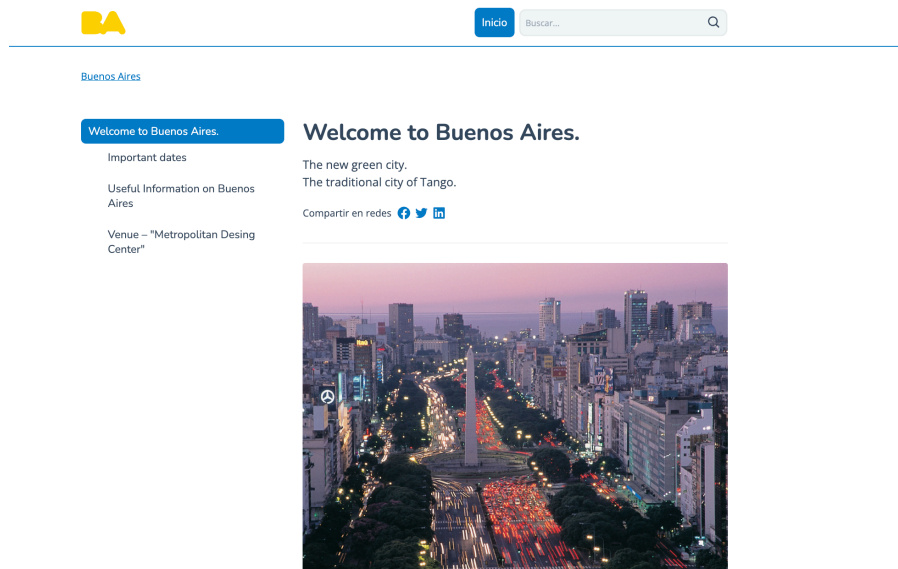


Figure 3: Screenshot of Buenos Aires website which shows the city's inclusion of "green"-ness as part of the city's slogan and in the lead image displayed (source: <https://buenosaires.gob.ar/solarcities/en/bienvenida-a-buenos-aires>)

A specific feature of Parque Micaela Bastida that echoes European green space design is the Rosedal Plaza del Huerto [rose garden plaza]. This rose garden is such a key feature of this park that the city has included a photo of it as one of two photos on the park's tourism webpage (Figure 4). I will elaborate more on the use and maintenance of colonial botany and green space design as an example of green space norms in chapter 6, however, the installation and maintenance of a rose garden in a new park of Buenos Aires is an aesthetic example of how the city continues to try to align its identity with Europe.

Parque Micaela Bastidas

El parque tiene distintos sectores que se comunican mediante caminos y escaleras.



También lo vas a encontrar en:

Puerto Madero | ¡Disfrutá Buenos Aires al aire libre! |

Este parque fue diseñado por el estudio de los arquitectos Néstor Magariños, Irene Joselevich y Graciela Novoa. Fue inaugurado en enero de 2003 y ocupa una superficie de 5,4 hectáreas.

El parque tiene distintos sectores que se comunican mediante caminos y escaleras: la Plaza del Huerto, la Plaza de los Niños y la Plaza del Sol.

Conocé la historia del barrio de [Puerto Madero](#).



Figure 4: City of Buenos Aires tourism website featuring Parque Michaela Bastidas and the Rosedal Plaza del Huerto

Parque Micaela Bastidas includes 24 different varieties of roses across its five different rose beds (Figure 5). Nearly all the roses in this garden originate from France, the United Kingdom, or the United States according to the plaques that accompany the roses in the garden, provided by the city (Figure 6). The fact that roses originate from the Northern Hemisphere and were key features of colonial gardens means that the presence of roses across the Global South in places like South Africa and India – as well as Buenos Aires – are the results of deliberate planning, as roses are not native to these regions. The symbolic relationship between rose gardens and colonialism has been well documented (Baber 2016; Favretti and DeWolf 1971; Herbert 2011; Hill 2013). Colonial green space elements are far from an aberration. For many cities there are

both nostalgic and practical reasons for the continued existence of colonial garden or green space design. The palm trees of Buenos Aires, which I introduced at the start of this project, presents one such example. However, a contemporary rose garden installation represents an additional layer of effort by the city to align itself to European ideals of aesthetic design.



Figure 5: Map of Rosedal Plaza del Huerto Rose Garden. The map shows the varieties and locations of each type of rose within the garden as well as highlighting that this garden is a prominent feature of the park. This sign also shows the scale of this section of the park, which includes 10 beds of different rose varieties. The sign is new and not damaged.



Figure 6: Plaques from the Rosedal Plaza del Huerto Rose Garden. Each plaque features the name of the rose, an indicator of whether it is a hybrid species, the origin, scent notes, and botanical classification

For postcolonial cities, hegemonic assimilation through aesthetic discourse is not merely a product of cultural hegemony. Postcolonial cities- and their residents- have agency. However, this is not to say that forces such as nostalgia and cultural hegemony do not play a role in the choices to maintain or even actively design aesthetic features which replicate or play on the

features of former colonial rulers. This type of dynamic obviously complicates the conventional (and perhaps oversimplified) understanding of cultural hegemony as a top-down process. Instead, it highlights that postcolonial aesthetics of colonial design represent a more fraught dynamic where postcolonial leaders and residents may embrace, adopt, and even protect, colonial designs despite engaging in other types of cultural or political resistance.

One way to understand the adoption of colonial aesthetics is through the lens of colonial mimicry (Bhabha 2004). Bhabha explains how this pattern of mimicry “repeats rather than re-presents” (p. 125) and “reverses ‘in-part’ the colonial appropriation by now producing a partial vision of the colonizer’s presence; a gaze of otherness” (p. 126). Bhabha adds that mimicry is “a complex strategy of reform, regulation and discipline which ‘appropriates’ the Other as it visualizes power.” Applied to an attempt to understand the discourse of aesthetic mimicry, this theoretical construct explains why postcolonial cities may embody the design of cities that represent hegemonic power within the global order while simultaneously holding onto other unique aspects of the city’s identity. Postcolonial cities may adopt the aesthetics of hegemonic powers to signal their acknowledgement of this power structure within the global order and to normalize themselves within that structure while simultaneously mocking other aspects of hegemony within this order.

In the case of postcolonial cities, I argue that the concept of mockery as part of mimicry, which Bhabha identifies as a critical component of this phenomena, has some variation. In the case of Buenos Aires, their embrace of European aesthetics may be more sincere. In contrast, cities like HCMC and Mexico City also have aspects of colonial design that have been maintained and promoted, but these cities have both maintained a much more tongue-in-cheek relationship with their colonial pasts. For instance, instead of wholesale embracing colonial

design, it is common for colonial inspired buildings, parks, or streets to contain small subversions or twists, which reasserts the city's unique identity.

The level of sincerity involved in embracing hegemonic and colonial aesthetics is related to the phenomena of hegemonic assimilation. Buenos Aires is more invested in colonial aesthetic as part of its norm leadership ambitions – they genuinely believe that these aesthetics represent success. On the other hand, Mexico City has been less willing to “play the game” with hegemonic assimilation (a point I explore more in depth in chapter 5), which means that the aesthetic mimicry we observe in this case has more mockery embedded to its use of these design elements. Mexico City represents a more “classic” application of mimicry according to Bhabha's account. Similarly, HCMC's brand of mimicry also contains these subversive elements. Since HCMC is not aspiring to become a norm entrepreneur, their mimicry discourse takes more of the standard tone of ambivalence that Bhabha observes in his work.

The third strategy for hegemonic assimilation is to pursue projects within the urban governance zeitgeist. As I will discuss in chapter 6, norms and best practices within urban climate governance regularly shift and are often brought about by a combination of advocacy from city norm entrepreneurs as well as policy economy structures. I explore two examples of Buenos Aires' participation in popular urban climate governance movements as examples of how the city has used alignment as a method of hegemonic assimilation. Specifically, I discuss initiatives to promote city resilience and add inclusivity into CAPs.

First, resiliency initiatives were a strategic initiative of urban climate governance which played a substantial role in elevating the status of many cities globally. Resiliency was primarily taken up and led by the 100 Resilient Cities Network (100RC), which ran from 2013-2019. Buenos Aires proudly discusses its membership in 100RCs throughout policy documents and in

statements from city leaders. Though now shuttered, 100RC represented an elite set of global cities committed to the idea of urban resiliency. This initiative, led by the Rockefeller Foundation, allowed cities to have access to financial and technical planning resources to support city resiliency efforts. Due to the Rockefeller Foundation wanting to have a tight-knit and diverse group of committed cities, combined with wanting to ensure that the foundation could sustainably support all cities within the network, membership to 100RC was restricted and highly competitive. In short, being a member was a coveted status and as such, Buenos Aires is proud to have gained access.

Though 100RC no longer exists, the legacy of resilience in urban climate governance is still embedded within institutional structures of cities and within many city planning documents. For instance, a cornerstone of the resilience effort was encouraging (and funding) cities to establish positions for Chief Resilience Officers (CROs), who would guide strategic planning of city resiliency. For the most part, these positions were funded by 100RC and the Rockefeller Foundation. Cities receiving support to establish these roles were charged with creating a transition plan to independently fund the salaries of their CRO. However, when 100RC shuttered, although some cities retained their CROs using their own city funds or other grants, other cities phased out the position. Now, many cities are beginning the process of transitioning this role into Chief Heat Officers (CHOs) to deal with the issue of urban heat island effects. Buenos Aires is one of the cities that continued to maintain the role of CRO beyond the direct support from C40. The city eliminated this position in October 2024.

A second example of strategic initiatives that have been taken up in Buenos Aires' CAP is inclusivity. This was introduced in 2020 as part of C40s climate action planning framework, which includes three pillars: commitment and collaboration; challenges and opportunities; and

acceleration and implementation (C40 Cities Climate Leadership Group 2020b, 9). These three pillars were later transformed into a more comprehensive framework titled “C40 Cities Climate Transition Framework” (Figure 7). Prior to C40 launching the inclusion pillar of their framework, CAPs within the network rarely included discussion or analysis of equity considerations in mitigation or adaptation planning. For example, CAPs for Buenos Aires, Mexico City, and Seoul prior to 2020 all excluded explicit discussion of specific population vulnerabilities or equity consideration in policy planning for climate mitigation or adaptation. C40 reinforced this norm through a series of planning documents and resources which includes communication toolkits, writing guides for CAPs, and framework documents. For example, an October 2020 CAP communication toolkit published by C40 emphasizes the need for inclusive engagement. C40 instructs network members that “cities need to identify and engage stakeholders and particularly hard-to reach groups, so that they can understand and address the root causes and drivers of disproportionate climate risk, and consider how the climate action process can be made more inclusive” (C40 Cities Climate Leadership Group 2020a, 42).

Cities Climate Transition Framework

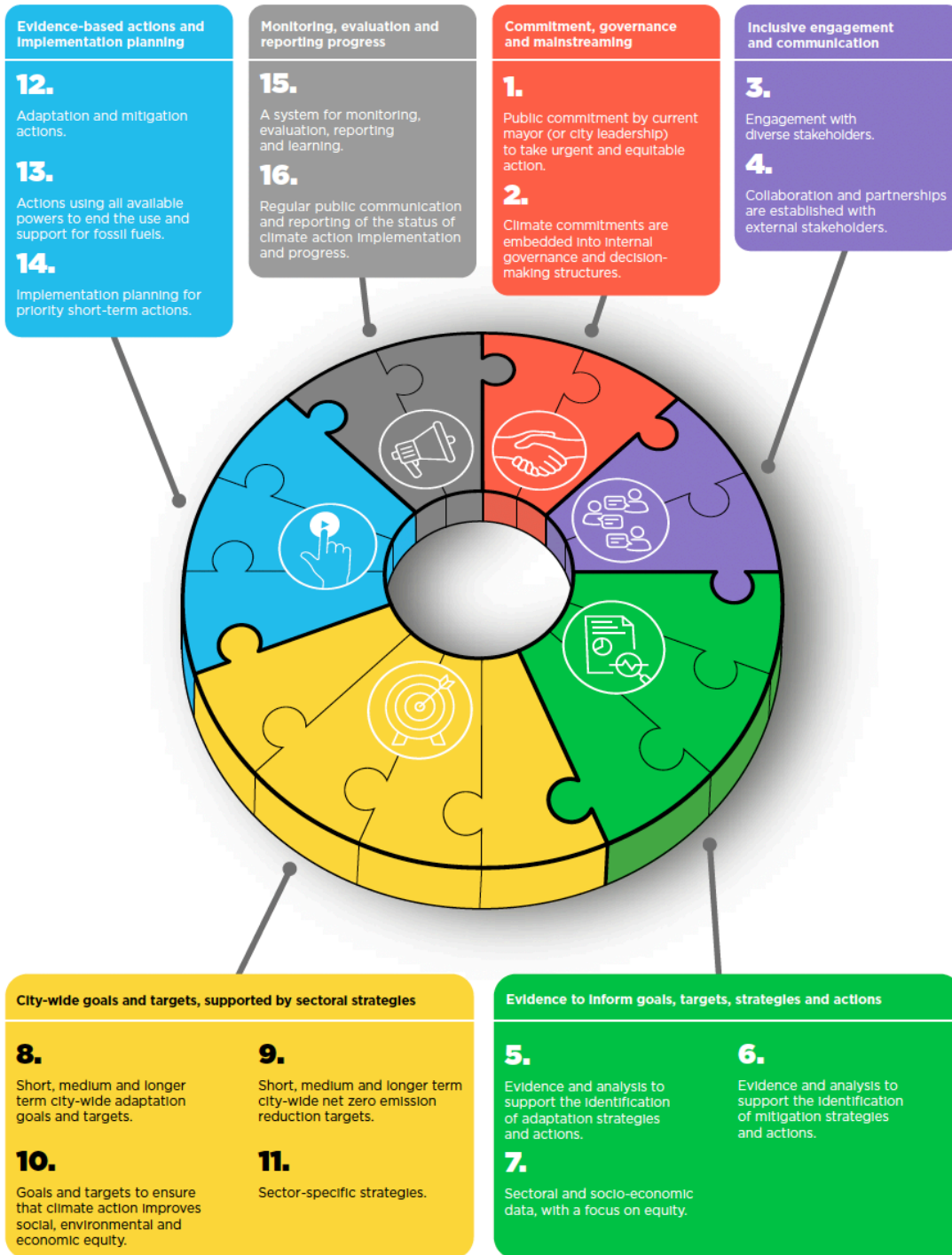


Figure 7: C40 Cities Climate Transition Framework (CCTF) (Source: (C40 Cities Climate Leadership Group 2023)

To help member cities address inclusion in CAPs, C40 entered a collaborative partnership with the United Kingdom Foreign, Commonwealth and Development Office (FCDO) to hire and implement city advisors across a collection of Global South cities. City officers were charged with partnering with cities to implement Paris Agreement compliant CAPs using the C40 Climate Transition Framework. Despite the more holistic framework, city advisors focused on helping cities plan around and connect with the technical expertise to tackle the “big three” components of their plans: mitigation, adaptation, and inclusion (framework components 5, 6, and 7 featured in Figure 7) (Interview 14 2025). Buenos Aires was one of the handful of recipient cities that received a city advisor under this initiative. One stream of work that these city advisors performed was assisting the city with strategically planning how they were going to include various perspectives of residents- especially those who were vulnerable, such as the elderly (Interview 14 2025).

Buenos Aires’ uptake of the resiliency and inclusion movements in climate governance offers two examples of how city participation in zeitgeist initiatives allow cities to gain access to more resources and to be seen as norm leaders through hegemonic assimilation. In the case of the resiliency (and now urban heat) movement, Buenos Aires was able to establish themselves as a global leader in resiliency government and access networks through the Rockefeller Foundation. As the focus on urban resiliency shifts to urban heat, Buenos Aires has easily integrated into these policy conversations and private initiatives. For instance, the Atlantic Council Climate Resilience Center (formerly known as the Adrienne Arsht-Rockefeller Foundation Resilience Center), which was established in 2019 at the Atlantic Council through Rockefeller Foundation funding, has included Buenos Aires as one of twelve case study cities in their first major report

on the social and economic effects of extreme heat on cities (Atlantic Council Climate Resilience Center 2024b; 2024a). Notably, all twelve cities featured in this report were 100RC members. Similarly, through embracing the inclusion aspects of C40s CAP framework, Buenos Aires was able to benefit from resources such as the city advisor program.

Taken together, Buenos Aires has become a norm leader in urban climate governance because of their practices of leveraging leadership roles in international organizations, aligning aesthetics and design to existing norm leaders, and participating in popular climate governance initiatives. Thus, despite a series of policy and leadership setbacks in the city (some of which I address deeper in chapter 6), Buenos Aires maintains a reputation as a norm leader among global networks and regional actors. These processes of norm assimilation also highlight that it is not necessary for norm entrepreneurs to promote *effective* climate policy to ascend to a leadership role as long as they embrace existing power structures.

But what happens when a city does not want to embrace existing global order, power structures, and norms around urban climate governance? In the next case I present Seoul, a city which successfully established themselves as a norm entrepreneur through hegemonic challenge.

Seoul (Pathway 2: Hegemonic Challenge)

Seoul represents a prototypical example of an alternative pathway towards the achievement of norm entrepreneur status as a city within global urban climate governance: hegemonic challenge. I argue that Seoul was able to successfully pursue this pathway through a combination of historic and economic structural opportunities. I specifically unpack Seoul's rise as a norm entrepreneur on the topic of transit-oriented development (TOD) and pedestrianization of the city. To

understand Seoul's rise as a counterhegemonic norm entrepreneur within urban climate governance, we must first understand how historical urban planning processes have shaped contemporary policies and practices in this city.

After the Korean War and periods of political unrest between 1960 and 1980, Seoul underwent a process of rebuilding and redesign of the city, which coincided with a period of “intense modernization” (Al-Bayati 2023). The need to rebuild and redesign was driven by a combination of factors. First, the rapid modernization of the city led to a huge increase in residents in Seoul and a need to provide housing to support this development (W. Cho and Kwon 2021). Second, in the post-Korean war period, the city was attempting to establish itself as a global space (W. Cho and Kwon 2021).

During this same period, Western cities were the head of the global order on urban planning and championed modernist and “rational” models which called for wholesale demolition and reconstruction within cities, the centering of expert urban planners, and a focus on car-oriented development (Ferial 2023). In tandem, the public space, public space architecture, and the city were rejected by architects and politicians throughout this era spanning between 1930 and 1970 (Ferial 2023). Ferial – and other scholars such as Jane Jacobs, Christopher Klemek, and Jan Gehl – actually explicitly say that this period was driven by “hegemony of modernism” (Ferial 2023, 235).

Seoul diverged from this norm of urban planning and instead forged a path which prioritized conversion of existing structures, democratic participation, and transit-oriented development (TOD). In the background of this counter-hegemonic approach to urban planning was Professor Byong-kee Kahng who is considered the “Father of Seoul's Urban Design.” Professor Kahng rejected Western urban planning norms of top-down urban development and

instead approached urban planning using a bottom-up approach. Additionally, his influence in Seoul's urban design included revamping streets and buildings to allow for a more walkable environment across the city and implementation of citizen-led urban planning through civic movements.

The turn against Western urban planning norms for Seoul began in 1960 with the Tokyo plan, followed by the 1977 and 1979 Seoul spatial structures, which combined to form a vision Kahng called the “Rosario Metropolis of Tomorrow for Seoul” (C. G. Choi, Seong, and Sung 2024). Figure 8 shows two diagrams designed by Khang to communicate his vision for TOD. In the diagram on the left, Kahng highlights the proximity of density to subway stations within the center of the city and, moving outward, a protected greenbelt for recreation and natural preservation. On the right, Kahng's diagram shows what the area surrounding each station would look like. Immediately next to the opening of the subway, there would be a series of businesses and other non-residential buildings to provide goods and services to residents and commuters. Connecting to and through each station would be speed controlled streets and buffer green surrounding those streets and non-residential buildings. On the outer corners of each station square there would be service industry and low-density residential use (and higher density residential uses right outside of this immediate area). An important feature of the Rosario model is that it would not create *one* center; rather, it would make the city more neighborhood-focused and create *many* centers, connected by transit (C. G. Choi, Seong, and Sung 2024). In doing so, Kahng believed that Seoul could simultaneously alleviate housing shortage problems and also road-traffic congestion (C. G. Choi, Seong, and Sung 2024).

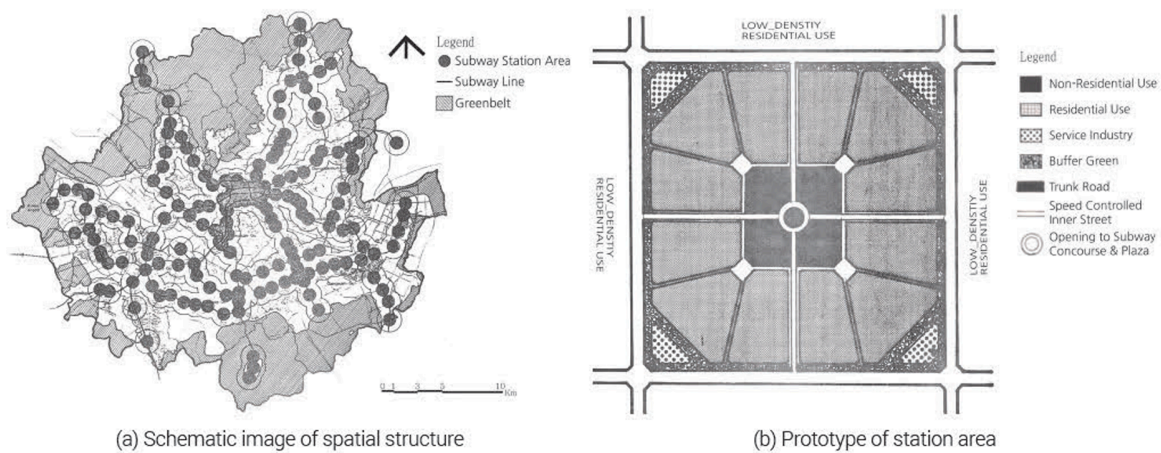


Figure 8. Rosario Metropolis of Tomorrow for Seoul

Source: Kahng (1980b)

Figure 8: Rosario Metropolis of Tomorrow for Seoul Prototype Diagrams (Source: (C. G. Choi, Seong, and Sung 2024, 93)

Byong-kee Kahng became inspired to pursue this alternative model of urban planning after he engaged in a development project in Kuwait where the apartments constructed led to unexpected social behaviors from residents. He concluded that this was because the planning he implemented “had been observed and developed from a western perspective” and that his perspectives of urban planning had been influenced by western hegemonic norms of city planning. In response, Kang advocated that “urban planning and design in Korea should start with an oriental thinking system and seek a way to maintain order while coexisting with Western urban ideas” (Appendix B, Artifact 1). Thus, Seoul’s modern urban development has roots in a counter-hegemonic movement against Western urban planning techniques.

The counter-hegemonic design of the Rosario plan and Kahng’s influence also extended into ideas about what it means to be a citizen and resident in Seoul. Kahng wrote “people should be in charge of cities and that the job of city-building should be left up to citizens rather than so-called experts such as urban planners” (Appendix B, Artifact 2). Kahng welcomed residents and citizens to co-design space, ceding power and agency to residents rather than planners. This

approach became embedded into Seoul's urban planning norms and discourses. Even in contemporary times, there are many projects across Seoul that have democratized planning designs, such as the Han Pyeong Park Project. This project, which was to build 50 parks across 4 municipalities within Seoul, had community design processes where residents were able to provide input and feedback on the design and implementation on each of these mini-neighborhood parks. In figure 9, you can see images and artifacts from this 13-year project, which show how communities formed their park spaces as well as showing the planning processes for collaboration and input.



Figure 9: Han Pyeong Park Project Artifacts depicting pictures of 50 spaces before, during, and after redesign projects, including pictures of participatory processes. (source: photo taken by author in January 2022 during fieldwork at the exhibit "Seoul as Envisioned by a Scholar of Urban Design")

Even though this democratized planning process arguably became a central part of Seoul's urban planning DNA, it was not loved by all politicians. Mayor Lee Myung-bak rebuked this approach to planning, lamenting about how "former city governments had their own city planning and urban designs" (Kirk 2002). He critiqued this approach, which felt meant that the city had little control of development processes, in favor of what he called a "more systematic urban planning" (Kirk 2002). Despite the legacy of Kahng's democratized urban planning, Lee Myung-bak defended his rejection of this idea by saying he had a mandate from the public to do so and that they were "living in a time when citizens want that kind of approach" (Kirk 2002).

This approach to urban planning provided a powerful, and intentional, counter-hegemonic approach to urban planning processes which had been established by Western cities. In decades that followed Seoul's implementation and leadership on these ideas, best practices of walkable cities and TOD were picked up and adopted by Western urban governance leaders. Indeed, the concept of the "15-minute city" bears a striking resemblance to 1980s schematics of transit development surrounding dense housing areas of Seoul.

One such result of this influence was the construction of Seoul's pedestrian plaza. Prior to the redesign of this plaza, Seoul had no public space in front of the city hall (Figure 10). Since the installation of the pedestrian plaza in 2004, it has been a significant space for civic life, hosting events like concerts, ice skating, and candlelight protests after the Itaewon crowd crush tragedy. Figures 11, 12, and 13 show the pedestrian plaza and adjacent areas in use in these various ways. These open spaces have also been points of gathering for protesters, as well as supporters, of President Yoon's declaration of martial law in 2025. The city describes this space

as “a central stage of ‘Korean contemporary history’ [and a] hub for communication with citizens and sharing nationwide sorrow” (Seoul Metropolitan Government 2024a). Although Kahng was not the designer or architect of this space, his values of human-centric design, which encouraged citizen participation, were at the core of the planning and implementation of the “People-oriented” Seoul Plaza (Seoul Metropolitan Government 2024a).



Figure 10: Seoul Pedestrian Plaza, 1979 before the city installed public space in front of the city hall building (Source: Seoul Metropolitan Government)



Figure 11: Seoul Pedestrian Plaza, January 2022. The space in front of the city hall (glass building) is empty except for a set of tents set up for COVID-19 testing. The space is partially shaded by buildings and partially covered in sun. (Source: author during fieldwork)



*Figure 12: Seoul Pedestrian Plaza hosting a Psy concert (above) and ice skating (below)
(source: Seoul Metropolitan Government)*



Figure 13: Candlelight protests against President Yoon from Seoul Station to Seoul Pedestrian Plaza after the Itaewon Stampede which killed 159 people on Halloween. You can see the City Hall building and Seoul Pedestrian Plaza in the far background. Seoul, November 19, 2022. (source: Jack Greenberg, <https://x.com/jackwgreenberg/status/1593893212372217857>)

Seoul's urban policies over the last decade have been driven by a desire to be a "first-class city" and "a gateway city to East Asia and beyond" (H. M. Kim and Han 2012, 152). Urban regeneration has been an explicit strategy in pursuit of this ontological vision, including one of the most famous nature-based solution and pedestrianization projects in the city – the restoration of the Cheonggye stream (H. M. Kim and Han 2012, 152). During the transportation expansion of Seoul, the Cheonggye stream was covered by the Cheonggye Expressway (Figure 14). In the 1950s, this stream was paved over as part of development processes and in the 1970s, the paved area was converted into an expressway, which became a "proud symbol of urban progress" of the city, as it represented an increase in economic development which coincided with the increased use of personal vehicles and also functioned as a method to hide poverty from the public view (Marshall 2016; Rashid 2025).

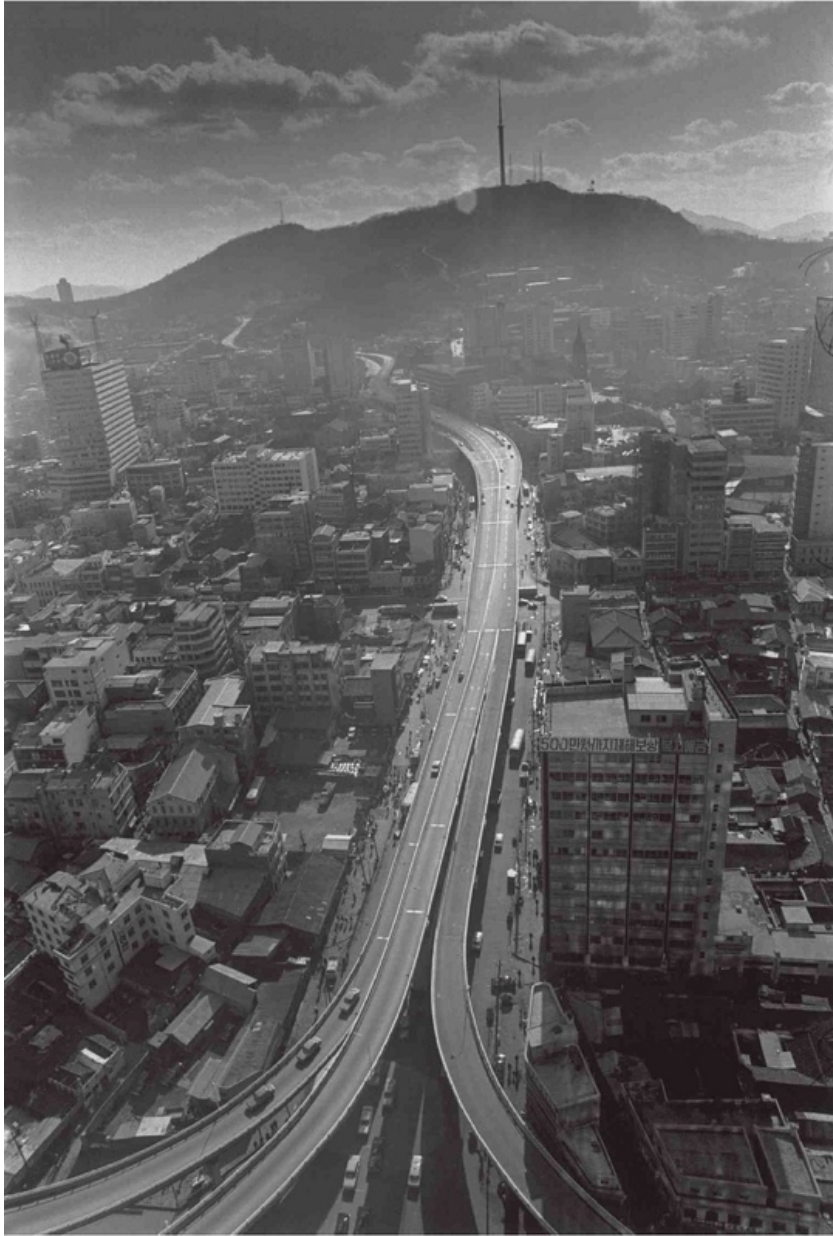


Figure 14: Cheonggye Expressway, 1972 (Source: <https://creativecommons.org/publicdomain/mark/1.0/>)

New Urban Development in Seoul

In the 2000s, Seoul began to harken back to its roots in Byong-kee Kahng's urban planning. A critical set of events including the collapses of the Seongsu Bridge and Sampoong department store in the mid-1990s, which killed almost 550 people, left the public feeling uneasy about large concrete government construction projects from the post-Korean War period (Rashid 2025). At the same time, cities were beginning to integrate concepts of sustainable development into urban planning as well as considering methods of development that would not require the type of large scale construction and redesign that was called for in the modernist era (Rashid 2025). The Cheonggye bridge redesign was a centerpiece of the 2002 Seoul mayor's race and after Lee Myung-bak's victory, he fast-tracked the restoration project to be completed within 27 months (Rashid 2025). Lee Myung-bak had come from the Hyundai Engineering and Construction Company – the same company in charge of the original design and construction of the Cheonggye bridge – prior to his pivot into the world of politics and election as mayor of Seoul (Marshall 2016; Kirk 2002). Lee's role in the Cheonggyecheon stream restoration (Figure 15) allowed the city to split the \$500 million USD cost of this project between the city budget and Hyundai (Robinson and Hopton 2011; Marshall 2016). As the city has continued to expand the restoration and commercialization of the Cheonggyecheon stream, it has brought in additional private partners, such as Citi, to help sponsor costs associated with this area (Figure 15).



Figure 15: Cheonggyecheon stream river walkway, October 2014 (source: <https://www.flickr.com/photos/inhabitat/15613612578>, CC BY-NC-ND 2.0)



Figure 16: Plaque recognizing Citi as a partner of the Cheonggyecheon stream restoration project

Seoul successfully created a counterhegemonic pathway to norm entrepreneurship related to pedestrian infrastructure and transit development norms. However, despite the success of this

counter-hegemonic approach in raising Seoul to norm entrepreneurship status, Seoul faces contemporary challenges as its legacy in pedestrian infrastructure and transit run in direct conflict with greenspace development and navigating climate action planning. Seoul has a very low percentage of green space and parks. As of 2022, green spaces and parks made up only 3.7% of the total area of the city (or 8.5% of the total area of the city with the addition of palaces) (Seo 2022). In comparison, parks and green spaces make up 14.6% of central London and 26.8% of Manhattan in New York City (Seo 2022). Given the health benefits, environmental, and aesthetic benefits of green spaces in cities, greening Seoul has become a substantial priority under Mayor Oh Se-hoon. In 2022, Mayor Oh Se-hoon announced for a “green makeover” of the city which would ease building regulations to allow for buildings to be taller and wider, with the goal of increasing the city’s green space from 3.7% to over 15% by 2026 (Seo 2022; S.-E. Lee 2023).

Seoul’s vision for a greener landscape introduces tensions with the legacy of pedestrianization and people-scaled architecture within the city center. Though Mayor Oh Se-hoon sees an opportunity to increase housing density to allow for more parks and green pedestrian walkways, the city may find it challenging to maintain its human-scaled design. Some architects in Seoul have seen this developing over time and begun conceptualizing how to maintain this unique aspect of Seoul’s pedestrian friendly design while accommodating the needs that accompany urban demand. Architect Byoung Cho, in his reflections about the space and design of Seoul, references one such building—the Urban Hive, designed in 2008 by Kim In-cherurl. Urban Hive is centrally located within one of the three historical, core districts in Seoul, Gangnam. Cho describes Urban Hive as “a good example of how a tall building responds well to its immediate street context” and “creates a dialogue with the street” despite its building scale (B. S. Cho 2023, 73, 76). Another Gangnam area building that achieves this feat, and was also

designed in 2008, was Minsuk Cho's Boutique Monaco: Missing Matrix. Missing Matrix has fifteen "missing" areas which host gardens and visual links to the world surrounding the building and in doing so, "achieves a human scale, despite its large volume" (B. S. Cho 2023, 76). These examples demonstrate that there may still be a pathway for Seoul to maintain its historical city identity while also meeting their ambitions for increased greenspaces and more housing. Given the rich tradition of Korean architecture, Seoul's design is likely to remain more ontologically present in these plans compared to cities with longer histories of hegemonic assimilation.

This is not to say that cities, like Seoul, who mount challenges to hegemonic norms cannot and do not align with some sets of hegemonic practices. For example, the existence of Seoul's greenbelt was created "following the example of London" (H. M. Kim and Han 2012). Additionally, although Seoul's hegemonic ascent has made them a leader on issues like pedestrianization and transportation, they look to other urban norm entrepreneurs for climate governance issues like green spaces, where Seoul Metropolitan Government has specifically named Freiburg and Singapore as "role models" for "transforming the city into a green capital" (Seoul Metropolitan Government 2023). Even though Seoul's interest in green space development is rooted in a concern for residential wellness, mitigation, and adaptation, Seoul has also been clear that they see the greening of the city as an important step in matching the aesthetics of other global cities.

Seoul's counter-hegemonic approach to pedestrian infrastructure and TOD established the city as a norm entrepreneur. Through a combination of structural and historical factors, Seoul was able to diverge from Western city norms related to transit, pedestrian areas, and urban planning philosophies. Seoul's approach, driven in large part by Kahng, was shortly embraced by European and American cities seeking to return to public space as a method of supporting a

robust public life. The case of Seoul highlights three important understandings about the process of becoming a norm entrepreneur. First, city norm entrepreneurs may become such through *specific issues*. In Seoul's case, this was transit and pedestrian infrastructure – norms I will elaborate on in chapter 6. While they are leaders in this space, they are norm adopters and engaging in assimilative behaviors in the area of green spaces. This brings me to my second argument—that city norm entrepreneurship is a fluid rather than static identity. I have shared examples of Seoul being a norm entrepreneur, but also examples of Seoul adopting norms on the back end when it comes to other issues of climate governance. During the period of the 1990s and early 2000s, Seoul was arguably not a norm entrepreneur, as European and American cities were all-in on innovating pedestrianization and TOD. However, during the 1980s, they were one of the first cities to start doing this and were a leader in that regard. Finally, Seoul exemplifies a case where they may look to other leaders (and thus be an adopter in one space) while being seen as a norm entrepreneur by other regional cities (such as cities in Vietnam) due to regional and cultural proximity.

