Cities in Transition

Institutional Breaches and Governance Transformations

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1. Introduction

The contemporary world is facing a confluence of interconnected and escalating crises - from the intensifying impacts of climate change and biodiversity loss, to growing urban inequality, public health emergencies, digital exclusion, and geopolitical instability. These are not merely global challenges in the abstract but are lived realities, experienced most acutely in cities - the places where populations concentrate, infrastructure converges, and governance systems are most directly tested. The twenty-first century presents cities with a unique paradox: while they are at the frontline of some of these world's most urgent challenges, they remain structurally under-empowered to address them.

Motivation for this research

Cities are becoming more densely populated, economically central, and socially complex, yet they continue to operate within institutional frameworks that were largely designed for slower-moving, nationally bound problems (Swiney, 2020). With around 68% of the world's population projected to live in urban areas by 2050 (WHO, 2025) the importance of understanding how cities are governed has never been more critical. From rising urban inequality to the accelerating climate crisis, cities are tasked with solving problems they did not directly create, often with tools they did not design, and with resources that they do not fully control or possess (Hirschl, 2020).

This reality demands a re-examination of the governance models that currently structure institutional action. Much of the existing governance architecture including national governments, global institutions, and supranational bodies was designed for a different era: one in which authority flowed vertically, policy was centralised, and cities functioned primarily as implementation vehicles (Swiney, 2020). However, this state-centric, hierarchical model is increasingly out of step with the governance challenges of today. Institutions such as the United Nations, World Bank, and OECD continue to set global agendas, yet the work of delivering those agendas often falls to municipal governments and city-level actors who must operate with constrained authority, limited budgets, and fragmented policy mandates (Hirschl and Shachar, 2019).

However, increasingly, city leaders are not just implementing policy, they are creating it, shaping it, and adapting it in ways that challenge traditional assumptions about where institutional authority lies. They are becoming institutional innovators, reinterpreting global and national policy frameworks, developing bespoke governance solutions, and forming new alliances and networks that transcend traditional borders (Barber, 2013). Initiatives and governance bodies like the Global Parliament of Mayors, C40 Cities, and the U.S. Conference of Mayors reflect an emerging political consciousness among urban leaders and the potential for horizontal governance - city-to-city collaboration that complements and sometimes challenges the authority of nation-states (Acuto and Rayner, 2016). Yet, these emerging practices remain under-theorised within institutional theory.

This shift presents a critical opportunity for institutional theory and urban governance. Cities are becoming test beds for policy experimentation, testing new institutional logics, trialling alternative governance configurations, and adapting their institutional infrastructures in response to rapidly shifting realities (Hodson and Marvin, 2010). These processes are often complicated, iterative, and context-specific. But they are precisely where institutional theory needs to look if it is to stay relevant in a world where the nucleus of institutional change is increasingly local.

Cities are also uniquely positioned as engines of bottom-up transformation. They bring together a diverse set of actors including local government, civil society, the private sector, academia and increasingly rely on forms of governance that are partnership driven and context-specific (Rockefeller Foundation, 2009). They are sites where grassroots innovation meets institutional authority; where informal norms interact with formal rules; and where new policy ideas take shape not through mandate but through translation, negotiation, and local embedding.

Critically, this makes cities essential to the success of global agendas such as the Paris Agreement and the UN Sustainable Development Goals (UNDESA, 2018). Yet, their capacity to fulfil this role depends not just on their willingness to act, but on their ability to design, adapt, and institutionalise governance mechanisms that are locally resonant and systemically robust (Swiney, 2020). Despite their growing importance, we still know relatively little about the specific governance arrangements that enable cities to respond to complex institutional demands nor how these arrangements are shaped, challenged, or reconfigured in practice.

This research is motivated by a desire to address that gap - to better understand how cities are renegotiating their institutional roles in the face of complex, and rapidly evolving pressures. It asks: What are the triggers that lead cities to deviate from traditional institutional norms? What are the specific characteristics of those deviations or breaches? How do they configure their governance infrastructures in response? By answering these questions, the study aims to advance both theoretical and practical understanding of this landscape.

Theoretical significance and findings

At the heart of this research lies a pressing theoretical concern: How can institutional theory account for increasingly context-specific, bottom-up forms of institutional change? Institutional theory has long emphasised the power of institutions to structure behaviour, align practices, and enforce legitimacy across organisational fields (Lounsbury and Boxenbaum, 2013) (Meyer and Rowan, 1977). However, much of this theory has focused on homogeneity and isomorphism (Powell and DiMaggio, 1991), how institutions become similar over time and very little has been said about heterogeneity and divergence (Drori, Höllerer and Walgenbach, 2013) in the context of changing environments. In an era of polycentric governance, multi-scalar challenges, and place-specific demands, this leaves a critical blind spot. To investigate this theoretical gap, this research takes cities as its empirical entry point and explores how they are breaching existing institutional infrastructures and creating tailored governance mechanisms in response. The findings from this research complement or otherwise extend the recent work published by other scholars as articulated in the subsequent paragraphs.

This monograph advances institutional theory by shifting the analytical focus from broad mapping and categorisation to the mechanisms and dynamics through which institutional tensions occur and institutional changes are navigated at the city level. While Vogel et al. (Vogel et al., 2022) provide a valuable conceptual framework for understanding the institutional logic-based tensions inherent in cross-sector partnerships, this monograph contributes empirical depth by examining how these tensions are not only managed but transformed into catalysts for institutional adaptation. Through the lens of city-led governance, it demonstrates how situated breaches prompt the emergence of new governance mechanisms that are deeply embedded in local realities.

This research also complements other recent research work such as the one on institutional work in food systems (Michel, 2020) where Michel shows how collaborative institutional work enables local actors to reconfigure existing fields and scale up alternative logics for systemic transformation.

Reinecke and Lawrence (Reinecke and Lawrence, 2023) introduce a processual lens on temporality in institutional theory, illustrating how institutions stabilise and evolve through dynamic, recursive, and temporal patterns that unfold across actor interactions and field-level shifts. The current work shows how breaches prompt governance adaptations that in turn reaffirm new norms, illustrating temporality's central role in institutional evolution at the urban scale, reinforcing Reinecke and Lawrence's work.

In other research on institutional work in Serbian Transition, Zara and Delacour highlight the context-dependent nature of institutional change and why it is important to understand interrelationships between multiple types of institutional work performed by different actors (Zara and Delacour, 2021).

Another recent study by Mityushina and Hehenberger (Mityushina and Hehenberger, 2025) advances institutional theory by conceptualising field governance as an ongoing, interactional process shaped by strategic activities across heterogeneous actors. By introducing the concept of Interactional Governing Activities (IGAs), the authors reframe field governance as an emergent outcome of co-development rather than top-down regulation. This monograph adds a spatial and infrastructural dimension to the study of field governance, enriching our understanding of how institutional change unfolds in place-based environments like cities. This monograph also complements and extends the framework proposed in the study by empirically grounding the concept of collaborative governance through the lens of Situated Governance Mechanisms.

By examining institutional fields such as economic regeneration, energy transition, and sustainable development, this research investigates how cities are disrupting dominant logics and institutional norms, whether by introducing new economic frameworks like circularity, decarbonising transport infrastructure, or redefining service delivery in the face of digital exclusion. Each of these cases involves some degree of loss of coherence in the existing institutional infrastructure, prompting a

reconfiguration of governance. Through qualitative data collected via semi-structured interviews, and archival documents, the study identifies the triggers for these breaches, the characteristics of the resulting breach, and the new forms of governance emerging from them.

This research identifies three central findings:

1. Triggers for institutional breach in cities are diverse and context-specific and these prompt institutional misalignment between the actor and the field.
2. Cities do not merely adjust within existing frameworks; they often enact institutional breaches that are of certain nature and require new types of logics to emerge.
3. In response, cities develop new governance mechanisms that do not repair existing systems but instead create new norms and practices that redefine institutional governance.

Contributions of this research

This research contributes to institutional theory by offering a more situated and dynamic account of institutional change, one that acknowledges the local nature of institutional responses in urban contexts and the complex interplay between breaches, governance, and institutional infrastructure. While institutional theory has traditionally focused on the structural features of institutions and the processes of conformity (Meyer and Rowan, 1977), repair (Lok and Rond, 2013), or diffusion (Strang and Soule, 1998), this study focusses on the ways in which institutional coherence is disrupted and reconfigured in response to localised pressures.

Through a comparative examination of city-level policy responses across different institutional fields including economic regeneration, energy transition, and sustainable development, the research introduces three novel conceptual contributions:

1. Triggers for loss of coherence in institutional infrastructure: The study identifies four types of misalignments that destabilise established institutional arrangements: Contextual Pressures, Infrastructure Void, Stakeholder Expectations, and Aspirational Shortfall. These are not general crises but field-specific tensions that expose weaknesses in institutional infrastructure and governance, pushing local actors to deviate from existing norms and to innovate.

2. Situated Breaches: In contrast to previously theorised breach types (e.g., hybrid, severe, or collision), this research proposes a new category of institutional breaches called Situated Breaches, which are characterised by their rooted, targeted, and relational nature. These breaches do not merely result in institutional repair or symbolic compliance, but serve as catalysts for rethinking and reconfiguring the institutional logic itself.
3. Situated Governance Mechanisms: In response to these breaches, cities are developing novel governance mechanisms that are collaborative, incentivised, and adaptive called Situated Governance Mechanisms. These mechanisms emerge as novel innovations, designed through iterative experimentation, negotiated stakeholder alignment, and contextual learning.

Together, these concepts form a recursive model of institutional change in which breaches and governance mechanisms co-evolve. Breaches reshape how governance is enacted, while governance, in turn, modifies the institutional infrastructure and the behaviour of actors over time. This dynamic relationship challenges more static interpretations of institutional change and offers a context-sensitive lens for studying innovation in urban governance.

In terms of practical contributions, the research offers a framework and perspective for city leaders, planners, and policymakers to understand how governance can be tailored to local contexts without sacrificing broader institutional legitimacy. It also provides actionable insights into how collaborative, place-sensitive models can be designed and scaled to confront the challenges of the twenty-first century.

Structure of the monograph

This monograph is structured in a sequential manner and builds theoretical depth, methodological clarity, and empirical insight into the evolving governance role of cities and their implications for institutional theory. The monograph unfolds across nine substantive chapters, each contributing to the central aim of understanding how and why cities are adapting institutional infrastructures and creating tailored governance mechanisms in response to contemporary challenges.

Chapter 2 begins by setting the contextual foundation for this inquiry. It provides a comprehensive literature review on the governance of cities, outlining how urban governance has evolved from

traditional, top-down models to more experimental and adaptive approaches. It examines the role of global institutions, the historical logic of policy-making, the emerging agency of cities in shaping localised responses, and the ways in which new governance models are being pioneered at the city level. This chapter draws attention to a growing misalignment between centralised governance frameworks and the realities experienced on the ground in cities.

Chapter 3 turns the analytical lens toward institutional theory. It traces the historical and intellectual evolution of the field from classical, sociological, and economic foundations to contemporary sub-domains such as new institutionalism, institutional entrepreneurship, and comparative institutional analysis. Particular attention is given to core concepts that are central to this research, including institutional fields, infrastructure, logics, governance, and breaches. This chapter culminates in a critical articulation of the research gap and the empirical questions that guide the investigation, particularly around the need to understand the processes and mechanisms through which cities generate tailored responses within institutional fields.

Chapter 4 provides a detailed explanation of the methodology used. It begins by contextualising the research design, outlining the ontological and epistemological stance underpinning the study. It explains the rationale behind the case selection and data sampling strategy, and describes the combination of cross-sectional and in-depth data collection methods employed. The chapter also details the abductive analytical strategy, including deductive coding techniques and the use of visual and tabular tools to track the emergence of conceptual categories. This chapter establishes the empirical foundation upon which the subsequent findings are based.

Chapters 5, 6, and 7 comprise the empirical core of the monograph. Each focuses on a distinct institutional field namely economic growth and regeneration, energy transition and climate resilience, and implementation of sustainable development goals, respectively. Each chapter is structured in four parts: an overview of the existing institutional infrastructure, a discussion of traditional governance mechanisms, the presentation of findings from selected cities and city-regions, and a consolidated synthesis of insights. These chapters reveal how institutional breaches manifest in different urban settings, and how cities are responding by developing new, and localised forms of governance.

Chapter 8 revisits the theoretical domain, positioning the findings within the broader landscape of institutional theory. It synthesises the empirical evidence to advance three key contributions: a new typology of triggers that lead to loss of coherence in institutional infrastructure; the conceptualisation of situated breaches as distinct from traditional breach types; and the identification of situated governance mechanisms that reflect the collaborative, adaptive, and incentivised nature of local responses. The implications of these findings are then unpacked for both theory and practice, offering insights for scholars and policymakers alike.

Chapter 9, the concluding chapter, reflects on the research questions and how they have been answered. It discusses the theoretical and practical significance of the findings, summarises the conceptual advancements made, and suggests pathways for future research. It also highlights how this study bridges a critical gap between urban governance and institutional theory making the case for a more dynamic, locally grounded understanding of institutional adaptation.

Supplementary sections including the bibliography, and list of abbreviations are provided at the end of the monograph to support ease of reference and citation.

2. Understanding governance in cities

To begin with, a city is typically understood as a territorially bounded, densely populated urban polity that combines:

- A legally recognised local government with formal responsibility over land-use, basic services and fiscal policy (OECD, 2012)
- A complex socio-economic system of firms, households, civil-society organisations, and infrastructures that together generate disproportionate shares of national GDP, innovation and cultural production (Sassen, 2005) and
- A node in wider multi-level governance networks, simultaneously embedded in regional, national and global institutional fields (Betsill and Bulkeley, 2007).

As the twenty-first century unfolds, cities have emerged as pivotal actors in addressing global, national, and local challenges. Once primarily regarded as administrative arms of the nation-state, cities today are increasingly seen as sites of innovation, institutional experimentation, and democratic engagement (Barber, 2013). Their growing influence in fields such as climate action, digital infrastructure, and economic resilience signals a fundamental transformation in the architecture of governance (Acuto, 2013).

This chapter explores how cities are reshaping the governance landscape by tracing the evolution of governance models from historically centralised systems to more cooperative, adaptive, and context-sensitive frameworks. It begins by examining the influence of global institutions on city-level governance and the persistent structural limitations cities face within the international and constitutional order. It then turns to traditional models of policy-making and governance, identifying how these often clash with the complexity and immediate nature of urban challenges.

The chapter also highlights the increasing capacity of cities to craft and institutionalise their own governance models. Drawing on insights from institutional theory and urban studies, it shows how cities are no longer passive recipients of top-down policy, but active participants in shaping institutional logics through situated practices. These emerging governance models characterised by decentralisation, stakeholder collaboration, and policy translation point to a shift in how governance is being reimagined and enacted at the urban scale.

In the context of institutional theory, a city functions as a meso-level actor-arena where it hosts multiple organisations that share (and contest) rules, logics, and resources, yet it is itself immobile, place-specific, and politically accountable to a resident population. This immobility and the resulting proximity among actors makes the city an ideal test-bed for institutional experimentation, for understanding breaches, and evolving bespoke governance mechanisms that often precede or transcend national reform.

By reviewing the key debates and contributions in this field, the chapter lays the theoretical foundation for understanding how institutional governance evolves in cities. It also surfaces the limitations of existing governance paradigms, arguing for a renewed focus on the role of cities as institutional actors capable of both contesting and creating governance norms.

2.1 Global institutions and urban governance

Global institutions such as the United Nations (UN), Organisation for Economic Co-operation and Development (OECD), World Bank, and European Union (EU) have played a formative role in shaping governance agendas across scales. Through frameworks like the Sustainable Development Goals (SDGs), the Paris Agreement, and various global economic and environmental benchmarks, these organisations influence how governance is understood, evaluated, and operationalised, often extending their reach into urban policy domains.

However, these institutions have traditionally operated with a state-centric logic, treating national governments as the primary units of governance (Acuto and Rayner, 2016) and cities as implementation sites rather than policy co-creators (Betsill and Bulkeley, 2007). This model reflects the enduring legacy of Westphalian sovereignty, wherein authority is vertically structured and tightly controlled by nation-states (Hirschl, 2020). As such, cities typically lack formal seats at the table in global negotiations, despite being responsible for delivering a large share of the outcomes, particularly in areas such as climate mitigation, public health, and migration (Betsill and Bulkeley, 2007).

The disconnectedness between global mandates and local realities creates friction in governance. International frameworks often assume administrative capacity and political autonomy at the local level that does not exist in practice (Parnell, 2016). In many countries, constitutional structures offer cities little decision making authority over budgetary allocation, legislative design, or cross-sectoral policy integration. Even when urban leaders are eager to act, they must navigate complex national constraints to tailor policies to their specific socio-economic and spatial contexts (Hambleton, 2015).

Yet cities have found ways to assert themselves globally through horizontal collaboration and transnational networks. Organisations like C40 Cities, ICLEI – Local Governments for Sustainability, the Global Parliament of Mayors, and the Global Covenant of Mayors have enabled cities to bypass state channels, develop shared governance agendas, and engage directly in international diplomacy (Toly, 2017). These networks exemplify what scholars have called “glocal governance” where cities operate both locally and globally, balancing local embeddedness with transnational engagement (McGuirk, Bulkeley and Dowling, 2014).

Despite their influence, global institutions are increasingly being challenged to recognise the agency of cities and provide governance frameworks that account for institutional diversity, subnational asymmetries, and context-specific innovation (Acuto, 2013). As scholars argue, global governance cannot remain agnostic to the role of cities not just as implementers, but as active producers of institutional norms, mechanisms, and logics (Sassen, 2013).

2.2 Traditional models of governance and policy making

Traditional models of governance were historically rooted in a state-centric, bureaucratic paradigm, in which authority was concentrated within national governments. These models conceptualised governance as a linear, top-down process: states set policy agendas, and subnational actors, including cities, implemented them. This structure reflected Weberian ideals of rational-legal authority and hierarchical command, with policy understood as a product of expert planning and administrative neutrality (Weber, 1978).

In these systems, cities were largely perceived as administrative units, lacking the autonomy to craft their own institutional responses to local challenges. Policymaking was dominated by a technocratic logic, prioritising uniformity, control, and efficiency. As Sabatier (Sabatier, 2000) notes in his Advocacy Coalition Framework, such traditional models often failed to account for the complex, multi-actor, and contested nature of policy formation in practice.

Institutional theory offers a critical lens for understanding why these models persisted. Institutions understood as rules, norms, and routines that structure social behaviour tend to favour stability and path dependence (North, 1990). Once governance practices become embedded, they generate cognitive, normative, and regulative pressures that resist change (Scott, 2013). In this context, national ministries or departments may reproduce inherited systems of control even when they are misaligned with contemporary governance needs.

These rigid models struggle to respond to the growing complexity, diversity, and dynamism of urban environments. The scale and speed of urbanisation, combined with new forms of economic and environmental disruption, demand more flexible, inclusive, and context-sensitive approaches. Yet in many countries, constitutional arrangements still constrain city governments from adjusting policy to reflect local realities (Parnell, 2016).

The Netherlands provides a useful example of this tension. While its dualist political structure, which separates executive and legislative responsibilities, enables a strong democratic culture (Smart and Koster, 2024) it also reflects a deeply institutionalised top-down tradition. Although Dutch municipalities play a vital role in service delivery, their capacity to adapt national frameworks to city-level priorities remains a subject of ongoing political negotiation. Likewise, while EU governance is increasingly multi-level in nature (Smith, 2004), formal policy authority often remains concentrated at the national scale.

As this chapter will show, cities are beginning to challenge this model by acting as policy entrepreneurs and governance innovators. But to understand this evolution, it is necessary to first recognise how traditional governance models have historically limited urban agency.

2.3 The emerging role of cities in governance

Cities are no longer passive recipients of policy; they are increasingly active producers of institutional change. This reflects a broader transformation from hierarchical government to horizontal, polycentric governance (Ostrom, 2009). In this emerging paradigm, cities operate as institutional entrepreneurs (Battilana, Leca and Boxenbaum, 2009) leveraging their unique local capacities to influence, reinterpret, and sometimes challenge national and global policy frameworks.

This shift is visible in how cities engage in policy translation, adapting external governance models to fit their own spatial, political, and institutional contexts (Czarniawska-Joerges and Sevón, 1996). Rather than simply adopting global or national directives, city governments and local actors reshape these policies to reflect local concerns, constraints, and aspirations. This process creates new governance logics that are locally situated yet globally resonant.

For example, cities like Curitiba have redesigned urban infrastructure and mobility systems to address ecological and social pressures, becoming a model of integrated, sustainable urban planning (Rabinovitch and Leitman, 2015). Similarly, Melbourne's application of water-sensitive urban design demonstrates how cities can embed environmental principles into core planning processes (Ferguson *et al.*, 2013). In Amsterdam, circular economy policies are not simply top-down sustainability mandates but they emerge from collaborative networks of government, civil society, and the private sector (Loorbach *et al.*, 2016).

Moreover, cities are now sites of experimental governance. Urban living labs, pilot programmes, and participatory planning forums allow local actors to test, refine, and institutionalise new governance practices. These spaces of experimentation offer fertile ground for the emergence of alternative logics, enabling local governments to bypass rigid state structures and generate context-sensitive solutions (Bulkeley *et al.*, 2012).

This emerging governance role also interacts with deeper institutional mechanisms. Cities often work within constrained legal and constitutional environments, but still find room to exercise agency through institutional layering, translation, and re-interpretation (Mahoney and Thelen, 2010). By mobilising soft power through narrative framing, stakeholder alignment, and symbolic action cities can influence wider policy fields without direct formal authority.

In this sense, cities are not just policy arenas; they are actors capable of reshaping the institutional landscapes they inhabit. Their capacity to breach, reframe, and institutionalise new governance norms makes them critical agents in understanding the dynamic evolution of governance in the 21st century.

2.4 Evolving governance models in cities

As cities take on increasingly complex roles in the governance landscape, their institutional configurations are evolving in significant ways. No longer confined to executing national directives, urban governments and their partners are crafting their own approaches to solving problems, often responding to local challenges with a degree of speed and creativity that is unavailable to higher tiers of government (Brescia, 2016). What is emerging is not a single model of governance but a variety of grounded, responsive, and innovation-oriented practices, shaped by the city's unique political, environmental, and institutional context.

One defining feature of these evolving approaches is the integration of multiple stakeholders into decision-making and delivery. Governments at the city level are frequently working with community organisations, businesses, research institutions, and residents to co-design policies and initiatives. This co-creation process not only brings in diverse expertise but also fosters legitimacy and collective ownership of the outcomes. For instance, in Amsterdam, the city's circular economy policy was designed through a structured process of engagement across sectors, aligning

environmental objectives with economic opportunity and community needs (City of Amsterdam, 2020).

Another notable shift is the emphasis on experimentation and learning. Instead of relying solely on rigid, long-term policy prescriptions, many cities are using pilot programmes, living labs, and iterative planning processes to test ideas in real-world settings. These experiments allow for ongoing feedback, course correction, and the development of context-sensitive solutions. Melbourne's water-sensitive urban design initiatives exemplify this approach, evolving over time through small-scale implementation and reflective governance practices embedded in planning systems (City of Melbourne, 2021a).

A third development is the move towards place-embedded approaches to institutional transformation. Cities are increasingly tailoring governance practices to their specific spatial and institutional environments, rather than applying standardised models derived from national or international levels. This form of embeddedness enables cities to confront issues such as inequality, climate resilience, or housing in ways that resonate with local political cultures and capacities. The city of Curitiba in Brazil offers a strong example, where a locally driven vision of social inclusion and sustainable transport reshaped the urban landscape and institutionalised new policy norms over decades (Rabinovitch and Leitman, 2015).

Cities are also asserting themselves in areas traditionally controlled by higher-level governments. In the aftermath of the 2008 financial crisis, U.S. cities such as Baltimore and Memphis initiated legal actions against discriminatory lending practices (Commission, 2011), while others, including New York and New Haven, introduced local ordinances to regulate financial institutions or provide undocumented immigrants with formal identification (Lok, 2010). These examples underscore how cities can not only fill governance gaps but also redefine the institutional logics governing critical policy areas.

Underlying these changes is an evolving relationship between local agency and institutional structure. Cities often operate under significant legal and fiscal constraints, yet they are finding ways to influence broader governance fields by mobilising partnerships, framing new narratives, and generating demonstrable outcomes. Rather than bypassing institutions, cities are engaging in institutional work subtly reshaping norms, practices, and expectations over time (Zietsma and Lawrence, 2010)

What emerges from this literature is a vision of governance that is relational rather than hierarchical, experimental rather than prescriptive, and situated rather than standardised. These developments challenge traditional models and demand fresh theoretical tools to understand how governance is produced in and by cities. The following chapters build on this understanding to examine how specific urban contexts are generating new governance practices in response to institutional disruptions and policy misalignments. A comparative overview of emerging governance approaches in cities is presented in Table 1, below.

Dimension	**Traditional Urban Governance**	**Emerging Urban Governance Practices**
Structure	Hierarchical, top-down	Networked, multi-actor, polycentric
Authority	Centralised in national/state institutions	Shared across public, private, and civil society actors
Policy process	Linear, expert-driven, formal	Iterative, co-produced, contextually adapted
Decision-making logic	Compliance and control	Trust, consensus, and mutual benefit
Mechanisms	Laws, regulations, standardised programmes	Pilots, living labs, workshops, public–private partnerships
Adaptability	Low — slow to respond to change	High — responsive, experimental, and reflexive
Legitimacy source	Legal-rational authority	Participatory inclusion, local relevance
Institutional role of cities	Policy implementers	Institutional entrepreneurs and policy innovators

Table 1: Comparative overview of emerging governance approaches in cities

This chapter has traced a clear shift in the governance of cities, from centrally managed administrative arms to active institutional actors engaging in policy innovation, institutional translation, and field-level change. While traditional models of governance relied heavily on hierarchical authority and top-down delivery (Somanathan *et al.*, 2014), contemporary cities are increasingly demonstrating capabilities to shape governance logics in context-specific, adaptive, and participatory ways (Vith *et al.*, 2019).

Global institutions continue to frame many of the overarching policy ambitions that cities are expected to implement. Yet, as this review has shown, cities are not simply passive endpoints in the governance chain. Rather, they navigate and contest institutional constraints, experiment with

new decision-making structures, and create governance mechanisms that reflect their socio-political and spatial realities.

The literature highlights that institutional flexibility, proximity, and pluralism are no longer theoretical advantages, but practical necessities (Walker, 2002). From co-creating policies with stakeholders to testing interventions through urban experiments, cities are stepping beyond their formal mandates to shape the conditions under which governance itself evolves. Their ability to adapt, embed, and scale locally significant practices makes them both responders to disruption and sources of institutional transformation (Loorbach *et al.*, 2016).

These developments demand a rethinking of how we understand cities within broader institutional frameworks. Rather than treating urban governance as a derivative of national policy, we must examine how cities are performing institutional work, producing situated responses to governance challenges, and in doing so, reshaping the field itself. The following chapter picks up this thread by turning to Institutional Theory, to explore how concepts like institutional fields, breaches, and governance mechanisms can enlighten the evolving role of cities in shaping governance norms.