Conclusion

In this chapter, I have discussed two pathways for cities to become norm leaders: hegemonic assimilation and hegemonic challenge. In pathway 1, hegemonic assimilation, I argue Buenos Aires has used a combination of leadership within international organizations, aesthetic mimicry, and pursuit of urban climate zeitgeist to emerge as an urban climate governance norm leader. Additionally, I discuss how Buenos Aires is motivated to do so in an effort to gain global status as a city and to differentiate itself from national levels of government. In pathway 2, hegemonic challenge, I demonstrate how the city of Seoul's combined structural and historical factors

allowed it to mount a challenge to urban planning hegemonic discourse in the 1970s and 1980s, which has allowed it to establish and maintain status as a norm entrepreneur in the space of transportation and pedestrianization, despite looming challenges.

Why might cities like Buenos Aires choose a pathway of hegemonic assimilation while cities like Seoul choose pathways of hegemonic challenge? First, economic resources play at least a minimal role in this process. Argentina relies heavily on foreign direct investment with net FDI inflows accounting for 3.7% of the country's economy in 2023. In comparison, FDI only accounted for 0.9% of South Korea's GDP in 2023 (World Bank Open Data, n.d.). Although the political economy is not the only driver of these pathways, it is hard to deny that there is a correlation between the dependency on FDI as a measure of percentage of country GDP and the level of hegemonic assimilation. Empirically, I observe that the cities in countries with less FDI inflows are best positioned to take on hegemonic challenges while cities in countries with higher FDI inflows are more likely to take on behaviors of hegemonic assimilation. I argue throughout the chapters that follow that, generally (and with exceptions), there is a pattern of cities with a higher reliance on FDI having less agency in the climate action policies they adopt, as their choices are largely driven by what other actors, including international development organizations, countries, and private companies, are willing to finance and support. In the next chapter, I explore this observation in more depth and discuss the case of Mexico City.

Chapter 5: Challenging Global City Order

In chapter 4, I introduced two viable pathways that cities can use to become norm leaders within urban climate governance, using two successful cases: Seoul and Buenos Aires. In this chapter, I explore the conditions which make success in these pathways possible and highlight that Pathway 2 (hegemonic challenge) does not always work out successfully for cities that attempt to take this route to leadership. To explore this, I examine Mexico City's failed campaign against New York City and former Mayor Michael Bloomberg to become a norm entrepreneur alongside NYC and Bloomberg within the space of C40 Climate Leadership group and CAPs. This example is juxtaposed against Seoul, who has had success in rising to leadership through pathway 2 in the areas of greenspaces and mobility. I begin with an introduction to the contemporary role of the C40 Climate Leadership Group before turning to the case studies of Mexico City and Seoul.

C40 Climate Leadership Group

The C40 Climate Leadership Group is arguably the most well-recognized and respected transnational municipal networks (TMNs) for climate change. Though C40 only allows cities with exceptional global climate leadership and/or mega city status¹¹ to join the network, C40's mission is to support ambitious climate commitments of cities globally, even outside of their membership. C40's importance is recognized by cities (Interview 3 2023; Interview 4 2023) as well as by international actors and organizations (Interview 7 2024). As one example, the UN High Level Expert Report on the Net Zero Emissions Commitments of Non-State Entities

¹¹ C40 defines megacities as "an urban population that currently/is expected to exceed 3 million or more people by 2030" (C40 Cities Climate Leadership Group 2025a). Originally, C40 was a group of 40 cities but has expanded its scope and mission since creation.

wanted to include cities as part of their consultation processes but given the short time between the time the group was created and when the recommendations were to be delivered (8 months) and limited capacity of the assembled team, leadership of this initiative were dependent on established city networks to help drive recommendations and offer feedback. C40 was the only group representing cities that was explicitly part of the negotiations and they had their own independent day of consultation, while many other representative groups were clustered together for consultation (United Nations High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities 2022; Interview 7 2024). C40 was consulted as the aggregate representative for cities due to the net-zero requirements baked into membership requirements as well as their reputational status as global leaders for climate ambition (Interview 7 2024). This example represents the type of invaluable role C40 plays in establishing and diffusing urban climate governance norms.

C40 is hardly the only TMN in the area of climate change. For instance, ICLEI has been around since the 1990s, the Global Covenant of Mayors for Climate and Energy have a far larger membership reach with 13,566 members (Cantwell-Chavez et al. 2025), and other regional initiatives, like the Urban Sustainability Directors Network (USDN) have been widely successful in developing support and resource networks across the US and Canada. So, why is C40 so highly regarded within the urban climate governance space and so often tapped by international actors to provide partnership and expertise? I argue that this influence comes from a combination of legitimacy through private foundation support and the reputational support provided from Michael Bloomberg.

Though C40 has established additional partnerships with global leaders and private foundations to support the network's work, Michael Bloomberg and Bloomberg Philanthropies

remain inextricable from the past, present, and future of C40. C40 formed back in 2005, under the Clinton Climate Initiative (CCI) but Michael Bloomberg's ascent to chair of C40 in 2010 and Bloomberg Philanthropies' award of a multi-year grant to the network is what shapes much of the present design and structures of the network today (Leal and Paterson 2024). Bloomberg's takeover of the helm of C40 from CCI included scaling down technical assistance for climate initiatives and increasing funding from Bloomberg and his foundation to cities directly (Leal and Paterson 2024, 34).

Specifically, the involvement of Bloomberg and his foundation has positioned C40 as a "broker for corporate connections" (Leal and Paterson 2024, 27). The heavy emphasis that C40 has placed on partnerships with private funding entities remains a core part of their network model. Indeed, C40 has launched an "accelerator" program wherein private foundations sponsor climate governance action in specific issue areas for clusters of cities who opt-in to that program (for example, the Grundfos Foundation sponsoring the C40 Water Safe Cities Accelerator). C40 intends for the accelerator model to become a core feature of the network and an organizing structure around which the network will position support and financing for cities.

The political economy structure that Bloomberg has both inspired and maintained in C40, which depends on and revolves around private funds, has played a role in reinforcing the existing global order of cities. First, it reestablishes well-resourced institutions in the Global North – and specifically Bloomberg himself—as climate entrepreneurs and leaders in urban climate governance spaces. These entrepreneurial and leadership roles are not because the policies these actors support or implement themselves are truly innovative but because they hold the check book for cities to do innovative work. Second, it reduces incentives for cities to engage in contestation by producing alternative programs or initiatives that may be innovative but that are

not in-line or may directly compete with established norms that are parts of C40 or Bloomberg's agendas. In particular, cities that are more dependent on external funding to finance their climate initiatives have social disincentives to mount these types of norms challenges. In contrast, cities with more economic independence can afford (literally and figuratively) to innovate and challenge norms and order. I will demonstrate this through the examples of Mexico City's failed attempt to be a norm entrepreneur in the area of emissions inventory systems and Seoul's success in becoming a norm entrepreneur and leader in the area of mobility.

Mexico City's Failure to Launch to the Top

CDMX has occupied both a norm leader and norm adopter role among global city governments when it comes to climate governance. This story of CDMX's attempt to position itself as a norm leader through pursuing a pathway of hegemonic challenge, and how it has subsequently settled into a pattern of norm assimilation, highlights that norm statuses are not static and that cities, just like states, engage in continual processes of social ordering. Mexico City has been a member of the C40 since 2005. The most recent mayor of the city, Claudia Sheinbaum, served as the Environment Secretary for CDMX under Andrés Manuel López Obrador (AMLO) while he was mayor from 2000-2005 (Mauad 2019, 131; C40 Cities, n.d.-c). Sheinbaum is now serving as Mexico's president as of 2024. The significance of her presidency and role within Morena, the ruling party, on CDMX's climate governance is discussed in more depth in chapter 6. Mexico City currently sits on twelve climate network groups within C40.¹²

¹² Air Quality Network, Clean Energy Network, Cool Cities Network, Food Systems Network, Mass Transit Network, Municipal Building Efficiency Network, New Building Efficiency Network, Private Building Efficiency Network, Sustainable Waste Systems Network, Walking and Cycling Network, Water Security Network, Zero Emission Vehicles (ZEV) Network (C40 Cities, n.d.-c)

Mexico City's presence in global climate governance has waxed and waned over the decades. Much of Mexico City's motivation to begin tackling climate issues resulted from global concern over the condition of air quality within the city. The catalyst for the first wave of climate policy action came shortly after the 1992 United Nations Human Development Report named CDMX as the "most polluted city in the world" which had the effect of tarnishing CDMX's global image (Mauad 2019, 130). In response to the air quality crisis, the city has pursued several aggressive policies intended to decrease air quality issues. While these were not focused specifically on climate at the time, the initiatives overlapped with climate mitigation measures for urban settings and included measures like reducing individual car use and improving access to public transit (Mauad 2019, 130).

One of the first initiatives to launch, ProAire, was heavily dependent on individual level behavior changes and includes campaigns like Hoy No Circula (No Driving Today), which reduced the number of cars on the road by restricting driving of 20% of the population daily (McDonald 2017). ProAire campaign was created by Mexican government in the 1990s and has been aggressively implemented by the Mexico City government (McDonald 2017). It was so successful as to win the 2013 prize from the C40 Cities Climate initiative for air-quality policy (McDonald 2017). Over a 25-year period, ProAire reduced lead emissions, SO₂, CO₂, and PM₁₀ (Centre For Public Impact (CPI) 2016; McDonald 2017). The ProAire program has been continually extended and is now currently known as Megalopolis ProAire 2017-2030, a federal level air quality program that has become embedded with Mexico's Nationally Determined Contribution under the Paris Agreement (Cárdenas Gonzáles 2018).

The success of ProAire and its successor was a major factor that put CDMX on the map for regional leadership in the area of urban climate governance. As a regional leader, CDMX

regularly facilitates exchanges of experience, direct support to other cities, and often fields a variety of requests for help on policy and technical implementation of programs (Interview 4 2023). CDMX is the state¹³ with the longest climate policy in Mexico, with over 20 years of experience developing climate mitigation and adaptation policies (Interview 4 2023). As a result of CDMX's governance experience, they are able to share progress and lessons with states and cities that are entering this space much more recently. A substantial amount of CDMX's policy and technical expertise that they are asked for is in the area of mobility to reduce emissions (Interview 4 2023).

Building on the success of ProAire and CDMX's rising regional leadership, Marcelo Ebrard (CDMX mayor from 2006-2012) ushered in a wave of aggressive environmental reform measures targeted at both air pollution levels and climate change that raised CDMX's global profile. Two programs gained international recognition for their emissions reduction outcomes under Plan Verde, Ebrard's 15-year, 15 billion USD climate initiative: Metrobús and Ecobici (Gallucci 2010). Plan Verde, CDMX's climate action plan in this period, focused on city-level infrastructure development by investing in the rapid deployment of Metrobús, a Bus Rapid Transit System (BRT), as well as purchasing 85 docking stations and thousands of bicycles for EcoBici, a bike sharing program in the city (Gray and Talberth 2011; UNFCCC 2022). The roaring success of Plan Verde led to Ebrard being named as "Best Mayor in the World" by the City Mayors Foundation and the plan to be "heralded as the only plan of its kind in Latin America" (Mauad 2019, 133; Gallucci 2010).

Mexico City also ramped up its presence on the international stage during this time. For example, Ebrard signed a partnership with Buenos Aires in 2006 to work together on urban

¹³ CDMX is both a state and a city

mobility projects and share knowledge from the Metrobús and Ecobici successes (Mauad 2019, 133). In 2010, Ebrard arranged for two mainstage international events to be hosted in CDMX that fall: the Third World Congress of United Cities and Local Governments (UCLC) and the 2010 World Mayors Summit on Climate Change (Gallucci 2010). These conjoint conferences were attended by over 2000 participants, including 152 mayors (Gallucci 2010; Mauad 2019). These back-to-back conferences were set to promote three goals. First, Ebrard wanted to push for the creation of the Carbonn Cities Climate Registry (CCCR), an emissions inventory system operated by ICLEI, that would allow cities to publicly track and report their emissions data, which would be part of the signing of the Mexico City Pact, a binding commitment for emissions reduction, in the lead up to the COP16 (Mauad 2019, 134).

The models for CCCR and CDP both shared a goal of creating transparency and accountability (as well as comparable units) between cities when it came to emissions reporting. At the time in which these proposals were being discussed, cities were still working on gaining international legitimacy. Unifying an inventory measurement and reporting system was critical for cities to make the case that they were a major player in climate governance (as demonstrated by volume of emissions) and also that they were *leaders* (as demonstrated by holding themselves to high and clear standards around reporting). Despite both proposals working towards this goal, the designs of the programs differed in a few substantial ways. First, CCCR worked on ensuring that local and regional governments had support on research, political advocacy, and technical assistance necessary to develop and report. So, CCCR attempted to support cities through capacity building around inventories. In contrast, CDP focused on a more standardized system of scoring and benchmarking from the start. The structure for CDP was a bit more rigid but had strengths in that the metrics were clear and with the right support, fairly easy to complete

disclosure. As of 2019, these two systems are now merged into an integrated reporting framework.

The second goal for Ebrard was promoting a platform for cities to provide governance input. Ebrard believed that global cities should have stronger voices in global climate negotiations (Gallucci 2010). At the time of these summits and the COP 16, cities were still playing background roles in international climate governance conversations. Ebrard, and his Secretary of Environment, Martha Delgado, wanted cities to have more prominent roles. Delgado argued that cities and mayors “are the authorities who confront the problems we live through related to climate change” and therefore were the “most concerned about climate change” (Gallucci 2010).

Finally, Mexico City also saw these summits as an opportunity to elevate Mexico City (and Ebrard) to the status of an international innovator on climate policy. In the weeks leading up to these conferences, Delgado explained “hosting this conference gives recognition to Mexico City as a city that has promoted a very important policy in climate mitigation” (Gallucci 2010). As a result of the timing of the Mexico City Pact and these summits, Ebrard was designated as the speaker for cities at COP16 to present the Mexico City Pact, “projecting himself internationally” (Mauad 2019, 134). As a result, for the first time in a COP meeting, cities were acknowledged as “strategic governmental entities in the international efforts to fight climate change, a recognition that opened new opportunities and new spaces of actions (PENSAR, 2011)” (Mauad 2019, 134).

The summits were successful on all three of these goals. By the end of the summit, Mexico City had catapulted into the international stage as a leader for cities on climate policy, with impressive data to support its initiatives. Additionally, cities were taken with much more serious consideration. Ebrard’s Mexico City Pact was warmly received with 138 cities and international organizations such as ICLEI signing on to the agreement (Mauad 2019, 134). Even with this

success, there was one curious omission by a significant international actor—C40 Cities Climate Leadership Group (C40). At the time, then New York City Mayor Michael Bloomberg was chairing the C40 and had been sent a draft of the proposal for the CCCR and Mexico City Pact ahead of the World Mayors Summit. C40 ended up declining to sign the agreement due to internal power conflicts between Ebrard and Bloomberg, according to Delgado in an interview discussing this incident (Mauad 2019, 134).

Following this snub by C40 and Bloomberg, CDMX began to distance itself from C40 events. After the CDMX hosted summits, Mexico City Pact gained more signatories, published two reports in 2011 and 2012 (Mauad 2019, 134). CDMX and Ebrard skipped the C40 summit hosted in São Paulo in 2011 following the refusal of C40 to sign on to the pact—a move that was surprising to many given the fact that this was the first time the summit had been hosted in Latin America and was attended by other delegates within Latin America, such as Buenos Aires and Rio de Janeiro (Mauad 2019, 134).

This distance became much worse after the Mexico City Pact was unilaterally relaunched and rebranded as the “Compact of Mayors” by Bloomberg in 2014 as a UN affiliated program (Mauad 2019, 134). After this announcement, cities basically abandoned the Mexico City Pact and CCCR entirely, switching their reporting to the carbon disclosure platform (CDP) backed by the Compact of Mayors (Mauad 2019, 134). The legacy of this shift has had some downwind effects for cities, such as a decline in technical assistance offered to cities. Instead, cities are often encouraged to work with external consultants where needed to bridge technical needs. To some extent, organizations like C40 are beginning to “course correct” on this and are piloting technical assistance programs for some initiatives. Ebrard also began to struggle politically with

the national government of Mexico after the CDMX hosted summits, causing the COP 16 meeting to be relocated from CDMX to Cancún (Mauad 2019, 134).

At the end of Ebrad's term, Mexico City's new mayor, Miguel Ángel Mancera, continued the campaign for CDMX to hold international leadership on city climate change governance issues. In a 2013 interview, Mancera stated

we want to transform Mexico City into an 'Alpha City', a city where there are transnational corporations, global companies, a well-defined niche of opportunity and a government that is more and more efficient (Maciel 2013; Mauad 2019, 135).

Mancera recognized that to gain this status as an "Alpha City," Mexico City would need to repair its relationship with C40. He recommitted Mexico City to the activities of the group and was voted to host C40 summit in 2016 (Mauad 2019, 136). Mancera was so successful in wooing over members of C40 with his presence and hosting of the C40 Summit that year that people said Mancera was "much more prominent than the C40 Chair at the time, Eduardo Paes" (Mauad 2019, 136).

Mancera was invited to join C40 on to the Steering Committee following this conference and received awards for Metrobús, EcoBici, and ProAire programs through ITDP as well as C40 (Mauad 2019, 135). In addition to improving his relationship with C40, Mancera also strengthened Mexico City's bond with 100 Resilient Cities, which partnered with the city in crafting a climate resiliency strategy (CDMX Resilience Office 2016). This partnership included a 2015 meet up in Rotterdam to discuss water resource resilience with a coalition of city climate planners from Bangkok, Berkeley, New Orleans, Norfolk, Rome, Rotterdam, Surat (India), and Vejle (Denmark) (CDMX Resilience Office 2016, 51).

Mancera was also quite vocal about who he saw as influencers for CDMX's climate policies as well as the type of image he was attempting to project to the international community.

At the top of the list for Mancera was European cities—primarily in Italy and Spain – as well as Tokyo. Mancera zeroed in on the attention on infrastructure, concern for green energy and environment, as well as an emphasis on personal mobility and transportation (Maciel 2013). The CDMX Resilience Strategy, which was developed during the end of Mancera’s term in office, also explicitly lists their “inspiration” for various adopted strategies. These inspirations include Melbourne, the NRDC in the United States, New Orleans, Rotterdam, New York City, Medellin, and Rio de Janeiro (CDMX Resilience Office 2016). Based on policy documents and interviews, CDMX in this current sees itself as in alignment with and leading norms of other Global North/western cities as well regional leaders (Medellín and Rio de Janeiro) but not necessarily as a norm entrepreneur. After Ebrad’s failed attempt to innovate on norms, the city leadership opted to settle into a pattern of norm assimilation as it seeks to maintain regional and global leadership status.

Even if CDMX and Ebrard had been successful in their bid to take a larger role in leading and shaping C40 as well as the carbon reporting mechanisms, what transpired in Bloomberg’s responses raise the question of whether CDMX would have been recognized for their role in carbon inventory systems for cities or whether the credit would have still gone to Bloomberg in the end. Ultimately, Bloomberg wielded power through his status at C40 and through the money he influenced through his foundation. This tale of events highlights that norm entrepreneurship and norm leadership is an intersubjective process. It requires power, legitimacy, and recognition from other actors. In this case, Bloomberg was perceived to have more power as chair, more legitimacy as someone with capital to support the agenda that accompanied the new power that cities were steadily accruing within international spaces, and this led to recognition from external actors (the UN) as well as internal actors (C40 and its members).

Mexico City's quest to differentiate itself actively from the values of the national government of Mexico continued during Mancera's term. In 2016, Mexico City was able to pass a reform to make it a federal state. This allowed Mexico City to have autonomy from the national government by establishing its own constitution, local governmental structure, congress, and fiscal rules (Rios 2016). In addition, the district was formally renamed by President Enrique Peña Nieto from "DF" or "the Federal District (Distrito Federal)" to "Mexico City (Ciudad de México)" or "CDMX" (Agren 2016). With this new autonomy, Mexico City was able to begin taking on measures like "legalizing same sex marriage, abortion and therapeutically use of marijuana" (Mauad 2019, 152). It's become very clear since the autonomy of Mexico City has increased that creating an international presence and climate politics, in particular, are part of Mexico City's strategy to continue to project a more progressive image as a global leader in comparison to its national government (Mauad 2019, 152).

CDMX has also maintained inconsistent international relations with other cities around climate governance. Several decades ago, Mexico City created the Coordinación de Asuntos Internacionales (CGAI), the agency within CDMX responsible for bilateral agreements with other cities and was focused on climate diplomacy for years (Mauad, p. 132). It has had waves of productivity. The lowest period was while Andrés Manuel López Obrador was in office where he basically shuttered the agency by whittling it down to one person and making it a symbolic office power and mission-wise (Mauad 2019, 132). The resurgence of international cooperation on climate issues and restoration of the power of this agency since Obrador left the city office and since Claudia Sheinbaum took over as head of government also highlights the power dynamic between CDMX and the federal level of governance.

CDMX has also built strong ties with international financial institutions as a means of building international status and legitimacy. Two experiences played significant roles in this regard. First, there was the creation of a World Bank taskforce that operated from 2009-2010 which included CDMX as a recipient of funds and focused on “training, technical support and investments” that focused on “urban poverty and climate change” (Mauad 2019, 133). Furthermore, CDMX capitalized on Mexico’s membership in the OECD by participating in mayoral roundtables as well as receiving technical support and networking (Mauad 2019, 135). These interactions have positioned Mexico City as a serious player on the international stage. In particular, Ebrard and Mancera “had greater political ambitious and though[t] that these [climate] agendas could help them perceive their own political goals” (Mauad 2019, 152). The Sheibaum government continued to build on the agendas set up by Ebrard and Mancera and added technical expertise as well as political and financial resources to these agendas to begin reestablishing CDMX as a global leader in mobility and climate change. Although CDMX has returned to being recognized by regional and global actors as a norm leader in several areas of urban climate governance, they have not been recognized as norm entrepreneurs in any major practices or policies.

Seoul

Seoul’s rise into norm entrepreneurship through its early adoption of transit-oriented development has been well detailed in chapter 4. In this chapter, I highlight how Seoul’s economic resources and strategic alignment of entrepreneurship policies with other urban governance agendas has allowed it to innovate and maintain norm leadership status in another area of mobility- transit. Specifically, Seoul has been able to become a norm leader in zero

emissions area (ZEAs) programs and passenger-oriented mass transit design by leveraging public-private partnerships (PPPs) and city purchasing power.

Zero Emissions Area (ZEAs) initiatives emerged from the C40 Green and Healthy Streets Programme, which is one of C40's 11 accelerator programs and the oldest of all the accelerator programs (C40 Cities Climate Leadership Group, n.d.-a). The Green and Healthy Streets Programme launched in 2017 with the release of a Green and Healthy Streets Declaration which required cities to pledge that by 2030, they would “establish a significant area of their city as zero-emission” (C40 Cities Climate Leadership Group 2022). To support the signatories of this pledge, C40 has created the Zero Emission Area Programme, which established six areas of focus and shared engagement on norms related to ZEAs including: designing zero emission areas, regulatory tools for urban vehicles, improving walking and cycling infrastructure for ZEAs, increasing use of zero emission vehicles (ZEVs), creating zero emission freight interventions, and improving communications about the benefits associated with ZEAs (C40 Cities Climate Leadership Group 2022). Seoul is one of the 36 signatories to this pledge, as is Mexico City. While both cities are part of this accelerator program, and thus arguably norm leaders on ZEAs, Seoul has been a leader within this pack of cities in their progress as the first city to launch a ZEA. Seoul's ZEA, the Green Transport Zone, launched in 2017, and the city has had a Low Emissions Zone established since 2012 which prevented heavy, diesel vehicles from entering the city (C40 Cities Climate Leadership Group 2021a, 18). Seoul's advanced progress on ZEA goals, in combination with their expanding mobility infrastructure, has served as a best practice model for the design of ZEAs.

ZEA initiatives have become extremely popular for cities to take up in recent years due to a combination of the potential to reduce transit emissions, one of the largest emissions categories

for most cities, and the secondary benefits that these programs create, such as improved air quality. In addition, ZEA programs often align with existing city initiatives on climate governance, including purchasing of zero emission vehicles (ZEVs) and improving pedestrian and cycling mobility. Cities can also extend ZEAs to include incentive structures, such as congestion pricing, or provide subsidies to encourage ZEVs uptake at accelerated rates. Furthermore, ZEAs carry a visibility component which cities can use to attract various public-private partners.

ZEAs have also gained support because they are part of a larger pattern of market-based solutions for urban climate governance that have gained popularity and been supported by organizations like C40 and influential leaders such as Bloomberg. At the residential level, ZEAs programs can offer incentives such as subsidizing residential purchase of ZEVs or support in installing chargers for ZEVs within neighborhoods and community locations. Cities can also disincentivize the use of non-ZEV vehicles - i.e. Internal Combustion Engine Vehicles (ICE) – through barring registration, movement in certain city sectors, and imposing tax schemes for emissions. At the scale of the city, the government can implement purchasing rules for public fleets and take on additional supportive measures such as lane reorganization to accommodate more efficient mass transit and to make pedestrian and bike mobility safer.

Seoul has emerged as a norm entrepreneur in the space of ZEAs because it was the first city to implement a ZEA and was one of the earliest cities to develop Low Emissions Areas. Furthermore, Seoul has sustained leadership in ZEA work through its advanced progress on the six priorities of the Zero Emission Area Programme. Seoul sees itself, as well as other cities leading up ZEA policies in the programme, as critical actors for accelerating transportation emissions reduction. In Seoul's CAP, they explain "the public sector must lead in taking

innovative measures and promote the private deployment of new technologies that are currently struggling due to weak infrastructure” (Seoul Mayor 2021, 19). Seoul’s aggressive leadership on ZEVs and low-emissions zones has received recognition by C40 through inclusion in various best practice guides and is the most prominent feature of their most recent CAP.

The city has set a goal that 50% of all registrations in the city be ZEVs, which aligns with the fourth focus area of the Zero Emissions Area Programme (“Zero Emission Vehicles for zero emission areas”) (C40 Cities Climate Leadership Group 2022). To support this endeavor, Seoul has designed and implemented a number of positive and negative incentive structures. To positively support ZEV purchase, Seoul has committed to purchase subsidies for ZEVs in private sector by city government, “supporting installations of slow chargers at multi-family housing buildings” and the installation of over 5,000 fast chargers in “highly accessible” public spaces across the city (Seoul Mayor 2021, 46–47). The city government has specifically said it plans to turn to PPPs to increase the number of charging stations (Seoul Mayor 2021, 47).

As for negative incentive structures, Seoul has planned for a phase out of ICE on the streets of the city. As of 2035, residents will no longer be able to register new ICE and leading up to this, Seoul has planned the phase in on a vehicle carbon tax which would be based on projected GHG emissions (Seoul Mayor 2021, 44, 84). In the meantime, ICE will also be banned from entering the Green Transport Zone- a 16.7 km² zero emissions transit area in the center of the city recently authorized by the city (Seoul Mayor 2021, 44). This is also part of the Zero Emission Area Programme focus areas (“urban vehicle regulatory tools”) (C40 Cities Climate Leadership Group 2022). By 2050, no ICE will be allowed to operate within the city boundaries. To support the enforcement of these policies, Seoul has leaned into components of smart-city initiatives, including “data-based monitoring systems” which will enforce traffic charges

(presumably with some degree of automation) (Seoul Mayor 2021, 47). Interestingly, the city has anticipated no political or social barriers in their extended scenario consideration of these policies (Seoul Mayor 2021, 84).

To support the transition away from GHG emitting vehicles and to account for equity (as many residents are likely to still be priced out of ZEV purchasing), the city has also adopted several measures at the level of the municipality. First, Seoul began their process of replacing their entire bus fleet with electric or hydrogen engines with an end goal of 2025 (Seoul Mayor 2021, 44). This required the city to purchase 3,000 electric buses and over 1,000 hydrogen buses (Seoul Mayor 2021, 44). In addition to mass transit vehicles, the city has also put into motion a plan to replace all current taxis with ZEVs by 2040 (Seoul Mayor 2021, 44). To help support more efficiency in the busing system and encourage residents to choose mass transit on ZEVs, Seoul is in the process of reducing car lanes alongside installing more bus lanes (Seoul Mayor 2021, 47). In total, the city aims to reorganize 22 roads by 2025, leaving less than four lanes per road (Seoul Mayor 2021, 47). To fill in this space, the city plans to also add more walking and cycling lanes to improve pedestrian and micro-mobility. As further incentive to get residents to use more mass or micro transit, Seoul is increasing parking fees for lots near or “highly accessible to subway stations and public transport” (Seoul Mayor 2021, 47). These measures taken together have led to a 37% decline in PM_{2.5} in tandem with a decrease of violations on the ban on ICEVs in the Green Transport Zone as of 2024 (Seoul Metropolitan Government 2024b).

As mentioned in the preceding chapter, Seoul’s holistic attention to mobility is hardly a new feature of the city. In addition to ToD and ZEAs, Seoul has just frankly considered mobility as an interdependent nexus. Consider how one architect described this approach through their own journey into the city:

When I took a taxi from Seoul Station to where I would be staying for a month, I was concerned that I made a mistake booking an accommodation at the south edge of Bukhansan Mountain, which on the map looked far from the city center. By then, I hadn't been introduced to Seoul's efficient and extensive public transit options: the subway, buses, and taxis. It only took me 30 minutes to get from my accommodation to the city center by bus. Even as a foreigner, the mass transit system in Seoul is easy to navigate: signs and announcements are in Korean and English. The more time I spent in Seoul getting around, the more my appreciation grew for this city's exceptional infrastructure and multimodal system of mobility (Al-Bayati 2023).

Seoul's entrepreneurship status around ZEAs, ToD, and other mobility policies is possible in large part due to the long-term investments and design choices made by the city and in consideration with other global agendas and ontological approaches to climate policy. For instance, Seoul has successful ZEA implementation because it has also made investments in mass and micro transit, allowing for viable alternatives and larger-scales of impact. Furthermore, though Seoul's wide net of policies and programs could be seen as a threat or a challenge, the city's embrace of market mechanisms and PPPs to prop up the success of these programs allows Seoul to take more aggressive stances on mobility programs and maintain entrepreneurship status. It also does not hurt that Seoul has a healthy city budget with a strong alignment to national level projects. This set of political and financial resources allows Seoul to do massive investments, such as a rapid change out of their transit fleet and major road infrastructure upgrades, within a very short period of time. Seoul's success in norm leadership around ZEAs is the result of a combination of norm entrepreneurship in creating the first zero emission zone, participating in a peer-led commitment on ZEAs to support global city buy-in on these six components of ZEAs, as well as alignment of values with other global actors, substantial access to capital, and political support from residents and national-level actors.

Conclusion

Cities are often drawn to entrepreneurial roles due to the “high risk, high reward” nature of these endeavors. Success in pursuing entrepreneurship in urban climate governance can not only rapidly improve the living conditions for residents and meaningfully contribute to reducing GHG emissions, but cities can also gain reputational benefits and unlock new partners and streams of revenue. For cities with more to lose reputationally or economically, the risks of taking on entrepreneurial efforts which challenge existing key actors or global city order are higher while the chance of failure is as well. In the case of Mexico City, Ebrad’s pursuit of an entrepreneurial role for CDMX in the space of carbon emission inventories led to a temporary retreat from C40 and longer-term consequences for the perception of CDMX’s global leadership. Since this failure, CDMX has shifted to a norm assimilation pathway and seems to be committed to this approach for the considerable future due to the need for the city to maintain financial partnerships with external foundations and organizations in addition to navigating alignment with the national government. In the case of Seoul, the city is able to continue to break new ground on climate governance initiatives—and particularly in spearheading new norms in the area of mobility—because it has economic strength and does not pose an ontological threat to the philosophy behind competing frameworks of policies advanced by peer cities. In the next chapter, I will explore how clusters of norms across CAPs, mobility, and greenspaces are not only explained by the presence of norm entrepreneurs and norm life cycles, but also by a combination of politics, cultural hegemony, and economic structures.

Chapter 6: Visualizing City Climate Governance Norms

In chapters 4 and 5, I have explored how cities may become norm leaders or entrepreneurs and whether attempts to be an entrepreneur through hegemonic challenge is always successful. In this chapter, I turn to the question of what norms exist within urban climate governance. To do so, I analyze a sample of norms related to CAPs, mobility and greenspaces. For each category, I turn to each of my four case studies—Seoul, Mexico City, Ho Chi Minh City, and Buenos Aires—to discuss how these norms came to be and how these norms spread. I argue that the success and diffusion of urban climate governance norms are shaped by challenges to the hierarchy of global city leadership within the global political economy. The nature of norms as I have defined in this project opens the door to a large swath of possibilities for what can be considered a norm within urban climate governance. Given that it would be impossible for me to identify and analyze every single norm, for this project, I narrow in on three categories of norms: climate action plans (CAPs), mobility, green spaces. For each category, I studied a variety of norms. These categories, norms, and norm entrepreneurs are featured in Table 2.

Table 2: Description of Norms

Norm Category	Norms	Norm Entrepreneurs¹⁴
Climate Action Plans (CAPs)	- CAP creation processes - Structure and content of CAPs - Equity and inclusivity	C40 New York City Mike Bloomberg IPCC Seoul
Mobility	- Sidewalks - Shade and protection from elements - Bike lanes - Bike share programs - Subway installation	Copenhagen Barcelona Buenos Aires Mexico City Seoul
Greenspaces	- Locations of formal and informal green spaces - Types of plants and trees in green spaces - Greenspace functions (recreation, flood management, etc)	Singapore Paris Medellín

This chapter is organized into three sections – one for each of the norm categories. As I unpack norms in each section, in addition to the historical context for each norm, I also offer evidence and insight from fieldwork, interviews, and policy document analysis to provide descriptive understanding of each norm observed. This level of detail is necessary both to develop clarity as to what these norms are and how they function as well as to illustrate how norm entrepreneurship and leadership differs from issue to issue, leading to different diffusion patterns. I offer this

¹⁴ There is no standardized criteria for norm entrepreneurship. The list here is not exhaustive of all norm entrepreneurs but, instead, represents those who are identified and discussed throughout this project through a series of triangulation through interviews, archival and policy document analysis, and grounded visualization. This table is intended to help readers ground themselves in the norm categories, the norms discussed, and key actors promoting these norms.

explanation to clarify the rationale for the length of this chapter in comparison to the other chapters in this monograph.

Although all three of these norm categories are somewhat independent of each other, climate action plans (CAPs) do play an important role in the design and implementation of mobility and greenspaces within contemporary policy design. I begin this chapter by unpacking CAPs and their roles in urban climate governance norms before turning attention to mobility and green spaces.

Section 6.1: Climate Action Plans (CAPs)

Climate Action Plans (CAPs) have become a core underlying component of city climate adaptation and mitigation planning. CAPs have been around since roughly the 1980s and one of the first cities in the world to have such a document is Santa Barbara, California, USA. Cities began organically developing CAPs throughout the last several decades to address localized climate concerns and to plan for climate mitigation actions such as emissions reductions and emergency preparedness. Until the mid 2010s, CAPs almost exclusively focused on climate mitigation with only cursory inclusion of adaptation planning (Cantwell 2021). In the past decade, one norm that has shifted among CAPs is the expectation that CAPs equally include mitigation and adaptation planning. Furthermore, CAPs themselves have become a norm for cities to develop. Private foundations and development agencies expect cities to have CAPs prior to seeking project funds for climate related projects and look to see if project proposals are in alignment with CAP goals.