3. An institutional perspective on city governance

Institutional Theory has become a cornerstone in the study of organisations, governance, and social systems, offering powerful tools to understand how practices, structures, and behaviours are shaped, maintained, and transformed over time (Thornton, Ocasio and Lounsbury, 2012). Originating in sociology, political science, and economics, the theory has evolved significantly to account for both institutional existence and institutional change. It is particularly useful for examining how actors navigate complex environments marked by norms, rules, and expectations and how they initiate or resist transformations within those environments (Micelotta, Lounsbury and Greenwood, 2017).

In the context of this research, Institutional Theory provides a compelling framework for exploring how cities, long considered implementers of national and global policy, are emerging as institutional actors in their own right. Cities today are not only responding to policy directives but also adapting, translating, and at times challenging the institutional frameworks that shape their governance. This requires a deep understanding of how institutional fields are structured, how breaches emerge, and how governance mechanisms evolve in response.

This chapter provides a comprehensive review of the Institutional Theory literature, tracing its intellectual roots, key sub-domains, and conceptual developments, as illustrated in Figure 1 below. It engages deeply with the theoretical aspects around institutional fields, infrastructure, logics, governance mechanisms, breaches, and repair, all of which are central to the empirical questions explored in this study. By doing so, it lays the theoretical foundation for understanding how institutions function and evolve, particularly in the face of complexity, uncertainty, and change.

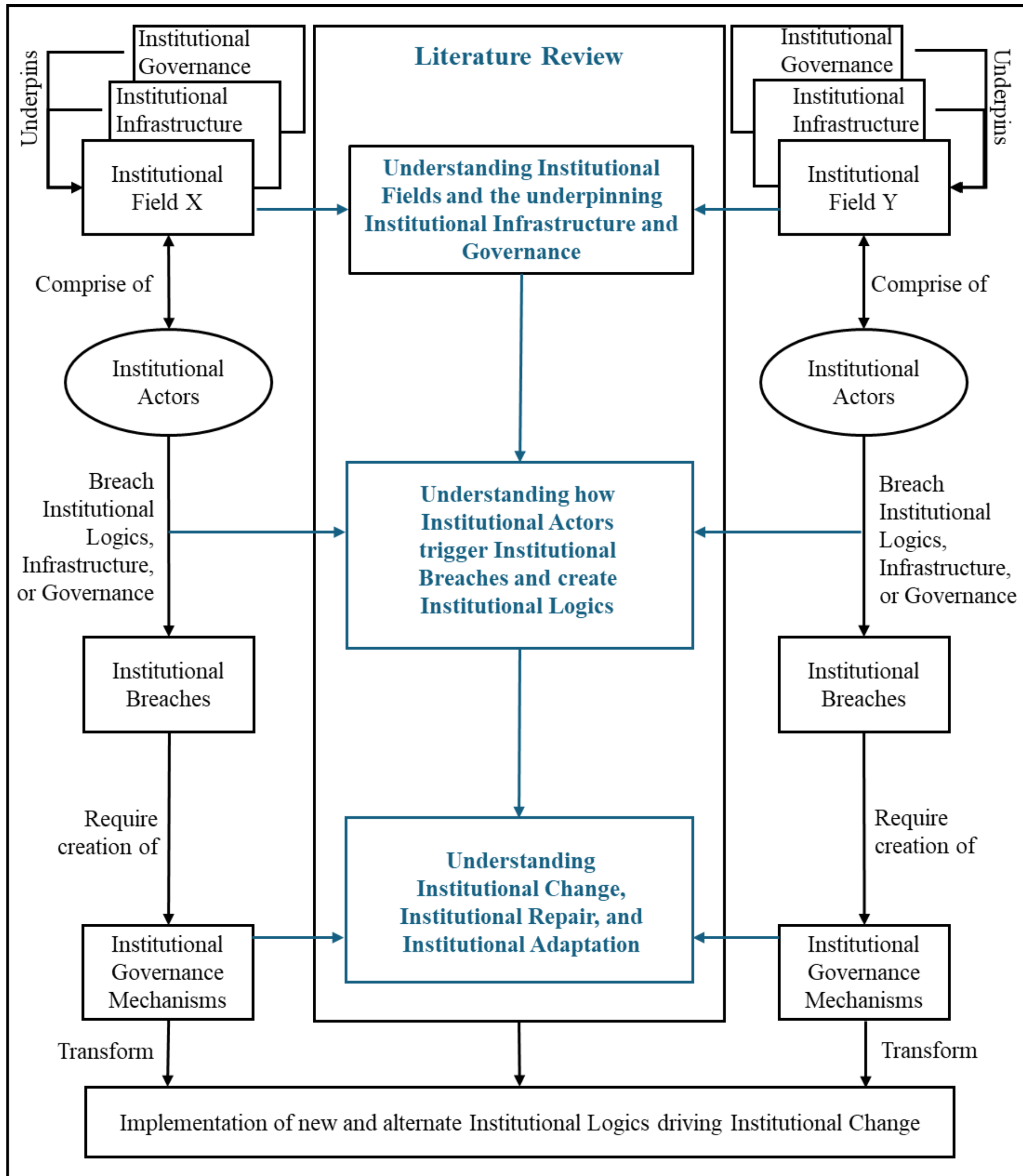

Figure 1: Theoretical foundations of institutional theory

Table 2 defines the commonly used terms in this paper and their relevance in the context of this research on governance in cities for ease of understanding purposes.

Term	Definition	Key Authors	Relevance to Cities
Institution	Socially constructed, rule-based systems that shape behaviours and are reproduced over time.	Jepperson (1991)	Cities operate within multi-level institutional structures including global, federal, and national institutions which set the overarching governance frameworks cities must respond to or adapt.
Organisation	Purpose-driven entities that operate within institutional environments and help reproduce institutional norms and expectations.	(Scott, 2013)	Municipal departments, NGOs, utilities, and local businesses act as key organisations within cities, enabling or resisting policy change.
Institutional Field (also called "organisational fields" or "strategic action fields")	Aggregates of organisations and institutions that share a common logic, interact regularly, and follow shared norms or rules.	(Powell and DiMaggio, 1991); (Scott, 2013); (Greenwood *et al.*, 2017)	Urban fields such as transport, sustainability, housing, and digital infrastructure are institutional fields in their own right. Cities both operate within and reshape these fields.
Institutional Infrastructure	The shared rules, norms, routines, and resources that support field coordination and interaction.	(Lounsbury and Boxenbaum, 2013)	Institutional infrastructure provides the foundation for how urban systems are governed including planning systems, legal frameworks, and coordination platforms within a city.
Institutional Governance	The mechanisms, roles, and processes that regulate behaviour and maintain field coherence.	(Hinings, Logue and Zietsma, 2017)	In cities, governance refers to the configuration of actors, their interactions, and the formal/informal mechanisms through which collective action is organised and sustained.
Institutional Work	The intentional actions (physical, discursive, or symbolic) through which actors create, maintain, or disrupt institutions.	(Lawrence, Suddaby and Leca, 2011)	City actors engage in institutional work when piloting reforms, mobilising stakeholders, or building coalitions to drive change from within.
Institutional Logic	Symbolic systems that provide meaning, legitimacy, and structure to organisational life; they	(Greenwood *et al.*, 2017);	Cities promote new logics when advocating sustainability, equity, or digital transformation often in

	guide perception, action, and communication.		contestation with dominant field logics.
Institutional Breach	A rupture in the established institutional order, when norms, rules, or practices are ignored or challenged.	(Herepath and Kitchener, 2016)	Breaches emerge when cities deviate from standardised approaches due to contextual pressures or institutional misalignment prompting the need for new responses.
Institutional Repair	Attempts to re-establish the previous institutional order by containing or resolving disruptions.	(Lok and Rond, 2013)	This study moves beyond repair to explore how breaches can be leveraged by cities to initiate institutional evolution, not just restoration.

Table 2: Core concepts of institutional theory and their relevance to cities

3.1 History and foundations of institutional theory

Institutional theory is a multidisciplinary framework that has significantly shaped the fields of sociology, organisational studies, political science, and economics. At its core, it seeks to understand how institutions, broadly defined as formal and informal rules, norms, and practices, influence human behaviour, organisational structures, and broader societal dynamics (Hodgson, 2006). This section explores the intellectual history and evolution of institutional theory, traces key contributions across disciplines, and introduces the foundational sub-domains that have shaped contemporary institutional analysis.

3.1.1 Classical foundations

The intellectual roots of institutional theory lie in classical sociology and political economy. Max Weber's concept of ideal types and his analysis of bureaucracy as a rational-legal system provided early insights into how formal structures influence action (Scott, 2013). Émile Durkheim emphasised the role of social norms and collective consciousness in creating order and cohesion, offering a foundation for understanding the embeddedness of institutions in society (Scott, 2013).

In economics, early institutional thinkers such as Thorstein Veblen (Veblen, 2017) who introduced the idea of conspicuous consumption and John R. Commons (Commons, 1936) who focused on the legal and normative foundations of economic behaviour, laid the groundwork for what would become the institutionalist school of economic thought.

Political scientists like David Easton (Easton, 2017) and Samuel Huntington (Huntington, 1965) similarly focused on the structuring role of institutions in shaping political order and policy stability. These classical insights form the philosophical and conceptual backbone of what would later evolve into a more formalised institutional theory.

3.1.2 The rise of new institutionalism

A significant turning point in the development of institutional theory occurred in the late 20th century with the rise of New Institutionalism. This shift saw scholars across disciplines challenge the limitations of earlier structural-functional and rational actor models. In sociology, Meyer and Rowan (Meyer and Rowan, 1977) argued that organisations adopt formal structures not purely for efficiency but to conform to societal expectations and gain legitimacy. They introduced the concept of decoupling, where organisational practices symbolically conform to external norms while diverging in practice.

DiMaggio and Powell (Powell and DiMaggio, 1991) expanded this logic by introducing institutional isomorphism, explaining how organisations within a field become increasingly similar through coercive, mimetic, and normative pressures. Their work highlighted the importance of legitimacy over efficiency and the role of social norms in structuring organisational life.

In economics, the emergence of New Institutional Economics (NIE) marked another major development. Scholars like Douglass North, Ronald Coase, and Oliver Williamson examined how institutions reduce transaction costs, resolve uncertainty, and shape long-term economic performance. North's definition of institutions as “rules of the game” both formal and informal — has become foundational to many institutional analyses (North, 1990).

3.1.3 Major sub-domains and theoretical evolutions

As institutional theory has evolved, it has diversified into a set of interrelated sub-domains, each with its own theoretical emphasis and analytical tools. These perspectives offer complementary insights into how institutions operate, how they persist, and how they change. Understanding these developments is essential to situating this research within the broader institutional landscape, particularly in explaining how cities function as institutional actors and how they negotiate, breach, and reshape institutional arrangements in response to contextual pressures.

New Institutional Economics views institutions as the formal and informal rules that structure human interaction. This tradition is more normative and efficiency-oriented, examining how institutions reduce transaction costs and increase predictability in economic exchanges. While primarily focused on markets, its frameworks have been adapted to explain how governance mechanisms emerge to address coordination failures (North, 1990).

Sociological institutionalism, emerging prominently in the late 20th century, explores how organisations and actors conform to broader social norms and belief systems. Institutions are viewed not simply as constraints, but as cultural templates that guide behaviour and create legitimacy. Organisational action, in this view, is shaped by deeply embedded norms and symbolic structures that are often taken for granted (Meyer and Rowan, 1977). This sub-domain is especially relevant for cities, which are often expected to conform to global development agendas (e.g. the SDGs), even when these may not align neatly with local realities.

The concept of institutional isomorphism (Powell and DiMaggio, 1991), coercive, mimetic, and normative, helps explain why cities often adopt similar governance forms or sustainability frameworks, even in vastly different contexts. Yet this isomorphism also creates tensions and opportunities for institutional innovation, particularly when local actors encounter mismatches between standardised policy models and complex, city-specific challenges.

Historical Institutionalism focuses on how institutions evolve over time, often through path-dependent processes. Change is understood to occur through mechanisms like layering, drift, and conversion rather than through dramatic ruptures (Mahoney and Thelen, 2010). These insights are vital in analysing how cities incrementally develop new governance practices, often under the radar of formal institutional reform.

Historical institutionalism also draws attention to power dynamics: who gets to define institutional rules, who benefits from their persistence, and who is positioned to challenge them. This is central to understanding how institutional governance is negotiated within

cities, especially when urban actors push back against national policies or global frameworks.

Organisational Institutionalism, rooted in the work of Scott (Scott, 2013) and further advanced by Greenwood (Greenwood *et al.*, 2010), has introduced key concepts such as institutional fields, logics, and institutional complexity. Fields are seen as arenas where multiple actors including governments, firms, civil society operate under shared understandings, while institutional logics provide competing frameworks for action and interpretation (Lounsbury, 2007).

This is particularly important for city governance, where actors are embedded within overlapping fields (e.g. housing, energy, transport) that are governed by distinct yet interacting logics. Cities operate at the nexus of these fields and must navigate institutional contradictions, triggering breaches, experimentation, and adaptation.

Institutional Entrepreneurship and Agency: One of the critiques of early institutional theory was its relative neglect of agency, the capacity of actors to challenge and change institutions. The concept of institutional entrepreneurship addresses this by highlighting how certain actors, often from the margins of fields, initiate and mobilise for change (Battilana, Leca and Boxenbaum, 2009). Institutional entrepreneurs harness resources, build coalitions, and strategically frame issues to alter existing logics or create new ones.

Urban leaders and city governments increasingly perform this role, not merely implementing national or global policy, but actively shaping new governance norms through collaboration, innovation, and local experimentation. Understanding cities as institutional entrepreneurs is central to this research, which examines how local actors respond to breaches and design context-specific governance mechanisms.