C40 and CAPs

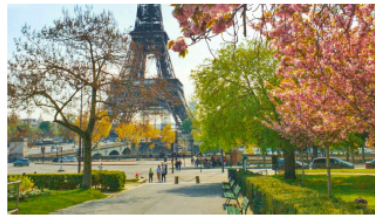
The most significant norm entrepreneur in the space of CAPs is C40. At the start of the network, C40 strongly encouraged and supported the norm of creating CAPs for the purposes of encouraging measurable progress on climate action and promoting accountability. Starting in 2021, members of the C40 network are required to adopt “resilient and inclusive climate action plan[s] aligned with the 1.5°C ambition of the Paris Agreement” and they are expected to “update[...] it regularly” (C40 Cities, n.d.-a). This expectation is listed as the very first item on “C40 Leadership Standards 2021-2024.” Not only does C40 now expect every city in its network to have a CAP, it also expects that these will be “high ambition” (i.e. aligned with Paris

Agreement targets) and include key components including emissions neutrality, resilience to climate hazards, inclusivity and benefits, and governance and collaboration. As of February 2025, C40 has created and classified CAPs into two frameworks: the Climate Action Planning Framework (CAPF), which is the “original framework” with the intent of aligning cities to Paris Agreement objectives, and the Cities Climate Transition Framework (CCTF), a framework designed to be more responsive to evolving technical, political, and infrastructural challenges while also incorporating recommendations from the Integrity Matters¹⁵ report (C40 Cities Climate Leadership Group 2025b). C40 explains that by the end of 2024 “almost all” cities within C40’s membership had a CAP aligned with CAPF and that as member cities update their CAPs in their next update cycle, the new CAPs should be in alignment with the CCTF (C40 Cities Climate Leadership Group 2025b).

In an effort to promote the CCTF and support cities in developing aligned places, C40 has used communications through their Knowledge Hub to showcase CCTF in action. These communications have included case studies and a map of CAPF and CCTF compliant CAPs. As of March 2025, there are only two CCTF era CAPs. To help cities and other stakeholders understand the framework in action, C40 created case studies of these two cities – Paris (C40 Cities Climate Leadership Group 2024c) and Stockholm (C40 Cities Climate Leadership Group 2024d) (Figure 17). These case studies unpack the key targets of the new CAPs, chart emissions in each city starting from baselines, highlight key initiatives within each plan, discuss pathways for carbon neutrality, and provide slide overviews of each city’s climate action planning revolution (C40 Cities Climate Leadership Group 2024c; 2024d). In particular, transparency about the emissions levels and committing to a carbon-neutral or net-zero pathway is one of the

¹⁵ A report produced to help cities combat greenwashing in their governance efforts

major points of differentiation between a Paris Agreement compatible plan under CAPF and CAPs that meet CCTF standards.



[Paris Climate Action Plan:](#)

[Plan Climat 2024-2030](#)

Released at the end of 2024, explore Paris' new plan to reduce emissions, improve air quality, and adapt the city and its economy to the impacts of climate change.



[Stockholm Climate Action Plan:](#)

[Klimatbaseringsplan 2030](#)

Also released in late-2024, explore Stockholm's plan to cut emissions to net zero, become climate positive by 2030 and become fossil fuel-free by 2040.

Figure 17: C40 Knowledge Hub Communication promoting Paris and Stockholm as norm leaders for the CCTF. The Knowledge Hub is free and open for anyone to join and subscribe to updates. (Source: C40 Communication Hub Email from March 10, 2025 sent to all Knowledge Hub members. This image is a screenshot from the email the author received)

To support this work, C40 has created several knowledge guides and webinars to assist cities in understanding what constitutes a high ambition CAP, what components or considerations cities should include, and to build the technical and knowledge capacity of cities to carry out the process of designing a CAP. In short, the Knowledge Hub and resources housed there is part of C40s efforts to diffuse and maintain norms.

The transition process from CAPF to CCTF kicked off in 2021 and has been ongoing for the past four years. Although CAPs are an expected standard of all C40 members, C40 has yet to enforce this as a mandate. Instead, C40 has used a combination of strategies to reinforce this

norm including mapping all cities with verified, Paris compliant CAPs¹⁶ and connecting cities with contractors or other technical assistance necessary to produce CAPs that meet C40s membership standard.

Through C40's membership policies, trainings, and materials, the network has alluded to the fact that it will soon require all members to have a CAP. For example, in their resource mapping cities with a climate action plan, they say "cities earn and keep their membership through action, and C40 staff support and assess cities' CAPs to ensure they meet the goals of the Paris Agreement and other standards" (C40 Cities Climate Leadership Group 2025b). This statement strongly implies that CAPs are conditions of membership and that cities who fail to create or maintain these plans – or who fail to maintain the high standards – are not welcome within the network.

All four cities I study in this project have verified CAPs that meet C40s criteria under the CAPF framework. I first provide an overview of each of the four case study CAPs before discussing larger patterns of norms within CAP planning and implementation across C40.

¹⁶ As of January 2025, 69 of C40's 96 members have a Paris Agreement compatible CAP:

https://www.c40knowledgehub.org/s/article/Mapped-Cities-with-a-climate-action-plan?language=en_US

Buenos Aires

Buenos Aires began publishing climate action plans in 2009, when it joined C40. After six years, during the year they hosted the C40 Mayors Forum for Latin America, they unveiled their second climate action plan. The city released their third and most recent CAP in 2020 (Government of the City of Buenos Aires 2020, 9). C40 played a major role in the drafting of the city's CAP, with members of the Latin America team and the CAP Project Manager participating alongside government authorities and the coordinating team (Government of the City of Buenos Aires 2020). C40's engagement with Buenos Aires in creating this CAP also brought in financial support from the Department for Business & Industrial Strategy (BEIS) of the British government (Government of the City of Buenos Aires 2020, 2).

In addition to policy planning, the government designed and released an open governance portal, which includes data related to energy, sustainable mobility, and waste management (Government of the City of Buenos Aires, n.d.). Buenos Aires' new CAP is credited by the UN as "the first initiative to combine open government and the climate change agenda" and was a finalist for the 2023 Sustainable Development Goal Action Awards in the "Inspire" category (UN SDG Action Campaign 2023). The innovation in governance combined with recognition from other actors is evidence of Buenos Aires' norm entrepreneurship in this area.

Mexico City

Mexico City completed their CAP design process and released their plan in early 2021. The city has only released the document in Spanish and this document has been reviewed and audited by C40. It is considered to be a high-ambition CAP according to C40s standards due to its

commitment to stay at or below the 1.5°C temperature rise planetary boundaries. The CAP document combines two different initiatives: their Local Climate Action Strategy 2021-2050 and their Climate Action Program 2021-2030. These documents are combined to reflect short-, medium-, and long-term planning for the city in response to climate change. This CAP comes as a result of the city's climate change law, *Ley de Mitigación y Adaptación al Cambio Climático y Desarrollo Sustentable para la Ciudad de México (Ley de Cambio Climático)*. Though CDMX has prior versions of CAPs, the city engaged in a completely new process for the design and construction of this document.

Seoul

Seoul's CAP is the newest of the three among my case study cities. Seoul approved and released their most recent, finalized CAP in June 2021. This CAP is built off a 2015 initiative "the Promise of Seoul to tackle climate change" (the Promise of Seoul) which had a collection of 11 commitments. Overall, the process of developing Seoul's CAP took about 12 years. This process included multiple phases, plans, initiatives, and input from global cities at the 3rd World Mayors Summit for C40 in 2009 (Seoul Mayor 2021, 16). The city also diagrammed its process of crafting its 2050 CAP in Figure 20. This diagram, the introduction letter, and Seoul's own narrative timeline of developing its CAP underscores the role of C40 in leading the norm of CAP creation and the content contained in these policy documents. Notably, this CAP, as well as the majority of C40 CAPs, are produced in English or have English versions. This further supports that CAPs are political documents and meant to have both internal and external audiences.

How Seoul has developed its 2050 Climate Action Plan

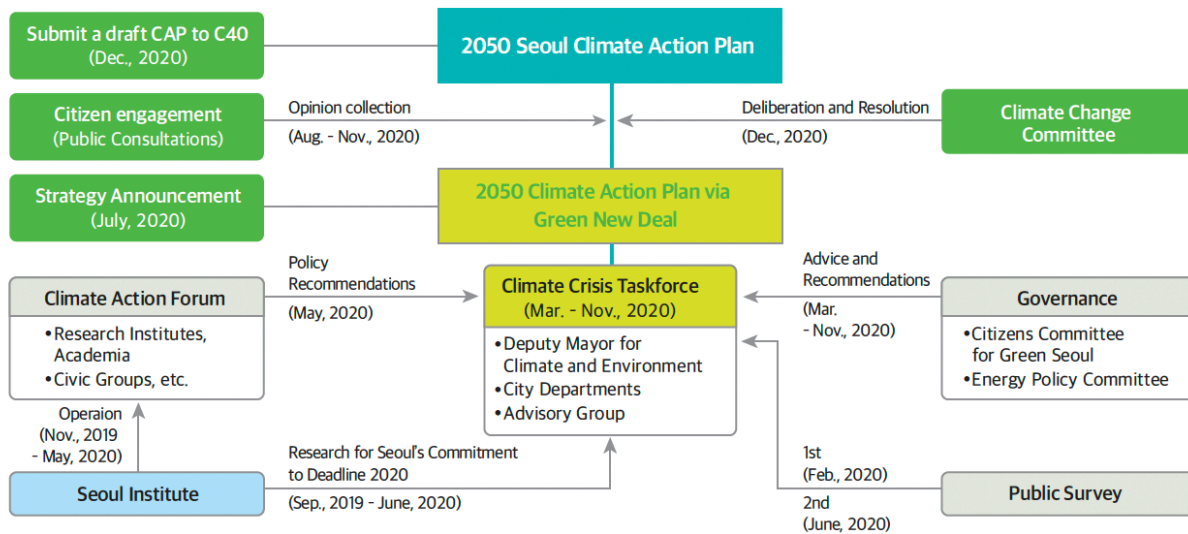


Figure 18: Seoul's CAP development process. This diagram details the multi-year process, including all bodies that reviewed and contributed recommendations and feedback. (Source: (Seoul Mayor 2021, 20)

Ho Chi Minh City

HCMC has the most aesthetically and functionally different CAP compared to the other three case studies in this project. Their CAP is a simple document with just text and plain tables, while the other three cases (and most other C40 CAPs) have many charts, graphs, and other aesthetic components to draw readers and external audiences in. This CAP is a supplemental document attached to Decision No 3273/QĐ-UBND of the Ho Chi Minh City People's Committee (the municipal governance structure for HCMC) on September 8, 2021. Interestingly, while this CAP is linked to the C40 website as of March 2025 through their CAP mapping tool, there was no CAP linked for HCMC even two months prior. Furthermore, during my fieldwork and interviews with stakeholders in HCMC and organizational partners, many actors were under the impression

that there was no new action plan in effect. I discuss the implications of this related to planning and implementation of urban climate governance efforts later in this chapter.

Having introduced each of the four CAPs, I will now discuss the CAP creation processes, structure and content of CAPs, and the issue of equity and inclusivity in CAPs.

CAP creation

The process for creation of CAPs involves numerous processes, including setting a baseline for emissions levels, establishing goals and criteria for evaluation, as well as initiatives designed to achieve these goals. Throughout the creation processes, cities are encouraged to involve community stakeholders, agencies, and subject-matter experts to craft policies and gather input. I discuss the development of norms around plan writing teams and then turn to the topic of participatory processes in CAP creation.

First, in constructing teams for CAP creation, some cities have capacity to work entirely “in house” within their sustainability or environmental offices and other city agencies. Other cities, including those with specialized technological or capacity building needs or those with smaller environmental and sustainability policy teams, may bring in external consultants from different consulting agencies or international development groups. This practice has become quite normalized as CAPs have become a necessary prerequisite to unlock climate financing, necessitating cities with less expertise or capacity to create CAPs to have to outsource this work. In this way, we can also consider the use of external consultants to be an additional norm that is part of the CAP creation process. C40 acknowledges this and explains in their guide for CAP

creation that “some cities seek support of external consultants for specific technical work” while also emphasizing that they believe cities should “actively lead and take ownership of the climate action planning process” (C40 Cities Climate Leadership Group, n.d.-b). Capacity and knowledge gaps are not the only conditions leading to the use of consultants, however, as we can see in the case of Mexico City.

Mexico City had a substantial team that developed their 330-page CAP, including their head of government, Dr. Claudia Sheinbaum Pardo, who had a career as a climate scientist prior to entering public office. At the time of this writing, Dr. Sheinbaum has ascended into the role of the national presidency as a successor to Andrés Manuel López Orbador (AMLO). Although AMLO and Sheinbaum were both heavily criticized for their party, Morena, supporting and facilitating oil extraction efforts, Sheinbaum’s technical expertise on climate change was referenced as a substantial factor in both funding and policy progress that the city had on climate efforts and had a meaningful role in actions which made it to the final draft of CDMX’s CAP (Interview 4 2023, 4).

Despite a high level of knowledge and expertise on the side of the government, CDMX still brought in and collaborated with several international organizations and development agencies. The two most substantial collaborating organizations was the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (also known as the German Agency for Development) and C40 Climate Leadership Group (Interview 4 2023; Gobierno de la Ciudad de México 2021; Interview 3 2023). GIZ played a substantial role in developing the adaptation instrument (Interview 3 2023, 3; Gobierno de la Ciudad de México 2021).

There is mixed evidence about the impact of external consultants on the overall outcome of the policies themselves. For instance, the impact of C40s work is mixed based on both

interviews and the acknowledgement statement in the CAP itself. CDMX briefly thanks C40 for “*por el acompañamiento al proceso de integración del documento*” [for supporting the process of integrating the document], which implies that C40 likely gave feedback on this but had very little substantive contribution (Gobierno de la Ciudad de México 2021, 8). This was confirmed through one of my interviews, where the senior level bureaucrat noted that SEDEMA and the city accepted collaboration with C40 and began working with them, but that some members of the team constructing the CAP were “quite reluctant” and thought this collaboration “felt superficial,” that it “wasn’t going to impact much” (Interview 3 2023). Originally, C40 was brought on board to help comprise a strategy to involve women in climate change action, but again, C40’s role in this work seemed to be quite minimal by the end of the process (Interview 3 2023).

In comparison, for Buenos Aires, the city advisor brought on by C40 (and paid for through the United Kingdom’s Foreign, Commonwealth, and Development Office, FCDO) provided “holistic” support and “technical assistance” (Interview 14 2025). The city advisor, which came through a larger funded initiative called the Climate Action Planning Program, targeted cities in the Global South and was meant to help provide the city support in strategizing, structuring, and filling any technical gaps. In the case of Buenos Aires, this looked like providing studies, research, and reports to provide detail or support for parts of the plan, helping the city develop a plan for how they were going to conduct their climate change risk assessments, and developing a pathway for helping city stakeholders understand the targets (Interview 14 2025). Additionally, the city advisor in this case kept the city grounded around the three “classic” pillars of mitigation, adaptation, and inclusion (Interview 14 2025).

Similarly, Ho Chi Minh City, external consultants have played a substantial role in both their prior and current CAP. Specifically, earlier versions of HCMCs adaptation planning have been heavily informed by collaborative work done with the Asia Development Bank (ADB) and the Agence Française de Développement (AFD). A 2010 report by the ADB (and co-financed by the United Kingdom) played a substantial role in forecasting and creating policy recommendations to help cities deal with flooding risk. More recently, leading up to COP 26 (2021), the AFD worked in collaboration with the Department of Climate Change of the Ministry of Natural Resource and the Environment (MoNRE) to do an updated risk assessment of climate vulnerability and identify adaptation policies recommendations for policy makers and researchers (Espagne et al. 2021). One interviewee went as far as to explicitly tell me:

If you take out the non-refundable funds from development banks, if you take out the funds from international corporations, if you take out the subsidies that are coming from international foundations, such as Bloomberg through C40, you would probably not have 90% – or maybe more – of the city local climate action plans in [Latin America and the Global South] (Interview 6 2024)

For many Global South cities, they are developing CAPs because of specific money set aside by organizations or funders to support this work. Without this funding set aside, many cities would not or cannot chose to spend their own budget to create and maintain these plans—especially not at the level of rigor that compliance with CAPF or CCTF requires, due to the technical capacity required in establishing, as well as measuring, baseline and ongoing emissions.

This relates to a second pattern – CAPs and external consultants to support that work are not coming in because of cities genuinely believing in these plans and having an interest in developing them. Instead, the plans and external supports are coming in to ensure that cities are in compliance. Cities are “reacting and responding to a demand from a development bank, from a city network, or from a corporation project that then instigates them to moving that direction”

(Interview 6 2024). The political economy of urban climate governance necessitates that cities have these plans to access any services or support. As such, CAPs are not coming from the center of local leadership – they are coming as a top-down process. This reinforces that norms are both internally and externally enforced within the regime of urban climate governance.

Participatory Governance in CAPs

In an attempt to balance the top-down nature of many CAPs and to attempt to be responsive to the needs of local residents, CAP creation also includes a norm of participatory governance processes. This norm is further reified through CCTF criteria for “inclusive engagement and communication” and the identification of “community engagement and consultation [...] in particular with historically marginalized groups, workers and frontline communities” as a required criteria for meeting *Integrity Matters* standards (Global Covenant of Mayors for Climate & Energy and WRI Ross Center for Sustainable Cities 2023, 15; C40 Cities Climate Leadership Group 2023). Participatory governance processes in CAP creation have a pattern of either creating new committees, groups, or positions to manage public input into CAP governance or of leveraging existing communities or groups and folding them into participatory designs. Seoul and Mexico City’s participatory process relied on a specialized set of groups and instruments designed specifically for input on the CAP while Buenos Aires leveraged existing communities.

In chapters 4 and 5, I discussed how Seoul’s participatory approach to climate and urban governance. Seoul reflects this continued commitment in the preface of its CAP, where Mayor Oh notes that they set up a Climate Action Forum which included experts and civic groups and paired insights from this forum with data from three public surveys and numerous public consultations (Seoul Mayor 2021, 3). The government’s framing of participatory governance

even extends into their org chart, which lists citizens at the top of the org hierarchy (Seoul Mayor 2021, 77).

In addition to these symbolic pieces of participatory action in CAP creation, Seoul's CAP also includes five pages of methodology detail about how, when, and where the public was consulted in drafting their CAP. Seoul ran two different surveys related to public awareness of the climate crisis and support for different climate actions that the city should take in response (Seoul Mayor 2021, 21). In total, Seoul surveyed 1,200 citizens in February 2020 and 1,000 citizens in June 2020 using online methods (Seoul Mayor 2021, 21). In their surveys, they found that there was a very high percentage of support for building and transport emissions reduction policies including GHG emissions caps for buildings, required GHG emissions disclosure for large buildings, mandates for private buildings to become [net] zero-energy, banning sales and registration of internal combustion engine vehicles (ICVEs), and prioritizing conversion of public vehicles of electric or hydrogen fuel cell vehicles (Seoul Mayor 2021, 21).

To pair with the survey, Seoul also created a "Climate Crisis Taskforce." This taskforce conducted an in-depth review of proposals and recommendations put forward by the Climate Action Forum and the Seoul Institute (Seoul Mayor 2021, 22). The taskforce then held a series of public meetings for citizens to provide additional feedback, input, or recommendations (Seoul Mayor 2021, 22). The city also appointed a Citizen Ombudsman, comprised of GHG emissions reduction experts (have existed since 2019), to take part in taskforce meetings and listen to the opinions of citizens and experts (Seoul Mayor 2021, 22).

These taskforce efforts combined with a series of other public meetings, which kicked off with the GHG Emissions Reduction Metagovernance meeting in July 2020. This meeting was organized "to build a public consensus on the 2050 Climate Action Plan and ensure the plan's

implementation” (Seoul Mayor 2021, 23). This meeting also included a Citizens Committee for Green Seoul. Following this meeting, the city hosted six Green New Deal Forums, run by The Seoul Institute, to hear from experts and civil groups on policies that should be included in the CAP. The Seoul Institute paired these forums with a Green New Deal Public Consultation, which included public forums in 22 administration districts throughout October 2020 (Seoul Mayor 2021, 24). During these forums, the city “collected public opinions at the meeting that have been reflected into this 2050 Seoul Climate Action plan” (Seoul Mayor 2021, 24).

Seoul’s approach to participation in CAP planning represents what is generally considered to be best practices in participatory policymaking. First, the layers of surveys, public forums, and smaller meetings over nearly a year reflects a systemic research design meant to include citizen and resident perspectives in multiple ways. Second, Seoul, to their credit, was able to achieve this level of participation and planning during the height of COVID-19. This is particularly remarkable given that the city remained on strict lockdown and prevention protocols through 2022 (a fact I can personally attest to after serving a week-long quarantine in a government-assigned hotel room). As I will discuss in the cases of Mexico City and Buenos Aires, COVID presented multiple levels of barriers for cities attempting to include citizen participation. Despite Seoul’s accomplishments in participatory governance and modeling of best practices, there are still some negative aspects of their engagement process.

First, as I will detail more in this chapter and the next, adherence to a norm or best practice is not always a *good practice*. Urban planning literature has recently had a wave of critiques of approaches like this, noting that there tends to be a bias in the types of residents or citizens who answer surveys (M. Jang and Vorderstrasse 2019; S. Jang and Gim 2022) and attend public forums to voice their opinions and provide feedback (Einstein, Palmer, and Glick

2019). Specifically, those who are least vulnerable tend to have the most capacity and access to these forms of participation. Second, the city did not specifically seek out climate vulnerable populations to gather input, ideas, or feedback. This means that Seoul's CAP lacks perspective from residents who are specifically most vulnerable to various impacts of climate change.

CDMX also had a participatory component to their CAP creation. To gather input on the CAP, the city hosted a set of 10 workshops (Gobierno de la Ciudad de México 2021, 16). In total, 840 people attended (Gobierno de la Ciudad de México 2021, 17) with about 100 people in attendance at each workshop (Interview 4). At each workshop, participants gave feedback on proposed measures and goals, identified information that needed to be gathered or diagnosed, and government officials integrated feedback from participants into the drafts of the CAP. These were participatory workshops that included NGOs, governments of municipalities (ACALEA), private sector, academic researchers, and various other community stakeholders (Interview 4 2023). In addition to these workshops, there was also a public participation period. This period happened during the beginning stages of the COVID 19 pandemic, so there were not many opportunities to have direct interaction with people (Interview 4 2023). Thus, the city held only online public consultation. In the annex of the CAP, CDMX published almost 20 pages of notes and pictures from each of the meetings

Following the participatory workshops and public consultation meetings online, CDMX published a draft of the document (a provision required by el Reglamento de la Ley de Cambio Climático) and held the consultation open for comments for two months (Gobierno de la Ciudad de México 2021, 17; Interview 4 2023). At the conclusion of the public comment period, the government went through 320 comments and proposed additions to the CAP (Gobierno de la Ciudad de México 2021, 17; Interview 4 2023, 4). Government workers documented, published,

analyzed, and integrated these comments into the CAP. Ultimately, a large portion of the comments received were related to issues regarding human rights and the intersection of these issues with policies proposed in the CAP (Interview 4 2023). The feedback that was integrated related to greater climate ambition, creating strategic partnerships, networks, and collectives to achieve climate goals, identifying management and participatory strategies that can help strengthen connections between the cities and other ongoing efforts, and perspectives which identified needs or concerns related to climate planning within short-, medium-, or long-term time frames (Gobierno de la Ciudad de México 2021, 18). Though CDMX's processes were not specifically designed to reach or interact with climate vulnerable communities within the city, the community did elevate human rights and climate justice concerns, which ultimately caused the city to need to substantively integrate and address issues of justice and equity in the final version of the CAP.

In comparison to Seoul and CDMX, Buenos Aires' approach to participation in the creation of their CAP differs in that they leveraged existing, formalized participatory structures in lieu of seeking feedback only during the drafting process of the CAP (Government of the City of Buenos Aires 2020, 48).

Using these existing structures, the city held a series of 9 workshops for promotion and training, 16 participation spaces, and 5 spaces for evaluating action. In total, these 30 events involved 1,538 people across the city.

It is difficult to say whether Buenos Aires' holistic approach of folding in existing, ongoing participatory infrastructure into the CAP process was the result of the overall vision for this CAP creation or whether the groups that the city sought participatory insight from shared the overall vision of the CAP. What I mean by this is that it is unclear whether the city entered CAP

planning with a predisposition and desire to want to integrate climate change across all sectors of municipal decision making, thus it made sense to draw on established participatory and community groups or whether in seeking input and ideas from these groups, the city arrived at the conclusion that the CAP and governance approach should be inclusive and cross-cutting across municipal ministries. Regardless of the directionality, Buenos Aires' approach of drawing on these existing groups to receive feedback on their CAP reinforced that climate change is a mundane part of day-to-day municipal business and also led to exclusion of some climate vulnerable populations in CAP planning. I elaborate more on the mechanisms and impacts of integrating climate change into the daily functions of Buenos Aires municipal governance later in this chapter, but the extension of this logic into the design of participatory processes in the CAP creation meant that many groups were under-sampled or simply not consulted.

CDMX, Seoul, and Buenos Aires all underwent their processes of CAP creation during the height of COVID-19 lock-downs. As such, it meant that cities had to rely on online methods of resident outreach. In Seoul, this did not change the online survey distribution strategy, but did necessitate public forums and meetings that would have happened in person to otherwise move online. In CDMX, about half of the participatory workshops and processes happened prior to lockdowns and half after. In Buenos Aires, nearly all of the participatory input happened during the lockdown period (Interview 12 2025; Interview 14 2025). Specifically, the two vulnerable populations that were the core focus of the city in design and input were the elderly and those who live in the informal settlements within the city (Interview 12 2025). Unfortunately, these two populations are quite hard to reach using online methods. The city was aware of this and attempted to have consultation meetings with vulnerable and “frontline communities” to understand their needs and points of view, but the limitations of the pandemic and the structures

of the municipal government, even by tapping on existing forums and groups, substantially limited the volume of input Buenos Aires was able to receive from these residents (Interview 12 2025). Thus, the city had to depend substantially on its vulnerability assessment to incorporate the perspectives of frontline communities and anticipate the needs and adaptation solutions necessary to include in the CAP (Interview 12 2025).

CAPs are one norm within the space of urban climate governance and are diffused and enforced through institutional advocacy and social enforcement at C40. There are also additional enforcement mechanisms outside of C40, including an expectation for cities to have CAPs within the political economy of urban climate financing. Given the formalization of CAPs within governance and political economy spaces for cities, it is commonplace for external consultants and development agencies to provide writing and technical assistance for the crafting of CAPs—especially for Global South cities. At the same time, while CAP development processes have become less localized in their origins and motivations, there is an expectation that cities engage the public in some manner in the process of writing their CAPs. While some cities like Seoul and CDMX designed specific processes for residents to provide feedback and input on this governance document, other cities, like Buenos Aires, leveraged existing participatory infrastructure. In cases like HCMC, there was no participatory governance process in their CAP creation, but they have built in ongoing reporting to “political-social, social-professional organizations, mass organizations, non-governmental organizations, businesses, and related units” where the city can raise public awareness (People’s Committee of Ho Chi Minh City 2021, 8). In all cases, the COVID-19 lockdowns limited accessibility to some climate vulnerable communities, exacerbating issues with equity in representation that may have already existed

otherwise. In the next section, I unpack how these CAP creation process norms also contribute to shaping the approach and content of the CAPs themselves.

CAP Content

C40s role in advocating for CAPs has led to some level of standardization over time. Most CAPs within C40, and all CAPs studied in this project, include content related to emissions reduction goals (including establishing baselines, emissions inventory system identification, and mechanisms for measuring progress towards emissions goals), mitigation efforts to achieve baseline emissions reduction targets, and strategic planning for adaptation efforts. I discuss each of these components and norms around the content and construction of these components using examples from each of the four cases.

Emissions Reduction Goals

The inclusion of emissions reduction goals, baseline emission targets, and planning emissions reduction efforts from these baseline levels are key features and requirements of C40 city membership as of 2021 (C40 Cities, n.d.-a). Both CAPF and CCTF require cities to achieve the “highest ambition of the Paris Agreement” (a cap of 1.5 degree Celsius rise in global average temperature) through achieving net-zero emissions levels by 2050 (C40 Cities Climate Leadership Group 2020b; 2023). Although C40 has declared that all four case study cities are CAPF compliant, there are differences in the norms that the cities adhere to in establishing emissions levels, emission monitoring, emissions reduction level planning (including setting baseline levels), and progress towards CCTF compliant norms regarding emissions reductions.

Despite CAPF and CCTF both having the same goals for carbon neutrality and compatibility with Paris Agreement high ambition targets, CCTF is much more specific in guidance for what this means for city targets, pathways, and monitoring.

First, each city uses a different methodology for measuring and reporting emissions levels. Buenos Aires uses the Global Protocol for Community-Scale Greenhouse Gas Emission inventories (GPC) and has since 2015 (including adapting reports between 2003-2014 to report along these metrics) (Government of the City of Buenos Aires 2020, 36). The GRC is jointly developed and maintained by the World Resources Institute (WRI), C40, and ICLEI and has recently been renamed the GHG Protocol for Cities (Greenhouse Gas Protocol, n.d.). This protocol has been the go-to emission inventory system for the Global Covenant of Mayors for Climate & Energy, which has legitimized this as a global inventory and been taken up by “hundreds of cities” (Greenhouse Gas Protocol, n.d.). Buenos Aires’ GHG emissions have also been reported to the CDP since 2011 on an annual basis (Government of the City of Buenos Aires 2020, 27).

Seoul also bases its measurements and inventory on international guidance but has developed its own emissions inventory system. Seoul uses the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and other IPCC GHG emissions calculation methodologies to inform its Local Autonomous Government Greenhouse Gas Emissions Calculation Guideline by the Ministry of Environment and Korea Environmental Corporation (Seoul Mayor 2021, 13). Neither Seoul nor the government of the Republic of Korea do the emissions calculation. Seoul explains that it has “commissioned calculation and verification of GHG emissions within its administrative boundaries to a professional organization since 2010” (Seoul Mayor 2021, 12–13). Based on the international guidance, the city’s calculations cover both Scope 1 and Scope 2

emissions + waste treatment outside of the city (Seoul Mayor 2021, 13). These emissions include CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ (Seoul Mayor 2021, 13).

In contrast to both Buenos Aires and Seoul, Mexico City does not use internationally developed norms for emissions inventory or GHG calculations. Instead, SEDEMA (Secretaría del Medio Ambiente, the Ministry of the Environment) develops different instruments at periodic intervals (Gobierno de la Ciudad de México 2021, 33). Specifically, CDMX's most recent CAP uses the Mexico City Emissions Inventory (CGEI), which identifies the main sources of emission in the city and identifies policies that can balance economic development with mitigation (Gobierno de la Ciudad de México 2021, 33). The city reports to the National Emissions Registry (RENE) annually and claims that it periodically undergoes external auditing (Gobierno de la Ciudad de México 2021, 33). CDMX includes Scope 1, Scope 2, and Scope 3 emissions, including emissions within and outside the boundaries of the city but are attributable to CDMX (Gobierno de la Ciudad de México 2021, 33).

Finally, Ho Chi Minh City does not identify its methodology for emissions inventory or reporting at all in its CAP. HCMC lists “stocktaking GHG inventory in HCMC (every 2 years)” and “developing an online GHG reporting system to take stock of GHG inventory” activities listed under its “programs, tasks, and priority projects” in the CAP as items to be completed between 2021-2025 and 2024-2025, respectively (People's Committee of Ho Chi Minh City 2021, 17, 20). Now, although HCMC does not list any methodology or specific inventory system in their CAP, they do use a combination of the GPC and 2006 IPCC guidelines to release a GHG inventory report for HCMC in April 2021, based on 2018, 2016, and 2013 data (Ho Chi Minh City People's Committee Department of Natural Resources and Environment 2021). Although

this is quite positive that HCMC followed through on a quite vague commitment in its CAP regarding emissions inventories and measurement, and that the resulting inventory met the same international standards of Seoul and Buenos Aires, it is both perplexing and concerning that there are not clear commitments to any particular emissions measurement system. Furthermore, the Department of Natural Resources and Environment (DONRE) report lacks any information about who actually carried out the inventory. As published, it seems that HCMC self-manages its inventory reporting system.

Third, each city has set a different baseline level for emissions reduction planning. The baseline levels accomplish two important things for cities in CAP processes. First, baselines allow cities to establish measurable reference points for emissions reductions. Second, baselines allow cities to take stock as to where their emissions have peaked so that that can bring down their carbon emissions in ways that are sustainable in terms of effort and resources. Though all cities are headed towards an overall goal of carbon neutrality under CAPF and CCTF, baselines help cities assess whether they are on track and help municipalities develop actional plans for carbon scale downs.

Seoul established 2005 levels as the baseline for reducing emissions (Seoul Mayor 2021, 28). In 2005, the city had 49,445 ktCO₂eq. They are aiming to reduce this to 29,667 ktCO₂eq by 2030, 14,834 ktCO₂eq by 2040 and reach carbon neutrality by 2050 (Seoul Mayor 2021, 28). The final stretch of carbon neutrality will need to come from carbon offsets. The city estimates that around 20% of GHG emissions must be neutralized through carbon credits and other offsetting initiatives (Seoul Mayor 2021, 28).

Buenos Aires was one of the first 25 cities to set a carbon-neutral city goal of 2050 (Government of the City of Buenos Aires 2020, 7). Buenos Aires uses 2015 for its emissions

reduction target and has set what it calls an “ambitious scenario” as its targeted commitment, which includes both ongoing and new efforts for emissions reduction (Government of the City of Buenos Aires 2020, 38). As the projections currently stand, under this scenario, Buenos Aires would cut emissions by over half by 2030 and by 84.4% in 2050 from 2015 levels (Government of the City of Buenos Aires 2020, 38). The remaining 15.6% of residual emissions comes from a variety of factors, including dependency on the national electric power system which will not reach 100% clean energy by 2050, wastewater emissions which are beyond the capacity of the city to address, and residential emissions stemming from gas heating and other fossil fuel use (Government of the City of Buenos Aires 2020, 39). The city plans to reach the final stretch of carbon neutrality through carbon offsetting programs, which they say will be “forestation programs in or out of the city’s area or by agreements for the clean electricity generation for public buildings” (Government of the City of Buenos Aires 2020, 39). Notably, while the city does not call these actions carbon offsetting, these actions are clearly plans to offset the remaining residual emissions for the city.

CDMX mapped out two reduction scenarios within its CAP. One would lead to a reduction in emissions by 42% of 2016 levels by 2050 and the other would achieve net-zero by 2050 (Gobierno de la Ciudad de México 2021, 36). The CAP additionally includes a carbon budget tool which represents the maximum amount of emissions that can be emitted between 2016-2050 by Mexico City and still be in compliance with limiting global temperature to 1.5°C (Gobierno de la Ciudad de México 2021, 38). For the 2018-2024 period, the city plans to emit 129.4 tonnes of carbon (Gobierno de la Ciudad de México 2021, 39). By the 2042-2048 window, they plan to reduce carbon emissions 12.6 tonnes (Gobierno de la Ciudad de México 2021, 39).

In contrast to the other three cities, HCMC does not have a carbon neutrality goal in its CAP. However, it does establish reduction goals. The city commits to “achieving the target of 10% GHG emission reduction by 2030 and moving towards a low-carbon and sustainable economy, or 30% emission reduction in case of international supports” (People’s Committee of Ho Chi Minh City 2021, 2). This goal, in combination with the GHG inventory report, seems to indicate that HCMC is circling around a 2018 baseline for emissions. The combination of better data availability for baselining and the need to set a baseline level closer to current day for developmental purposes would justify HCMC selecting a 2018 (or even later) baseline level.

The last component of emissions reduction goal norms relates to the actual reduction scenarios themselves and their alignment to high ambition targets. I find that all three norm entrepreneur cities (Buenos Aires, Mexico City, and Seoul) are on-track to CCTF CAP alignment while HCMC, a norm adopter city, is missing key components of CAPF criteria and is substantially behind CCTF requirements for emissions reduction goals. In Table 3, I provide a list of actions that are required to be net zero aligned and thus CCTF compliant and an analysis of whether or not all four CAPs meet each CCTF net zero alignment criteria. All cities, except HCMC, are on-track to be CCTF compliant as it relates to net zero alignment. The lack of net-zero goal is the most substantial factor holding back HCMC from being on-track for CCTF. For instance, action 2 requires that cities have targets and pathways formally adopted by executive decision-making authority. While HCMC’s CAP has been adopted by the HCMC People’s Committee, and does include a pathway and reduction target, it does not include a net zero target. Thus, HCMC only partially meets the criteria for action 2.

Table 3: Assessment of CAPs to be on-track with CCTF net-zero alignment requirement

Required Actions	Buenos Aires	Ho Chi Minh City	Mexico City	Seoul
Action 1: A city must use “a robust and transparent methodology consistent with limiting warming to 1.5°C with no or limited overshoot according to a fair share approach and aligning with the latest science” to set “targets and pathway to net zero by 2050 or earlier.”	Yes	No	Yes	Yes
Action 2: A city must have 2050 net zero targets and pathway formally “adopted by the executive decision-making authority (e.g. mayor, city council)”	Yes	Partially-pathway formally adopted, but not net zero	Yes	Yes
Action 3: A city must have a CAP which defines strategies and actions to support net zero targets and pathways	Yes	Partially-reduction, but not net zero	Yes	Yes
Action 4: A city must demonstrate progress by “achieving or exceeding its interim targets through public reporting based on publicly available data”	Yes	Yes	Yes	Yes
Action 5: A city must advocate and work collaborative with “national governments and non-state actors to help unlock and realize their full mitigation potential”	Yes	Yes	Yes	Yes

Source: Adapted from Integrity Matters for Cities, States, and Regions report (Global Covenant of Mayors for Climate & Energy and WRI Ross Center for Sustainable Cities 2023, 11)

Overall, although all four cities have variations across their design of emissions measures, setting baselines, and planning reduction scenarios, there are noticeable patterns of norms. First, cities are by-and-large attempting to align to more universal or international standards for emissions inventory systems and complying with reporting to organizations like CDP. Among these four cities, the strongest norm entrepreneurs — Seoul and Buenos Aires — have the most transparency of their emissions methodology and direct ties to international standards. Moving

into the CCTF era, cities will be required to report into a “standardized, open format and via public platforms that feed into the UNFCCC Global Climate Action Portal” (Global Covenant of Mayors for Climate & Energy and WRI Ross Center for Sustainable Cities 2023, 20).

Second, when it comes to setting baseline, there is an observable pattern in the baseline set year and the norm entrepreneur status. Seoul, arguably the strongest norm entrepreneur and current member of the C40 steering committee, has committed to a 2005 baseline, while Buenos Aires, CDMX, and HCMC have committed to baselines of 2015, 2016, and 2018 (estimated), respectively. These baselines also align with common but differentiated responsibilities (CBDR) norms that undergird the Paris Agreement and allow non-Annex I countries to have a later baseline level than Annex I countries.

Last, related to planning reduction scenarios, norm entrepreneur cities are not only aligned with the CAPF guidance for these components, but these cities are also prepared for the next phase of CCTF emissions reduction planning guidance. The roles that norm entrepreneurs played in setting these criteria may be a factor in explaining CAP alignment with these standards and norms. For instance, Mexico City was part of the collaboration planning group that developed the CAPF in 2017 and Buenos Aires was part of the CCTF planning team. Interestingly, the CCTF has much better representation from Global South cities than the CAPF team did. In the CAPF development, only 2 of 8 members of the planning team were Global South cities. In the CCTF planning team, 7 of the 11 representatives are Global South cities. What this may mean as C40 rolls out support for the CCTF era of CAPs is that this framework and the network resources may be better positioned to support cities like HCMC who have not met base criteria for CAPF or CCTF due to economic challenges.

Mitigation Programs

Getting cities to set ambitious emissions reduction goals, set and measure progress towards baselines, and plan reduction pathways are critical, but overall smaller, segments of the CAP documents themselves. The bulk of CAPs are generally reserved for discussing plans for mitigation and adaptation. I focus my analysis of this component on how cities align their CAPs to guidelines set out within the CAPF and CCTF.

CAPF guidance includes a series of seven required action, ranging from criteria such as basic information, such as the inclusion of timelines, cost, and responsible actors to the necessity of including a methodological, evidentiary, and equity basis for each policy in CAPs (C40 Cities Climate Leadership Group 2020b, 27–31). CAPF guidance also explicitly tells cities that “climate change mitigation and adaptation should be considered in an integrated way” two times in the explanation of the requirements for mitigation and adaptation action writing (C40 Cities Climate Leadership Group 2020b, 27). In the case of Seoul’s CAP, they explicitly mirrored the language of CAPF guidance by explaining that they linked efforts for adaptation and mitigation for “policy effectiveness” (Seoul Mayor 2021, 37). Across the four case study cities this project, all cities fully met criteria 3.1.1, 3.1.4, 3.1.6, and 3.1.7.

For criteria 3.1.3 and 3.1.5, cities were partially compliant and exhibited a wider variability in ways that they met (or partially) met these requirements. Mexico City, for example, included comprehensive summaries and notes from community meetings in addition to a robust set of scientific evidence to demonstrate how they prioritized actions within the CAP. Seoul took a similar approach, including justification related to the emission sectors combined with public opinion data on specific policies related to these sectors, gathered by the city. Buenos Aires’ CAP most clearly met this criteria, with four pages of its CAP spent outlining the methodology

for action prioritization (Government of the City of Buenos Aires 2020, 44–47). Ho Chi Minh City’s document provides an explicit and clear set of action priorities, organized by budget source, but does not provide any insight or explanation as to the process used to establish these priorities.

None of the cities met criteria 3.1.2 as it was laid out in the CAPF. All four cities did discuss funding and budgeting related to climate governance, but they chose to address these holistically instead of action by action. Ho Chi Minh City’s approach of organizing actions by budget area came the closest to full compliance with this criterion given that it at least identified the part of the budget that each action item was to come out. However, despite this, HCMC still falls short of the full requirement in 3.1.2 given that there is no cost estimate for any of the projects provided. Furthermore, the sources of funding are quite broad – they include “non-business recurrent budget,” “capital budget,” and “open for investment” (People’s Committee of Ho Chi Minh City 2021, 11). In complete contrast, Buenos Aires completely excludes any cost or budgetary discussion from their CAP. None of the actions include discussion about either the cost of implementing the action or the source of funding for action. Seoul and Mexico City both include general discussions of their climate financing strategy, including plans to bring in PPPs, federal funds, and international investments to support mitigation actions.

Under CCTF, cities have been given a stripped-down set of criteria to meet when it comes to minimum requirements for mitigation and adaptation planning. At minimum, all cities are instructed to include nine criteria. Under CCTF, all four cities meet criteria 1-4, 6, and 8-9 as indicated in this table. For criteria 6, as they did for criteria 3.1.2 under CAPF, cities were all able to generally provide details on funding and financing at a birds-eye view, yet not action-by-action. The criteria where the most variance exists across the four plans is in the compliance to

criteria 5. Criteria 5 is the updated version of 3.1.5 from CAPF, which requires a focus on equity and for cities to specifically name and plan for frontline risk communities in their action planning. Under CAPF, all cities had at least minimal acknowledgement of differentiated vulnerability across communities. However, some cities fell short in having a centralized aim in actions improving equity. I unpack this specific component more in-depth in the next section, as equity and vulnerability fell most often under adaptation action planning for the cities.

There are two key differences in the design and norm impact between the CAPF and CCTF requirements for mitigation planning. First, former CAPF guidance explicitly instructs cities to consider mitigation and adaptation as integrated frameworks while CCTF has dialed back this guidance and allowed cities to consider these action plans more discreetly. Across the four cases, cities had mixed adherence to CAPF guidance to integrate planning. Seoul and Ho Chi Minh City separated their mitigation actions from their adaptation actions, though freely discussed these priorities alongside each other in the CAPs. Buenos Aires took this guidance to heart and did not identify actions as adaptation or mitigation. Instead, the Buenos Aires CAP created individual actions under a series of four thematic clusters that described the action, target, affected sectors, stakeholder groups, associated co-benefits, sub-actions, and complementary actions. CDMX adopted a hybridized approach where the CAP clearly identified some actions to be mitigation or adaptation but also marked some actions, such as water resilience and nature-based solutions, to be actions that cut across mitigation and adaptation policy areas (Gobierno de la Ciudad de México 2021, 187).

Second, CCTF's pared down requirements for mitigation (and adaptation) actions may serve to make more cities compliant with these criteria. To start, having a simplified list of requirements—and dot-pointed within the framework guidance document—makes it easier for

cities to understand and identify if they have met those basic criteria. The CAPF attempted to allow cities agency with regard to planning, but this introduced much more subjectivity into the CAP compliance process and made the requirements more technically complicated for cities to follow when designing CAPs. The new CCTF framework should theoretically make it easier for cities to create compliant action plans and for C40 and other third parties to evaluate alignment between the plans and net zero emissions alignment. In the next section, I discuss norms related to adaptation programs and explore these norms in each of the case study CAPs.

Adaptation Programs

As discussed in the previous section, adaptation actions are often planned in tandem with mitigation actions in CAPs. Despite this norm, there are some components of adaptation planning in CAPs that are unique to adaptation actions. In this section, I explore norms related to municipal assessment of climate vulnerabilities, how adaptation actions navigated coordination challenges, and the intersection of adaptation action planning with equity considerations.

Adaptation Measurement and Assessment

Adaptation measurements and assessments present myriad challenges to cities in CAP processes. To begin, adaptation needs must be considered alongside the contextual factors of social, economic, and cultural communities within cities. This means that standardization can be a difficult task for cities to engage with, as there is no true “one-size-fits-all” assessment that can capture all adaptation risks and scenarios. However, there have been some international tools, such as the IPCC Fifth Assessment Report (AR5) Representative Concentration Pathway (RCP) scenarios, which provide a general overview of risk at different emissions and warming levels.

All four cities used either the RCP scenarios or Coupled Model Intercomparison Project Phase 6 (CMIP6) models (from the IPCC Sixth Assessment (AR6) Report) to set adaptation baselines or design localized assessments for vulnerability. Buenos Aires, CDMX, and Seoul have paired RCP scenario analysis with local vulnerability assessments to plan for adaptation actions. HCMC was the only city to plan to use the CMIP6 scenarios to assess vulnerabilities and impacts. I discuss how each city has used these tools in more depth below.

Beginning with CDMX, although the city does not use IPCC or other international models to conduct emissions inventory or to form its mitigation strategy, it does use international models in combination with other national data like the Coupled Model Intercomparison Project 5 (CMIP5) and representative concentration pathways (RCP) of the IPCC to plan for adaptation needs and policies (Gobierno de la Ciudad de México 2021, 44). There are two possible explanations for this deviation in measurement instruments. First, the legacy of nationally created emissions inventories may be a holdover from Ebrard's rejection of mitigation norms embraced by Bloomberg. Such a history did not exist with adaptation norms or measurement tools, so there may be less ontological tension with the use of international measures for this component. Second, it is possible that the involvement of GIZ in this component of the CAP led to the city wanting to pursue a more internationally recognized pathway for adaptation since it was co-planning adaptation with an international partner. Using international measures, pathways, and scenarios make it easier to standardize planning for adaptation and may also set the ground for bringing in global partners and international private investors for adaptation efforts. In this CAP, CDMX said that the goal was not to create new measures but to try to integrate information into existing measures and tools (interview 4).

However, Mexico City acknowledges that adaptation planning must be hyper localized. For example, urban heat island effects across the city can fluctuate several degrees between the higher elevation and forested regions of the city in comparison to less protected areas (Gobierno de la Ciudad de México 2021, 48). The city has developed a risk atlas¹⁷ that they consult to try to reduce vulnerabilities in adaptation planning (Interview 4 2023). In zones where the social vulnerability index is high or very high, the city works with the municipality to develop climate change programs (Interview 4 2023). Using the Risk Atlas, the city constructed a table where they identified municipal risk factors for various hydrometeorological events such as floods, temperatures, landslides, snowfall, etc (Gobierno de la Ciudad de México 2021, 57–58). In addition to identifying the climate vulnerability, the city is working with municipalities to better understand where there is also an intersection of social vulnerability such as household poverty, clean water access, educational access, and stable employment to determine where climate change programs should be prioritized (with a focus on prioritizing adaptation programs in the highest vulnerability areas of each municipality) (Interview 4 2023). The CAP includes an annex (Annex E) which has a full breakdown of vulnerability related to Social Development Index. Understanding these particularly vulnerability areas is important for optimizing adaptation resources when it comes to threats like flooding (where 9 of the 16 municipalities are at high risk) and high temperatures (where all municipalities are in the medium to high risk range) (Gobierno de la Ciudad de México 2021, 58).

Buenos Aires bases their adaptation and climate risk scenarios based on IPCC RPCs. They selected four main scenarios for their risk planning: RCP 2.6 (optimistic decreased

¹⁷ <https://www.atlas.cdmx.gob.mx/principal/inicio>

emissions), RCP 4.5 and 6.0 (intermediate-level stabilization of emissions), and RCP 8.5 (pessimistic scenario of increasing emissions).

Seoul conducted adaptation vulnerability assessments based on IPCC RCP 4.5 and 8.5 scenarios (Seoul Mayor 2021, 61). Under national law (the Framework Act on Low Carbon, Green Growth), the municipality is required to “develop and implement[...] a climate change adaptation plan every five year[s]” (Seoul Mayor 2021, 30). In conjunction with the RCP assessment scenarios, Seoul has developed a Vulnerability Assessment Tool (VESTAP) which is meant to understand “climate exposure, sensitivity, and adaptability” using localized climate and socio-economic data (Seoul Mayor 2021, 61). This tool, which was designed and is administered by the Ministry of Environment, assesses local governments’ climate vulnerability, but doesn’t reflect detailed conditions and contexts within Seoul (Seoul Mayor 2021, 71). As it is designed, it is assessed by district (Gu), but many of the adaptation risks need to be assessed by Dong or lattice unit. This is because one Gu can have multiple Dongs. For example, a Gu with one dong close to Hangang River, another dong near mountains, and another dong near roads (Seoul Mayor 2021, 71). Thus, there must be more local government and stakeholder participation to better reflect conditions and to provide data for cities to use in CAPs.

The difference in the international baselines that HCMC uses for adaptation planning versus the other three cities is likely best explained by timing and design. HCMC’s CAP does not actually draw on this data or use it to set adaptation actions—it merely declares that the municipality will use CMIP6 as part of its process for climate risk assessment. In the case of the other three cities, their climate action plans were released either before (Buenos Aires and Mexico City) or shortly after (Seoul) the AR6 CMIP6 models were published.

Navigating Coordination Challenges

In addition to outlining the action planning efforts themselves, the adaptation components of CAPs often discuss coordination challenges between city and national levels of implementation. I discuss a case of positive coordination (Mexico City) and a case of coordination roadblocks (Buenos Aires).

Mexico City stands out within C40 as a city that is well in-sync and alignment with the national level of government. Through multiple interviews, Sheinbaum's role in this was cited as a key factor. As one source put it, Sheinbaum "has worked all of her life in climate change and energy" and that it was "helpful to have a leader who wants to lead [efforts on climate change]" (Interview 4 2023, 4). In having a "real political leader with that kind of commitment" who also held a close relationship with AMLO and the federal government, the city was able to receive unprecedented levels of financial and logistical support that previous city government administrations had not been able to secure (Interview 4 2023). Specifically, Sheinbaum and the friendship that she had with AMLO and party resources she had access to "helped our government to ensure financial resources to implement several of the measures, for example, energy" (Interview 4 2023). This was a particularly important set of resources on the issue of adaptation planning. Specifically, this relationship helped ensure that measures related to adaptation are implemented in the areas of social vulnerability (Interview 4 2023).

In addition to the financial resources, the city was also able to pursue a historic level of cooperation with international partners. For instance, multilateral banks and international financial institutions now want to work with CDMX because of this strong relationship between the city and the national level of government (Interview 4 2023). These financial firms and institutions have reached out to CDMX to partner with the city to accomplish various mitigation

and adaptation goals (Interview 4 2023). For instance, organizations have proposed new partnerships through pilot programs (Interview 4 2023). Thus, having a coordinated relationship played a role in attracting FDI and shaping the political economy surrounding climate planning.

Not only did the political connections between the city and national level of government increase funding from external sources, it also increased financial resources within the country itself (Interview 3 2023; 2023). The Fondo Ambiental Público (FAP) was established during Sheinbaum's time in office and was a huge breakthrough for the city, as it locked in money for environmental policy (Interview 3 2023). The design of FAP takes money out of polluting sectors and invests it in the environment and other climate change action projects (Interview 3 2023).

This partnership also garnered gains in administrative capacities. Having a strong connection between local and national levels of governance contributed to breaking down barriers and silos between sectors. Traditionally, sectors never talk to each other due to lack of access and broken lines of communication between city and national leadership (Interview 3 2023). This presents barriers and resistance to change and often requires substantial resource investment by city officials in changing minds of public officials within other agencies or at the national level (Interview 3 2023). Thus, the streamlining afforded by Sheinbaum's leadership and connection to Morena and AMLO presented a great success for CDMX on climate change coordination (Interview 3 2023).

In contrast to the recent success in coordination that CDMX has experiences, Buenos Aires is clear-eyed about the level of coordination and cooperation it needs from the national level of government to achieve climate action. The city notes that "it's erroneous to think that plans to tackle climate change begin and end in Buenos Aires, neither in administrative terms nor

in terms of our capacities” and that this support is most necessary from the national government, in addition to other jurisdictions and neighboring cities (Government of the City of Buenos Aires 2020, 40). To navigate challenges of polycentricity in governance of climate change, Buenos Aires has taken on several commitments in support of vertical and horizontal collaboration, including working with the Federal Council for the Environmental (COFEMA), the national Climate Change Commission, and the Metropolitan Transport Agency (Government of the City of Buenos Aires 2020, 40). The city also maintains a partnership with the national government in the state-run solid waste management company, CEASME (Government of the City of Buenos Aires 2020, 40). In addition, hydraulic watersheds with starts in Buenos Aires (such as Maldonado, Medrano, and Cildañez) have integrated management between Buenos Aires and the national government.

The city has also committed to streamlined coordination, vertically and horizontally, by considering other governmental action plans and frameworks which may have overlapping goals or strategies with the CAP (Government of the City of Buenos Aires 2020, 44). However, this level of strategic planning across levels has not been the case historically. In fact, until the alignment of the Milei and Jorge Macri administrations, Buenos Aires’ CAP acted as an artifact to clearly differentiate the forward-thinking city government of Buenos Aires from the national level of government. Over the last several decades, the national level of government tended to follow a political tradition in Argentina of Peronism, which is a nebulous term for a political ideology which most closely resembles socialism with added populist, authoritarian, and social justice elements.

Since the Néstor and Cristina Fernández de Kirchner administrations (2003-2015), the Argentinian presidency has been largely run by Peronists, with the exception of Mauricio Macri (2015-2019), who identified as an anti-Peronist. During periods of support for Peronism at the national level, it was common for the city government to be run by anti-Peronists (usually members of Republican Proposal, one of Argentina's other major parties with an anti-Peronism ideology). At the provincial level (AMBA), which encompasses the rest of the greater metropolitan area of the city, the electorate typically sides with the national government and Peronism in elections (Interview 8 2024). This dynamic between the three levels of government (city, provincial, and national levels) has fed into climate change action planning playing a role in further distinguishing the city of Buenos Aires as its own entity and promoting its identity independent of the state itself (Interview 8 2024). I go into a deeper exploration of this dynamic in the section on transportation norms later in this chapter.

Equity Considerations in Action Planning

The final component of adaptation actions in CAPs I discuss is how cities engage with the concept of equity. Though the CAPF and CCTF frameworks implore cities to consider equity across both mitigation and adaptation plans, equity is most often considered, analyzed, and included in the adaptation parts of CAP. I discuss how each plan engaged with concepts of equity and inclusion, starting with Mexico City, the most comprehensive of the CAPs when it came to these considerations.

Mexico City's CAP is explicit about the types of vulnerabilities that various populations within the city face and notes these vulnerabilities early-on within the CAP (Gobierno de la Ciudad de México 2021, 23). For instance, the CAP notes that not only does climate change have

a more substantial negative impact on women in comparison to men but that this difference in vulnerability also impacts perceptions about the causes and responsibilities of climate action (Gobierno de la Ciudad de México 2021, 23). For instance, women are more likely to understand that climate change impacts their personal lives and families while men are more likely to externalize vulnerabilities to other groups (Gobierno de la Ciudad de México 2021, 23). The CAP also noted how care impacts were different between men and women when it came to illness due to climate conditions- only 14% of men would be likely to spend an entire day caring for a family member in these circumstances compared to 37% of women (Gobierno de la Ciudad de México 2021, 23). Furthermore, these considerations around vulnerability extended into considerations of patterns of transit and spillover effects to other climate vulnerable communities, such as children, elderly, and disabled people (Gobierno de la Ciudad de México 2021, 23). The CAP continues on to note additional impacts to earned wages, land ownership, mortality rates during natural disasters, vector-borne illnesses, illness from poor water quality, and health impacts from interactions on wood-burning stoves (Gobierno de la Ciudad de México 2021, 24). The report even goes as far. As to acknowledge the differences in contributions to the city's GHG emissions via transport methods. The CAP notes that although women make a greater number of trips, only 16% of them are made by private car in comparison to 25% of trips made by men and that women use public transport at higher rates than men (43% vs 39%, respectively) (Gobierno de la Ciudad de México 2021, 24).

Following this section on gender and climate change impacts, CDMX's CAP includes a decalogue—a list of commandments or instructions with a normative, value component to them – of ten rules that the city is going to abide by in its climate action (Gobierno de la Ciudad de México 2021, 24–25). This list includes things like committing to disaggregation of data by sex

for plans and projects, promoting women's rights to access, manage, and control resources like land and water, training and educating women on structural inequalities related to climate change, increasing intersectional representation of women in decision-making on environmental issues with a specific emphasis on Indigenous women, integrating women in management capacities for natural resources, recognizing domestic care work as a subsidy and public good, and integrating gender into economic development models (Gobierno de la Ciudad de México 2021, 24–25).

The choice of a decalogue over other types of lists or rhetorical communication devices carries a few potential implications. It is likely that CDMX is trying to send a message to the public, as well as other cities and the national government, that they are taking the intersection of women's rights issues and climate change seriously. The inclusion of this decalogue in the beginning of the CAP implies that these ten items are meant to be foundation to other policies and initiatives within the CAP. Given that the majority of public feedback related to human rights (specifically women's rights), this may be the city's attempt to show that these concerns and this feedback was taken seriously in the CAP. The inclusion of a decalogue also echoes rhetorical strategies of AMLO and Claudia Sheinbaum's party, Morena, which has a history of framing policies within moral terms.¹⁸ This structure reinforces a point I will elaborate in the next section- that CAPs are not merely policy documents, but *political* documents.

CDMX pairs the decalogue of commitments to a gender-conscious approach to governance in the CAP with a list of six more specific, cross-cutting gender measures. These measures include commitments to disaggregate qualitative and quantitative data about gender perspective of climate change, monitoring and evaluating climate policy using a system of

¹⁸ I would like to thank and credit Ramón Garibaldo Valdéz for this piece of insight he offered in a January 2025 conversation about this rhetorical move in CDMX's CAP

gender indicators, increasing the number of women in decision-making roles, mainstreaming gender perspective into climate policy through coordination with national and international partners, preparing budgets with a gender perspective, and actively training women in green jobs to help facilitate their inclusion in just transition of the urban economy (Gobierno de la Ciudad de México 2021, 26–27; 31).

Women are not the only vulnerable group identified in CDMX’s CAP. The CAP also spells out the issues of vulnerability related to poverty, Indigenous status, youth, old age, and disability (Gobierno de la Ciudad de México 2021, 28). This section culminates in a guarantee to *“el derecho a una vida digna, a la igualdad, a la ciudad, al desarrollo sustentable y a un medio ambiente sano como los derechos llave para la justicia climática”* [The right to a dignified life, to equality, to the city, to sustainable development and to a healthy environment as key rights for climate justice] (Gobierno de la Ciudad de México 2021, 29). To achieve this guarantee in the CAP, CDMX identifies a cross-cutting measure of inclusion and human rights which will commit the city government to generating and updating information related to causes and differentiated impacts of climate change, as well as opportunities to reduce inequalities and guarantee human rights for all residents (Gobierno de la Ciudad de México 2021, 29). The recognition of these climate vulnerable groups also extends into the CAPs section on just transition, where the city notes that these communities, in addition to those who are in the informal economy, have the most threat to their economic livelihoods (Gobierno de la Ciudad de México 2021, 29). Thus, the city emphasizes an additional layer of moral imperative for green economic transition through emphasizing the effects of delaying or not engaging these transition processes.

Seoul also demonstrates leadership around the area of equity in their CAP. For instance, although many of the concepts in the predecessor for their CAP, Promise of Seoul, are included in the current CAP, the CAP makes substantial improvements in the area of inclusion and equity. While the Promise of Seoul only mentions this issue in passing through a reference to the impact of transit on the disabled and elderly and a commitment to just transition, Seoul's CAP dedicates a full section to the issue of equity and includes perspectives directly from youth (Seoul Mayor 2021, 74–75).

Despite a more concerted effort to address equity and inclusion forthright than previous policies in Seoul, it is worth noting that this section is only 2 pages of an 88-page document and does not include any measurable targets or milestones to evaluate the city's progress. For instance, under the subsection, "policies for the vulnerable," Seoul says the city is "going to continue research and policies focusing on the disadvantaged groups" (Seoul Mayor 2021, 74). To do so, Seoul says they will continue adaptation and disaster response measure (Seoul Mayor 2021, 74). The section otherwise contains no additional information about what these adaptation or disaster response measures entail or how it will continue to research and develop policies for climate vulnerable populations within the city.

In evaluating other parts of Seoul's CAP, there is evidence of equity considerations in a variety of adaptation areas including housing policy, heat adaptation, air pollution, flooding, and green spaces. To make housing more affordable for both the city and for residents, the Seoul Housing and Communities Corporation (SH) is in charge of constructing, managing, and renting public housing. The city is working with SH to improve energy efficiency by "switching to high-efficient boilers, LED lightings and water-saving equipment" (Seoul Mayor 2021, 41). Though these improvements may be nice, they do not address a larger issue looming around housing

vulnerability- flooding. In 2022, the city experienced historic floods and unfortunately, one of the casualties was the death of a woman and young girl who lived in “Parasite-style apartments”¹⁹ (in reference to the famous movie) (Zhu 2022). This CAP, which pre-dated this tragic event, does not mention flooding adaptation as part of its housing adaptation plans. As a consolation prize of sorts, the city has included financial support for vulnerable groups for insurance for potential storm and flood damages. The city has been able to get 5,000 people insured in 2020 and in 2021, city set a goal of insuring another 4,000 low-income people (Seoul Mayor 2021, 64).

Some of the most substantial adaptation work from an equity lens is being done around urban heat impacts to residents. Seoul has designated institutional buildings (including senior centres, welfare and community service centres, and municipal offices) as a cooling shelter to protect “at-risk populations” from heat waves. They will operate from “May to September each year” and the city has committed to increasing cooling shelter numbers from 2,026 in 2020 to 2,500 in 2021 (Seoul Mayor 2021, 62). To support the increased operations of these cooling shelters, the city has also committed to raising funds for increased utility bills 2021 (Seoul Mayor 2021, 62). Furthermore, the city will run a Heat Waves Disaster Response Headquarters in summer, which will send text messages of prospective high temps, focused on “most at-risk and outdoor workers” (Seoul Mayor 2021, 63). The city used similar technology to communicate COVID exposure and infection information at the height of the pandemic (a feature I had a chance to observe in action during my 2022 fieldwork). In conjunction with the text messages, the city plans to hand out heat protection guidelines to outdoor workers and other citizens and inspect construction sites to ensure that they have “necessary measures to protect the health of

¹⁹ Basement apartments with no windows or very small windows

their workers from scorching heat” (Seoul Mayor 2021, 63). Given that nearly 15% of construction workers in South Korea are construction workers, this initiative addresses a vulnerability with an increased impact on migrant workers (K. Nam 2023).

Seoul specifically acknowledges air pollution as a climate risk factor that “low-income populations and people with underlying diseases” often experience at the highest levels because they “tend to live in neighborhoods that are exposed to severe levels of air pollution” (Seoul Mayor 2021, 75). The city has designated these areas with higher vulnerability density as “particulate matter extensive control areas” (Seoul Mayor 2021, 63). As of 2019, three areas in the city have this designation and the city has planned to add three additional areas each year to a total of 12 by 2022 (Seoul Mayor 2021, 63). In addition to the designation of these areas, the city has committed to the installation and maintenance of 50 AQ monitoring networks across the city, as air pollution is “one of the most acutely felt climate and environmental issues in Seoul” (Seoul Mayor 2021, 75).

In comparison to the level of depth provided in the areas of equity for both CDMX and Seoul, Buenos Aires and HCMC have much broader and vaguer plans for adaptation as it relates to equity issues. Buenos Aires identifies equity as a core component within their “Scope of Action,” a collection of four key missions that make up the foundation of their CAP (Government of the City of Buenos Aires 2020, 14). This component, dubbed a commitment to “an inclusive city,” notes that the city aims to “guarantee an even distribution of climate action benefits” (Government of the City of Buenos Aires 2020, 14). The city emphasizes that “people living in the most vulnerable areas are the main focus of our solutions” and that policies applied in “the poorest neighborhoods” offer evidence of this approach (Government of the City of Buenos Aires 2020, 26).

In HCMC's CAP, there is general reference to "building capacity" and "resilience" but no specific communities or vulnerable groups of residents are identified within the CAP itself. Given that the city has included adaptation and vulnerability risk assessment as part of its CAP actions, it is understandable that the city may not have a specific focus until they have those data available. However, there is no identified process for how the city will use the data to prioritize and identify adaptation policies on the basis of socioeconomic vulnerability. Where there are references to vulnerability in the CAP, they often refer to solely geographic vulnerability, such as "identifying areas vulnerable to climate change and flooding in existing urban areas and planned new development areas" (People's Committee of Ho Chi Minh City 2021, 14).

CAPs as Political Documents

Through the analysis of the norms underlying the process of creating CAPs, as well as norms of how mitigation and adaptation actions are constructed, I hope to impart a critical argument to readers, which is that *CAPs are political documents*. Conventional wisdom within both climate change research and practitioner spaces is to understand CAPs through a very literal and apolitical reading without consideration for the actors, agendas, and material conditions shaping these plans in the first place. Though CAPs may have once had a more organic, localized structure, that is rarely the case now. There are both normative incentives – through organizations like C40—and economic incentives – through climate funds and international development organizations – to create and standardize content within CAPs. To the extent that there is deviation in standardized norms, these are often explained by external or internal political factors.

CAPs are also a valuable political window for understanding other urban climate governance norms. In the next two sections, I unpack norms related to mobility and green spaces. In both of these norm areas, the cities allude to or explicitly discuss strategies in these areas as part of their CAPs. Through an understanding of the political landscape surrounding each city CAP, as well as a better contextual grounding in the CAP content of each city itself, I demonstrate that the emergence and diffusion of norms are not merely driven by evidence of these being best practices. History, political economy structures, and power play substantial roles in encouraging the creation and diffusion of norms.

Section 6.2: Mobility

Transportation is generally one of the largest sectors of city GHG emissions (Wei, Wu, and Chen 2021). As such, transportation is often a large focus of mitigation efforts as part of city CAPs. To tackle transportation, cities have developed strategies for improving both macro- and micro-forms of transit access, in tandem with improving pedestrian infrastructure. I consider the combination of policies related to these forms of transportation and pedestrianization as a larger norm concept of mobility. Ironically, though cities include and depend on improving mobility to achieve substantial portions of their CAP goals, CAPs can also act as a roadblock to progressing mobility policies in cities. One senior leader of a transnational city network explained “sometimes [...] process of mobility policy is slow because CAP is preventing some things to move” (Interview 6 2024). Thus, although mobility and CAPs are often tied together, they may not always be complimentary. In this section, I unpack tensions related to CAPs and mobility policies related to pedestrian infrastructure, micro-transportation, and macro-transportation access across my four case studies. I begin with analysis of pedestrian infrastructure, then move to discussing micro-transit norms before wrapping up analysis in this section with unpacking macro-transit norms.

Pedestrian infrastructure

There has been increased global attention on pedestrian infrastructure in recent years due to a combination of climate change and urban wellness goals that pedestrian-friendly design can help cities achieve. In particular, cities have developed norms around the design and placement of sidewalks as well as the design of lighting and shade along pedestrianized routes. I focus

specifically on the case of HCMC to highlight how norms around pedestrian infrastructure are shaped by a combination of political, cultural, and economic factors.

In HCMC, the politics of sidewalks and pedestrian mobility has been largely driven by a desire to attract global tourists. As such, there have been two sets of norms that the city has been primarily engaged in: restriction of sidewalk uses and concentrated development of pedestrian mobility in certain districts. The politics of HCMC's sidewalks have been a long-debated issue by the government and residents, prompting study by scholars such as Annette Miae Kim. Kim's core work on this topic, which explores the politics of public spaces in HCMC with an in-depth case study of sidewalks, explores changes in sidewalk culture in the early 2000s that coincided with policies to "clean up" the sidewalks (A. M. Kim 2015). At the time of these policies, Kim notes that the rationale – at least the rationale given in the documents themselves-- was "for the sake of traffic congestion and public health, and in order to be a modern, world-class city" (A. M. Kim 2015, 4). In response to these policies, though, vendors used loopholes to continue their livelihoods, such as carrying items that they sell or putting their cart on wheels (A. M. Kim 2015, 4). However, on the whole, these types of activities took a sharp nosedive by the 2010s (A. M. Kim 2015, 4).

During my fieldwork in HCMC, I learned that sidewalk life had a renaissance during COVID-19. When the bars, restaurants, and other entertainment venues were forced to shutter businesses, many residents literally took to the streets to do activities. While these weren't sanctioned, per say, they were also not explicitly banned as entertainment venues. From hugely popular sidewalk karaoke to the fruit stands I passed on my way to the park every day, sidewalk life in 2022 was bustling. In addition to the vending and entertainment culture making a comeback, many businesses and budding entrepreneurs realized that they could reclaim some of

the public sidewalk for motorbike parking (Figure 19). These makeshift parking lots lined many of the main sidewalks as storage for bikes but also as a place for Grab²⁰ drivers to rest between deliveries. They also offered businesses an opportunity to make some additional cash as they recovered from the country's shutdown and individuals struggling to find work an opportunity to make some income as parking lot guards.

²⁰ Grab is basically a local version of Uber/UberEats



Figure 19: A motorbike “parking lot” on a sidewalk with security guard and motorbikes lining a sidewalk, 2022 (Source: taken by author during 2022 fieldwork)

The average walk around the city involved often jumping into the street when I encountered a vendor or makeshift motorbike parking lot. In the areas the sidewalks were clear opened a different problem- impatient motorcyclists using the sidewalks as a shortcut during peak traffic hours (see Figure 20). To try to curb this problem, the city has installed metal bars across parts of the sidewalk (Figure 21) and while that does somewhat deter motorbikes (I say somewhat because some more determined riders would merely lift their bikes over and proceed on the sidewalk), it also means more limited pedestrian mobility for those with strollers or assistive devices, such as wheelchairs or walkers. These bars, in combination with broken and uneven pavement that lined many of the sidewalks in the more residential districts of the city (Figure 22) made for a very limited walking culture. Many residents and visitors found it much more

hospitable to hop on the back of a Grab bike or to catch a Grab cab ride than to walk more than a couple of blocks.



Figure 20: Motorcyclists using sidewalk as a shortcut during heavy vehicle traffic hours in HCMC, 2022 (Source: taken by author during 2022 fieldwork)



Figure 21: Metal bars on sidewalks in HCMC to discourage motorbikes in HCMC, 2022 (source taken by author during 2022 fieldwork)Source: taken by author during 2022 fieldwork



Figure 22: Broken sidewalks in residential districts in HCMC, 2022 (source: taken by author during 2022 fieldwork)

Conversations about the lack of hospitable pedestrian infrastructure began to come to a head shortly after the end of my fieldwork, in 2023 (M. Gia and Nguyen 2023). One catalyst to this discussion was the fact that Vietnam struggled to return to its pre-COVID tourist levels and as neighboring countries, like Thailand and Singapore, saw their tourism industry robustly rebound. These conversations among expats, residents, and members of the government partially blamed the lack of pedestrian culture (in conjunction with requiring a visa for many tourists for a maximum of 30 days) for the struggle to return this sector of the economy to its previous levels of success. To make matters worse, buzz around promoting pedestrianization in global cities, such as Paris and Singapore, during COVID made the lack of such culture HCMC stick out like a sore thumb in comparison. HCMC began trying to clear the sidewalk by introducing new

policies that would allow vendors to functionally rent space at a cost of .85- 14.50 USD per square meter in addition to creating more paid parking spaces across the city (M. Gia and Nguyen 2023). These efforts went largely unnoticed and unenforced as they went into effect throughout 2024.