Discursive institutionalism adds a further layer by focusing on the role of ideas, language, and meaning-making in institutional change (Schmidt, 2008). Institutions are sustained not only through rules or norms, but through narratives and discourse that legitimise or challenge particular practices. This perspective is important when examining how cities frame their actions. For example, through narratives of resilience, inclusion, or innovation to justify departures from national frameworks or to gain support from local stakeholders.

It also helps explain how legitimacy is constructed in the absence of formal authority, a common scenario for cities negotiating multi-level governance landscapes.

Finally, *comparative institutional analysis,* as seen in the work of Hall and Soskice (Hall and Soskice, 2001) highlights how institutional arrangements differ across national contexts, and how these differences shape governance outcomes. This research contributes to that literature by showing how sub-national actors, particularly cities, also vary widely in their institutional configurations and pathways for innovation.

Contemporary institutional theory also confronts the tension between global standardisation and local adaptation. On one side, scholars such as Meyer and Rowan (Meyer and Rowan, 1977) argue that global norms and structures promote convergence across organisations and settings — a process termed *isomorphism*. On the other hand, others advocate for *heterogeneity* and local embeddedness, recognising that national and sub-national contexts introduce variation in how institutions are translated and implemented (Drori, Höllerer and Walgenbach, 2013).

Greenwood and Oliver (Greenwood *et al.*, 2010) argue that institutions are never static; they are continuously shaped by the organisational fields in which they operate. These fields, comprised of interdependent organisations sharing common norms and logics, provide the context within which institutional practices emerge, stabilise, or transform.

This dynamic is particularly relevant in the context of globalisation, where cities and local entities face growing pressure to conform to standardised policy templates while grappling with distinct local needs. This raises important questions about how local actors, including cities, negotiate, adapt, and sometimes resist global institutional logics.

Each of these subfields contributes unique insights into how institutions form, adapt, and interact with actors and environments. This research aligns most closely with the tribe of *Organisational Institutionalism*, particularly the branch that explores institutional complexity, field-level dynamics, and institutional change. It draws on insights from *historical institutionalism* to understand path dependencies in governance systems, while engaging deeply with *institutional entrepreneurship* and *discursive institutionalism* to explain how cities act as agents of change. The research is rooted in contemporary debates within *urban studies* and *policy governance* focusing

on how sub-national actors, particularly cities and city regions, navigate and reshape institutional arrangements in the face of contextual pressures and policy vacuum. In doing so, it extends the boundaries of institutional theory by integrating governance studies, policy translation, and multi-level political dynamics to highlight the situated, adaptive, and experimental nature of institutional change in urban environments.

3.2 Key sub-themes in institutional theory

Institutional theory offers a rich vocabulary and conceptual toolkit for analysing how social structures persist and change over time. Several core constructs have emerged as foundational to this framework, enabling scholars to explain not only institutional stability but also the processes through which institutions evolve. This section synthesises the key themes most relevant to understanding institutional dynamics particularly in complex, multi-actor contexts such as urban governance.

3.2.1 Institutional fields

Institutional or Organisational fields, or just referred to as Fields, are a foundational concept in institutional theory, offering a meso-level unit of analysis that bridges individual organisations and broader societal systems. Defined as "those organisations that, in the aggregate, constitute a recognised area of institutional life" (DiMaggio and Powell, 1983), fields are composed of actors including firms, regulators, advocacy groups, and professional bodies that interact under shared logics, norms, and expectations (Hoffman, 2016). These actors do not operate in isolation; instead, they are embedded in a web of mutual awareness, interdependence, and a common understanding of what constitutes legitimate behaviour (DiMaggio and Powell, 1983).

Initially, fields may be populated by highly diverse actors. Over time, however, processes of structuration lead to increasing coherence and homogeneity within the field (Garud, 2008). Through mechanisms such as normative pressures, coercive regulations, and mimetic emulation, organisations gradually conform to prevailing institutional logics often at the cost of originality or local relevance (DiMaggio and Powell, 1983). This drive toward isomorphism can result in the reproduction of dominant governance structures that may not be well suited to context-specific challenges.

This phenomenon is particularly important in the context of cities. While national and global governance frameworks often define the institutional rules of the game, cities function within fields such as sustainability, energy, or urban mobility that are both heavily institutionalised and structurally bounded (Fuenfschilling, 2019). These fields shape the possibilities for action, but they are also sites of contestation and negotiation.

Importantly, institutional fields are also defined by their boundaries and practices. Drawing on classification theory, Bowker and Star (Bowker and Star, 1999) argue that boundaries whether geographic, political, or organisational are socially constructed yet materially consequential. In urban contexts, boundaries are often territorially fixed: cities cannot relocate like multinational firms; their agency is bound to their geography. This immobility heightens the importance of institutional proximity and makes the coherence of field-level practices especially critical. This gives rise to distinctive field governance arrangements that reflect both embedded institutional norms and emergent, situated practices (Mityushina and Hehenberger, 2025).

Practices, meanwhile, refer to the routine activities and behaviours that unfold within field boundaries. Whittington (Whittington, 2006) emphasises the importance of integrating internal practices with strategic vision, suggesting that practices are not simply operational but also constitutive of institutional meaning and legitimacy. In cities, this might involve the local tailoring of sustainability policies or the collaborative development of climate governance mechanisms.

Zietsma and Lawrence (Zietsma and Lawrence, 2010) advance this line of thinking through their concept of embedded agency, the capacity of actors, both internal and external to a field, to influence institutional outcomes. In their study of the Canadian forest industry, they demonstrate how institutional change is made possible through collaboration between exogenous forces (e.g., social movements) and endogenous actors (e.g., industry players). This dynamic of co-creation and negotiation is especially salient in city contexts, where a wide array of stakeholders, from local governments to grassroots organisations, work within and across institutional fields to reconfigure governance practices.

In the present research, institutional fields are conceptualised as encompassing major domains of city action such as economic regeneration, climate adaptation, or digital infrastructure each structured by its own logics, infrastructures, and governance arrangements. These fields are not just neutral environments but active areas of struggle, innovation, and transformation (Fligstein

and McAdam, 2011). The capacity of city actors to navigate, contest, and reshape these fields lies at the heart of institutional evolution, a theme that recurs throughout the findings.

3.2.2 Institutional infrastructure

Institutional infrastructure refers to the political, legal, cultural, technological, and organisational systems that underpin the functioning of actors within an institutional field. It is the scaffolding that sustains field-level coherence by supporting governance mechanisms, guiding interactions, and enabling the enactment of institutional logics (Hinings, Logue and Zietsma, 2017). While institutional logics describe the belief systems and meaning structures that guide behaviour, infrastructure encompasses the more tangible and relational components, both formal and informal, including rules, artefacts, technologies, roles, and networks that make those logics actionable in practice (Smets, Morris and Greenwood, 2012).

At its core, institutional infrastructure is about structure in motion. It reflects the organisational and material aspects of institutional order. In their foundational work, Hinings and others argue that institutional fields are not simply constituted by ideas or rules but by a complex infrastructure of actors, artefacts, networks, and technologies. This infrastructure includes collective interest organisations, regulatory agencies, legislative institutions, professional associations, and more ephemeral entities such as field-configuring events (Waddock, 2008). These elements work together to reinforce the normative and cognitive order of a field, helping maintain stability or enabling transformation. This echoes earlier perspectives from organisational sociology that emphasised the importance of institutionalised roles, standardised practices, and shared infrastructures in maintaining order (Giddens, 1985).

The concept of institutional infrastructure builds upon earlier traditions in political economy, particularly work by Hamilton and Biggart (Hamilton and Biggart, 1988), who emphasised the interplay between formal systems (such as laws and regulations) and informal systems (including cultural norms and social values). In this view, infrastructure is both material and ideational: it consists of durable physical arrangements, bureaucratic institutions, and the shared understandings that make coordinated action possible. Boettke (Boettke, 1994a) similarly highlighted the centrality of infrastructure to institutional performance, particularly in supporting economic governance and institutional resilience.

In contemporary institutional theory, the infrastructural lens has gained renewed relevance through work on institutional complexity and practice-based views. Smets, Morris, and Greenwood (Smets, Morris and Greenwood, 2012), in their work for example, show how infrastructure mediates between competing logics by enabling actors to engage in situated agency, selectively drawing on different elements to manage contradictions.

In the context of this research, institutional infrastructure is essential to understanding why cities can, or cannot, adapt broader institutional frameworks to meet local needs. Cities do not operate in institutional vacuums. Their ability to reconfigure or translate national policies depends on the alignment (or misalignment) between the urban context and the infrastructure of the institutional field. For example, the presence of enabling legislation, local regulatory autonomy, or strong intermediary organisations may facilitate governance innovation; conversely, rigid central oversight or fragmented authority may inhibit it.

Moreover, institutional infrastructure is not static. It is subject to path dependency, but also to drift, layering, and conversion (Mahoney and Thelen, 2010). It evolves over time and across contexts, shaped by power dynamics, resource flows, and technological change. As such, it plays a critical role in institutional change. Hinings et al. (Hinings, Logue and Zietsma, 2017) note that many field-level transformations begin not with direct challenges to logics but with gradual shifts in infrastructure such as the emergence of new coordination platforms or the redefinition of stakeholder roles. For example, the emergence of 'urban innovation districts' or civic data infrastructures can reshape the architecture of urban governance long before formal policies change (Battilana, Leca and Boxenbaum, 2009)

In urban settings, this perspective sheds light on why some cities succeed in institutionalising new governance models while others struggle. Changes in the urban transport field, for instance, may stem from new partnerships between transit authorities and civic tech startups, signalling a shift in infrastructure even before dominant logics shift. Conversely, infrastructural fragmentation or centralised rigidity can inhibit innovation and lead to institutional breakdowns or misalignments. Understanding these infrastructural dynamics allows us to better grasp how institutional breaches occur, how governance is restructured, and how new logics are embedded in practice.

In this research, institutional infrastructure is treated as a core analytical category for explaining how institutional breaches occur, how governance innovations emerge, and how new logics are

embedded within cities. Rather than seeing cities as passive recipients of top-down governance, this view recognises them as actors embedded in and actively reshaping the institutional infrastructure of their institutional fields.

3.2.3 Institutional logics

Institutional logics refer to the overarching belief systems and symbolic frameworks that provide meaning and coherence within institutional fields. They shape how actors perceive their roles, define problems, and pursue solutions. As Greenwood and others (Greenwood *et al.*, 2010) argue, institutional logics serve as "symbolic systems" that bring order to reality, providing structure for interaction among organisations and for interpreting the environment in which they operate.

These logics function as cognitive and normative templates that guide behaviour, justify actions, and stabilise expectations (Thornton, Ocasio and Lounsbury, 2012). In essence, they are the scaffolding through which institutions articulate problems, prioritise goals, and coordinate across actors, acting as both constraints and enablers of change. Meyer and Hammerschmid (Meyer and Hammerschmid, 2006) highlight that institutional logics not only shape formal structures but also influence how organisations frame issues, respond to pressure, and align with field-level expectations.

Institutional fields are rarely governed by a single, unified logic. Rather, they are often characterised by multiplicity, the coexistence of competing, overlapping, or even contradictory logics (D'Aunno, Sutton and Price, 1991). For example, a sustainability-focused urban policy field might see tensions between economic growth logics and environmental preservation logics, or between centralised planning and participatory governance. Such multiplicity reflects the diverse interests and values held by various field actors, including governments, businesses, NGOs, and community groups.

In some cases, a dominant logic may emerge, often enforced by powerful institutional actors, that shapes the behaviour of other participants (Lounsbury, 2007). However, this dominance is not absolute; it is continuously negotiated and potentially destabilised by peripheral actors, context-specific needs, or exogenous shocks. This is particularly relevant to cities, which may find themselves needing to reinterpret or resist dominant logics in order to address local challenges.

Smith's (Smith, 2004) analysis of foreign policy coordination within the European Union offers a useful typology of institutional logics that is applicable to multilevel governance. He identifies:

- A socialisation logic, where collective understanding and mutual problem-solving shape shared policy;
- A functional logic, which allows members to draw resources from the collective for individual benefit;
- An appropriateness logic, in which actors perceive policy coordination itself as the legitimate and expected mode of decision-making.

These varied logics reveal how institutional actors both align with and reshape field-level norms depending on perceived utility, legitimacy, and context.

Relevant to this research is the intersection of institutional logics with the theory of translation. The translation perspective, as articulated by Czarniawska and Joerges (Czarniawska-Joerges and Sevón, 1996) and furthered by Kirkpatrick and others (Kirkpatrick *et al.*, 2013), focuses on how global ideas and practices are modified, adapted, and localised as they manifest across contexts. Pallas (Pallas, Fredriksson and Wedlin, 2016) bring these two frameworks together, arguing that institutional logics provide the overarching meaning systems, while translation enables their situated adaptation. This is highly salient in urban governance, where city actors are often tasked with interpreting and reshaping national or global logics to fit their own socio-political and infrastructural realities.

Binder's (Binder, 2007) concept of *inhabited institutions* adds a micro-foundational layer to this discussion by focusing on how actors enact, reframe, and contest institutional logics in their everyday work. Rather than passively adopting field-level templates, actors, including those in city governments, perform a sensemaking function, modifying logics through situated practices. This bottom-up reinterpretation is not just a form of implementation but a significant manifestation of institutional creativity and redefinition.

In this research, institutional logics are key to understanding how city-level governance innovations emerge. Cities operate within institutional fields that promote particular logics, whether of growth, resilience, or efficiency, yet often must translate and inhabit these logics to

address their own complex realities. As such, logics are not fixed schemas but dynamic systems of meaning that evolve through interaction, contestation, and contextualisation.

3.2.4 Institutional governance

Institutional governance refers to the systems, processes, and mechanisms through which stability, coordination, and legitimacy are maintained within an institutional field. It encompasses both formal and informal arrangements that regulate behaviour, enforce norms, and align actor interests across the field (Hinings, Logue and Zietsma, 2017). In institutional theory, governance is not limited to hierarchical control or compliance mechanisms; it is better understood as a set of embedded practices that define, control, and help comply with the "rules of the game" including who participates, how decisions are made, and how accountability is ensured.

Governance is increasingly recognised as a core dimension of institutional infrastructure. It constitutes one of the key binding elements that support the coherence and reproduction of field-level arrangements. According to Scott (W. Richard Scott, 2014), comparing governance mechanisms across fields, or within fields across contexts, offers meaningful insights into how institutions adapt to local constraints or opportunities. This is particularly relevant in the context of cities, where different institutional fields such as transport, climate, or economic development, operate with distinct governance logics shaped by political, legal, and economic factors.

Aguilera and Jackson (Aguilera and Jackson, 2010), in their work on corporate governance, emphasise how national governance systems are shaped by deeper institutional conditions, including political traditions, regulatory structures, and stakeholder expectations. Their comparative approach shows that governance is not merely a technical or structural feature, but a reflection of broader institutional logics. This insight applies equally to city-level institutional fields: the governance of a transport system in Singapore will differ significantly from that in Rotterdam or Chicago, not only because of political context but also due to differing cultural, geographical, regulatory, and economic infrastructures.

Beyond these structural considerations, governance is also a dynamic and performative process. Scholars have identified various forms through which institutional governance operates:

- *Normative governance* refers to institutional arrangements rooted in shared values, professional norms, and social expectations. This mechanism derives its authority not from

coercive power but from a collective sense of what is appropriate or desirable within a field. Normative governance operates through mechanisms such as codes of ethics, accreditation bodies, professional networks, and cultural norms that guide organisational behaviour. In urban governance, normative mechanisms are often evident in sustainability standards, design principles, or equity frameworks adopted voluntarily by city governments, planning associations, or advocacy coalitions. They play a crucial role in legitimising practices by appealing to moral and societal ideals, and in doing so, often shape long-term change in subtle but powerful ways (W. Richard Scott, 2014).

- *Performative governance* refers to the practice of signalling legitimacy and alignment with institutional norms through visible demonstrations of compliance or innovation. Rather than relying on formal enforcement or shared values alone, performative governance builds legitimacy through action by doing, displaying, and communicating. It is often employed in contexts of uncertainty or scrutiny, where actors must "perform" their alignment with field-level expectations to maintain credibility (Callon and Latour, 1981). In urban contexts, performative governance might include high-profile pilot projects, climate action plans, or dashboards that showcase progress toward sustainability targets. While such measures can catalyse momentum, they also raise concerns about symbolic rather than substantive change.
- *Negotiated governance* involves decision-making processes that emphasise deliberation, consultation, and compromise among a diverse array of stakeholders. It recognises that in complex institutional fields, particularly those involving cities, multiple actors hold divergent interests, values, and degrees of power. Rather than assuming top-down control, negotiated governance seeks alignment through engagement, dialogue, and consensus-building (J G March, 1976). It often takes the form of participatory planning, collaborative policy-making, or multi-stakeholder platforms. In institutional terms, negotiated governance is a manifestation of "institutional work" (Lawrence, Suddaby and Leca, 2011) where actors actively reshape governance practices in pursuit of more inclusive or responsive outcomes. Its strength lies in its adaptability, though it can also suffer from slowness or fragmentation in the absence of strong facilitative leadership.
- *Voluntary governance* refers to arrangements where actors choose to participate in governance mechanisms or align with institutional norms without legal compulsion or enforceable sanctions. This form of governance relies on soft power, shared values, social pressure, and

reputational incentives to encourage alignment. Voluntary governance is prevalent in settings where flexibility and experimentation are required such as in sustainability initiatives, cross-sectoral partnerships, or transnational city networks (e.g., C40 Cities, ICLEI). In such cases, cities or organisations commit to shared goals (like carbon reduction targets or reporting standards) but retain autonomy in implementation. Voluntary governance enables local innovation and contextual adaptation but may suffer from limited accountability and uneven performance across actors. From an institutional theory perspective, this mode aligns closely with normative and performative mechanisms, where legitimacy is earned through shared commitment and visible alignment with field expectations (W. Richard Scott, 2014).

- *Coercive governance* involves the use of force, legal obligation, or hierarchical authority to impose rules and ensure compliance. This form of governance is most closely aligned with the regulative pillar in institutional theory (W. Richard Scott, 2014) where laws, penalties, and formal oversight mechanisms maintain institutional order. In practice, coercive governance can be exercised by national governments, regulatory agencies, or dominant institutional actors who have the authority to coerce behaviour, for example, by mandating compliance with building codes, zoning regulations, or environmental laws. In city contexts, coercive governance becomes particularly visible when cities are required to implement national mandates, even when they may not fully align with local priorities. While coercive governance can ensure standardisation and enforce institutional coherence, it often lacks sensitivity to local conditions and may generate resistance or superficial compliance (DiMaggio and Powell, 1983).
- *Mandatory governance* sits between voluntary and coercive forms, combining elements of legal requirement with room for negotiated implementation. It typically involves institutionalised rules that are expected to be followed but allow flexibility in how they are operationalised. For instance, EU member states are required to meet certain emissions targets, but they have autonomy in choosing the pathways to achieve them, a model often referred to as obligatory flexibility (Ostrom, 2009). In institutional theory, mandatory governance is supported by both regulative and normative mechanisms, as actors must comply with overarching mandates but may interpret and translate them in ways that align with their internal logics and capacities (Greenwood *et al.*, 2010). In urban governance, this form is evident in multi-level policy implementation, where national frameworks (e.g., housing targets, carbon

budgets) require city-level action but allow for context-specific approaches. While this model balances standardisation and flexibility, it also depends heavily on institutional capacity and trust across levels of governance.

In urban governance settings, these mechanisms often appear in hybrid forms. Cities typically operate under multi-level governance constraints, lacking full constitutional authority but responsible for delivering on policy mandates. As such, they often create locally embedded governance arrangements combining state mandates with informal networks, community partnerships, and multi-actor coalitions to implement change on the ground.

Scholars such as Loorbach (Loorbach *et al.*, 2016) and Bulkeley (Bulkeley *et al.*, 2012) have shown how cities are developing experimental and adaptive governance models to address sustainability transitions. These models move away from static top-down frameworks toward iterative, collaborative approaches that align better with local dynamics and institutional complexity. They reflect an understanding that governance must be not only directive but reflexive, capable of evolving in response to feedback, resistance, and contextual change.

For this research, institutional governance is a central lens through which the processes of institutional change in cities are analysed. As different cities innovate with new forms of governance to address challenges ranging from climate resilience to economic regeneration they also breach and reconfigure field-level norms. Understanding how these governance shifts unfold, and what mechanisms are employed, provides critical insight into how institutional adaptation occurs from the ground up.

3.2.5 Institutional breaches

Institutional breaches refer to moments or processes where established norms, rules, or logics within an institutional field are disrupted or no longer offer coherent guidance for actors. They represent points of disjuncture where the underlying assumptions of a field, its shared understandings, expectations, or practices are questioned, contested, or abandoned. Institutional theory has long recognised that institutions, while appearing stable and enduring, are in fact subject to episodes of tension, conflict, and breakdown (Greenwood *et al.*, 2010). These breaches are crucial to understanding how institutions evolve, adapt, or resist change.

Breaches may occur due to internal contradictions, the entrance of new actors, shifts in the broader environment, or increasing misalignment between institutional logics and field-level practices. When these tensions reach a critical point, the legitimacy and functioning of the institutional infrastructure may become compromised, prompting actors to either reinforce, repair, or reform existing arrangements. Over the past two decades, scholars have proposed several key typologies of institutional breaches to help categorise and explain these phenomena.

- *Severe breaches* represent deep, often field-wide disruptions that challenge the foundational assumptions or legitimacy of existing institutions. These breaches tend to occur in response to systemic crises, public scandals, or widespread failures that expose the limits or contradictions of current practices (Herepath and Kitchener, 2016). Unlike more routine deviations, severe breaches create existential uncertainty, forcing actors to question not only the tools and processes in use, but also the overarching logic of the field itself. In organisational contexts, such breaches can emerge from financial crises, governance scandals, or public health emergencies that render existing institutions untenable. The consequence is a destabilised field in which repair, reinvention, or re-legitimation becomes urgent. Severe breaches often serve as precursors to major episodes of institutional transformation, but may also lead to short-term efforts at institutional repair aimed at restoring order (Lok and Rond, 2013).
- *Hybrid breaches* emerge when actors within an institutional field combine elements from multiple, and often conflicting, institutional logics. These breaches are not necessarily the result of exogenous shocks, but rather reflect endogenous attempts to innovate, navigate institutional complexity, or respond to multiple institutional demands simultaneously (Meyer and Hammerschmid, 2006). Hybridisation creates new configurations of meaning, structure, and practice but these are often unstable or ambiguous. When actors blend competing logics such as market and community, or bureaucracy and entrepreneurship, the resulting arrangements may lack clarity in accountability, coherence, or legitimacy (Battilana, Leca and Boxenbaum, 2009). Over time, this can erode the institutional infrastructure if the hybrid practices fail to stabilise or if field actors resist integration. Hybrid breaches thus illuminate the tensions involved in institutional pluralism and the challenges of reconciling diverse or competing institutional expectations (Meyer and Hammerschmid, 2006).
- *Collision breaches* occur when fundamentally incompatible institutional logics come into direct conflict within a field, producing sharp tensions, breakdowns in cooperation, or outright

fragmentation (Scott, 2013). These breaches are marked by the absence of a shared institutional framework and the inability of actors to reconcile divergent values, priorities, or practices. Unlike hybrid breaches, which involve blending, collision breaches are confrontational and often result in polarisation or stalling of field-level coordination (Suddaby and Viale, 2011). Examples include fields where scientific and political logics collide (e.g., public health policy), or where market and welfare logics are in direct tension (e.g., housing or education policy). In such cases, institutional repair is difficult unless new intermediating structures or negotiation mechanisms are introduced. Collision breaches often trigger significant power struggles within a field, with competing actor coalitions vying for dominance or seeking to redefine the institutional logic altogether (Scott, 2013).

Collectively, these breach types deepen our understanding of institutional fragility and the non-linear, contested nature of institutional change. Rather than assuming that institutions adapt smoothly to shifting conditions, the literature on breaches highlights that breakdown, ambiguity, and conflict are integral to how institutional fields evolve over time.

Importantly, breaches are not purely reactive; they are also agentic. Zietsma and Lawrence (Zietsma and Lawrence, 2010) describe how actors within fields, including those at the periphery, engage in "institutional work" to shape, resist, or reinterpret institutional arrangements. In city contexts, local actors such as municipal officials, civic organisations, or grassroots coalitions often seize upon breaches as opportunities to challenge dominant logics and assert new visions for governance. This is particularly evident in cases where breaches are strategically enacted. For example, a city might deliberately deviate from national policy in order to respond more effectively to a local crisis, or pilot a governance innovation in anticipation of broader structural change. In these cases, breach is not merely a rupture but a lever for transformation enabling institutional experimentation, realignment, and evolution.

Thus, institutional breaches in this study are conceptualised not as breakdowns to be repaired but as inflection points where cities challenge prevailing institutional structures and articulate alternative governance logics.

3.2.6 Institutional change and triggers for loss of coherence in institutional infrastructure

Institutional theory has increasingly turned its attention to the conditions under which institutional infrastructure of the institutional fields lose coherence and stability, prompting change, negotiation, and reconfiguration. While much of the foundational work has focused on institutional stability, more recent work recognises that disruption and contestation are integral to how institutions evolve. As Hinings and Logue (Hinings, Logue and Zietsma, 2017) argue, understanding institutional change requires not only analysing the types of work undertaken by actors (Lawrence, Leca and Zilber, 2013), but also interrogating how such work affects the underlying fabric of institutional infrastructure.

Institutional infrastructure, as conceptualised by Waddock (Waddock, 2008), comprises the social, political, and professional arrangements including regulatory bodies, collective interest organisations, and networks that stabilise and govern an institutional field. A field is considered coherent when its infrastructure supports consistent practices and aligned expectations across stakeholders. However, fields are rarely static. Competing priorities, evolving norms, and internal contradictions often create conditions under which coherence is strained, if not lost (Zietsma and Lawrence, 2010). In such instances, existing governance mechanisms may prove inadequate, prompting institutional responses that vary in form and intensity across contexts.

The table 3 below offers a comparative overview of how institutional loss of coherence in infrastructure has played out across a diverse set of fields including healthcare, economic development, public administration, and environmental policy. The table categorises these instances according to the trigger for loss of coherence, the types of governance mechanisms involved, and the impact these dynamics have had on institutional governance.