However, in response to the international normalization of pedestrianization, as well as high levels of traffic injuries and fatalities that occur annually during the Tết holiday season, the national government passed decree 168/2024/ND-CP at the end of 2024, which required cities to levy enforcement and hefty fines for traffic violations (Tuan 2025). Fines for doing activities like running red lights or driving on sidewalks now carry a “tenfold increase” of \$250 USD for an average violation and up to \$1,500 USD at the highest end as of January 1, 2025 (Tuan 2025; Cave 2025). Since this rollout in Ho Chi Minh City, traffic has become considerably calmer in a record amount of time. Some local publications were even reporting the effects on traffic just days after the decree went into effect (Bac and Vi 2025). The effects of this policy has been so effective that it even picked up coverage in the *New York Times* by the end of the first month as a testament to the effect of public policy on changing deeply embedded cultural norms (Cave 2025).

The city has benefited from millions of dollars “pouring in” through this new system of fine, with a 35% increase in revenue within the first two weeks of enforcement (Cave 2025). The decree also provides “rewards for snitches,” which has led to some residents questioning how much the embrace of this norm is for safety and how much of it is a money grab for the government (Cave 2025). Much of the conversation about this norm and policy enforcement has centered on the idea of HCMC and other cities in Vietnam becoming *văn minh* (“civilized”), implying that the lack of pedestrianization has put HCMC behind other global cities (Cave

2025). One person interview for the New York Times piece run on this initiative focused on this concept of *văn minh* saying “it takes time and effort to promote a civilized style” and that decrees like 168/2024/ND-CP are a core part of pushing the city along to being *văn minh* (Cave 2025). It is also worth noting that some of the core voices in support of this policy have been expats, such as one who wrote for an English-speaking, youth-audience outlet about how they have been forced into the roadway due to vendors, bikes, or broken sidewalks during their daily walks with their dog or during their jogs throughout the city (Kuschert 2025).

Of course, economic and external cultural pressure to improve pedestrianization in HCMC are not the only drivers of the policy. Some local, non-expat residents are supportive of these changes, mentioning that prior rush hour driving on sidewalks made them “fear for [their] safety” and expressing appreciation that the new regulations have also helped reduce noise pollution as drivers are not honking to be let in and out of the road from the sidewalk (Bac and Vi 2025). Some residents have also said pointedly that “it’s safer, it’s better” (Cave 2025). However, despite this support and improvements in some areas of pedestrian safety, it has had downwind, negative impacts on gig economy workers like delivery and taxi drivers who are now stuck in much longer traffic as a result of more road congestion (Cave 2025).

To additionally support pedestrianization efforts, HCMC has also been working through their Department of Transport and Public Works to expand the quality and width of sidewalks to increase pedestrian safety and to “enhance urban aesthetics” (Ha and Tuan 2025). These improvements will also be critical for safety because the broken sidewalks are not only inaccessible for disabled residents, but also for the aging populations in the city (Kuschert 2025). The most recent statistical data from the HCMC Statistics Bureau points to an aging index of 65.2 in 2024 (compared to the national average of 60.18), with 65.2 elderly people for every

person under the age of 15 (Bao and Thu 2025). Since the city crossed the threshold of being an “aging city” (i.e. a city with higher than national average aging population) in 2017, it has been more concern about how it can improve quality of life for elderly residents, including by making mobility more accessible through sidewalk safety improvements (Bao and Thu 2025).

HCMC’s pedestrian infrastructure improvements in the form of policy enforcement and investments in sidewalk quality represent a very common dynamic when it comes to urban climate governance norms—a policy that is not initially driven by local residents but often drives improvement for residents. External pressure, whether economic or through cultural hegemonic processes, can be a catalyst for cities to prioritize governance initiatives and this is not necessarily a negative phenomenon. In the case of pedestrian policies, continued enforcement of sidewalk restrictions may help improve quality of life for all residents, but especially those with young children and the elderly. However, the danger with policy pressures coming from external versus internal actors is that the motivation to continue enforcement and development may erode over time without intrinsic and internalized interest. Additionally, there can be negative externalities in some communities if issues like this are driven most by aesthetic and economic concerns. Under the current policy, street vendors and other low-income residents are facing the brunt of the negative externalities of enforcement and displacement. To avoid either a rebound from the improvements the city has observed in the status quo or disproportionately negative impacts from being felt by lower socio-economic groups in the city, the city will need to move beyond just external economic and cultural hegemonic pressures.

Micro-transit

As cities have attempted to improve mobility, micro-transit has offered a “low-hanging fruit” for many cities with either logistical or financial constraints when it comes to macro-transit infrastructure. These micro-transit options include expanding infrastructure for transportation devices such as bikes, mopeds, motorcycles, and scooters. Options like bike-share programs and expanding bike transportation pathways through protected bike lanes have allowed more residents to gain access to bike infrastructure and to be able to safely use bikes as a form of mobility. These forms of micro-transit are also much more accessible to a wider range of economic groups as forms of personal transport, compared to vehicles. In this section, I explore policies related to one mode of micro-transit—bikes. Specifically, I explore the norms of bike lanes in Buenos Aires and bike-share programs in all four cities.

The issue of mobility and transit in Buenos Aires has become highly politicized over the last decade. Buenos Aires’ CAP calls for the city to become a “human-scale city,” an urban design norm that reflects Seoul’s approach to urban planning (Government of the City of Buenos Aires 2020, 24). Within the CAP, the city notes that their motivation is multi-purpose: human-scaled design will assist the city with achieving climate goals but also Buenos Aires acknowledges that in taking up the norm of human-scaled city design, they are able to gain status within the urban climate governance community. The city states that human-scaled city design and practices will also “allow[.] us to be part of the latest climate decisions at the world level” (Government of the City of Buenos Aires 2020, 24). Indeed, human-scale planning connects strongly with Sustainable Development Goals (SDGs) 3, 11, and 15. Ironically, the desire of prior city administrations to align with global norms of urban development has led to a contemporary backlash against this approach. Argentina’s newly elected president, Javier Milei, has gone on record bashing Agenda 2030 and sustainable development goals as “*un programa de*

gobierno supranacional, de corte socialista, que pretende resolver los problemas de la modernidad con soluciones que atentan contra la soberanía de los Estados Nación y violentan el derecho a la vida, la libertad y la propiedad de las personas” [a supranational government program, of a socialist nature, that seeks to resolve the problems of modernity with solutions that undermine the sovereignty of national states and violate people’s right to life, liberty and property] (Javier Milei 2024).

Within their CAP, Buenos Aires interprets the norm of “human-scaled cities” as incorporating several components, including pedestrian priority areas, increased green spaces, and “clean mobility.” Buenos Aires considers several different initiatives as part of their quest for clean mobility, including extending bike paths across the city and a free public bike system, creating exclusive lanes for public transport, elevating public trains, and creating more pedestrian-only mobility areas.

Bike Lanes

The conventional wisdom about Buenos Aires’ bike pathways program is that it only began in 2009. In reality, bike pathways began popping up around the city as early as the 1990s as a way to connect parks together (Interview 11 2025). In 2009, the city government kicked off its most recent iteration of the bike pathway network, which includes pathways for daily mobility, more protection for bike lanes, and a free bike transport system in 2010 (Government of the City of Buenos Aires 2020, 28–29). Furthermore, the 2009 initiative created a policy which codified support and budget for expanding and supporting bike pathways for mobility across Buenos Aires (Interview 11 2025). By 2020, the city had expanded to 267 km of bike paths (Government

of the City of Buenos Aires 2020, 25; 29). Both the Mauricio Macri and Horacio Rodríguez Larreta administrations were highly supportive of bike lanes, which is reflected in the city's most recent CAP, which was released under Larreta. In addition, ridership numbers across the city have gone up 131% between 2013 and 2020, according to city data. Notably, the city's expansion of bike lanes seems to be frozen at 300km since Larreta's term ended and the city is rapidly following behind other regional peers such as "Bogotá (630 km, Santiago de Chile (490 km) and Rio de Janeiro (307 km)" (Poore 2024).

Despite the investment in these lanes and the emphasis in this form of mobility across the city, bike lanes have become a contentious part of politics both locally and nationally for Buenos Aires. During the Javier Milei campaign for Head of Government, bike lanes were cited as part of the status quo barriers to prosperity. In December 2024, the Jorge Macri administration took their first step in rolling back the city's commitment to bike lanes and removed the lane on a major thoroughfare street, Tucumán (Spinetto 2024). In the opening session of the 2024 legislative session, shortly after Jorge Macri took office, Macri kicked off the government's charge to reduce bike lanes saying "Tenemos que dar un paso más y revisar la razonabilidad" [we have to go one step further and review its reasonableness] (infobae 2024a). Ironically, Jorge Macri was "hand-picked" by Mauricio Macri, his cousin, the former leader of Buenos Aires who kicked off the bike lane network and went on to a term in the presidency, and a widely respected advocate of progressive climate policies (Poore 2024).

The city is closely monitoring 30 bike lanes, including on Avenida Córdoba, a major street in the city to determine which lanes it should remove under Jorge Macri (infobae 2024a). The administration has said that the decisions to install the bike lanes originally were not data-driven and that they will use video surveillance data combined with AI to determine which lanes

should be kept (infobae 2024a). In talking with a cycling activist in the city, they said “Bueno, en realidad eso fue bastante un show. Eso fue realmente un show” [well, actually that was quite a show. That was really a show] (Interview 11 2025). He explained, and the published city data confirms, that the city has a long-established methodology for counting cyclists which both the city and cycling advocates and the city agree on (Interview 11 2025). While this resident and activist said “es muy gracioso eso” [that’s very funny] that Jorge Macri made a big deal about using AI to count cyclists across the city and that a year later “no tenemos ninguna inteligencia artificial que sepamos” [we don’t have any artificial intelligence that we know of’], he also acknowledged that he was sad to see this so easily embraced because “ahora todo es inteligencia artificial” [now everything is artificial intelligence”]. Though this AI approach to counting bike lane activity has not actually surfaced in practice, it is reflective of some emerging norms to try to automate parts of city climate action and urban planning decision-making. Despite this, the city maintains an analog process to counting cyclists. They choose one day a month to carry out manually administered surveys of cycling traffic at 20 different intersections across the city. Annually, they choose one hour in the morning and one hour in the evening of one day to represent the average annual hourly traffic on various bike paths across the city. The annual data collection is done at 880 intersections on the city bike path network.

Jorge Macri’s administration claims that the bike lanes on some of these major streets are contributing to traffic congestion by removing lanes for vehicles and do not have the ridership to justify their continuation (infobae 2024a). The story is a bit more complicated, however. First, while Jorge Macri claims that the city did not conduct studies of traffic patterns after the installation of these traffic lanes, this claim appears to be false. In a write-up of the 17km

expansion of the bike path network along both Corrientes and Córdoba that happened in 2020, the World Resources Institute (WRI) explains:

The city collected data related to traffic flow on both avenues and was able to demonstrate that there were no significant changes to travel times for motorized vehicles after the intervention. With this evidence, the infrastructure became permanent, and the plastic bollards were replaced with concrete barriers (World Resources Institute 2022).

Thus, the claims from Jorge Macri that these expansions to the network were added with no “data-driven” decision making does not empirically hold up, according to WRIs’ account of this bike lane addition.

Second, in the areas where there is lower bike ridership, there are some confounding variables. Some routes include large obstructions of the lane, which make it hard to navigate, and some paths are also not fully connected which may be reducing ridership of some paths (infobae 2024a). Interestingly, despite Buenos Aires historically and contemporarily embracing and aspiring to European norms around urban climate action and urban planning, the argument that anti-cycling advocates in Buenos Aires took up was “no somos Amsterdam” (Poore 2024). In short, although this alignment with European human-scaled design and mobility planning has been desirable for the city and there have been attempts to position the city identity around these ideas, the new leadership of the city is rolling back these policies by trying to redefine the identity of the city itself.

Instead of maintaining the current network of bike lanes, Jorge Macri’s administration argues that the city can continue to promote accessible and sustainable transit through adding tram bus services (infobae 2024a). However, the alternative transit systems, including buses and Sube, the subway line, have become less accessible as rates have risen and service has declined. Setting aside cost considerations, Sube is clunky and disjointed. Getting set up with my first

Sube card was a 45-minute ordeal that involved visiting three different subway stations. The first station did not sell the Sube cards, so we walked down a couple of blocks to buy a card. That station allowed us to buy a card and top it off with credit but was not going the correct direction of the train that we needed that day. Thus, we had to walk to a third station to catch the train after our card and credits were purchased.

All of this to say, it is unsurprising that during the start of the pandemic, bike ridership increased 30% (Spinetto 2024). The popularity of cycling as a means of mobility in the city is directly related to the accessibility of other methods of transit. It is unlikely that the addition of tram busses in Buenos Aires can support the volume of residents that cycling currently does and equally unlikely that these trams could do so while being within the household budgets of those who made the switch to cycling for daily transport.

In addition to the actual norms related to expanding bike pathway access for improved urban mobility and emissions reduction, there are also negative norms demonstrated through the Buenos Aires case study. In this case, the phenomenon of rolling back progressive policy on bike pathways can be summarized as “porteño policy.” One interviewee explained this phenomenon as follows:

“Puedo definir muy a rasgos así medio ampliado, que es como una es un clima de época. Algo así está. Creo que pasando en Toronto. Si no me equivoco, debo, me parece que algo así está. Hay una idea de ir de retroceder con estas políticas” [I can define very broadly that it is like a feature of the current climate. Something like that is happening. I think it is happening in Toronto, if I am not mistaken, I think something like that is happening. There is an idea of going backwards with these policies] (Interview 11 2025).

In short, in tandem with expanding cycling access in cities, we are also witnessing the rise of this porteño policy norm, which grasps on to regressive policies for the purposes of elevating particular political ideological positions. In this quote, the interviewee is referencing ongoing

conflict between the city of Toronto and the provincial government headed up by Doug Ford and the Conservative Party regarding bike lanes across the city. The province has forced the city into removing bike lanes as early as March 2025 (Hauen and Chamandy 2024). This has come as the result of a fast-tracked bill in the Ontario legislature, Bill 212, which gives the province “sweeping control” over bike lanes as well as green lights highway construction to begin before Indigenous consultation or environmental impact assessments (Carter 2024). Although the specifics about which lanes and how much of each lane will be ripped out of Toronto, allow the province to review and halt progress on any bike projects started in the last five years, and allows the province to establish criteria for bike lane installation in the future, it is unclear which specific projects will be impacted as of now (Carter 2024). Similar to Buenos Aires, the government of Ontario claims that “it will be a data-driven process” determining which lanes should be removed within the city (Carter 2024). And like Buenos Aires, the evidence of what this “data-driven” process is remains opaque (Carter 2024). Opponents of the bike lane removals have also noted an exorbitant cost- upwards of \$48 million USD for the removal the three largest lanes, which is nearly twice the cost of the initial installation (Carter 2024).

In looking at the porteño policies impacting both Buenos Aires and Toronto, this norm does not seem to fit easily into a particular segment of the political spectrum. Although Doug Ford and his administration hail from a conservative party, Jorge Macri’s party, Propuesta Republicana [Republican Proposal] (PRO), is a more centre-right party with a strong centrist tradition. In fact, one of the most well-known leaders of PRO was Horacio Rodríguez Larreta, who led a centrist movement within the party and led the charge on bike pathway network expansion in 2009. Though these political ideologies do not neatly align, they do share similarities in their respective parties’ embrace of neoliberal approaches to governance, which

embrace concepts like “data-driven governance.” This political economy ideology has given life to not just porteño policies, but also to rejecting movements like the 15-minute city.

Bike Share Programs

Another set of norms around bike mobility has been the existence and placement of bike share programs in cities. It has become one of the most ubiquitous global norms around cycling infrastructure, demonstrated by the existence of 3,000 bike share programs – hosting over 10 million bikes and e-bikes—globally in 2021, including all four of my case study cities (Lyft Urban Solutions 2021). Bike share programs have become nearly universally expected in global cities. What used to be a marker of a “hip” city (“we even have a bike share program!”) has now become an expectation from residents and visitors to any large or mid-sized city.

Public bike share programs have a variety of origin points, but the general consensus is that one of the earliest versions of the bike share model we now know (a paid or deposit system) comes from a group in Copenhagen 1995 who developed a mechanism, similar to Aldi grocery stores, where users would pay a small deposit to unlock the bike from a machine (Shaheen, Guzman, and Zhang 2012). This program, Bicyklen (“city bike”), was the first of its kind to launch in Europe (Shaheen, Guzman, and Zhang 2012). These machines housed conspicuously designed bikes that could be “locked, borrowed, and returned” at a series of bike racks managed under the city’s New Mobility Agenda 2008 (Shaheen, Guzman, and Zhang 2012). This program still operates today in a more updated model but inspired a wave of new bike share programs in Norway, Finland, and Denmark throughout the 1990s and early 2000s (Shaheen, Guzman, and Zhang 2012). These early programs were either administered through non-profits created to fundraise and manage these programs or through parts of municipal government budgets

(Shaheen, Guzman, and Zhang 2012). In parallel, programs in Portland, Boulder, and Minneapolis/St. Paul developed to launch these city-supported bike docking programs.

The rise of the bike sharing norm in cities came at a rapid pace by the 2010s. In 2011, researchers estimated that there were 135 programs across 160 cities globally with around 230,000 bikes and grew 40 times this size by 2021 (Shaheen, Guzman, and Zhang 2012; Lyft Urban Solutions 2021). Bike share programs were able to proliferate at this rate because of two critical phenomena: the power of cultural norms and the rise of public-private partnerships in urban climate governance initiatives. First, I discuss how the key norm entrepreneurs embraced bike share programs, leading to rapid uptake by cities globally within this decade. Following this discussion, I explore how public-private partnership (PPPs) contributed to the growth of this norm and how the success of PPPs in this instance opened the door for other PPPs in the realm of urban climate governance. I conclude this section with analysis of bike share programs in each of my four case study cities.

There are several reasons why bike share programs took off. First, for many cities, bike share programs offer an ability to connect incomplete portions of transit networks. For instance, Dutch Railways (NS), the nationally owned train operator in the Netherlands has invested in a system called OV-fiets, which have over 300 locations—all of which are located at train stations or near bus stations, metro stops, or Park and Rides (NS, n.d.). By having bike shares *only* at or near other transit systems, NS has allowed the train network to more efficiently navigate issues related to bike balancing and has also reduced costs for train transportation as well as other municipally managed forms of transportation (Zipper 2023). This also improved ridership for NS, as a 2011 survey found that 46% of NS users use OV-fiets for the last mile of their journey

as opposed to a bus or tram option (Nanninga and Röntgen 2017). This model has allowed cities to essentially “in-fill” gaps in transit service systems.

Aside from the practical benefits of bike share programs making these initiatives highly popular, bike share programs are another form of highly visible infrastructure that is highly rewarded by international actors and organizations like C40. While other transit programs like buses or subway lines are also quite visible and marketable for cities, they come at a much higher price point, have less flexibility, and are more subject to various geographic and climate factors. Bike share docking stations can be installed virtually anywhere in a city – especially in the “fourth-generation” of bike share programs, which are dockless.

The norm entrepreneurs of bike sharing became part of a larger phenomenon of cities wanting to raise their profiles around transportation infrastructure by showcasing the most innovative approaches to mobility. CDMX’s former mayor, Miguel Mancera, recounts this phenomena in a 2013 interview:

In Europe we found examples that we are now implementing in the city [...] Public transport is a good example. In the past, when travelling, people sought to move by car. The competition used to be for the most modern and sophisticated motor vehicles. But now it is about public transport: a concern for having the best buses or the best pedestrian schemes. [...] Mexico City seeks to have one of the most competitive mobility systems, allowing for different management options (Mancera 2013).

Mancera’s predecessor, Marcelo Ebrard, spearheaded the introduction of the Ecobici program for CDMX in 2010 based on the city’s study of Paris and Barcelona’s bike share designs (Delgado Peralta 2017). Barcelona launched their bike share program, Bicing, in 2007 (Shaheen, Guzman, and Zhang 2012). In the year that Barcelona installed Bicing, biking as the primary form of transport rose from .75% to 1.76% within the same year (Shaheen, Guzman, and Zhang 2012). Barcelona’s program evolved in parallel with Vélo’v (Lyon) and Vélib’ (Paris) and Bicing used

the same docking and bikes as both Stockholm and Oslo (Shaheen, Guzman, and Zhang 2012). The success of bike share in Barcelona and these other cities in Europe during the 2010s established bike share programs as a desirable feature of municipal transit programs and encouraged other cities to implement their own schemes for bike share.

In addition to the norms that came from European norm entrepreneurs, bike share programs also borrowed from other models of mobility to influence design and structure. Take, for example, the original inspiration for Seoul's cycle rapid transit (CRT) program, which was modeled after observing the success of Bogotá's bus rapid transportation (BRT) model (Nikola 2019). Seoul's program, which kicked off in 2019, was meant to create an entire set of infrastructure throughout the city that would allow people to travel through "bicycle highways" (Nikola 2019).

The popularity of bike share programs were both a product and driver of improving the competition of mobility systems in cities, globally. European cities, such as Barcelona, were norm entrepreneurs of these programs and shaped many norms related to the design, placement, and function of bike sharing. The status of these cities within the urban climate governance space elevated bike share programs as a desirable norm for cities to take up within their mobility planning. Many of the bike share models that developed in the decade of the 2010s were directly modeled after these cities. In some cases, like CDMX, the programs were even aesthetically similar (Figure 23).



Figure 23: Ecobici (CDMX) bikes and docking station (left) and Bicing (Barcelona) bikes and docking station (right). The docking stations share similar design and the bikes have nearly identical bike designs, including the coloring and wheel covers. (Source: Mario Roberto Durán Ortiz taken March 2014, CC BY-SA 3.0 (left); Michael Holtermann taken December 2016 CC BY-SA 3.0 (right))

Second, the PPP aspect of bike share programs became introduced as the “third-generation” of bike sharing, as cities scaled up bike sharing operations, locations, and features (Shaheen, Guzman, and Zhang 2012, 198). While Copenhagen was a norm entrepreneur responsible for ushering in the second-generation, Barcelona was a norm entrepreneur for the third-generation. Barcelona’s innovation in this area was using a combination of public funds (through parking fees) and private funds (through advertising agreements) (Shaheen, Guzman, and Zhang 2012, 198). In 2014, Vodafone announced an exclusive partnership with the Barcelona City Council to sponsor the Bicing program (BSM 2014). This 1.2 million euro partnership allowed the city to upgrade features and expand service while keeping costs for customers and the city low (BSM 2014). CDMX also followed this model with its Ecobici program. Mexico City sought out a large contract where they would partner with a private

company that they would purchase physical infrastructure from, while the company would, in exchange for a street advertising concession to the company, maintain the hardware and software in the system (Delgado Peralta 2017). Ultimately, the company they selected, Clear Channel Outdoors, was able to advertise on 150 outdoor clocks and 8 publicity screens in exchange for a 25% reduction in operating costs for the city government (Delgado Peralta 2017).

Having introduced the development of bike sharing program as a mobility norm and discussing key norm entrepreneurs and features of these programs, I discuss what bike share programs look like across each of the four case studies.

Mexico City

The Ecobici program is one of Mexico City's most successful urban climate governance programs and because of this, has been featured by C40 as a city leading best practices around bike share mobility (C40 Cities Climate Leadership Group 2015; 2019b). CDMX's bike mobility plan can be considered a norm leader both because the quality of the Ecobici program and also because of CDMX's early adoption of dockless bikeshare technology and scooter-share as part of this program (i.e. they are early-adopters of the "fourth-generation.")

Like many global cities, the scale of bike share usage has skyrocketed over the last decade. When Ecobici launched in 2010, it had 85 stations with 1,114 bikes, 18,985 annual users, and 841,079 annual rides (Gobierno de la Ciudad de México, n.d.-a; n.d.-b). By 2024, CDMX had 689 stations across the city hosting 9,300 bikes which supported 193,447 users and over 22 million rides per year (Gobierno de la Ciudad de México, n.d.-a; C40 Cities Climate Leadership Group 2024a). Ecobici allows subscribers to purchase daily (1, 3, or 7 day) and annual plans, which allow them to take unlimited rides for 45-minute increments during the

weekdays or 90-minute intervals during the weekends (with an annual subscription). These plans vary from as low as \$5 for a daily pass to \$25 for a basic annual membership plan and up to \$80 annually for the most expensive annual option, which includes extra features (Gobierno de la Ciudad de México, n.d.-b). The Ecobici system includes pedal assisted bicycles, e-scooters (like Lime), and throttle e-bikes.

A unique feature of the Ecobici program—and one that distinguishes it as a fourth-generation bike share program—is the use of dockless stations as well as open data infrastructure. The Ecobici system began including dockless bikesharing fairly early in its implementation, starting with a phased introduction of pedal assisted bikes in 2018 coupled with a dockless bikeshare system as well as introduction of e-scooters (Medina Cardona 2019). In the following year, CDMX developed and passed a regulatory mechanism for dockless systems and an annual permitting process (Medina Cardona 2019). This has led to the introduction of 340 assisted bikes and 28 new stations (around 5% of the total fleet, accounting for 3% of all Ecobici network trips in 2019) (Medina Cardona 2019).

Dockless stations have been a bit of a double-edged sword for cities. On the one hand, these systems have allowed for more flexibility in filling needs for transportation across cities as the transit needs of populations change and require less infrastructure (i.e. no need to set up terminals). A study of dockless systems in 32 US cities also provides evidence that dockless systems may be able to help cities address inequalities when it comes to access to micro mobility options, as docked systems are less likely than dockless systems to be located in areas with low median household income and communities of color (Meng and Brown 2021). In the case of CDMX, a dockless regulation and permitting scheme has also brought in additional revenue from

private companies. On the other hand, the dockless systems have also provided many urban planning challenges to cities as they attempt to balance issues of safety and cost.

Dockless systems have also ushered in a second unique feature of the fourth-generation bike share programs: datafication of bike shares. While docked bike programs can collect some data, dockless systems necessitate the installation of tracking systems to be able to track down bikes and e-scooters for charging, redistribution, or repair. These companies that run these dockless programs collect information such as the real-names of users, identity information, and other demographic or personal information (Zhou 2024). Thus, the real “money maker” for companies that run these programs is not the actual subscriptions or rental fees—it’s the user data that is collected which can be harvested and sold to marketing firms or even be used to train AI algorithms (Zhou 2024).

The availability of data is not only useful to companies as part of their profit model, it is also useful to residents and cities. For instance, CDMX has used data collected from Ecobici users to construct real-time availability maps for bikes as well as identifying popular routes taken by users across the city to create a living map of bike paths. This data also allows cities to be able to better plan out demand and could allow cities to develop a better understanding of where there may be inequalities baked into transportation systems. For instance, by being able to track the locations of where bikes travel throughout the city in combination with gender, city planners might get a better sense of gendered transportation patterns within the city. This type of gendered behavior in transportation patterns has been unpacked by researchers such as Caroline Criado-Perez in her book, *Invisible Women*, where she discusses how men tend to do longer, more efficient trips (from home to work, work to home), whereas women tend to do shorter and more clustered trips (home to school to grocery store to cleaners) (Criado-Perez 2019). So, if city

planners saw that women in a city were travelling more frequently at certain times and to a cluster of locations, they could optimize balancing bike availability during peak hours to improve mobility of women within the city.

Despite the benefits of bike sharing for urban planners and the necessity of some of the data collected from users to create functionality of these programs, the issue of datafication does not remain wholly unproblematic. Zhou's study of dockless bikeshare users in the Shenzhen province of China through surveys and interviews highlights how this infrastructure plays a role in normalizing data collection by local and private entities as part of "common and modern" data practices (Zhou 2024). In short, bike share programs may be contributing to a robust economy of "surveillance capitalism" which may exacerbate issues of data justice, especially as dockless bikeshare may be a more common available option for low-income or racialized groups within cities (Meng and Brown 2021; Zhou 2024).

Buenos Aires

Buenos Aires began its bikeshare program in 2010, with 3 stations, 72 bikes, and manual stations that required staffing (Power 2015). The city scaled up its program to 32 stations with 850 bikes, with 24-hour automated access by 2015 and by 2019, the city contracted a Brazilian company, Tembici, to run its Ecobici program (Power 2015; Radio ADN 2019). Leading up to the switch in operations in 2019, the city had been maintaining the program itself, at a smaller scale of 200 stations, 2,500 bikes, and 22 neighborhoods (Radio ADN 2019).

When Tembici took over the operations for the Ecobici program, they contracted with Lyft Urban Solutions, a division of the Lyft rideshare company which focuses on micro mobility transportation to install new stations, bikes, and software (Lyft Urban Solutions, n.d.). Lyft

Urban Solutions began as PBSC Urban Solutions in Montreal in 2008 and expanded to Latin America (Guadalajara, Mexico) in 2014 (Lyft Urban Solutions, n.d.). By 2022, PBSC was acquired and merged with Lyft (Lyft Urban Solutions, n.d.). The city has opted into two of Lyft Urban Solutions bike models—the ICONIC, which is the “original” model developed by PBSC with a heavier and sturdier frame, and the FIT, which is lighter weight and smaller (Lyft Urban Solutions 2024a). As of 2023, the FIT model is 2.5x more popular over the ICONIC, which was the model the city had originally started their contract with in 2019.

Lyft’s Ecobici infrastructure includes 400 stations and 4,400 bikes (Lyft Urban Solutions, n.d.). Lyft Urban Solutions offers several docking options for cities, including a solar-powered docking system which Buenos Aires has opted into. I show an example of a typical bike share station in Figure 24. The city is able to reduce energy consumption costs and also emissions related to that energy consumption by opting into a solar-powered docking system. Additionally, the design of the docking system allows the city to be able to capitalize on advertising revenue as a method of recouping costs for bikeshare maintenance and operation. As part of Tembici’s operations design, cities are responsible for providing concessions, including lanes, advertising space, and subsidies, while Lyft Urban Solutions manages the logistics, and private entities provide the funding (infobae 2024b). Banco Macro, the second-largest private bank in Argentina, has been the main financial sponsor of the Ecobici program since 2019 (Buen Ciudadano 2024).



Figure 24: Representative Example of a Bike Share Station in Buenos Aires, 2024 (source: taken by author during May 2024 fieldwork)

Interestingly, Buenos Aires takes a slightly different approach to Mexico City regarding pricing for users. Instead of a generic structure that uses the same cost structure for both residents and tourists, Buenos Aires has two tiers of pricing—one for residents and one for tourists. Residents can use bikes for free, 4 times a day, for 30 minutes at a time or purchase trip,

daily, monthly, or annual passes which range from .18 USD for one ride up to \$53 USD per year for an annual pass (Government of the City of Buenos Aires 2025a). The cost of these rides for residents is subsidized by the city budget (infobae 2024b).

This differential pricing for residents versus international tourists may account for why most newly registered users (over 80%) are residents of Buenos Aires or other parts of Argentina, while international users represent less than 20% of new registrations (Figure 25). The relatively low number of international users compared to Argentinian residents may be explained by cost model differences but may also have to do with the use of ease (Interview 11 2025). Put bluntly, the app is quite slow and has not been regularly maintained or updated by the company that manages the software (Interview 11 2025). During fieldwork, I tested out this bike share app for myself and reached the same conclusion. Registering an initial account took approximately 20 minutes and I had to exit the app several times to deal with various glitches with loading. It was quite confusing to figure out how to register for use of the bike as a non-resident of the city (which required my passport information to be uploaded) and difficult to add payment information. International users may decide between the cost and the hassle of creating an account that other modes of transport are better.

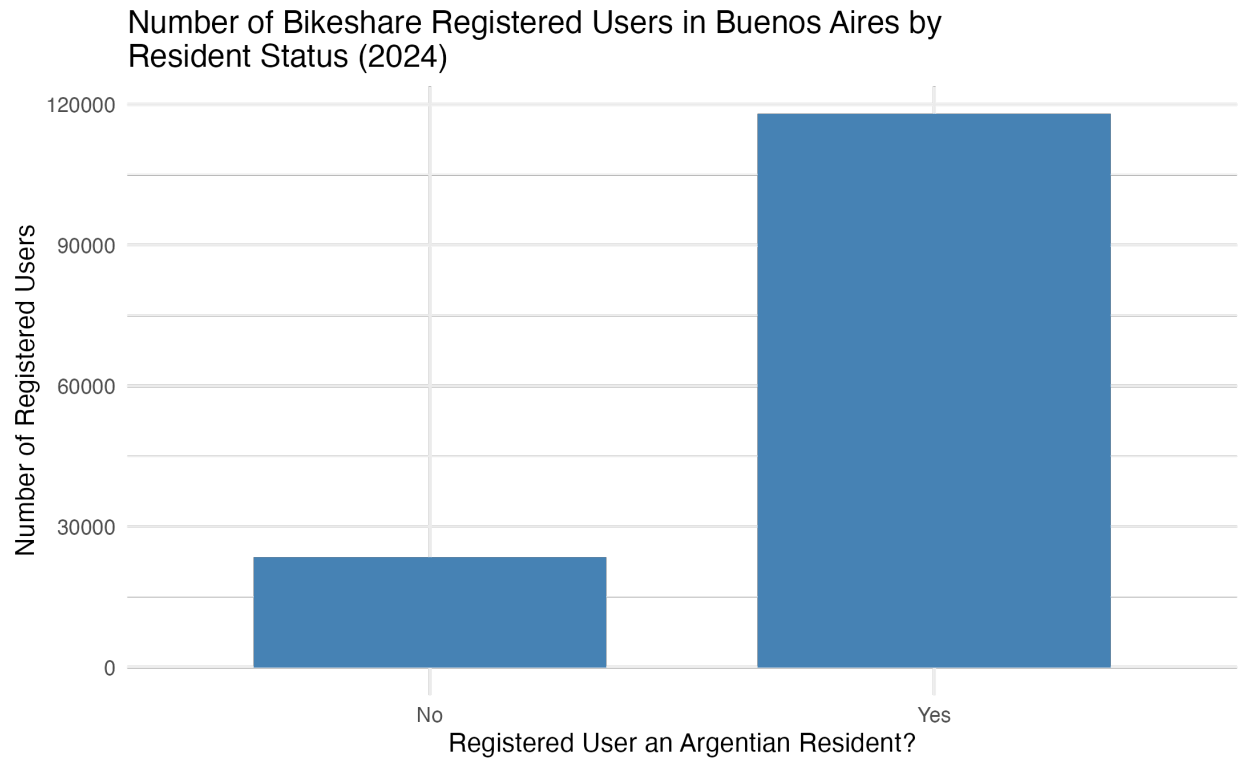


Figure 25: Number of New Ecobici User Registrants by Residential Status (2024) (source: data sourced from Buenos Aires Ecobici Data Portal; graph created by author)

Notably, because all of Buenos Aires' Ecobici devices are docked, the city collects less behavioral data about users than cities like CDMX, which use dockless technology within their fleet. That being said, the city can still track the sex, age, and residential status of registered users, as well as start and end point information (location and time) from the start of the program in 2011-2025 (Government of Buenos Aires 2025). Using this data, we can observe that when the Ecobici program began in 2010, with 407,957 total rides completed in 2011 (the first year that data was available). By 2024, the number of total rides increased to 3,559,284, up from 2,622,331 rides in 2023 (Government of the City of Buenos Aires 2025b). Overall, the city has approximately 1.1 million registered users over the 14 year period of the program, according to

the CEO of Tembici Argentina, which manages the logistics of Buenos Aires' bikeshare program (infobae 2024b).

The Ecobici system of Buenos Aires provides several insights regarding how and why we may begin to see similarities in the design and implementation of bike share programs globally. First, the capacity necessary to install and maintain bike share programs are often going to be beyond the capacity for many cities to do themselves. Given the availability of regional companies, such as Tembici, and international companies, such as Lyft, to provide a standardized and cost-effective model of service delivery to cities, it seems increasingly likely that cities will opt in to outsourcing this component of micro-transit to private companies. Second, the cost of running Buenos Aires' Ecobici program with this model is relatively low. The city pays for about 300,000 rides per month, at a rate of approximately .15 USD per ride (infobae 2024b). At this rate, the city is only responsible for a direct cost of around 540,000 USD per year in the form of direct subsidies to residents. The other costs are paid for through advertising revenue and the financial support from Banco Macro. This will present an attractive option to cities looking to expand transportation options for residents without adding substantial operational costs to the city budget or logistical strains to city services. Finally, companies like Tembici are encouraging cities to implement bike share operations as a component of "multimodal transportation," in combination with macro transit (buses, subways, trains) or walking (infobae 2024b).