Author	Sector (institutional field)	Trigger for loss of coherence	Type of governance	Impact on governance
(Empson *et al.*, 2015)	Professional Services (globally)	Rise in demand and cross-border activity	Voluntary, Mandatory, Normative, Negotiated, Coercive	Increase in governance complexity; more players and transnational influences
(Zietsma and Lawrence, 2010)	Forestry (in Canada)	Environmental policy shifts and internal barriers	Coercive, Performative	New regulatory norms and restructured power dynamics
(Hinings, Logue and Zietsma, 2017)	Impact investing (in Australia)	Balancing profit with social impact	Cognitive, Normative	Governance mechanisms emerging; field still maturing
(Brunsson and Olsen, 2018)	Rail (in Sweden)	Deregulation and market entry of private firms	Normative, Cognitive, Performative	Creation of new business entity; top-down restructuring
(Hepburn *et al.*, 2021)	Economic growth (in China)	Aligning economic growth with carbon neutrality	Performative, Negotiated, Coercive	Integration of national and international frameworks
(Raworth, 2018)	Economic growth (in Netherlands)	Urban planning based on ecological limits	Cognitive, Normative, Negotiated	Redefinition of economic success through planetary boundaries
(Zapata-Barrero, Caponio and Scholten, 2017)	Immigration (in Europe)	Integration of migrants into host cities	Negotiated, Cognitive	Multi-layered governance across city, national, and regional levels
(Hallett and Ventresca, 2006)	Education (in America)	Transition to standards-based education	Normative, Mandatory	Contestation over who governs public education — local vs federal
(How to make the European Green Deal work, 2019)	Economic reform (European Green Deal)	Climate action integrated into economic policy	Normative, Mandatory	Reallocation of resources and redefinition of investment priorities

Table 3: Triggers for loss of coherence and associated governance mechanisms

What is evident across these examples is that no singular pathway to loss of coherence or institutional response exists. While some fields are disrupted by policy reform (e.g. education), others respond to emerging economic models (e.g. circular economy) or sustainability imperatives (e.g. forestry, EU Green Deal). The associated governance mechanisms are similarly diverse ranging from voluntary coordination in emergent fields to coercive frameworks in more regulated sectors. Notably, even within fields sharing a similar overarching goal, such as economic growth, the form of governance, and the logic underpinning it, can vary substantially across national or local contexts.

To complement this observation, Table 4 presents select examples from the literature where different types of institutional breaches have occurred. These illustrate how loss of coherence manifests in practice, and how institutional fields attempt to respond whether through repair, realignment, or reinvention.

Author	**Context**	**Type**	**Resolution**
(Daskalopoulou and Palmer, 2021)	Health tech in clinical practice	Breach	Need for regulatory and institutional alignment to legitimise digital interaction
(Meyer and Hammerschmid, 2006)	Austrian public administration	Hybrid	Emergence of hybrid vocabularies; partial adoption of reform logics
(Bátora, 2009)	European Defence Agency	Collision	Defined interoperability principles and governance mechanisms
(Herepath and Kitchener, 2016)	NHS in England	Severe	State-led institutional repair and re-legitimation of medical norms

Table 4: Examples of institutional breaches and resolution pathways

Each of these breach types, severe, hybrid, and collision, points to a different pathway of institutional disruption, but all share one commonality: they expose the limits of the existing institutional infrastructure. Whether the issue lies in legitimacy, authority, or the capacity to adapt, breaches create a moment of reflection and potential redirection within institutional fields.

Together, these tables show that governance is not static or uniform across fields. Instead, it is highly contingent, shaped by the form of disruption, the maturity of the field, and the institutional capacity of actors involved. This insight sets the stage for the subsequent case chapters, which explores how such dynamics unfold specifically in the context of cities, where institutional infrastructure is often decentralised, layered, and deeply affected by local conditions.

3.3 Articulating the research gap and the empirical questions

Institutional theory has long provided a powerful framework for understanding how systems of norms, rules, and practices stabilise and structure organisational behaviour. It has also become increasingly attentive to questions of change - how institutions evolve, how actors contest institutional arrangements, and how new logics become embedded over time. Yet, despite this robust foundation, significant gaps remain in our understanding of how institutional change unfolds in practice particularly in complex and dynamic environments such as cities.

While prior research has extensively addressed institutional stability and the mechanisms through which institutions resist change (DiMaggio and Powell, 1983), fewer studies explore the conditions under which institutional infrastructures within which they operate lose coherence in the first place. Much of the institutional literature treats change as episodic or exceptional, rather than as a recurring feature of complex, context-specific challenges across fields. This is especially limiting when applied to urban contexts, where contemporary challenges are not only persistent but also deeply embedded in spatial, political, and socio-economic characteristics.

Moreover, the literature has predominantly focused on institutional change in relatively formalised or sector-specific settings such as professional services (Greenwood *et al.*, 2010), education, or healthcare (Zietsma and Lawrence, 2010) with limited attention paid to the spatial context of cities. As a result, our theoretical tools remain underdeveloped for understanding the institutional complexity, and fragmentation that characterise urban policy environments.

This study responds to these limitations by interrogating three interrelated research gaps, each rooted in an unexplored territory within institutional theory and each emerging from the literature reviewed in the preceding chapters:

What triggers a loss of coherence in institutional infrastructure?

While institutional change has often been linked to exogenous shocks or actor-driven institutional work (Lawrence, Leca and Zilber, 2013) there is a limited understanding of how and why institutional infrastructures, the underlying political, legal, and normative scaffolding of an institutional field, begin to fall out. What conditions lead actors to perceive existing frameworks as inadequate? What kinds of pressures (e.g., contextual, social, regulatory) challenge the prevailing coherence of institutional infrastructure within fields? And what mechanisms reveal the cracks between global, national, and local governance logics?

Existing work has identified some sources of misalignment, such as conflicting logics (Reay and Jones, 2016), regulatory ambiguity or actor contestation (Zietsma and Lawrence, 2010), but lacks a systematic framework for understanding these triggers in applied urban settings. There is therefore a need to explore how pressures, whether arising from evolving societal demands, infrastructural voids, or aspirational shifts, manifest as institutional tensions that challenge the coherence of existing infrastructure and governance arrangements.

What are the characteristics of institutional breaches as they emerge in response to local pressures?

While a growing body of literature has explored types of institutional breaches including severe, collision, and hybrid forms (Herepath and Kitchener, 2016), these typologies remain largely abstracted from localised or spatially specific governance environments. Moreover, the literature does not explore in much detail the character of these breaches: how they unfold, who enacts them, and what they reveal about the relationship between institutional infrastructure and the field-level actors embedded within it.

This study asks: when coherence is lost, how do breaches emerge? What are the characteristics of these breaches? Do stakeholders and actors play a role in triggering these breaches? These questions aim to deepen our understanding of institutional breaches not simply as anomalies, but as patterned responses to misalignments in complex systems.

What forms of governance mechanisms emerge in response to these institutional breaches, and how do they support new norms and practices?

Institutional theory has recognised a range of governance mechanisms from coercive and mandatory arrangements to normative, negotiated, and performative models (Hinings, Logue and Zietsma, 2017). However, these models have typically been developed to describe sectoral or organisational contexts, not spatially embedded governance fields like cities.

This raises several questions: What kinds of governance mechanisms emerge when cities experience institutional breaches? How are new rules or practices introduced, and legitimated? Do existing typologies of governance adequately capture the dynamic, negotiated, and often fragmented responses that arise in such contexts? And importantly, what new forms of norms and practices, often anchored in place, relationships, and specific socio-political conditions, come to define these governance adaptations?

In exploring these questions, this research seeks to contribute to the theoretical development of breaches and governance within institutional theory by foregrounding the ways in which local actors not only respond to loss of coherence in institutional infrastructure but also actively craft new, embedded forms of governance and control.

Together, these three lines of inquiry form the foundation of this research's empirical investigation. They are motivated by a desire to better understand the relationship between institutional fields and their infrastructures, the dynamics of breaches and response, and the emergence of governance mechanisms tailored to specific contexts of institutional change. By addressing these questions, the study not only identifies a gap in the literature, it also helps recalibrate institutional theory to account for the complexity, diversity, and fluidity of institutional change in cities.

4. Methodology

In this research, I explore how institutional practices play out in the context of cities. More specifically, this study is guided by three core empirical questions, as articulated in detail in the previous section, that emerge from critical gaps in institutional theory. First, it investigates the triggers that lead to a loss of coherence in institutional infrastructure, examining how contextual, regulatory, or normative pressures expose misalignments within institutional fields. Second, it explores the nature and characteristics of institutional breaches, focusing on how such disruptions emerge in response to localised tensions and actor dynamics. Third, the research examines the governance mechanisms that arise in response to these breaches, seeking to understand how new norms and practices are developed, legitimised, and embedded within complex urban environments. My goal is to identify where current theory falls short and how it might be extended to better reflect the challenges cities face today.

Cities, as I see them, are not uniform systems. They are shaped by many actors, histories, and priorities, and often face similar problems such as climate change or social inequality in very different ways. This research is based on the belief that institutional action is shaped by context, and that there are multiple ways of understanding and interpreting what happens in different places. I take a relativist epistemological stance, which suggests that knowledge is socially constructed (Lincoln and Guba, 1985). At the same time, I lean toward a nominalist ontology, which treats concepts like "city" or "institution" not as fixed entities, but as human-made categories that are open to interpretation and change (Blaikie, 2007). While I work with these categories, I am interested in how they are understood and enacted in different local contexts.

This research does not try to apply a general theory to different cities to see how well it fits. Instead, it looks at how different cities respond to similar pressures in context-specific ways, and what those responses can tell us about how institutional change happens. My aim is to spot patterns and build insights from the ground up, rather than testing pre-set hypotheses. To do this, I draw on a comparative and interpretive approach (Flyvbjerg, 2001), which helps me make sense of the differences and similarities across urban settings without forcing them into a single framework.

I hope to contribute to institutional theory by showing how institutions change in ways that are shaped by the places where they are embedded. While there has been a growing interest in how institutions respond to global pressures, there is still limited research on how these responses are influenced by local conditions, especially in cities, which are becoming critical to addressing

global challenges (Suddaby and Viale, 2011). By focusing on what I call Situated Breaches and Situated Governance Mechanisms, I aim to show how institutional change can come from the bottom up, shaped by people and organisations working within their specific environments. This approach adds to current theory by placing institutional actors, cities in this context, at the centre of how we think about institutional adaptation and governance.

4.1 Research context

In this research, the city is the central unit of analysis. My interest lies in understanding how cities navigate institutional pressures, interpret governance responsibilities, and respond to change through tailored approaches. Cities are the spatial and political entities where the impacts of global challenges such as climate disruption, migration, inequality, environmental sustainability are most acutely felt. They are also the sites where governance gaps often become most visible. As Pratt notes (Pratt, 2009), cities experience these tensions first-hand, yet they frequently lack the authority to act decisively. Despite being at the forefront of implementation, many urban governments remain institutionally constrained, with limited formal power relative to national or federal authorities (Hirschl, 2020).

This context shapes the rationale for my research. I begin from the premise that cities, particularly their leaders and governance actors, require more tailored, place-based institutional mechanisms to effectively manage their responsibilities and deliver local benefits for their residents and communities. National-level policies, while often well-intentioned, are not always aligned with the needs of individual cities. They may overlook critical contextual variables such as local demographics, economic histories, governance cultures, or civic priorities. What emerges from this setting is a clear institutional misalignment where urban actors must translate or rework top-down frameworks to fit local realities.

This view reflects a relativist epistemology, in which knowledge and action are understood to be context-dependent and shaped by multiple perspectives (Lincoln and Guba, 1985). Institutional actors across different cities will interpret and respond to similar pressures in distinct ways depending on their histories, capacities, and stakeholder configurations. In this respect, I position my research within a social constructivist paradigm, one that prioritises how meanings, rules, and practices are constructed, contested, and adapted over time (Li, 2009). This also reflects a shift away from universal or prescriptive models of institutional governance toward more adaptive, interpretive, field-sensitive approaches.

4.2 Research design

The design of this research reflects its interpretive and constructivist orientation. My aim is to explore how institutional actors, cities in this context, make sense of, respond to, and reshape governance frameworks in their own contexts. This requires a research design that is flexible, comparative, and able to accommodate variation across settings while still allowing for theoretical insight.

I adopted a comparative case study design approach (Yin, 2018) to help uncover patterns in order to help respond to the identified empirical questions. The goal here was to examine how institutional practices vary across cities when adapting national or global policy frameworks to local conditions. Rather than aiming for representativeness, these cases were selected for their theoretical relevance (Eisenhardt, 1989). They include cities actively engaged in forward-thinking initiatives, sustainability transitions and institutional experimentation - contexts where the pressure to act is high and institutional boundaries are already being renegotiated.

This comparative design was guided by a set of consistent analytical questions:

- What challenges were cities responding to and what interventions were introduced?
- Who were the actors involved and what types of breaches occurred and their nature?
- How were decisions made and institutional governance reconfigured?

These questions allowed me to trace the processes through which cities breached institutional frameworks to deliver grounded action through tailored governance mechanisms thus driving institutional change and adaptation.

The city is treated here as the core unit of analysis. More precisely, the focus is on the institutional arrangements, breaches, practices, and governance strategies that city leaders adopt when tailoring policy or creating new policies. This includes both the structural and relational dimensions of city governance: how agendas are shaped, which actors are involved, and how local authority is exercised or constrained in different institutional settings.

This study also takes a longitudinal perspective, looking at how certain policy pathways evolved over time (Langley and Abdallah, 2011). In doing so, I was able to examine how institutional shifts unfolded not just as single-point interventions, but as ongoing processes shaped by adaptation,

iteration, and learning. This is particularly important to understand the relationships between governance mechanisms and institutional breaches across the chosen institutional fields.

My design choices are grounded in the belief that institutional change in cities cannot be understood through static snapshots or abstract modelling alone. Instead, we need to trace how change happens in practice, how meaning is constructed around governance actions, and how institutions evolve through context-specific interactions (Langley and Abdallah, 2011). The research methods applied here look to find evidence and examples for when cities created their own tailored policies and implemented them successfully given the need to understand retrospectively the various phases and experiences that cities may have undergone to deal with the challenges of their own. This approach has the ability to provide quality insight on the past, present, and ideas for the future for the city from the relevant stakeholders. This approach also offers a richer view of institutional transformation, one that takes seriously the complexity, diversity, and agency embedded in urban governance.

In summary, the combination of cross-sectional and embedded case data, framed through an interpretive lens and analysed comparatively, provides the methodological foundation for addressing the research questions. This design allows me to explore not only what is changing in city governance, but how and why these changes are occurring in specific institutional contexts.

The research design described above is summarised in the table 5 below.

Component	**Description**
Research orientation	Interpretive and constructivist approach aimed at understanding how institutional change occurs in city governance settings
Epistemology	Relativist – acknowledges multiple perspectives and the context-dependent nature of institutional knowledge.
Paradigm	Social constructivist – focuses on how meanings and practices are co-constructed by actors within specific urban and institutional contexts
Unit of analysis	The city, with a specific focus on breaches, governance practices and institutional responses to policy challenges
Research strategy	Comparative case study design involving cross-sectional and embedded cases to explore variation and commonalities in institutional responses

Data sources	1. Cross-sectional interviews with city leaders and mayoral representatives 2. Deep-dive interviews with diverse urban stakeholders 3. Document and case review
Case selection	Theoretical sampling – cities selected for their relevance to institutional adaptation and sustainability transitions.
Temporal scope	Longitudinal – tracing the occurrence of breaches, evolution of city-level governance and policy adaptations over time
Analytical focus	Understanding how institutional breaches are triggered and institutional governance mechanisms are reconfigured locally through principles of collaboration, incentivisation, and adaptation
Theoretical contribution	Advances institutional theory by highlighting Situated Breaches and Situated Governance as mechanisms of bottom-up, context-responsive institutional change

Table 5: Components of the research design

4.3 Data collection

The aim of this research was to understand how cities create and implement context-specific adaptations of national and international policy frameworks. At its core, the study investigates whether, and how, urban institutions breach existing institutional norms and reconfigure governance mechanisms to suit their local realities. To explore this, I collected data from multiple sources using a combination of cross-sectional and embedded case methods.

To gather empirical insight, I conducted semi-structured interviews with a range of city-level stakeholders, including mayoral representatives, policy advisors, and institutional actors involved in local governance. These interviews were designed to surface perspectives from practitioners directly involved in urban governance, allowing their experiences to inform and refine the theoretical direction of the research.

In addition, I analysed a select number of case studies to build a more holistic picture of how governance decisions are shaped in practice. These cases were chosen to reflect both proactive institutional innovation and ongoing transitions in power and responsibility between different levels of governance. Case selection was informed by my engagement with local governments, as well as by the strategic relevance of cities currently leading or preparing for sustainability transitions. The case studies are not intended to be representative in a statistical sense; rather, they serve as theoretical samples - cases that can illuminate how institutions are being reconfigured through processes of decentralisation, translation, and local adaptation (Eisenhardt, 1989).

Ultimately, these cases allow me to trace how institutional breaches are triggered, to understand how institutional governance mechanisms are shaped, enacted, and potentially transformed in the space between local and regional needs and broader institutional frameworks. This positioning, centred on the city, grounded in institutional theory, and motivated by practice frames the logic of the study and informs the subsequent methodological decisions.

The overall design combines two key strands of empirical data.

1. The first consists of cross-sectional interviews with mayors and senior representatives from cities around the world. These conversations provided broad insight into the kinds of institutional and policy challenges city leaders face, and the different approaches they adopt in response.

2. The second strand is more deeply contextual, involving targeted interviews with a range of stakeholders connected to specific urban policy cases. These allowed for a more nuanced understanding of the institutional dynamics involved in shaping, adapting, and implementing tailored governance responses.

The sampling strategy was designed to capture variation in both governance mechanisms and instances of institutional breach. Cities were selected to reflect a mix of contexts, including those in Europe, Americas as well as a sample each from Africa and Australia. The sample includes both highly-dense metropolitan cities and secondary or rapidly growing urban centres, some of which have shown signs of deinstitutionalising traditional practices and others where policy adaptation remains partial or contested. Cities such as Cardiff, Amsterdam, Singapore, Rotterdam, Melbourne, Antsirabe, and others were chosen for their relevance to the questions of how breaches and governance adaptations evolve. As Yin (Yin, 2018) argues, a multiple-case design enables theoretical replication by examining how similar processes unfold in different settings, and how divergent patterns emerge in comparable institutional fields.

The study drew on two forms of data:

1. *Semi-Structured Interviews:* I conducted semi-structured interviews with city leaders, policy officials, and governance experts who are directly involved in urban decision-making. These interviews helped uncover how institutional actors interpreted national or global policies, identified the need for local adaptation, and engaged in processes that often breached institutional norms in order to create more relevant, responsive logics and governance models.

   Participants were identified through professional city networks such as the Global Parliament of Mayors, C40 Cities, The Connected Cities Lab, and the Arup Cities Team. These organisations work directly with urban governance professionals across the globe and were instrumental in connecting me with key individuals who had firsthand experience with institutional adaptation and breaches.

   Each participant was informed in advance about ethical considerations, including:

   - Consent to recording and transcription for research purposes only

- Data storage protocols (data stored securely on University of Bamberg's encrypted file storage drives)
- Anonymity and confidentiality of individual identities
- Voluntary acknowledgement of their participation in the final monograph

In total, I conducted 63 interviews with representatives from 11 cities, resulting in approximately 4000 minutes of audio data and 400 pages of transcribed material. The interview protocol was structured around three sections:

- Section A: Policy Change – exploring recent policy changes and whether they required adaptation or breached existing norms
- Section B: Contextualisation – investigating how policies were tailored to local needs and specific contexts
- Section C: Outcomes – reflecting on risks, stakeholder engagement, and lessons learned

This structure enabled a deeper understanding of how breaches occur, not simply as acts of non-compliance, but as strategic, context-driven efforts to realign institutional logic with urban realities. In some of these instances, the interviews were with a group of individuals in a workshop setting, more so in the case of the deep-dive examples.

2. *Archival and Documentary Sources:* In addition to interviews, I gathered documentary data from a range of sources. This included press releases, municipal records, policy documents, public reports, and government strategy documents. I also accessed data from workshop minutes and public planning sessions where available. These materials helped triangulate the accounts provided in interviews and filled in key contextual details about both governance adaptation and policy breach events.

   Where possible, archival data was accessed through public records and databases, as well as shared directly by contacts in city governments. Academic and grey literature including reports from city networks, research organisations, and consultancies provided additional insight into broader governance trends. More specifically, the data required for purposes of this research was collected through access to:

Scholarly databases – Scholarly databases such as the OECD Digital Library, and UN-Habitat's Urban Data Platform had provided access to specialist papers, reports, and review articles. Access to Google Scholar articles, reports, opinion pieces and papers has provided a wealth of information to conduct the literature review.

Networks - City networks such as the Chicago Council of Global Affairs, Arup Cities, Global Parliament of Mayors, C40 helped connect with City leaders and policy personnel in City Councils & Municipalities

The aforementioned data sources have helped build a credible and quality data store to be able to comprehensively build the evidence base to answer the empirical questions.

Building on these interviews and documents, I developed a set of embedded case studies using a multiple-case design (Yin, 2018). The cases were chosen to reflect variation in institutional response, scale, and geographic setting. They include cities undergoing sustainability transitions, experimenting with governance devolution, or leading localised climate adaptation efforts. Some cases such as Antsirabe or Cardiff highlight clear instances of institutional breaches, where cities moved beyond compliance to reshape institutional expectations altogether. The following six steps structured my case study analysis:

1. Identifying and describing the case context: For each selected city, I developed a foundational understanding of the local context. This included mapping the city's governance structure, identifying key institutional actors, and describing the broader institutional infrastructure within which decisions were made. This provided a contextual baseline to support comparison across cases.
2. Uncovering the initial policy challenge: I identified the key issues that each city was responding to whether related to sustainability, social equity, infrastructure, or climate resilience. For instance, early inquiries revealed examples such as transport decarbonisation in Cardiff and climate change responses in Antsirabe as entry points into broader institutional dynamics.
3. Applying a governance and institutional lens: I used concepts from institutional theory such as institutional logics, field-level tensions, institutional breaches, and governance to frame

the questions I asked and guide the type of data I collected. This helped position governance shifts within broader patterns of institutional behaviour.

4. Tracing back the trigger for change or breach: I explored the moments or pressures that appeared to disrupt coherence in institutional infrastructure. These included environmental events, community expectations, resource gaps, or other tensions that prompted institutional actors to reconsider existing arrangements.
5. Mapping the sequence of events: I documented how cities moved from problem recognition to action, including timelines of policy development, roles played by different actors, and the process through which institutional shifts took place. I assembled these timelines gradually, drawing from both interviews and documents.
6. Capturing stakeholder roles, responses, and reflections: I recorded how various stakeholders were involved in the change process, their perspectives on implementation, and reflections on lessons learned. Interviewees often shared candid views on what worked well, what proved difficult, and how similar efforts might be approached differently in the future.

Taken together, the interview data, archival sources, and case studies formed a rich and triangulated dataset. This combination allowed me to trace patterns of institutional breaches and institutional governance mechanisms across diverse city contexts. Following the guidance for analytic generalisation (Yin, 2018), my intention was not to generalise statistically but to develop insights about how institutional breaches and institutional governance mechanisms emerge in practice. A summary of the case studies and participating cities is provided in Table 6 below.

City / Region	Institutional Field	Policy Focus	Primary Data Sources
Amsterdam	Economic growth & regeneration	Local circular economy policy	Interviews, city documents, policy papers
Humber (UK)	Economic growth & regeneration	Freeport strategy for economic regeneration	Interviews, strategic reports, government data
Chicago	Economic growth & regeneration	Local economic response to COVID-19	Policy documents, reports, public communications
Humber Region (Detailed Case)	Economic growth & regeneration	Local economic development and levelling-up agenda	Interviews, planning documents, local news; Workshops
Amersfoort	Energy transition & climate crisis	Energy transition policy and innovation	Interviews, energy transition briefs, workshops
Singapore	Energy transition & climate crisis	Green transition and urban sustainability	Interviews, programme documents, policy analysis
Antsirabe	Energy transition & climate crisis	Local climate change response	Interviews, newspaper articles, policy drafts
Cardiff Metropolitan Region (Detailed Case)	Energy transition & climate crisis	Transport decarbonisation strategy	Interviews, regional strategy documents; Workshops
London	Implementation of Sustainable development goals	Clean air and active travel policy	Interviews, city policy reports
Rotterdam	Implementation of Sustainable development goals	Health, safety, and well-being	Interviews, local authority publications
Melbourne	Implementation of Sustainable development goals	SDG localisation and urban governance	Interviews, SDG reporting tools and strategy
Bristol Cosmopolitan Region (Detailed Case)	Implementation of Sustainable development goals	Digital inclusion and innovation for sustainability	Interviews, innovation frameworks, regional data; Workshops

Table 6: Summary of case study profiles and participating cities

4.4 Data analysis

This chapter outlines the analytical steps I undertook to explore how institutional change unfolds within cities, particularly in response to evolving, context-specific challenges. An abductive research strategy (Langley and Abdallah, 2011) guided the study. Rather than applying a purely inductive or deductive lens, the abductive approach allowed for a dynamic interplay between empirical observation and theoretical refinement. This was particularly well suited to the aims of the research, which sought not only to apply institutional theory but to expand it through insights drawn from real-world governance practices in diverse urban contexts.

Step 1: Data familiarisation and deductive coding

As an initial first step, I reviewed the transcripts and the audio recording from the interviews and the data gathered through archival research thoroughly in detail to gain familiarity. It was essential to get acquainted with the collected data before proceeding with the analysis. I structured the data for every city in a consistent template. I used this template shown in Table 7 below to align with the different sections of data I had captured from the semi-structured interviews.

Institutional breaches and governance transformations
1. Changes in policy
1.1 Type of policies that are usually changed
1.1.1 Economic
1.1.2 Health
1.1.3 Infrastructure
1.1.4 Climate
1.2 Frequency of policy change
1.2.1 Annually, Quarterly, etc.
2. Contextualisation of policy
2.1 Key factors that influenced the need for change
2.1.1 Population demographics
2.1.2 Climate change mitigation mechanisms
2.1.3 Industrial growth
2.1.4 Need for educational reform
2.1.5 Geography and geopolitics

2.2 Key stakeholders involved in the change
 2.2.1 Public
 2.2.2 City Government
 2.2.3 Central/ Federal/ State Government
 2.2.4 Experts/ Specialist Group
 2.2.5 Devolved Ministries/ Administrations
3. Outcomes of the process
3.1 Key challenges, risks and issues faced
 3.1.1 Political backlash
 3.1.2 Public acceptance
3.2 Reactions from stakeholders
 3.2.1 Positive/ Negative
3.3 Mechanisms to drive adoption
 3.3.1 Incentivisation
 3.3.2 Collaboration
3.4 Reflections and lessons learned
 3.4.1 Need for more public participation

Table 7: Template to structure information captured from semi-structured interviews

The analysis began with a process of deductive coding informed by key constructs from institutional theory. Drawing from the literature reviewed in earlier chapters, I developed an initial coding framework comprising codes such as “institutional infrastructure,” “governance mechanisms,” “policy translation,” “misalignment,” “context-specific,” and “stakeholder engagement.” Deductive coding allowed me to organise the data in a way that reflected pre-existing theoretical categories while remaining open to new meanings that could emerge from within them (Hashimov, 2015). I manually applied these codes to the full corpus of data, which included interview transcripts, policy documents, and supplementary archival materials using template analysis (Easterby-Smith *et al.*, 2021). This helped me organise the data and look for patterns related to how cities were changing the way they govern in response to context-specific challenges.

Step 2: Inductive coding and thematic abstraction

With the data now coded, I next moved to group codes and themes into broader, second-order categories using thematic analysis (Braun and Clarke, 2008). This inductive step allowed me to synthesise the data gathered from the different cities within the themes and sub-themes identified in the coding stage. This step helped uncover some initial insights on similar behaviours or responses across cities around the world. A mind-map of this process is illustrated in Figure 2 below showing three different institutional fields and the cities grouped into each of those fields as key institutional actors. The policy or institutional change in question is also mentioned in Figure 2 below along with the name of the city/ region. This classification helped me to explore institutional infrastructures and institutional governance in those respective fields of play.