Seoul

Like many cities across Asia, Seoul is one of the more recent cities to adopt bike sharing programs. Seoul's program, Ttareungyi, began in 2015 as a program meant to simultaneously

reduce emissions and traffic (Y. Lee, Kang, and Kim 2021). Like many other bike share programs within urban transit systems, Ttareungyi has been used as a connecting bridge to other transit options (Y. Lee, Kang, and Kim 2021). Despite the fairly recent launch of Ttareungyi, the scale of the program is massive— it has 37,500 bikes in operation with over 2.54 million users registered and 35.7 million cumulative rides taken between 2015-2021 (E. Choi 2020). Rides grew 173x from 2015 to 2019 as the Ttareungyi system increased the number of units from 2,000 in 2015 to 40,500 by 2020 (E. Choi 2020). The city has spread these bikes out across 2,600 rental stations throughout the city (S. Kim 2023).

Ttareungyi has also undergone several iterations of the model and frame that it uses. The original units that launched with the program in 2015 were heavy and had a very limited top speed for riders (E. Choi 2020). The city launched upgraded models of its bike in 2020, which included smaller bikes (Saebak Tttareungi) that would be friendlier for smaller people, such as the elderly, women, and children (E. Choi 2020).

Ttareungyi also operates as a docked system but unlike traditional docked systems, has more data tracking, including “travel information (distance, duration) and amount of physical activity (burnt calories)” (Seoul Metropolitan Government, n.d.-b). The city has also used this data to help create crowd-sourced bike ride course maps and real-time bike station availability information.

Seoul has also offered a set of economic incentives to improve safety related to bike share. First, residents can complete a safety education certification program which then entitles the user to a 30% discount on usage fees for up to two years options (Y. Lee, Kang, and Kim 2021). The training includes three different modalities: online synchronous training, “offline practical training,” and a metaverse safety training hosted in Roblox (Y. Lee, Kang, and Kim

2021, 2). The city developed the Roblox training after seeing steadily increasing numbers of teenagers increased by 8% between January 2020 and July 2021, accounting for over 5% of overall users in the system (Y. Lee, Kang, and Kim 2021, 2; Seoul Metropolitan Government 2021).

During the height of COVID, the Seoul Metropolitan Government had to manage the challenge of balancing low fees with increased costs for maintaining and operating the system. When interviewed by a local reporter, one official for the municipal government explained “Ttareungi is a project to expand citizens’ basic transportation rights, prevent air pollution, and promote citizens’ health, so it should be viewed from the perspective of public interest and sustainability, not profitability” (E. Choi 2020). The city also received complaints in the original rollout of the program about the lack of integration with the city’s transportation card, stations being disconnected from other transit centers, and a lack of bike lane infrastructure to support use of the bikes safely (S. Kim 2023). In response, the city introduced the Cycle Rapid Transit (CRT) in 2019 (Nikola 2019). The CRT included a QR code-based system which allowed residents to use one transit card for all transit systems in the city and they increased the fleet and stations near other transit centers (S. Kim 2023; Nikola 2019). As part of CRT, the municipal government aimed to have bikes within a five-minute maximum walking distance and to increase the volume of daily bike rides to 2.3 million (Nikola 2019).

Although the city considered raising the rates for this service to account for issues like operations costs increasing and theft, as of April 2025, the rates have remained the same for a one-day pass (1,000 won for a 1-hour ride (.70 USD); 2,000 won for a 2-hour ride (\$1.40 USD); 200 won for each 5 minutes after (.14 USD)) (Seoul Metropolitan Government, n.d.-b). Seoul also allows users to buy weekly, monthly, semi-annual, and annual passes which allow users to

use the bikes for unlimited 1-hour or 2-hour periods with docking in between. Seoul does not offer e-bike rental options as of 2025.

Seoul's bike share system carries lessons specifically about the norms surrounding bike share programs that are seen as part of basic citizen rights versus cities that see bike share programs as an attraction or ancillary policy. First, of the four cases, Seoul is the only system that has tried to directly address issues of equity in availability and use. When the city saw that younger residents were increasing their ridership in the system, the city attempted to literally meet youth where they were at—in the Roblox universe—to provide safety training. Additionally, the launch of a smaller framed bike addressed a more structural-level issue that may impact residents who could benefit most from the type of independence that bike shares can afford—youth, women, and the elderly. Second, Ttareungyi uses no advertising. The only branding on these bikes are the colors and branding of the Seoul Metropolitan Government. Third, by maintaining 100% ownership of the fleet of bikes instead of contracting or subcontracting service delivery, the city has been able to be much more responsive to needs of residents regarding location, service design, and even the design of the bikes themselves. In models where cities contract or subcontract, adjustments to service delivery and design are driven by a larger political economy and are more beholden to regional or global norms. Finally, Seoul's history of participatory governance as a norm in urban climate governance shines through in the Ttareungyi program. From integrating user feedback for improved service to providing hosting and infrastructure for crowd-sourced bike path maps, the city has continued to center the public in design and implementation.

Ho Chi Minh City

The latest adopter of bike sharing among these four cases is Ho Chi Minh City. HCMC's program, TNGo or TN-Go, opened in 2021 as a station-based system (TNGo, n.d.-a). TNGo operates HCMC's system as part of national operations which span five other cities (Hà Nội, Vũng Tàu, Quy Nhon, Hải Phòng, and Đà Nẵng) (TNGo, n.d.-a). TNGo advertises itself on its website as "a new type of urban transport that is civilized, convenient, healthy and environmentally friendly," thus tapping into the desire of leaders and residents to be seen as modern (TNGo, n.d.-a). The framing of the bike share program in this way underscores how bike share has become an expectation of global cities leading urban climate policies and of global city residents. In HCMC, there are 51 locations as of 2025. The 51 locations across HCMC host slightly more than 500 bikes (Tieu and Thu 2024). Although TNGo bills its design as integrated with other travel systems (e.g. trains and buses), nearly all the bike share stations are primarily concentrated within District 1. This means that in actuality, TNGo is only able to be connected to travel journeys that either originate or end in District 1 and does not serve the entire city. As I will discuss more in depth in Chapter 7, District 1 has far less residential density than other areas of the city but is home to a large percentage of businesses and government buildings. In 2024, HCMC announced a plan to add hundreds of additional stations across the city to include all districts in addition to Thu Duc City, a sub-municipality of HCMC (Tieu and Thu 2024). The city plans to begin with the addition of 68 new stations in District 1, then open 12 additional stations in District 4 (Tieu and Thu 2024). Following this, the city will pilot additions in District 5, District 6, the Nha Be District, and Thu Duc City (Tieu and Thu 2024).

TNGo offers both electric and traditional bike models for rental with trip, daily, and monthly ticket options. For a traditional bike, one 60-minute trip is 10,000 VND (.39 USD),

while a daily ticket with 450 minutes of ride time for 24-hours costs 50,000 VND (3.90 USD) and a monthly ticket with unlimited 45-minute rides is 79,000 VND (3.05 USD) (TNGo, n.d.-a). The e-bike rental option is twice the cost and is limited to only trip or daily passes (TNGo, n.d.-a).

TNGo collects relatively little data. The system runs through an app, which collects the name, email address, phone number, and pictures of identification documents, as well as device data and location data (if authorized by the user) (TNGo, n.d.-b). The only reported usage that the service has for location-based data is helping users locate the nearest bike stations.

Additionally, the stations do not use a docking technology, however, TNGo does claim that the bikes contain “GPS, smart locks, and Bluetooth” (S. Nam and de Bil 2021). Examples of the dockless TNGo biking stations are found in Figure 26. These stations are designed to park approximately 20 bikes and were generally half to quarter full of bikes when I conducted fieldwork in HCMC in 2022. Due to the design of TNGo’s financial model, the signage did not include external advertising partners. Instead, the signage included reminders about the benefits of this program as well as a map of the surrounding streets and a list of all the locations. The city has added 8 additional stations in HCMC between 2022 and 2025.



Figure 26: TNGo Dockless Stations, HCMC, 2022. The station (top left) is only partially full of bikes. The station does not have external advertising and instead uses signage to convey additional information about the program such as location, other bike stations, and information

about the app (right). The bottom right shows features of the TNGo bikes, including a dock for riders to put their phone, a basket, and a cup holder (Source: taken by author during 2022 fieldwork).

Despite the fairly low-tech design and features of TNGo, the bikes do include features to provide convenience to users, including cupholders, baskets, and phone holders (Figure 26).

Given that the Grab ridesharing infrastructure and availability of motorbikes offer convenience at a similar cost, having a design that allows riders to easily carry items and drinks is a necessary set of features to have a chance of competing with those alternative modes of transport.

TNGo operates as a PPP through the HCMC Department of Transport. While the program is administratively managed through the municipal government, the program is financially sponsored by Tri Nam Group, an IT solutions company. The Tri Nam group consults on issues and implementation related to IT but has a particular service emphasis in the areas of smart transportation and smart government (Tri Nam Group, n.d.). One of the Tri Nam Group's subsidiaries, Tri Nam Digital Transport Joint Stock Company, is the owner and operator of TNGo and the app that supports the operation of the bikes (Gia A. 2023). In HCMC, as well as other cities, the Tri Nam Group has fronted the start-up funds to implement TNGo and has recouped the money with rental fees (Gia A. 2023). This particular PPP brings in an interesting dilemma in, as typically private partners receive a benefit like advertising concessions. In this case, the Tri Nam Group is able to collect personal data and contact information. Given that Tri Nam Group's main focus heavily benefits from data access both for the operations and for the development of smart transportation and smart government tools, including AI-based tools, the value of continuing access to user data far exceeds many of the standard PPP agreements that come with bike share management agreements.

Furthermore, there does not seem to be data infrastructure provided back to HCMC to help with more strategic planning through the Department of Transport nor does the city seem to own the information. In other outsourcing scenarios, such as Buenos Aires and Lyft's partnership, while Lyft still owns the data, it has a much more robust data privacy policy to make it compliant with the EU General Data Protection Regulation (GDPR) (Lyft Urban Solutions 2024b). As cities consider PPPs, especially in the realm of bike-share programs or other urban climate governance programs which require the collection of personal data, municipalities should consider possible ethical issues as they relate to data privacy. For instance, residents in the Global South are subjected to structures of surveillance capitalism more regularly than residents in the Global North due to the potential to become not just "financial subjects but also subjects of surveillance" (Zulfiqar 2023, 1248). As private services like Uber and Lyft have entered Global South markets they have also created opportunities for enhanced digital tracking of citizens (Firmino, Cardoso, and Evangelista 2019) and risk weakening agency of users through obscuring the structure of PPPs and using less robust data privacy frameworks (Alshamy et al. 2024).

Although all four case studies have distinct designs to their bike share programs, there are common features and patterns across bike sharing in these contexts. First, all of the programs have exponentially increased the scale and ridership from initial installation to current day, including recently installed systems in Seoul and HCMC. Second, the membership structure and pricing design for the programs all work very similarly. Municipalities have offered residents options in short-term and long-term programs. Some cities, such as Buenos Aires, have made more robust investments to encourage resident use but all four programs provide relatively reasonable rates for residents and international visitors. Third, three of the four programs depend on PPPs to operate. In the case of Buenos Aires and HCMC, these cities quite simply could not

have bike share programs without private contracts in place operating the programs. In the case of CDMX, PPPs through the use of advertising concessions have allowed the city to operate this program at a more affordable rate. Only Seoul's model provides a window into what an autonomous, entirely public-funded bike share program looks like. Notably, Seoul's transportation leadership is the only of the four cities to frame transportation as a basic right of residents. Most cities do not operate their own internal programs for bike share. As a result, they are reliant on global structures for bike share technology and management. Although they may have options for providers, there is not a huge range of providers to choose from and each bike share operator uses very similar technology and processes. Especially for cities with less capital to invest in this form of micro-transit, they will be limited in options, design, and the ability to adapt to the needs of local residents.

Buenos Aires and Mexico City have also integrated open data components into their bike share programs. These open data platforms thus additionally connect these cities beyond just norm regimes within urban climate governance, but also to norm regimes related to data-driven decision making and "smart cities." These features underline that the pursuit or adoption of climate governance norms by cities may be linked to other norm regimes or city agendas. While cities may benefit from the additional input of this residential data, cities walk a fine line in balancing surveillance capitalism with the well-being benefits of "smart" infrastructure. In the case of HCMC, the collection of (albeit very light) data on residents does not actually feed back into city infrastructure at all- instead, it pretty much solely benefits the PPP for this program, the Tri Nam Group, which is an active firm in the "smart city" political economy. As cities consider these trade-offs, I argue that they also ought to consider how these data may improve public

service delivery to vulnerable and frontline communities and how “smart” designs may also inadvertently cut off resources and services to these same communities.

As discussed in this section, bike-sharing programs and bike lanes provide necessary infrastructure to support transit journeys of residents in conjunction with macro-transit options like trains, subways, and buses. In the next section, I look at examples and norms related to macro-transit – specifically HCMC’s nascent subway system – to understand how the uptake of certain norms in macro-transit, such as building subway systems, can become tools for establishing cultural and economic connections for cities within urban climate governance networks.

Macro-transit

I conclude this section on mobility norms by discussing macro-transportation norms. This form of mobility includes various forms of mass transit, such as subways, trains, and buses. I focus on subway and bus line routing as well as the infrastructure supporting stops along bus and subway lines. I provide analysis from fieldwork in Ho Chi Minh City to explore how macro-transit plays a role in shaping FDI structures for climate financing opportunities.

During my fieldwork in Vietnam, I walked past a billboard nearly every day with a hopeful message that “In 2022, HCMC will improve the quality of urban government construction and improve the investment environment in partnership with businesses” (Figure 27). Although this billboard did not directly promise that the metro line would be opened in 2022, it alluded to soft updated projections the city had made to the public and funders about the anticipated opening. However, among the public, the opening of this metro line had become

somewhat of a running joke. In fact, I often joked that my dissertation would be done before I had a chance to write on this topic! The sign below, meant to rally the city around the inevitably opening metro line, didn't even have the heart to commit to a date or season.



Figure 27: An advertisement for the new HCMC metro. (Source: taken by author during 2022 fieldwork)

However, much to my pleasant surprise, the HCMC's metro line opened on December 22, 2024. HCMC's metro line project began the planning process over 17 years ago and started construction back in 2012 (Clark 2024). Other cities in Southeast Asia—specifically Bangkok and Kuala Lumpur—served as inspiration for developing a metro line as a sustainable transit solution (Anh 2025). Due to a combination of financial issues with the project and the COVID 19 pandemic, which shut down all of Vietnam for two years, the city had to continually move back its first anticipated opening of 2018 (Uyen 2024). These major issues paired with a series of

smaller-scale “almost comical” misfortunes, such as 13,000 rail clamps getting stolen and train cars getting vandalized by graffiti in 2022 (Tatarski 2024).

In addition to delays, the scale of HCMC’s metro line project has scaled down substantially throughout this process. Originally, all eight metro lines were originally supposed to open by 2020. The metro line opening in December 2024 was merely Line 1, which spans from Ben Thanh Market in District 1 to Suoi Tien Theme Park in Thu Duc City (Anh 2025). Line 1 has 14 stops and connects outer districts to the heart of the city. The next line to open will be Line 2, which will connect at Ben Thanh station and run through Tham Luong. The city has already cleared 86% of the site as of December 2024 and the line is expected to break ground in 2025 and open to traffic by 2030 (D. Nguyen and Hue 2024). The city has now committed to seven more metro lines opening in HCMC by 2035—an ambitious goal that a local journalist in HCMC bluntly said “will not happen” (Tatarski 2024). As the city continues to build out their financial plan for completing all eight lines, the Prime Minister of Vietnam, Pham Minh Chinh, has suggested that the chair of Vingroup, Pham Nhat Vuong, the wealthiest individual in Vietnam, the 833rd wealthiest person globally, and has a net worth of \$4.1 billion, should finance the construction of a subway line that would connect HCMC with Can Gio (Tho, Long, and Le 2025). The PM has highlighted this as an effort to assist tourism and preservation for the Can Gio mangrove forest, which is a UNESCO-recognized world biosphere reserve (Tho, Long, and Le 2025). This line between Can Gio and the city centre would not be part of the initial eight lines, but would instead constitute an additional connection point. The involvement of private actors, and specifically billionaires, is not a new innovation in urban climate governance. Billionaires, such as Mike Bloomberg, have taken on more and more local, national, and global

governance issues through bankrolling various environmental and climate policy initiatives (Papin and Beauregard 2024). The involvement of private actors in large-scale projects like this, though not an established norm yet, is certainly a rising expectation. IOs and other funders want to see that cities have found matching and diversified sources of funding. Additionally, some cities prefer to work with private foundations as they perceive the funding to be more flexible with fewer strings attached (Papin and Cantwell-Chavez 2025).

Despite the scaling down of the project and the seemingly endless delays, the public anticipation of the metro opening has not waned. This is because in addition to addressing critical issues related to HCMC's air quality, noise, and congestion, HCMC's transit line is also “a symbol of Vietnam's readiness to modernize urban mobility” (Anh 2025). This transit system has taken on a larger symbolic value for municipal leadership. For instance, Bui Xuan Cuong, Vice Chairman of the municipal People's Committee was quoted saying “we will continue to prioritize urban railway projects to build a civilized, modern, and creative city” (D. Nguyen and Hue 2024). This emphasis on *civilized* and *modern* transportation modalities highlights that HCMC understands that the success of their subway line extends beyond just trying to make a dent on air quality and climate change goals—it is also critical for HCMC being seen as a world-class city within the global economy and among its urban leader peers. Quite bluntly, one piece of coverage on this project unpacks this phenomenon:

Vietnam's metro systems symbolize more than modern infrastructure; they represent a shift towards sustainable urban living. If the initial successes of HCMC's Metro Line 1 and Hanoi's Cat Linh-Ha Dong line are anything to go by, the future of Vietnam's cities looks brighter—less congested, more connected, and environmentally conscious (Anh 2025).

In short, subway systems have been shaped as a norm necessary for cities to implement in order to be seen as a global leader.

HCMC's metro line is also part of a battle between states to establish regional influence and alliances within Southeast Asia. Alongside HCMC's complicated development process for their metro line, Hanoi has been constructing their metro system with the backing and assistance of China (Footer 2023). In December 2023, Hanoi pulled ahead in the metro line race and opened its first line (Footer 2023). These two projects represent a developmental funds arms race between China and other states vying for increased influence within the region. Although Hanoi was able to open their line first, they did have some safety concerns (Footer 2023) and HCMC is able to still boast the title of the first below-ground section in the country (Tatarski 2024).

The HCMC metro line depended heavily on investments from regional partners, such as Japan's Official Development Assistance (ODA), the World Bank (Anh 2025). The loan from ODA is the largest loan project that Japan has funded for Vietnam and "a symbol of the Japan-Vietnam cooperation relationship" (D. Nguyen and Hue 2024). As global investments from other traditional partners of Vietnam, such as the US, dry up through changes under the second Trump administration, these types of infrastructure investments from regional and global partners will become more critical for both HCMC and Vietnam's infrastructure and development plans. However, given the delays and explosion of cost from the initial project proposal and timeline, HCMC must prove success in their model and work quickly to shift public culture regarding transportation to secure future infrastructure support.

As an attempt to help shift cultural transit patterns, Line 1 of the HCMC metro was made free for the public for the first 30 days, from opening day (December 22, 2024) to January 22, 2024. The free fare program is intended to increase ridership interest and to buffer inevitable service adjustments that need to happen as the city gets day-to-day transit procedures in motion. Once fares go into effect, the cost will be between 7,000 VND – 20,000 VND (.29 - .80 USD)

for cash and 6,000 VND- 19,000 VND (.27-.79 USD) for non-cash payment based on distance traveled along the line (D. Nguyen and Hue 2024). Riders also have options for daily, 3-day, and monthly passes (\$1.60, \$3.30, and \$11.80, respectively) which grant unlimited ridership per person, per day (D. Nguyen and Hue 2024). There will also be half-priced monthly passes available for youth and students, while disabled and elderly passengers will be eligible for free travel on metro lines (Minh 2025).

The demand on the metro line has so far wildly surpassed even the most optimistic estimates for ridership numbers. In just the first 11 days of service, Line 1 served 1.4 million people which is 332% higher than the expected volume of operation (Minh 2025). The pricing tiers combined with QR code payment options and the ability to tap-to-pay (for Mastercard only as of January 2025) demonstrates a nudge for riders to use cashless forms of payment to help expedite service in stations and reduce staffing needs.

Alongside the metro line project, HCMC pursued a bus rapid transit corridor which received a grant from the Swiss State Secretariat for Economic Affairs (SECO), with administrative support from the World Bank (World Bank 2020). This travel corridor and the grants supporting it have a secondary goal of creating “regulatory framework for transit-oriented urban development and boost private sector investment for such development” (World Bank 2020). In short, transit plays a strategic role in FDI and creating PPPs in HCMC’s urban development.

Section 6.3: Green Spaces

The final category of norms that I explore are those related to green spaces. I explore norms related to the location of formal and informal green spaces, the ecological composition of urban green spaces, and the functions of these spaces. In this chapter, I explore these elements in the cases of Buenos Aires, Mexico City, and Seoul. I explore the case of green space in Ho Chi Minh City in-depth in chapter 7.

Before diving into these three specific cases, I first unpack the design and implementation of green spaces found in four different norm leaders in this space: Medellín, Singapore, Freiberg, and Paris. I discuss a brief history of these programs and key features of their leadership that have been translated to the three case study cities.

I begin with the case of Medellín as an example of a norm entrepreneur. Medellín's approach has been recognized by C40 and Ashden, a UK-based charity focused on sustainable development, for the city's Corredores Verdes (Green Corridors) program (C40 Cities Climate Leadership Group 2024a). Corredores Verdes started in 2016 and has led to the creation of over 30 interconnected corridors within the city boundaries over the last 9 years (C40 Cities Climate Leadership Group 2024a). Corredores Verdes is considered to exemplify best practices for urban greenspace development due to a combination of its ability to contribute to both adaptation and mitigation efforts, high level of community-engagement, and attention to frontline communities. First, Corredores Verdes has made a substantial impact on mitigation. The large-scale installation of nearly 9,000 trees over 60 hectares in addition to over 90,000 smaller plants has contributed to an estimated 2,308,505 kg of CO₂ absorption (C40 Cities Climate Leadership Group 2019a). In

addition to contributing to mitigation, the program has also reduced the average city temperature by 2 degrees Celsius by 2019 and over 3 degrees Celsius reduction in some area by 2023, as well as reduced PM_{2.5} levels, leading to better health outcomes regarding respiratory and heat-related illnesses (C40 Cities Climate Leadership Group 2019a; Gouvea de Andrade 2023).

Second, Corredores Verdes has been highly successful in engaging the community through multiple layers of design and implementation of this program. In the planning stages, residents of Medellín are given the opportunity to vote to opt-in to the 16-million-dollar investment of public funding of this program through a nationally mandated participatory budget process (C40 Cities Climate Leadership Group 2019a). By investing in this initiative through public funds, it has helped citizens maintain awareness of this program and gives the city a strong public mandate – financially and through legitimation—to carry out work in this program. The city has also allowed for citizens to be involved in the continued implementation of this program through gardening and planting. The city has trained 75 residents from low-income neighborhoods or who are part of disadvantaged communities of the city to garden, plant, and maintain the corridors as a full-time job (C40 Cities Climate Leadership Group 2019a). Some of these workers include people who had been displaced due to armed conflict in Colombia, which has served a dual purpose of addressing social vulnerability and maintaining the progress of this program (Gouvea de Andrade 2023). In addition to the paid work, members of the local community have also participated on a volunteer basis to help maintain the corridors as gardeners (Gouvea de Andrade 2023).

Third, Corredores Verdes has had a strategic focus on installing the corridors in dense and highly populated areas with high levels of pollution (C40 Cities Climate Leadership Group 2019a). Furthermore, because of the placement of these corridors, the city has also been able to

improve noise levels in these areas as the plants are able to muffle sounds (Mestas Izurieta 2024). This program has also assisted Medellín with urban water management goals as the vegetation has been installed in some areas with higher flooding risk (Mestas Izurieta 2024). In doing so, the city has been able to address issues of equity as it relates to multiple components of urban wellness.

Corredores Verdes has been a model program used to inspire green spaces designs of other regional actors, such as Bogotá, Barranquilla, and São Paulo, in addition to inspiring other global cities such as Buenos Aires and Seoul. All five of these actors have adopted the network green space design model that Medellín kicked off.

In addition to the green space norm entrepreneurship taken on by Medellín, the cities of Singapore and Paris have emerged as norm leaders in green space to reinforce network green space planning in addition to other green space norms. First, Singapore's picturesque greenery juxtaposed alongside futuristic buildings are practically iconic representations of what people think of when the term "urban green space" is used. This type of landscape is supported through the planning work in Singapore's "City in Nature" program, which builds on the norm of connectivity between green spaces in urban environments through the use of green space networks and also adds plans for nature restoration (i.e. informal green spaces) and animal management (Singapore National Parks 2025b; Government of Singapore 2025). The nature restoration programs in Singapore encompass a variety of smaller scale projects, one of which is nature-based flood management through the restoration of the Kallang River in Bishan-Ang Mo Kio Park (C40 Cities Climate Leadership Group 2024b).

Originally, the city had a concrete canal which ran through the city and the park which was beginning to struggle under increased rainfall events in the mid-2000s (C40 Cities Climate

Leadership Group 2018). The city worked across their national parks (NParks) and water agency (PUB) to come up with a revitalization plan which would also provide public green space. Through this project, the city was able to expand the river to five times its original width and extended it an additional .3 km (C40 Cities Climate Leadership Group 2018). The restoration of this river and the green space surrounding it has led to myriad benefits including a 30% increase in biodiversity in the park and a spike in recreational outdoor activities (C40 Cities Climate Leadership Group 2018). In addition, C40 and the city have emphasized economic benefits such as an increase in property value and increased interest from businesses in locations near the park (C40 Cities Climate Leadership Group 2018). The city plans to build on the success for restoration initiatives like this by creating additional naturalized lakes, reservoirs, and bringing back mangroves in the parks and coastlines of the city (Singapore National Parks 2025b).

Second, while animal management may seem like a somewhat secondary goal to green space policies, this component is particularly important because of the impact that domestic household animals can have on biodiversity and health of urban green spaces. Singapore's NParks agency has established an Animal and Veterinary Service program to manage policies, licensing, and various educational initiatives for sectors of the public including pet owners, business owners, vets, and travellers (Singapore National Parks 2025a). By creating this agency and integrating this work into Singapore's green space policy, they can address a variety of health and safety issues such as pet waste, unleashed animals, and lack of pet identification. Pet waste can create issues with disease spread, which can interfere with the health of the green space ecosystems and make the parks generally less enjoyable for the public. Leashing and pet identification aids in increasing rabies and other vaccination rates as well as improves safety and

enjoyment in parks. Further, these issues help reduce the risk and negative impacts on other species co-existing in the green space areas of the city.

Alongside Singapore, Paris has become a recent darling of the urban climate governance world through its green space plan. In March 2025, the city voted (with 66% approval) to close 500 additional streets to cars and to install green space and trees along these newly pedestrianized streets (O’Sullivan 2025). Although this referendum has been criticized by right-wing groups due to a “record low turnout” of only 4% of eligible voters in the city, the vote has received global media attention as well as deep praise from urban planning advocates as a roadmap for green space leadership (Le Monde with AFP 2025). The pedestrianization and greening is mostly seen as an innovation of scale and size. This plan has only been in place since 2017 and this quick progress has led many to believe that similar types of transformations may be possible in their cities (Freemark 2024). The Deputy Mayor of Paris, Christophe Najdovski, describes this as “a revolution of in the urban landscape of Paris” and the push for this has been substantially undergirded by promises by the city to make the city more welcoming by increasing access to nature and improving climate adaptation (IUCN 2024). In short, Paris’ leadership in this realm is less to do with innovations on how green space is designed or planned and much more to do with the politics of time associated with this norm.

Across Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul, we can observe elements of these greenspace norms including connected green space networks, nature-based restoration for adaptation, and animal management. However, as I will discuss through each case in this chapter (and next), green space development across these cities remains mediated by geographic, economic, and cultural components.

Buenos Aires

Buenos Aires encompasses the most of these different norm entrepreneur and norm leader components. For instance, Buenos Aires' CAP and implemented strategies include a comprehensive strategy for creating interconnected green spaces through bike lanes. This strategy is strongly modeled after the Corredores Verdes program and also seeks to integrate goals around transit into this green space planning.

In addition to the similarities to Medellín, Buenos Aires is cross-referenced alongside Rotterdam, Melbourne, Paris, and Austin as a city that has done good mapping and analysis of green space and green assets (C40 Cities Climate Leadership Group 2021b). This type of planning, C40 notes, is necessary to understand the natural profile of the city, including opportunities to expand nature-based solutions as well as the limitation of the natural environment (C40 Cities Climate Leadership Group 2021b). Buenos Aires began integrating planning for trees and green spaces as part of its climate action strategies in 2013, when it drafted its first Master Plan for Trees and Green Spaces, which outlined a strategic plan for increasing the variety and volume of public green space across the city (Government of the City of Buenos Aires 2020, 28). By 2019, the city had created 110 hectares of new green spaces (Government of the City of Buenos Aires 2020, 29).

The city currently has 1,300 green areas across the cities, including three nature reserves, totaling 6.2m² of green space per inhabitant (Government of the City of Buenos Aires 2020, 25). The city identifies the development of urban green space in the city as “fundamental” and notes that in addition to expanding hectares of green space across the city, it has also opened a third

ecological reserve, which protects 400 hectares of green space (Government of the City of Buenos Aires 2020, 27). Among the six conceptual and strategic principles of the Buenos Aires CAP is that of “taking nature as part of our climate solutions” (Government of the City of Buenos Aires 2020, 44).

In addition to these green areas, the city also finished an initiative to map out the vegetation cover across the city using aerial mapping photos and used that data to calculate the absorbing surface of the city (Government of the City of Buenos Aires 2020, 63). Importantly, one point of analysis that the city claims they have done with this data is analyzing it to “understand the relationship between public use, restricted, and private green spaces” across the city (Government of the City of Buenos Aires 2020, 63). This data is then used to identify where the city maintains a deficit in public green space (Government of the City of Buenos Aires 2020, 63).

Buenos Aires also embraces animal management policies as part of its efforts to improve safety and quality of green spaces. During one visit to the park, Plaza Arenales, that is the center of Villa Devoto, an upscale residential neighborhood of the city, I ran across an active campaign that is part of this program, “Mascoterios Responsables,” which aims to reduce the amount of dog poop in public spaces across Buenos Aires. That day, the city had sent out a group of contractors to do education work through talking with park visitors, laying down sidewalk signs, and handing out individual poop bags to owners (Figure 28). Speaking to one of the contractors out there that day, she explained that there had been a growing problem of dog poop accumulating in parks which created issues for health and safety, as well as made the parks unpleasant and harder for the city to maintain. What I found interesting about the contractors being at Villa Devoto that day is that this is an upscale area of the city – not exactly where I would think piles of poop

would be accumulating (or accepted, to be honest). However, in another way, this makes sense that there would be efforts in this area to keep the parks and green spaces beautiful, as the aesthetics of Villa Devoto are an important feature of this neighborhood. Additionally, the contractor explained that in many of the parks, Villa Devoto included, the poop bag stations installed in the parks would often just get filled with trash instead of being regularly maintained. So, the provision of individual poop bags was meant to help reduce excuses to not pick up dog waste with the knowledge of how the poop bag stations are usually used. This strategy to manage health in the greenspace points towards strategies that cities like Buenos Aires are using to manage individual behavior and social norms in greenspaces.



Figure 28: Buenos Aires “Mascoterios Responsables” Program to Reduce Dog Poop in Parks²¹
(Source: taken by author during fieldwork in May 2024)

²¹ Top left sign says “it rains and disappears” followed by “false. Dog poop does not disappear.” The bottom left sign says “I forgot the bag” followed by “It’s no excuse, collect the poop of your dog”

As discussed in chapter 4, Buenos Aires' green spaces are part of a larger political project to be seen as a global urban norm leader. Much of the green space design taken up by the city resembles and replicates the colonial garden structures that have been part of the city since the early days of its modern planning. This pattern also echoes in how trees are scattered across the city. In Figure 29, I show many of the common configurations of tree canopies in Buenos Aires. These tree canopies are “a reminder that the arboreal greening of cities was an imperial project” (Wilson 2023).

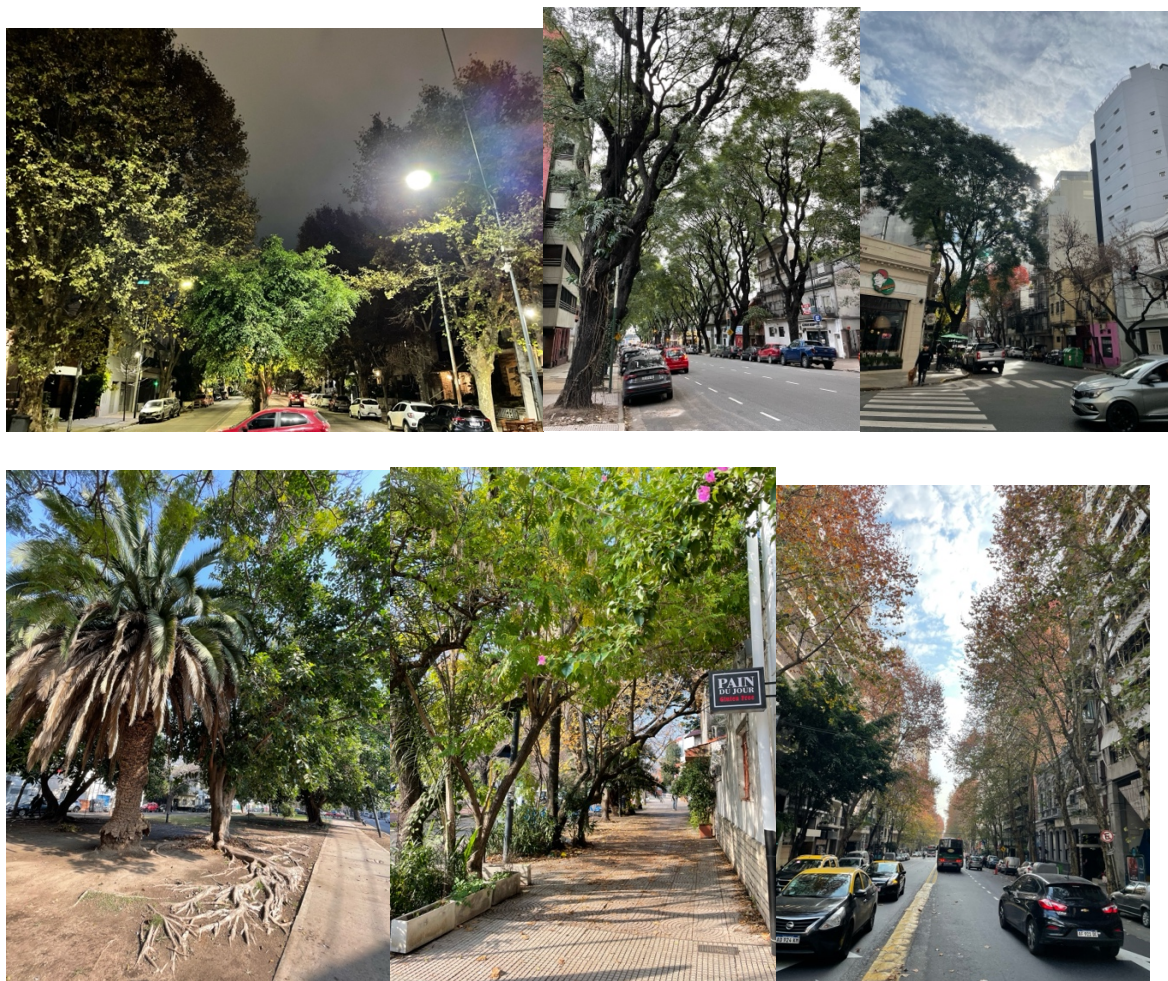


Figure 29: Tree Canopies in Buenos Aires, May 2024. (source: taken by author during May 2024 fieldwork)

Mexico City

In Mexico City, these types of tree canopies have become a core part of the city's external identity. To this point, I began making a joke on Twitter and Bluesky a few years back about the type of post that would happen about once a quarter, where some urban planning fan from North America or Europe "discovers" these canopies and declares this vibrancy to the internet, only to be met with a slew of exhausted residents of Mexico City responding that this brilliant green space said visitor got to experience was not the norm for the vast majority of local and long-term residents. While many tourists and visitors to CDMX believe that the city is lush and full of gorgeous tree canopies, this does not match the reality for the majority of residents. In fact, nearly 72% of CDMX neighborhoods contain no green space within 300 meters and residents in areas with higher levels of poverty have, on average, less access to urban green space (Mayen Huerta 2022). In almost every instance of these viral tree canopy posts, the poster shares a picture of either Roma Norte or Condesa. These two neighborhoods are far from representative of the city population, with a higher-than-average income across both neighborhoods and high concentrations of tourists, expats, and "digital nomads." On top of the resource distribution and population differences, Mexico City has also privatized their urban forests and urban green spaces through corporate governance (Mayen Huerta 2022).

These tree canopies and their unequal placement have roots in European design of public space, in addition to being exacerbated through modern privatization and neoliberal economic processes. During the Porfirio Diaz administration in the late 19th and early 20th century, Diaz took on the project of building public park spaces "literally imported from Europe" (Fernández Álvarez 2012, 102). The design of parks and the installation of the very structured tree canopies lining boulevards and streets was meant to make Mexico City "sophisticated," "modern," and

“attractive for foreign investment” (Fernández Álvarez 2012, 102). Parks were a way for Mexico City, and by extension the country of Mexico, were contemporaries in terms of values and status and thus fit to invest in and partner with (Fernández Álvarez 2012).

The use of public green space as part of a respectability narrative of the city has extended into modern day, including the 2007 construction of Parque Bicentenario. This park was a pet project of Felipe Calderon, Mexico’s president from 2006-2012, who sought to build “one of the greatest parks” as a kick off to an unprecedented level green investment in the city (a promised 92 million USD) and as a symbolic transition of the city’s industrial history (Fernández Álvarez 2012, 107). While choice of the land that this park was built on, that of a closed oil refinery, certainly beautified the area and gave residents of the more access to green space, the project also advertised to the US and other global partners that the city was continuing to modernize and improve itself—that it was keeping up with cities like Los Angeles, who was pursuing similar styles of greenification projects at the time (Fernández Álvarez 2012, 107).

The inequitable access to green spaces across the city is something that is on the city’s radar, especially as it relates to women’s access to these spaces. In one interview, my interlocuter discussed the city’s green infrastructure plan and the ongoing efforts by the city to create more green spaces as well as identify where there are gaps in accessibility of these spaces (Interview 4 2023). This program has joined forces with the Institute of the Women of Mexico City (Inmujeres) to create a sub-initiative- Senderos Seguros (Safe Pathways), which focuses on creating safe pathways for women and girls to walk through improving infrastructure development and addressing violence against women. My interviewee explained that these programs were related because green areas and bike lanes are the epicenter of the infrastructure and design planning for these safety and infrastructure improvements (Interview 4 2023). Thus,

discussions of expanding green spaces in the city are often accompanied by or centered through the lens of gender-based violence and women's needs in the city. In addition to the collaboration with Inmujeres, the CDMX has also set up collaborations with other cities on issues of biodiversity and greenspaces where they can share experiences. These collaborations have been primarily led and facilitated by C40 Climate Leadership Group and the Under 2 Coalition (Interview 4 2023).

Finally, I turn to Seoul to examine how the city has embraced networked green space and nature restoration. Seoul's CAP makes a general commitment to expanding green spaces to ensure access remains equal and barrier-free (Seoul Mayor 2021, 75). To support this, Seoul plans to create a Cycle Rapid Transit (CRT) system, which will reduce the width of roadways, increase green space, and connect bike pathways to each other, creating a networked pathway of green space and emissions-free transportation (Seoul Mayor 2021, 47; Nikola 2019).

Seoul

Seoul's CAP identifies a bold goal of adding 30 million trees "to expand carbon sink" and a 100,000m² forest "to ease urban heat island effect and to promote air circulation" by 2030 (Seoul Mayor 2021, 54). Specifically, the city dives into its plan for an urban forest alongside the Hangang River and another along streams of Bukhansan Mountain where they will create 295,000 m² and 530, 000 m² forests, respectively, which will transform empty lots and idle spaces into lush green space (Seoul Mayor 2021, 69). To finance this project and support construction, businesses will be eligible for future carbon credits (Seoul Mayor 2021, 69). Seoul will also supplement the large-scale urban forests with the installation of a 1.5km long section of forest down Sejong-daero street. In total, the city plans to install over 6,000 m² of trees along city

streets. Seoul argues that the combination of these initiatives is critical for the city “to absorb emitted greenhouse gases and accelerate its transition to renewable energy” (Seoul Mayor 2021, 37).

In conjunction with these more traditional aspects of expanding urban green space, Seoul has also looked for opportunities to create more green space through spaces like school “rooftops, green walls, and gardens” (Seoul Mayor 2021, 68). The city explains in its CAP that using designs like vertical gardens will assist the city in reducing urban heat island effects and particulate pollution from transit vehicles. The city has long embraced this type of creative use of vertical space, even displaying it in City Hall (Figure 30). This wall was named as the “largest vertical garden” in the Guinness World Records—a fact it proudly displays on a plaque in the City Hall lobby (Seoul Metropolitan Government, n.d.-a).



Figure 30: Seoul City Hall Vertical Green Space (source: taken by author during January 2022 fieldwork)

Overall, green space norms tend to focus around the concept of networked green space, nature restoration, and ecosystem maintenance. The most explicit pattern of uptake relates to Medellín's network green spaces and has been iterated on throughout the last decade, such as Buenos Aires, Mexico City, and Seoul's respective designs that attempt to connect green spaces through pathways. Similarly, consideration for, and management of, the multiple ecosystems that cohabitate in urban green spaces is becoming a more common feature within urban green space policies, which we observe led by Singapore and taken up by Buenos Aires. However, historical, cultural, and economic incentives continue to play a large role in shaping the design and

implementation in green spaces across global city spaces. In the cases of Mexico City and Buenos Aires, it is nearly impossible to understand or analyze the design of arboreal green space and park design without also understanding the colonial and development histories of these cities. In both cases, the cities have financially and reputationally benefitted from maintaining culturally hegemonic green space designs. In the case of Mexico City, the distribution of green space remains starkly different based on class, though the city is attempting to assess these inequalities and is making progress on these goals through a gendered lens. Still, all three cities examined here have incentives to align their green space strategies to legible and laudable efforts that will be rewarded politically, culturally, and economic by their constituents as well as by their urban peers. In chapter 7, I explore this argument in more depth through the case of Ho Chi Minh City.

Conclusion

In this chapter, I have introduced three categories of norms in urban climate governance: CAPs, mobility, and green spaces. In each of these categories, I have discussed histories and patterns of norms within these categories as they relate to the core cases of Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul. Throughout these case studies of norms and these cities, I demonstrated the nuanced, interconnected, and complex ways that norms emerge, diffuse, and become internalized by urban actors. While networks like C40 play substantial roles in supporting these norm lifecycles, hegemonic power and political economies also play critical roles in promoting or reinforcing norms. Additionally, though some cities, like Copenhagen or NYC, are often popularly referenced in the everyday operations of urban climate governance groups like C40 or ICLEI, the reality is that norm entrepreneurs and leaders are more

concentrated by specific issue areas. In many cases, the cities that we consider to colloquially be city leaders and entrepreneurs when it comes to urban climate governance have just managed to strategically stack the most promoted or accepted practices—they are not *necessarily* doing innovative, entrepreneurial, or even good work. In the next chapter, I explore how Ho Chi Minh City’s approach, which seeks to stack policies in an ahistorical and ad hoc fashion based on political economy structures and cultural hegemonic incentives, has led to exacerbated inequalities related to green space governance.

Chapter 7: The Impacts of Norms on Residents in Saigon²² (HCMC)

“There are two seasons in Saigon—hot and hotter”

- Vietnamese adage

In the face of substantial climate threats and policy language which identifies equity as an important value governing climate adaptation decisions, the case of HCMC introduces two interesting phenomena within urban climate governance. First, the material conditions of the city play a substantial role in shaping city action and policy around climate. Second, although HCMC aspires to address climate vulnerability and highly values policies that tackle these inequities, structures like funding availability and technical support chip away at the fidelity of those values and plans when it comes to implementation due to differing norms set by the entities who can provide these resources.

In the previous chapter, I explored the political, economic, and social conditions related to the rise and spread of urban climate governance norms. In this chapter, I focus on one specific case – Ho Chi Minh City – to gain a more in-depth understanding of how historical, material, and economic factors continue to shape inequalities in urban climate governance norms. I draw on grounded visualization data to highlight inequities in HCMC’s climate adaptation plans. Additionally, I discuss the institutional and material conditions which shape the gaps between planning and implementation within the city. Finally, I conclude by discussing the implications of this phenomenon for other cities globally and for urban climate governance more broadly.

²² While the official name for Saigon is now Ho Chi Minh City and the name Saigon has traditionally encompassed a more concentrated geographic area within the city, I use the name Saigon at points in this chapter to reflect the terminology used by my interlocutors to discuss the city.

HCMC faces significant threats from climate change and is considered to be one of the ten most vulnerable cities in the world to the impacts of climate change (Mydans 2009). Specifically, air pollution, rising heat, heat island effect (UHI), and flooding pose the most significant risks to residents of HCMC (“Air Pollution at Alarming Rate in HCM City - News VietNamNet” 2018).

Given these threats, HCMC has crafted policies for climate adaptation that are meant to provide residents some relief and build resilience against climate threats. One strategy HCMC has adopted to manage rising heat and UHI is the use of greenspaces and tree coverage. Greenspaces have had positive outcomes in reducing the threats of heat island effects and flooding (Shishegar 2014; H. Kim, Lee, and Sung 2016; Bai and Krumdieck 2020; Liu 2018). Yet, a read of Vietnam’s updated Nationally Determined Contribution (NDC)²³ clearly situates it as an actor constrained by resource availability. The NDC refers to Vietnam’s dire need for foreign direct investment, building of technological capacity, and assistance from the international community (The Socialist Republic of Vietnam 2020). HCMC is in a similar position and is a critical player in Vietnam’s capital and capacity building campaigns. Although Hanoi, Vietnam’s capital city, has much closer ties with the national level of government, HCMC maintains a symbiotic relationship with Vietnam’s national leadership through its status as an economic hub within the country. When it comes to raising infrastructure funds and development, HCMC plays a critical role in bringing in business and investments. HCMC has also taken proactive steps in an effort to attract more business and investment through elimination of red tape, tax incentives, and online registration processes (Viet Nam News

²³ NDCs are the official documents submitted by countries under the Paris Agreement which reflects their mitigation and adaptation priorities and goals. They are to be submitted every 5 years. This is currently the second wave of NDC documents.

2023b). Even before these new changes, HCMC saw a \$2.8 billion FDI year-on-year increase (30.7%) at the beginning of 2023 (Viet Nam News 2023b). In addition to FDI, HCMC has an estimated GDP of \$166.8 billion (C40 Cities, n.d.-b).²⁴

Prior to the new Master Plan and CAP (discussed in chapter 6), HCMC's 2013 CAP was considered advanced for its time in the arena of social consciousness. Both this CAP and the Vietnamese NDCs specifically discuss how environmental issues must be considered from a lens of justice. Additionally, there is extensive discussion of the integration of social and environmental issues. For example, part of HCMC's 2013 CAP calls for improving the healthcare infrastructure to better handle threats of vector-borne illnesses and heat sickness that arise from the impacts of climate change (The Socialist Republic of Vietnam 2013).

In addition to the Master Plan and CAP, HCMC has also announced a plan to dramatically expand its greenspace infrastructure. This plan, approved by the Ho Chi Minh City People's Committee in May 2022, aims to add or rehabilitate more than 6,000 trees, 10 hectares of parks, and 2 hectares of public greenspaces by 2030 (VietnamPlus 2022). HCMC, which currently has an average of .55 meters of greenspace per capita, is in dire need of greenspace as construction, development, and parking lot creation continues to reduce the city's greenspaces (Viet Nam News 2023a). Through the greenspace expansion plan, the city hopes to increase the average greenspace per capita to 3-4 meters as a measure to reduce flooding, heat island effects, and improve the quality of life for residents.

²⁴ This data is a pre-COVID projection from 2019 for Ho Chi Minh City, using data from city GPC inventories and Oxford Economics' Global Cities Dataset

Contextualizing the Geography of HCMC

HCMC has a population of 9 million people (C40 Cities, n.d.-b). Within the city, there are nineteen urban districts and five rural districts. Although the Ho Chi Minh City municipal and administrative area is expansive, I focus my analysis on this smaller subset of the city and particularly within *quận* (districts) 1, 2, 3, 5, and 7 and Bình Thạnh. The layout of these *quận* is featured in Figure 31. As is the case in many cities, *quận* in HCMC have distinct characteristics, which I describe in Table 4.

Saigon District Map

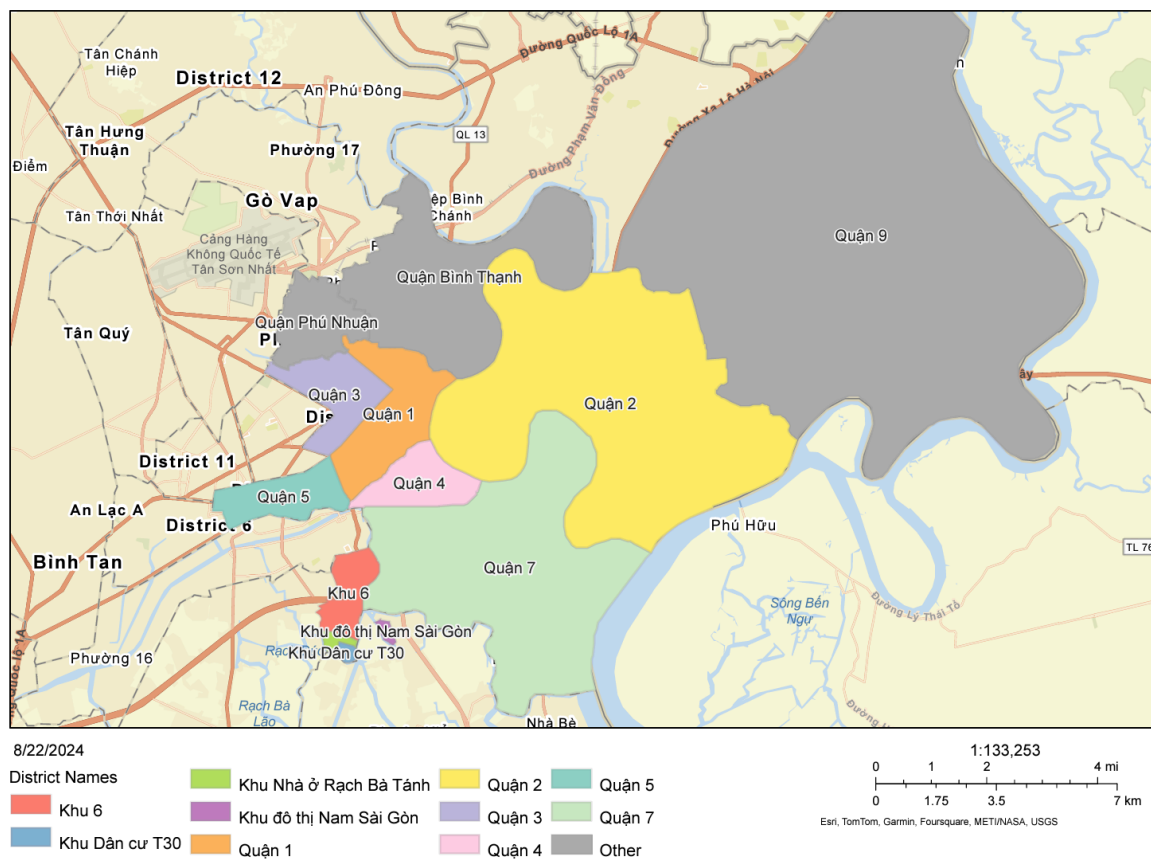


Figure 31: HCMC District Map (produced by author using GIS)

Table 4: HCMC District Descriptions. (Adapted from <https://vietcetera.com/en/a-guide-to-ho-chi-minh-citys-districts-understanding-the-city> in addition to ethnographic field notes)

District Number	Description of District
District 1	Central district, business and commercial
District 2	Expats, new developments, international schools
District 3	Colonial architecture, old + new, young professionals
District 4	Street food, residential
District 5	Heart of HCMC's Chinatown, specialty market shopping, "old town", residential
District 6	"old town", part of the Chinatown, residential
District 7	New, high-end, international, young, "new town"
District 8	Cultural heritage sites
Binh Thanh	Expats, recent investments, new developments

My fieldwork specifically focuses on the shaded rows of Table 4. This was to allow for comparison between residential and non-residential areas. This selection of neighborhoods also have geographic variance in regard to flooding risk and in the residential districts, there is variation among the age of buildings, designs, and the residential populations.

HCMC, like many cities, does not have evenly distributed climate vulnerabilities. In this chapter, I focus on two distinct vulnerabilities: flooding and heat. In Figure 32, the map shows a distribution of flood vulnerability, using an index calculation created by Hue Duong in 2024. Duong collected 36 responses from flood control and management experts in HCMC to rate the importance of 75 flooding indicators and crowd source data for analysis (Duong 2024). These indicators and data values were then weighted into a vulnerability formula with higher numbers representing higher levels of vulnerability and lower numbers representing lower levels of

vulnerability. The vulnerability scores range from 0.288 to 0.558. I have binned these into four quartiles of vulnerability to best understand vulnerability differences across the city.

In figure 32, the lightest category represents the lowest flooding vulnerability index score and the darkest category represents the highest flood vulnerability index score. There are two notable trends in this data. First, the higher flood vulnerable neighborhoods of the city are concentrated in the center quậns of the city, while the vulnerability index in quậns on the periphery of the city are lower. Second, highly vulnerable flood areas are often bordered by low vulnerability flood areas. For example, area between quận 1 and quận 3 in Figure 32 has the lowest quantile low flood vulnerability with areas in the highest quantile flood vulnerability bordering this neighborhood. I unpack the drivers and impacts of these stark contrasts in vulnerability more in later parts of this chapter.

Saigon District Flooding Vulnerability Map

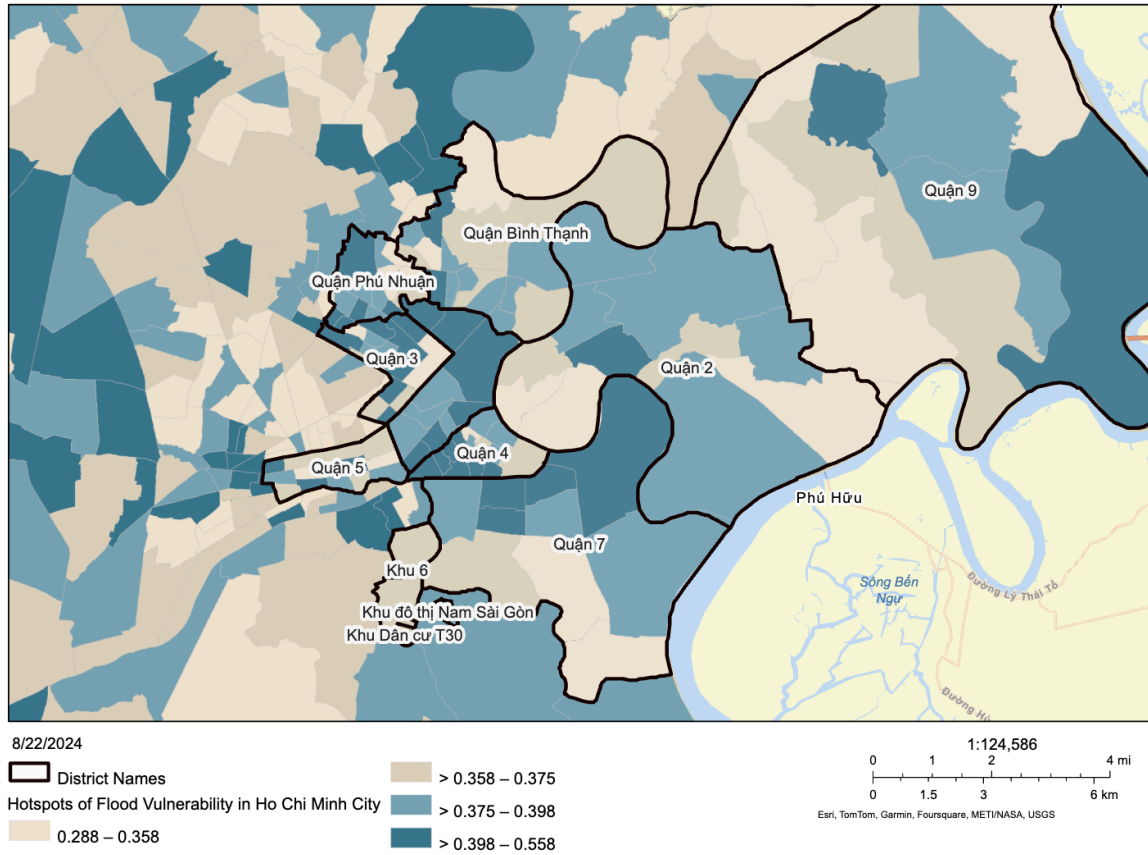


Figure 32: HCMC Districts by Flood Risk. Darker colors indicate higher risk of flooding while lighter colors indicate lower risk of flooding. The data in this map is sourced from Duong 2024 and the map was created by the author using this data in GIS.

In addition to differences in distributions of flood vulnerability across neighborhoods and quận, the impacts of heat island effects are also not evenly distributed across the city. Figure 33 details the distribution of the air and land surface temperatures (LST) in 2020. This data, collected and modeled by TPC Nguyen (2023) and cited by (Dang et al. 2018, 4), compares satellite collected LST with and without adjustments for vegetation.

Saigon Number of Days Per Year Above 30 C by District (2010-2013)

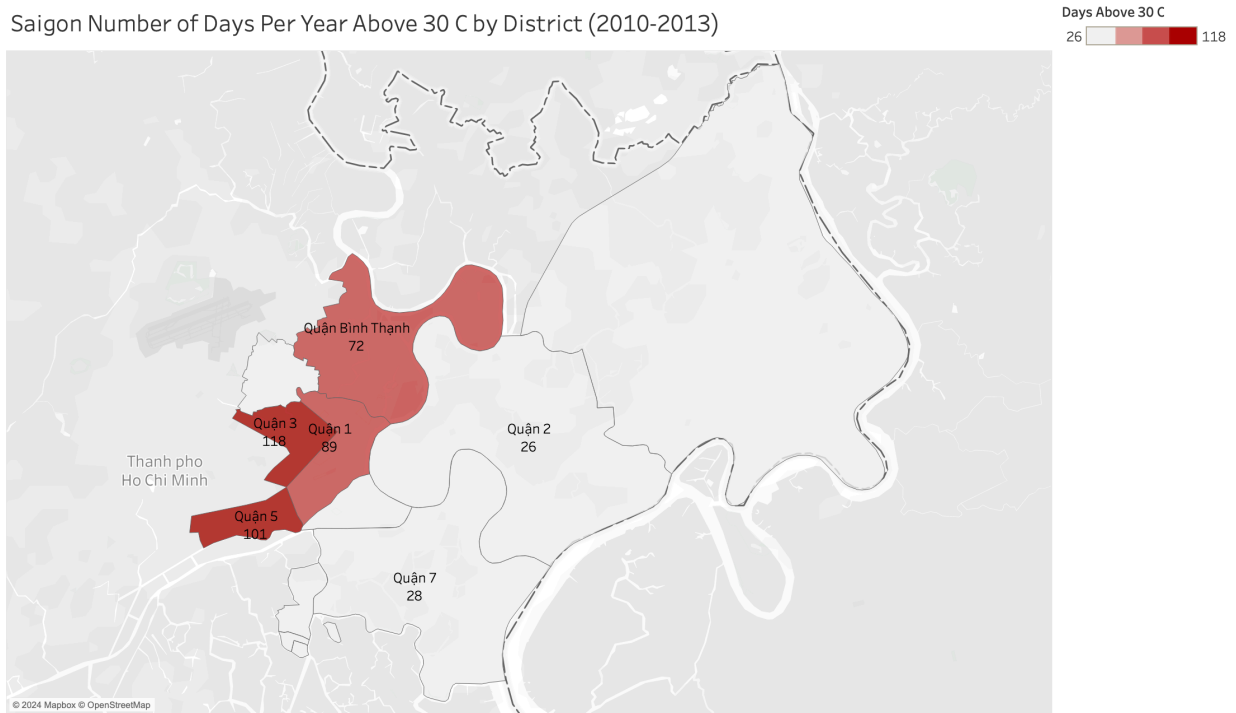


Figure 33: the distribution of the air and land surface temperatures (LST) in HCMC in 2020. This data, collected and modeled by TPC Nguyen (2023) and cited by Dang et al. 2018 (4), compares satellite collected LST with and without adjustments for vegetation. The map was created using Tableau and this data by the author.

The uneven distributions of vulnerabilities must also be understood within the context of the experience of residents within the city. Although HCMC is a mega city and the land area of the city is quite large, the concentration of residents within the city is clustered within a few *quận*. Figure 34 shows the distribution of residents across the city.

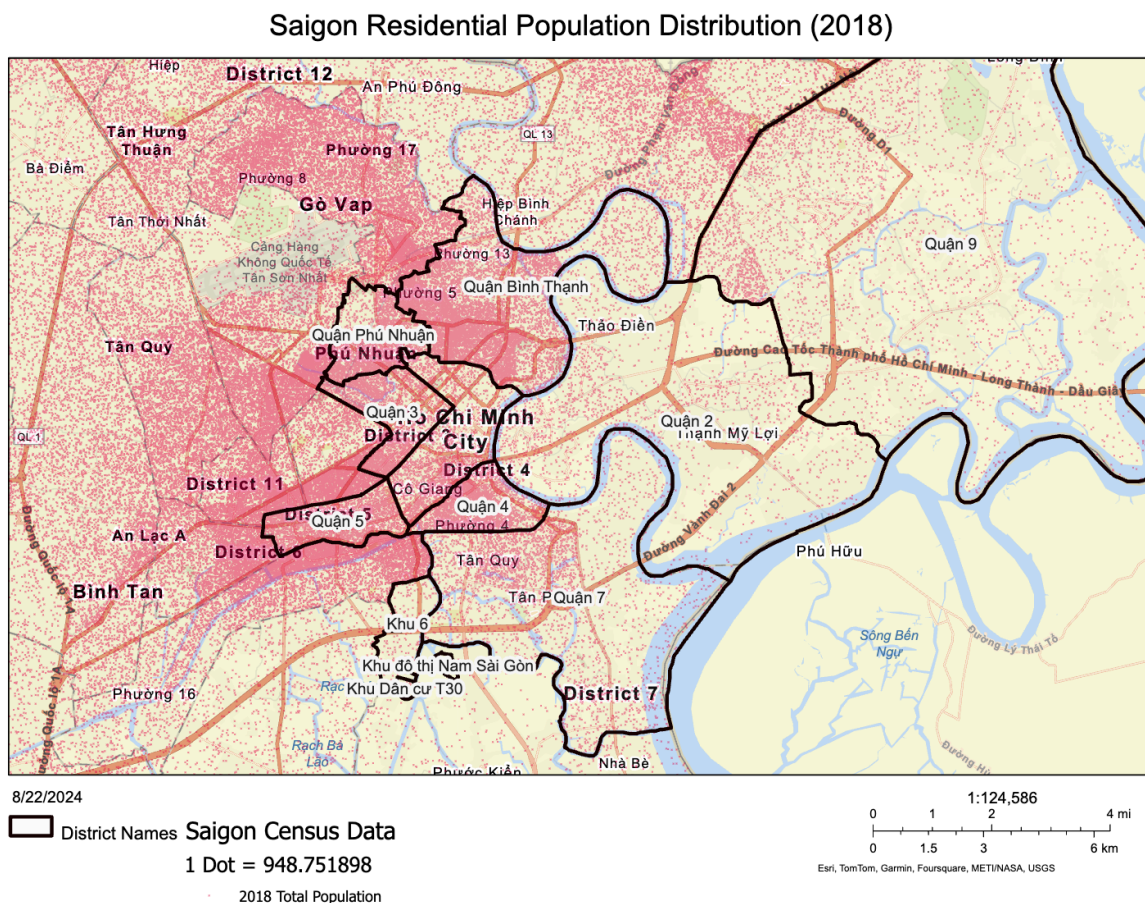


Figure 34: Distribution of Residential Population (2018). Red dots represent approximately 949 people. More red dots indicate more residential density. This was created in GIS by the author using 2018 census data for Vietnam.

The final element that is critical to understanding the puzzle of climate vulnerability within HCMC is understanding how land use is distributed across the city. In Figure 35, the map illustrates how the vast majority of the city is made up of continuous and discontinuous urban

fabric with pockets of urban greenery, urban forest, and natural or semi-natural areas. As shown in Figure 36, of the districts included in my analysis, quận 1 has the largest concentration of urban greenery, followed by quận 7. Quận 3 has no urban greenery, while Quận 5 has one urban green area. Quận 2 is a bit of an outlier among my studied districts. It has much lower density urban fabric and few areas of urban greenery but has a much higher concentration of forest and natural or semi-natural areas.

Saigon Population Density by District (2010-2013)

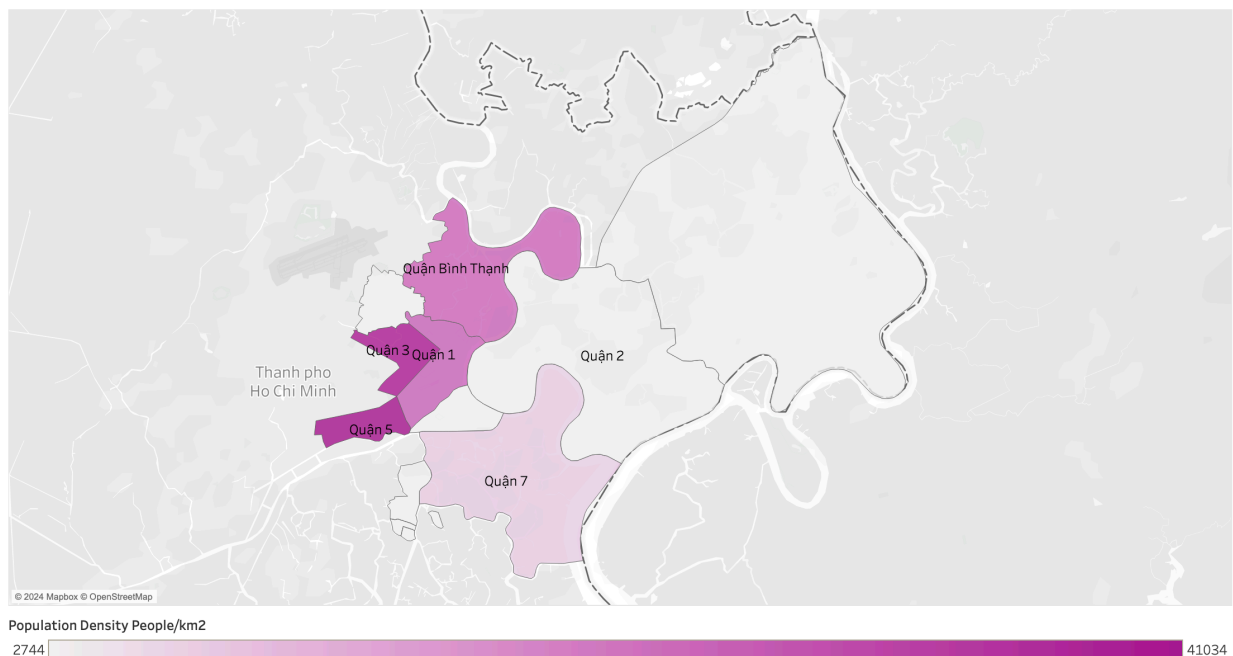


Figure 35: HCMC Population Density by District (2010-2013). Map created in Tableau by author using sourced from (Dang et al. 2018, 4).

Saigon Land Use Map (2010)

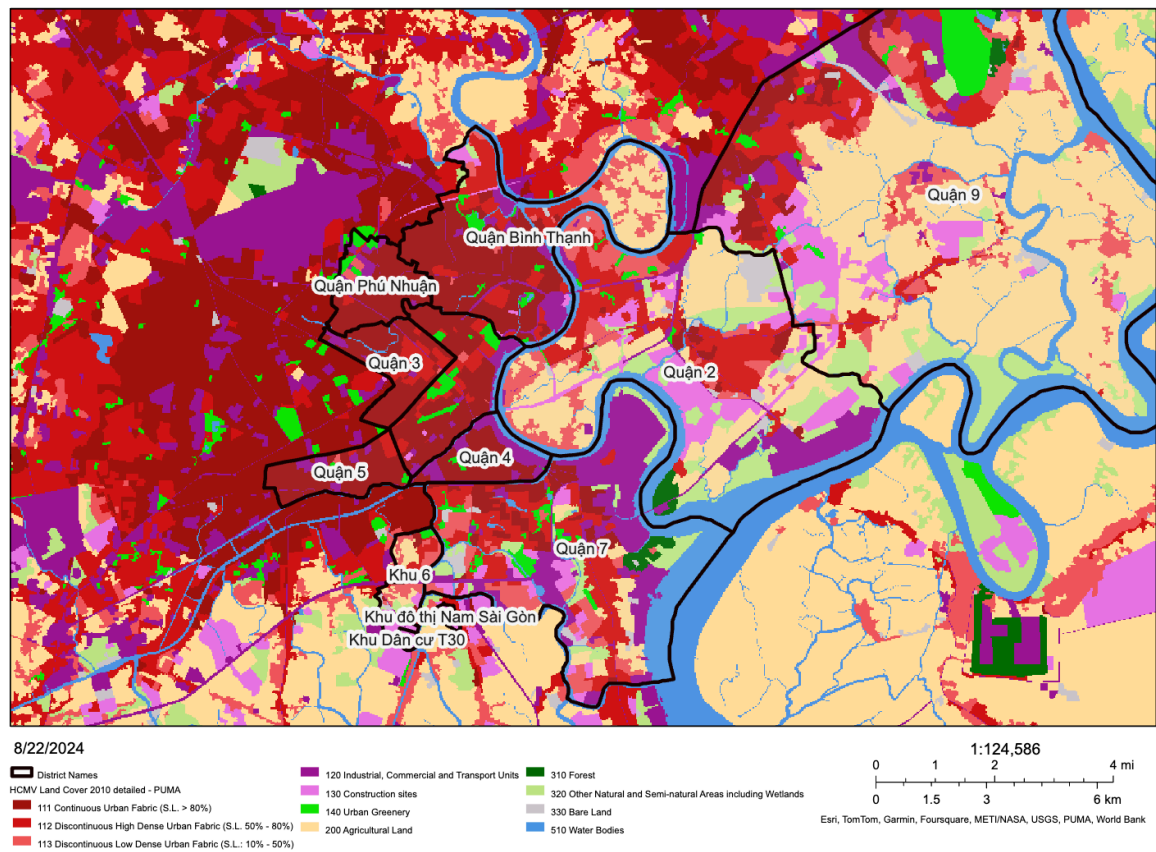


Figure 36: HCMC Land Use Map (2010). This map shows the locations of formally zone greenspace within HCMC as of 2010. This map was produced in GIS using zoning data from HCMC government portal.

The topic of greenspace has been studied by public health researchers in HCMC, who found that for greenspace and health data collected between 2010-2013, every 1-square-kilometer increase in green space per 1000 people prevents 7.4 deaths caused by heat in HCMC (Dang et al. 2018). This same study highlights the differences in total available greenspace in each district compared to the temperature. In Table 5, I have highlighted the five neighborhoods I concentrate on in this article (Binh Thanh, District 1, District 2, District 3, District 5, and District 7). According to this data, there is an inverse relationship between the number of days with high temperatures (over 30

degrees Celsius) and the kilometers of green area in the district. Additionally, when I calculated the total percentage of the neighborhoods with greenspace coverage, there are patterns to the proportions. The older and more traditional residential districts (Districts 3 and 5) have only 18% and 14% greenspace coverage, respectively. In contrast, the districts with high numbers of governmental buildings and western businesses (Binh Thanh, District 1) and expat districts (District 2 and District 7) have a much higher proportion of green space coverage (45%, 33%, 54%, and 37%, respectively). The visual representation in this data is found in Figure 37. Though this data illuminates the disparities in greenspace, it tells us little about where greenspace is primarily installed and the types of greenspaces (trees, ground coverage, etc). The visual data I offer provides a richer picture of these patterns and their relationship to power and constraints in climate action planning.

District Name	Average Temperature, °C	Average Relative Humidity, % (Range)	Days $\geq 30^{\circ}\text{C}$	Population Density People/km ²	Total Deaths	Area, km ²	Green area, km ²	Budget Revenues, Million VND ²⁵	Urban Fraction, %
Quận 1	28.4 (22.6-31.4)	68.7 (43.2-87.0)	89	24,025	5,067	7.7	2.6	827,769	0.66
Quận 2	27.6 (22.4-30.7)	74.1 (49.7-89.5)	26	2,744	1,781	49.7	27.1	387,410	0.31
Quận 3	28.6 (22.6-31.5)	67.9 (42.5-86.9)	118	38,394	4,314	4.9	0.9	565,613	0.81
Quận 5	28.5 (22.7-31.5)	68.6 (42.3-87.3)	101	41,034	4,118	4.3	0.6	558,499	0.86
Quận 7	27.8 (22.6-30.8)	74.4 (50.1-90.2)	28	7,453	3,271	35.7	13.3	745,409	0.46
Quận Bình Thạnh	28.2 (22.2-31.2)	69.7 (44.7-88.3)	72	23,104	7,174	20.8	9.4	733,707	0.55

Table 5: Demographic Comparison of HCMC Neighborhoods, 2010-2013. Table created with data from Dang et al 2018, 4.

²⁵ Revenue of the government from domestic production, business and service establishments, or citizens and other revenue from abroad

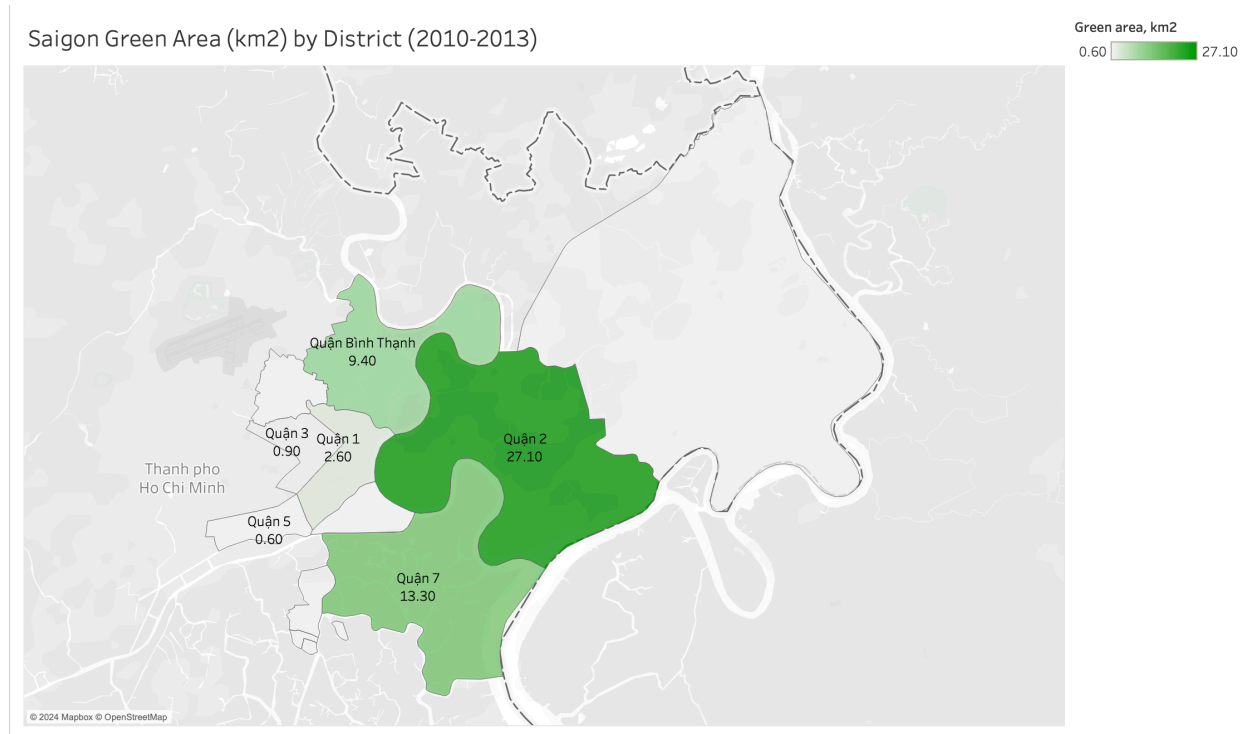


Figure 37: HCMC Green Area (km²) District Map (2010-2013). Map created by author using data sourced from Dang et al. 2018, 4

Data

Greenspace Coverage

In figures 38-40 below, you can observe examples of greenspaces in District 1 and Binh Thanh. As discussed in Table 1, District 1 is known as a business and financial district of the city while Binh Thanh is where a lot of new developments, expats, and recent investments in the city reside. In the figures below, we see examples of multiple types of greenspaces present in the districts, including high treetop coverage and ample shrubbery. These greenspace installations serve two primary purposes: reducing UHI impacts and alleviating infrastructure damage from flooding. As I conducted field research, I could feel a discernible difference in temperature in the areas with ample greenspaces versus without. In shaded parts, the temperature felt about 10 degrees cooler and could even be chilly in some parts. In areas where there was less coverage or

no coverage, the heat was sweltering, intense, and unbearable. In addition to the canopy types of greenery available, like trees, there was also lush ground greenery, such as what is seen in the photos on the right of Figure 38 and the top-right of Figure 39. This ground-level greenery not only helps reduce heat but helps reduce flooding and infrastructure damage from flooding in those areas.



Figure 38: Green spaces in North Quận (District) 1. Photo taken by author during fieldwork in 2018.



Figure 39: Green spaces in North Quận (District) 1/ South Binh Thanh. Photo taken by author during fieldwork in 2018



Figure 40: Green spaces in North Quận (District) 1/ South Binh Thanh. Photo taken by author during fieldwork in 2018

In District 4, which is known for street food and is also heavily residential, there is little to no green space. The buildings are clustered and located on narrow streets. The heat is absorbed by the dark color of these buildings and walking through these neighborhoods on a sunny day and at the height of the daily temperature can feel like walking through a furnace. Figure 41 below shows an example of one of these streets. Other highly residential areas like this, such as Districts 3 and 5, have almost no relief from this relenting heat. Examples of these can be seen in Figures 42 and 43 below.



Figure 41: An example of the residential space in District 4. Photo taken by author during fieldwork in 2018

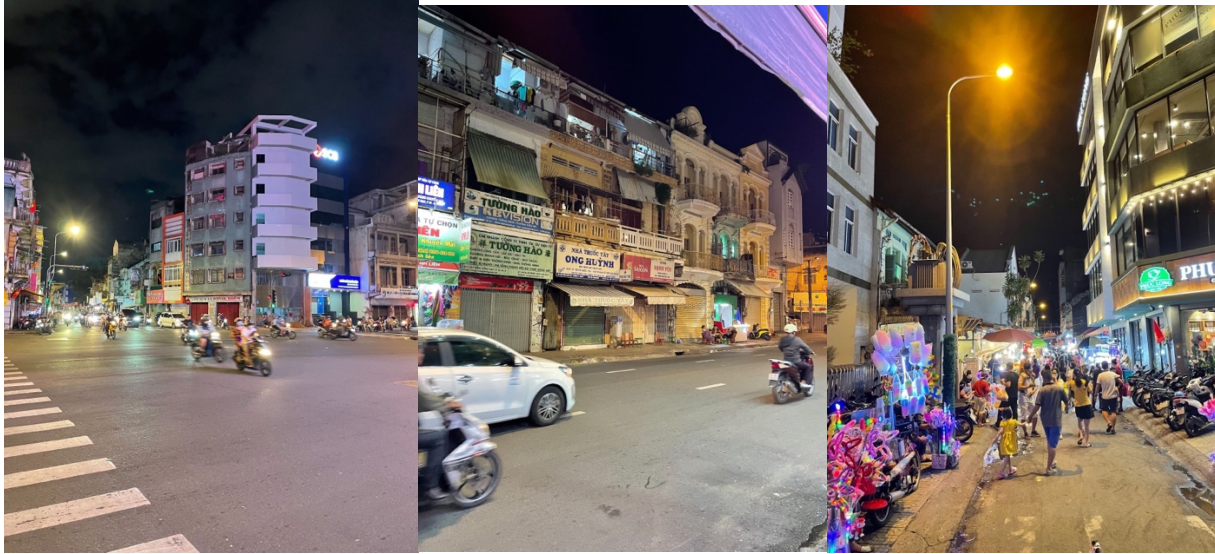


Figure 42: Residential and business space in District 5. Photo taken by author during fieldwork in 2022.



Figure 43: Residential and business space in District 3. Photo taken by author during fieldwork in 2022.

If you recall the map in Figure 32, it shows the flooding vulnerability in relationship to the district boundaries. The areas with the highest existing greenspace are Binh Thanh and District 1 by a long shot. While Binh Thanh has a severe flooding risk and District 1 is considered elevated, the districts also enjoy far more resiliency protections due to the greenspace installation they have received. Districts 3, 4, and 5 have low, moderate, and severe risk levels

for flooding, respectively, but have little greenspace coverage. Additionally, although HCMC has announced plans for installation of more greenspaces across the city, the city has been primarily focused on installations in District 2, which is primarily inhabited by expats and only has moderate flood risk.

In a situation of greenspace being installed as a set of best practices of urban planning, the city would be focusing on installation in the areas with highest need due to flooding and UHI threats. Indeed, the most recent CAP establishes large goals for installing new greenspace. However, neither the CAP nor the city's observed implementation of greenspace indicates that the installation is being done according to concern for residential vulnerability or public health. Instead, the patterns of greenspace installation and maintenance remain tied to the economic forces (i.e. where private actors invest funds to install and maintain greenspaces) and historical design (i.e. French colonial design which concentrates trees on main streets and near buildings of those in power).

Greenspace, Businesses, and Government Buildings

Another dimension that tells an important story about development, planning, and climate policy are the locations of greenspaces in proximity to businesses and government buildings. While HCMC does install and maintain a large amount of greenery, there is also a rise in public-private partnership to install and maintain greenspaces. The city-maintained trees are inventoried and numbered, such as the examples seen in Figure 13. Even the trees in the parks display this inventory numbering.



Figure 44: City installed and maintained trees, indicated by the numbers on the trunk. Photos taken by author during 2022 fieldwork.

In contrast, other trees and green areas in the city that do not display this numbering system represent greenspace that is privately managed by either businesses or private housing companies. This difference in public versus private funding and management of greenspace in HCMC is one factor driving the differences in greenspace availability across the city. There has been immense pressure for acceleration of development in HCMC over the past decade. The COVID-19 pandemic has also accelerated the demand for development. HCMC, and Vietnam more broadly, was shut down for the larger part of two years as it engaged in an aggressive response to minimize infections and deaths from the pandemic. A spillover impact of this was a massive slowdown in construction and development across the city. Since the reopening of the country in March 2022, there has been immense pressure for developers to catch up on projects

and the city has been soliciting many large-scale development projects to try to compensate for this development freeze.

Throughout my collaborations and interviews, a recurring theme between development and greenspaces in HCMC was that the pressure for development has led to loosening zoning protections of these spaces over the years. For example, the city has approved waves of new construction projects that will or have led to the removal of city-installed greenspaces. In exchange, the company with the approved zoning is supposed to install equivalent or greater numbers of green space on the property to replace what is removed during construction. Unfortunately, the follow through with this has many limitations. Foremost, enforcement of these provisions is unreliable. There is little follow through from the city government to enforce this zoning—partially due to resource constraints and partially due to low prioritization. There is also the additional issue that when companies do follow through, they are often installing monoculture or other types of greenery that has limited benefits for local ecology.

In addition to the limitations of private greenspaces in terms of follow through and types of greenery, the location of these represents an issue. District 7 is an excellent example. Although District 7 has a great concentration of lush greenspaces near the international schools, Fulbright University, and expat neighborhoods, that is not the case for the whole district. The images in Figure 45 are all privately managed and installed by public-private partnership. Figure 45 shows some examples of the concentration of these canopies, bringing cooling relief and establishing protective barriers against flooding levels. Older areas of the district where locals (non-expats) work, live, and travel through have been neglected in greenspace installation and experience dramatic flooding effects.



Figure 45: Greenspace near international schools, Fulbright University, and expat neighborhoods in District 7. Photos taken by author during fieldwork in 2022.

Figure 46 shows flooding in these areas on September 14, 2022, where 20cm of water flooded into the roads and into houses (“High Tide Floods Streets, Houses in Ho Chi Minh City” 2022).



Figure 46: Flooding in District 7, September 14, 2022. Source: Le Phan / Tuoi Tre

In Figure 47, the zoning map (left picture) and satellite image (right picture) show the zoned and actual greenspaces of the neighborhood, respectively. As one of the newest neighborhoods in HCMC, the zoning maps for the city have left several areas completely unregulated to zoning restrictions (depicted by the pale yellow in the left photo). Interestingly, in comparing these maps, the southern part of the district has been developed to include a lot of green space (dark green in the right photo). The photos in Figure 45 are all from this newly developed part of the district. While there are some small pockets of urban greenery that can be found in the older parts of the district (all shades of green on both maps), the bulk of the greenspace is in the newer areas of the district and a result of private-public partnerships, not direct city policy.

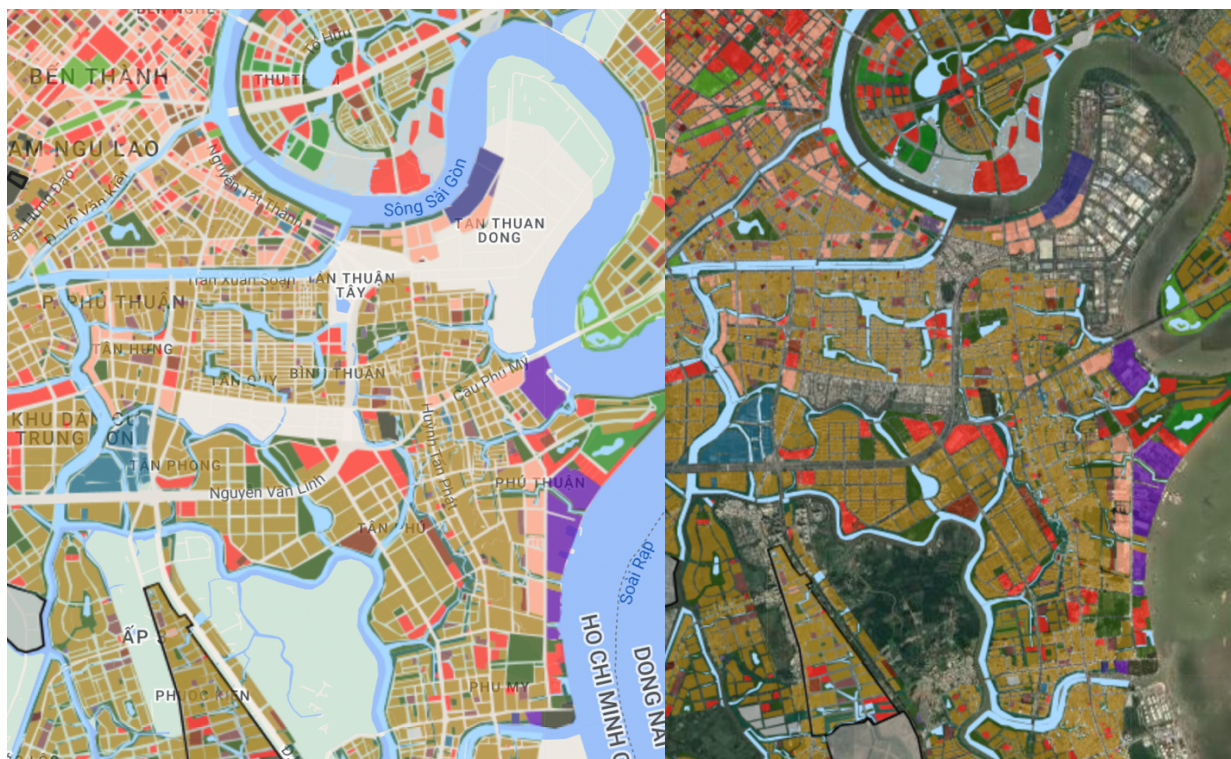


Figure 47: Zone Map and Satellite Images of District 7 in HCMC. Source: <https://thongtinquyhoach.hochiminhcity.gov.vn/>

District 2 also has similar development and greenspace concentration patterns to District 7.

While the residential areas (see Figure 48) have robust greenery, the older parts of the district, and where many locals work and run businesses have little green coverage (Figure 49). These residential neighborhoods are mixed types of residences—they include both buildings with 30+ units and single-family units. The areas of business with better greenspace coverage are those with private neighbors who have an interest in installing greenspace, such as villa communities or schools.



Figure 48: District 2 residential greenspace. Photos taken by author during 2022 fieldwork.



Figure 49: District 2 business and public-facing greenspace. Photo taken by author during 2022 fieldwork.

This concentration of greenspaces is not just the result of public-private partnership. There is also strategic concentration of greenspaces near government buildings or public memorials, such as the design in District 3 (see figure 50). Pretty much all the 18% greenspace coverage in District 3 is concentrated near government buildings and offices (middle and right photos) or at public attractions like The Venerable Thich Quảng Đức Monument (left photo). As you move further away from these sites, the greenspace, and the coverage of that greenspace from weather elements, declines dramatically. Thus, visitors and government officials are the primary beneficiaries of the green infrastructure in these areas. A picture of the district supports these observations. In both images in Figure 51, you can observe the small proportion of greenspace in the district and the small concentrations in a few areas, which are where the government buildings are located. This figure also highlights why the work of grounded visualization is important. While greenspace maps, such as those in Figure 36 and Figure 37 can give a sense of the distribution of formal green spaces, they fail to capture the more informal greenspace and green infrastructure along city streets, which are the ways that everyday residents experience the benefit or lack of green space in urban areas.



Figure 50: Greenspaces in District 3 near government buildings and public attractions. Photo taken by author during 2022 fieldwork



Figure 51: Zone Map and Satellite Images of District 3 in HCMC. Source: <https://thongtinquyhoach.hochiminhcity.gov.vn/>

Discussion

The lack of equity in greenspace coverage in HCMC is concerning for several reasons. First, the pattern of greenspace allocations seems to be targeted and concentrated on meeting the needs of business development and foreign/expat residents over native residents of HCMC over the actual evidence of risk. Second, the installation pattern of the greenspaces reflects a commitment that is antithetical to the social justice orientation in both Vietnam and HCMC's climate action plans. Although the documents clearly articulate how environmental factors and health are integrated with each other, the city is taking few efforts to reduce risk of heat, flooding, and vector-borne illness exposure for residents most vulnerable. Even though the city acknowledges the need for equity in greenspaces in their CAP and have written down that they intend to install more greenspaces across the city, the CAP and other communications from the city lack a comprehensive strategy for ensuring that more UHI and flood-prone areas of residents receive more support and relief through greenspace technology.

In the case of HCMC, the pressures to manage development priorities as well as the lack of internal funds available to install and maintain greenspaces has a significant power in shaping where greenspace has evolved in the city and who is able to benefit from that adaptation technology. HCMC, as a subnational actor, cannot directly access any types of climate funds that are available to states, such as the Green Climate Fund. All those funds must be administered to states. As such, HCMC sees a much more viable pathway of funding adaptation technology through individual organization grants, through organizations like Winrock International, Friedrich Ebert Stiftung (FES), other city governments, or private businesses. For projects like greenspaces, public-private partnerships with businesses have been the most viable route for the city, but the effects of this type of piecemeal approval for zoning and development has led to mixed inequitable results.

The legacy of exploitation, colonization, and imperialism has accelerated climate vulnerability for many countries in the Global South as well as many cities within their jurisdiction (Intergovernmental Panel on Climate Change (IPCC) 2022). Many cities and countries that we consider to be norm entrepreneurs have created the very necessity for climate mitigation and adaptation in the first place. Additionally, norm leaders have been put in charge of the very funding mechanisms that norm adopters will depend on to implement urgent climate adaptation measures. For example, Canada and Germany were recently appointed to restructure the Climate Finance Delivery Plan, the mechanism under the Paris Agreement that will provide over \$100 billion annually to developing countries for adaptation (Canada 2021). As things are currently organized within international organizations, norm entrepreneurs will set the funding priorities, criteria, and administration of these funds for norm adopters. Interrogating the norms that are set by these entrepreneurs around adaptation governance and implementation is critical

to identifying where there may be systematic shortcomings for global equity. The case of HCMC shows that even when a city has high ambitions and intentions around equity-driven climate policy, when they are forced into relying on external actors for financial support for these policies, equity may become a secondary concern.

Using the existing theoretical lenses for studying norms, one may assume that Ho Chi Minh City may be supported or encouraged to adopt equity-driven greenspace policies given the emphasis on climate equity that C40 has recently focused on in combination with the city's aspirational policies in this area of policymaking. However, in using the critical theoretical lens I have applied here, we are able to consider the postcolonial, political, and economic factors that have driven HCMC to a different set of policy norms and outcomes for residents as it relates to greenspaces. HCMC's colonial greenspace design set the foundation on which current greenspace policy is built from. Internal political processes and power distribution across the city through neighborhoods and local politics have shaped the allocation of resources and as well as the attention that HCMC's city government lends to maintaining these greenspaces.

Economically, HCMC sits as a powerhouse and entry point for foreign direct investment into the Vietnamese economy. However, the need to attract and retain FDI means that HCMC also has reduced agency to advocate for specific climate policies and maintains more limited operational funds. This economic dynamic happens in parallel with the strengthening of the PPP norm in urban climate governance, which puts HCMC in a position to deepen its reliance on PPP for urban climate governance components, such as greenspace development. As of now, there are few methods of evaluating and holding PPPs accountable for equity-based outcomes. Thus, PPPs can—and often do—have tension with the promotion of equity-based norms in urban climate

governance. These nuances are all easily missed through conventional theoretical understandings of norms.

Conclusion

In this chapter, I demonstrated and explored the availability of greenspaces in HCMC as a measure of equity in adaptation planning and implementation. The macro and micro design and implementation of greenspaces across five districts in HCMC (Binh Thanh, District 1, District 3, District 5, and District 7) reflect inequity in who benefits from greenspaces. Primarily, government officials, businesses, and western expats are the primary beneficiaries of this adaptation technology, while locals experience gradual erosion of these spaces to developers and a sluggish pace on anti-flooding efforts. The material conditions of HCMC have challenged the values of the city and Vietnam at large, forcing it into public-private partnership routes, which yields inequitable resource distribution. To address these inequities, the international community must consider direct financing of the local governments and offer competitive conditions of finance compared with private businesses. Until then, cities like HCMC will continue to model their adaptation implementation after the available resources and will experience large gaps in equity for vulnerable residents.

Chapter 8: Concluding Discussion

So, why *are* there palm trees in the middle of Buenos Aires? I begin this conclusion by bringing us back to the question I opened with in the preface of this monograph. The short answer to this question (which my interlocuter succinctly answered) is that Buenos Aires' palm trees are there for the same reason palm trees continue to grow in the middle of London- they are legacies of colonial city planning. However, they have been kept and maintained all this time through a combination of norm acceptance and identity affirming practices. The second part of this connects with a longer answer to this question, which is that palm trees, like many urban climate governance norms and status symbols, represent a symbolic and aspirational goal for cities. Over the past seven chapters, I have explored how various norms in the areas of CAPs, mobility, and greenspaces have come to be as well as what these norms mean in practice for residents.

As I argued in Chapter 2, while political science has offered many frameworks to understand components of urban climate governance norms, norm entrepreneurship, and norm leadership, the discipline lacks a unified theory that can adequately capture the historical, cultural, political, and economic dimensions necessary to unpack these phenomena. As a result, I explain how I have turned to a critical theoretical approach to norm theory influenced by a combination of postcolonialism, constructivism, and neo-Gramscian approaches.

In Chapter 3, I addressed how the study of this phenomena has led me to take on an interpretive methodological approach to study norm emergence and impacts in Buenos Aires, Ho Chi Minh City, Mexico City, and Seoul. Specifically, I introduce my designed approach of interviewing, grounded visualization, and process tracing to understand norm emergence and impacts of these norms on residence as it relates to the areas of CAPs, mobility, and greenspaces.

I highlight how these approaches allow for a richer and more contextualized understanding of the *what*, *how*, and *so what* of global urban climate governance norms.

Chapter 4 began the empirical exploration into these cases and explored the question of how cities successfully become norm leaders. I argue that cities have two pathways to leadership: hegemonic assimilation (pathway 1) or hegemonic challenge (pathway 2). Hegemonic assimilation requires a combination of leveraged leadership within respected international organizations, alignment of urban aesthetic norms to hegemonic ideals, and the pursuit of policies and projects within the urban governance zeitgeist. Hegemonic challenge is functionally the process of cities becoming norm entrepreneurs around an issue area. To illustrate hegemonic assimilation, I explore the case of Buenos Aires, which I argue has engaged in all three components of hegemonic assimilation to become a norm leader. To demonstrate hegemonic challenge, I unpack the case of Seoul and how structures established through a combination of historical choice and economic capacity has enabled the city to be a norm entrepreneur in the area of mobility and greenspace.

Through Chapter 5, I explore the conditions which make cities successful in pursuit of norm entrepreneurship. I compare a failed case of this, Mexico City's campaign to lead on the issue of emissions reporting inventories and the backlash that ensued, against Seoul's success in continuing to maintain norm entrepreneurship status in the area of mobility. Although cities may be incentivized to try to become norm entrepreneurs for the high payout of success, attempts to do so in a way that present a legitimate threat to global order is not only challenging, but may be out of reach for cities without economic and political strength on their side.

Chapter 6 deep dives into the three areas of norms (CAPs, mobility, and greenspaces) to understand how they came to be and how they spread. I demonstrate how a combination of

historical, cultural, political, and economic factors drive the ways that norms emerge, diffuse, and become internalized. In short, urban climate governance norms and their life cycles are much more complex than we may have previously understood them to be within the space of IR and environmental politics. Networks like C40 play critical roles in supporting and driving these norm life cycles, but external factors like the political economy and hegemonic power structures can often tip the scales on norms. Additionally, this chapter highlights an important implication that norm entrepreneurs and leaders have a high level of variance by issue. That is to say, cities leading norms on one issue will not necessarily be seen as a norm leader or entrepreneur in other issue areas. Furthermore, despite a norm of public consultation in CAP processes, cities are rarely driving their decisions about urban climate governance around the potential impact for residents. Instead, factors like network priorities and opportunities for collaborative partnerships or private funding are primary drivers of city governance efforts on climate change issues.

Finally, in Chapter 7 we turn to this question of what the consequences and impacts of norm internalization and adoption are on residents. To explore this, I look at Ho Chi Minh City's greenspace design. Ultimately, the city has designed and maintained greenspaces primarily around government and more western facing districts of the city, despite the benefit and need for such infrastructure in more residential parts of the city. In addition, the city is increasingly relying on PPPs to make ends meet in the city budget, including in the area of greenspace development and maintenance. The case of Ho Chi Minh City highlights that not all norms are good for residents and that the international community ought to take a more critical look at programs and initiatives along this dimension of analysis.

Implications

Overall, this project produces several implications worth considering and reflecting on. First, it is worth considering to what extent the global order of urban actors is changing or has changed. Although Global North cities are still often called to the mind of global leaders most often, cities in the Global South are continuing to play a much larger role in TNM governance and norm setting than ever before. For instance, C40's CCTF was written by a majority of Global South cities. As Global South cities gain more access to resources and power within international organizations, we may see more shifts in who emerges as norm entrepreneurs and which cities the global community turns to for norm leadership.

Second, policymakers and researchers must pay attention to the increasingly larger role that private actors play in creating, encouraging, and enforcing global norms. These private actors have the potential to be a source of shifting cultural hegemony through their imbued presence amongst municipal actors and TNMs. It is unclear to what extent these private actors and their impact on the political economy of urban climate governance may influence norm emergence, diffusion, and the impacts of these norms on residents. Take, for example, how the shifts in availability of private, alternative financial resources for cities has led to many Global South cities in Southeast Asia having more favorable terms for World Bank projects (Interview 5 2024).

Third, national level politics still matter. In all four cases, the political relationship between the city and national level of government played a defining role in determining which norms cities could or desired to carry out. Nearly every organizational or city official I interviewed for this project highlighted that despite the best efforts to maximize the development

of technical skills and provide alternative economic resources for cities, without coordination and cooperation from national leadership, cities will experience great difficulty in achieving ambitious and meaningful climate outcomes.

Contributions

Through this project, I have sought to make several contributions to the field of IR and to our scholarly understanding of urban climate governance norms. These contributions include new methodology, theoretical, and applied understandings.

First, methodologically, my dissertation has unique applications for both grounded visualization and process tracing, thus makes several contributions to the literature in terms of methodological practice. First, with few exceptions, IR literature has not used grounded visualization as a methodological tool. Although IR and political science have generated research using spatial analysis and grounded theory, and geographic based analysis has become more popular in urban and American politics fields, combining these methods using grounded visualization is novel within IR. The use of this method demonstrates how visualization and interpretive methodology can be combined to tell rich, compelling stories about the effects of space on social and political discourse. This method also has the added benefit of being easily translatable to practitioners and general audiences. My dissertation thus uniquely contributes to the methodology of the discipline of IR.

Furthermore, while process tracing is not a new method in political science or IR, its use to model subnational actors is another methodological contribution of this project. It may encourage others to use this method to study more causal relationships in subnational climate governance while maintaining the “thick description” (Geertz 1973) that we often lose through

quantitative causal modeling techniques. Demonstrating the use of process tracing for researching normative and abstract concepts in governance will make a useful contribution to the broader literature, as researchers in global climate governance attempt to synthesize existing research and findings. For instance, modeling the factors that go into each decision that a city makes regarding its climate policy is a challenging task as the causal factors are often multifaceted and involve fluid sets of variables. Demonstrating coincident and congruent process tracing through the exploration of norms helps offer ways that researchers can build more nuanced and contextual explanations for how or why some climate policies may work in some places, while they fail to work in other places. Researchers can thus maintain the level of complexity necessary to support cities in developing meaningful climate policy—especially cities with more complicated histories and those with less straightforward political or economic solutions.

Theoretically, I have expanded the scholarship on norms literature to add more detail to our collective understanding of how norms form, how norms become adopted within the regimes of urban climate governance norms, and what the impact of norm uptake may be on residents. The field has richly developed theory to outline parts of the norm life cycle from the point a norm appears to the point of internalization or death. However, relatively little work has been done to understand how norms emerge in the first place or what the empirical impacts of norms are for citizens. Furthermore, though norms have been studied within the context of environmental politics, a much smaller proportion of this literature has focused on norms within the urban climate governance regime.

My theoretical approach, which combines norm theory with neo-Gramscian, postcolonial, and coloniality concepts, also allows us to better understand that norm entrepreneurship and

norm leadership is not neutral or meritocratic – it is structured by global capitalism and colonial legacies. Cities like Buenos Aires pursue norm leadership through hegemonic assimilation to achieve recognition as peers of US and European cities. Meanwhile, Ho Chi Minh City remains constrained as a norm adopter due to material conditions including funding dependencies and technical assistance requirements which are ultimately shaped by norm entrepreneurs and norm leaders within urban climate governance. Traditional norms literature tends to present norm adoption as relatively voluntary and explain that actors internalize norms because they believe in their appropriateness. In adding neo-Gramscian analysis to our understanding of norms, in combination with components of postcolonial scholarship, it reveals how economic incentives, the historical geographic and physical designs of cities, as well as power structures, all shape the emergence and enforcement of norms. HCMC’s adoption of public-private partnerships for greenspaces, for example, is not driven by belief in their appropriateness of PPPs for greenspace design needs or a belief that their current spatial design is the best or most equity-producing approach. Rather, their current greenspace designs reflect what the city can afford to pursue politically and economically.

Perhaps most importantly, the normative elements of neo-Gramscian theory and postcolonial theory open space for understanding resistance and transformation that traditional norms literature within IR largely ignores. Specifically, the case of Seoul demonstrates how cities can pursue hegemonic challenges rather than simply adopting existing norms. This supports existing literature on norm life cycles as sites of contestation rather than just diffusion while also reinforcing that norms are not inherently *good practices* that all cities *should* adopt.

My approach also fills a gap in another area where traditional norms literature remains largely silent – the impacts of norms. Traditional norms literature focuses on whether and how

norms spread, not whether they serve justice. In asking this question, I have demonstrated in several cases throughout this project how the pursuit of norm entrepreneurship or norm leadership status can undermine climate justice goals within cities. In essence, neo-Gramscian theory transforms norms literature from a descriptive account of how international society socializes actors into shared understandings, into a critical analysis of how global power structures are constructed, maintained, and potentially transformed through everyday governance practices. It reveals norms as not merely demonstrating neutral and appropriate behavior within the social context of the urban climate governance regime but also as expressions of hegemonic interests embedded within global capitalist relations of urban climate governance that can be contested and reconfigured.

Finally, I offer new applied understandings of power and norms within urban climate governance. This project will be one of the first to document C40 initiatives like the accelerator program or the CCTF. These relatively recent programs are at the forefront of C40s work and are being iterated on by both C40 and other global cities. The contribution I offer through robust descriptive research involving a combination of 6 years of fieldwork, document analysis, and embeddedness within these areas is beneficial to practitioners and other scholars interested in understanding more about specific mechanisms and norms within the urban climate governance regime. Specifically, in pursuing collaborative work with cities and through my lived experience working in public service, these detailed accounts of the mechanics of program and history of initiatives are useful reference artifacts for public servants as they look to innovate and adapt policies and practices.

In conversations with many of my interviewees, they reflected on how they often participate in interviews yet rarely see the final products of this research. Thus, shortly following

the finalization of this monograph, I plan to conduct follow up presentations and information sessions with participants and interlocuters who have generously offered their time and insights to this project. I am also producing a series of short executive summaries and white papers on the major points and implications I have summarized in this conclusion.

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Appendix A: Semi-structured Interview Questions

General/Background

Tell me the story of how the city's climate vision was created?
What are some of the city's major climate change action initiatives?
What do you perceive as the largest success of the city on climate change?
What has been the biggest challenge in climate change policy for the city?
How successful do you think your city has been in implementing its climate action plans?
Why is action on climate change important for this city?
What threats does climate change pose for your city?

Actors/Relationships

Tell me the story that demonstrates how your city collaborates with others to create and implement climate policy.
Tell me about the key actors you have worked within forming these policies.
Tell me about how you collaborate with or learn from other cities when crafting your climate action plans.
How would you compare the climate action plan of this city to the national climate goals or NDC?

Resources

What resources have been key to developing the city's climate action plan/climate policy?
What could cities learn from what you are doing on climate change?
How does the city pay for climate mitigation and adaptation implementation?

Environmental Justice

Who is most vulnerable to climate change in your city?
How does the city's climate action address those most vulnerable?
What part(s) of the city is there the most urgent focus for adaptation?

Appendix B: Interview Descriptions

As part of my ethics protocol, information about the exact roles, organizations, and other identifiable information has been anonymized. Additionally, to help ensure confidentiality with interview participation, I have aggregated the interview date to the level of quarter and year

Interview Code	Date	Country or Region	Role	Organization Type
1	Q2 2022	Vietnam	Senior Level Bureaucrat	National Organization
2	Q4 2022	Southeast Asia	Senior Leader	International Organization
3	Q3 2023	Mexico	Senior Level Bureaucrat	City Agency
4	Q4 2023	Mexico	Senior Leader	City Agency
5	Q1 2024	Vietnam	Senior Leader	International Organization
6	Q1 2024	Global; South America	Senior Leader	Transnational city network
7	Q2 2024	Global	Global and national expert	International Organization
8	Q2 2024	Argentina	Resident	Resident
9	Q2 2024	Argentina	Resident	Resident
10	Q1 2025	Argentina	Resident	Resident
11	Q1 2025	Argentina	Resident and organizer	Civil society organization
12	Q1 2025	Argentina	Senior Level Bureaucrat Consultant	City Agency
13	Q1 2025	Global	Senior Leader	International development organization
14	Q1 2025	Global; Argentina	Senior Leader	Transnational city network

Appendix C: Artifacts

Artifact 1