Emerging themes included "adaptive governance," "stakeholder-led disruption," and "infrastructural misalignment". These conceptual groupings provided the scaffolding for theorising the relationships between triggers, breaches, and governance responses.

Eventually, I could see a pattern: cities were responding to triggers such as external pressures or gaps in infrastructure by breaking away from standard practices. These breaches then led to the creation of new, tailored governance mechanisms. This pattern - trigger → breach → governance - became the core framework of the research. It helped explain how and why change happens in the way cities govern especially in the context of responding to contemporary challenges. This pattern provided a structure to conduct the within-case and cross-case analysis as detailed in the subsequent steps.

Step 3: Within-Case Analysis and Situated Themes

The next step involved analysing each city case individually to construct "within-case" narratives. This process involved tracing how institutional infrastructures functioned in each setting, identifying context-specific triggers for disruption, and noting how breaches were articulated by local actors. These case-level insights yielded situated, descriptive themes such as localised responses to regulatory voids or adaptations of governance in response to emergent community pressures, that were strongly rooted in the data.

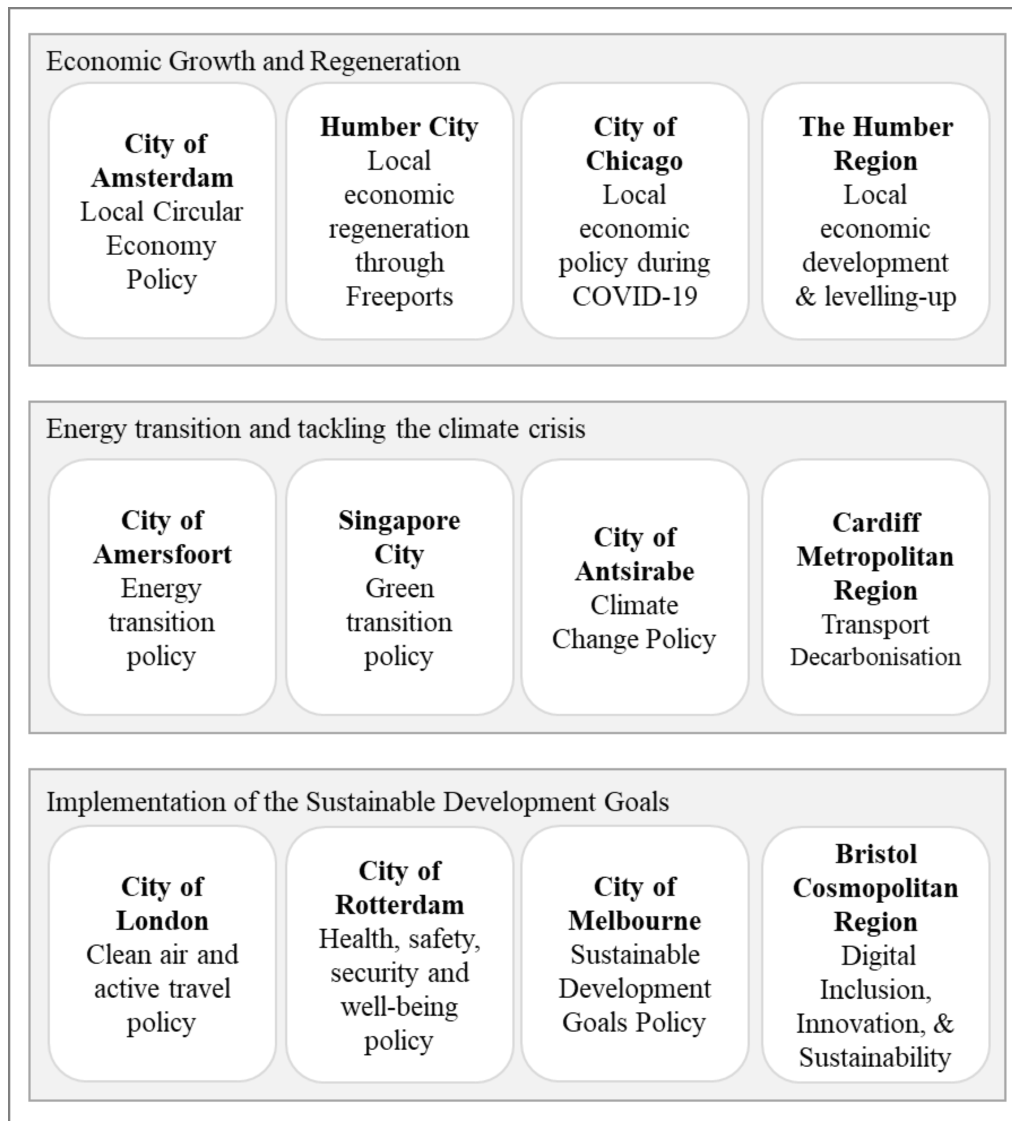

Figure 2: Mind map of the data gathering process

At this stage, I also began to identify cases where cities were not simply adapting existing policies, but innovating in ways that suggested a break from established logics. In one such example, Amsterdam's circular economy policy revealed a shift not only in regulatory practice but in how problems and solutions were framed. These patterns helped me understand this new type of breach, a locally grounded disruption in institutional coherence which became a recurring pattern in the analysis. Figure 3 below shows the flow in which the data collection and analysis steps were performed to align with the institutional theory literature.

Step 4: Cross-case comparison and pattern identification

Following (Eisenhardt, 1989), I then moved into a cross-case comparative mode, engaging in a process of constant comparison. Here, first-order, descriptive themes developed through within-case analysis were juxtaposed across cases to identify similarities and divergences. This process helped to surface patterns that were not visible when cases were viewed in isolation, particularly around how institutional breaches and governance responses varied according to context.

For example, while both Bristol and Cardiff were responding to climate-related challenges, the governance mechanisms employed in terms of partnerships, scope of action, and narrative framing differed significantly. These differences highlighted the contingent nature of institutional responses and the importance of local factors such as political leadership, actor networks, and spatial infrastructure. The comparative approach enabled me to move from mere description toward more abstract theorisation and helped me understand how local context (the trigger) shapes both the problem (the breach) and the solution (the governance mechanism).

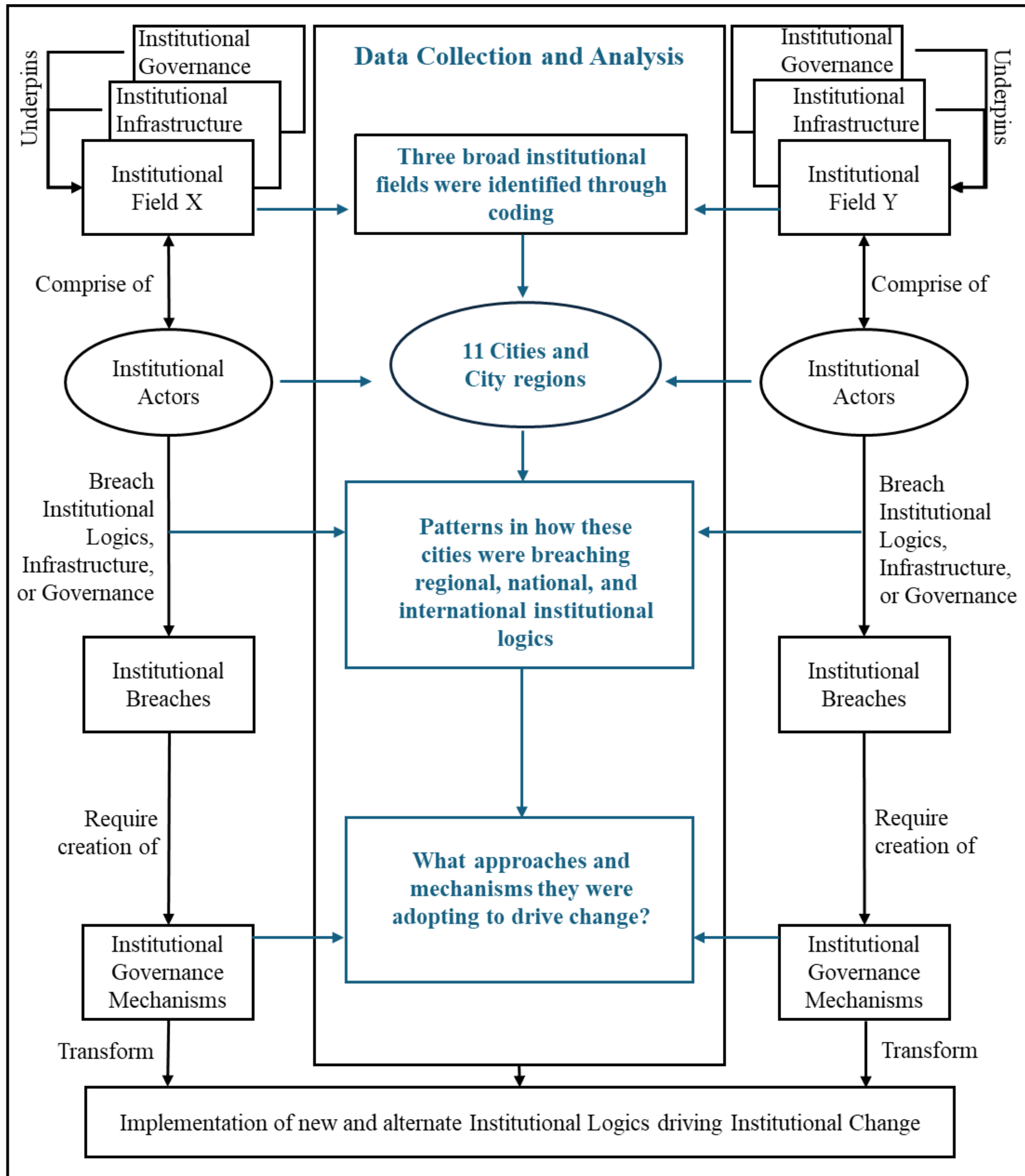

Figure 3: Illustration showing the process of data collection and data analysis

Step 5: Conceptual framing and theoretical contribution

The final stage involved translating the thematic findings into a core explanatory framework. Across cases, I observed that institutional change was initiated when cities faced misalignment between local conditions and existing institutional logics. This led to *Situated Breaches*, locally emergent and actor-mediated breaks from standardised institutional norms. In turn, these breaches prompted the development of *Situated Governance Mechanisms*, governance arrangements that were adaptive, hybrid, and tailored to the specific spatial and socio-political conditions of the city.

This analytical progression from deductive codes to situated themes, and then to theoretical abstraction led to the development of a grounded yet transferable model of institutional change. The core finding, articulated as a recursive pattern of "context-specific trigger → situated breach → situated governance," provides a novel contribution to institutional theory by explaining how cities initiate and sustain institutional transformation under dynamic and uncertain conditions.

Reflexivity and assumptions

Throughout this process, I was careful to stay aware of my own perspective. Since I was interpreting what city actors said and did, I regularly stepped back to question my assumptions. I kept notes on how I was analysing the data and checked that my interpretations were grounded in what participants actually said. This helped me stay true to the data and build a trustworthy analysis.

In summary, the analysis was shaped by a mix of structured coding and flexible thinking. I used theory to guide the process, but I also let the data lead me to new ideas. This balance allowed me to develop new concepts such as Situated Breaches and Situated Governance that make a useful contribution to institutional theory and help explain how cities are dealing with today's challenges.

5. Institutional breaches and emerging governance mechanisms in the institutional field of economic growth and regeneration

A majority of economic activity in the world happens in cities. By 2025, about 60% of the world's economic output is expected to come from around 600 cities around the world (Hirschl, 2020). This will become more pronounced and prominent going forward given the emergence of megacities (Rockefeller Foundation, 2009). By 2040, 64% of the world's population will be residing in cities and developing markets will remain key engines of global urbanisation (Euromonitor International, 2024). This chapter is focused on uncovering the subtleties around how cities grow economically and how they are regenerated and I present these through the lens of institutional theory.

In this chapter, chapter 5, and the next two chapters, chapter 6 and chapter 7, I first set out the context for why institutional breaches are occurring, the characteristics of these breaches, and the resulting governance transformations requiring introduction of new norms and practices. I present these findings in the case of three broad institutional fields – economic growth and regeneration in chapter 5, energy transition and tackling the climate crises in chapter 6, and implementation of sustainable development goals in chapter 7. I specifically highlight the occurrence of 'situated breaches', a type of breach characterised by its targeted, contextual, and rooted nature, resulting in 'situated governance mechanisms', a type of governance mechanism that drives the implementation of tailored and contextual institutional logics, through the lens of specific institutional actors, in this case – cities from around the world.

This chapter 5 is divided into four sections. In the first and second sections, I provide an insight into the existing institutional infrastructures and governance frameworks within this field, supported by some examples. In the third section, I present findings from three cities – Chicago, Amsterdam, and Humber and articulate the characteristics of the breaches and the evolution of certain types of governance approaches in these cities. I then strengthen this argument by providing a detailed case on Humber. In the final section, I summarise the findings for this specific institutional field, economic growth and regeneration, and present the consolidated findings thus evidencing the existence of situated breaches and the evolution of situated governance

mechanisms. Finally, I consolidate this in a table to summarise three important arguments that are central to this research:

1. *The type of trigger that has led to the loss of coherence in institutional infrastructure* - the reasons why these cities have tailored the traditionally known approaches to help drive economic growth and to regenerate their respective cities and communities
2. *The characteristics of the 'situated breach'* – the context in which these cities are going about creation of new institutional logics.
3. *The types of 'situated governance' mechanism that are emerging, resulting in the creation of 'situated norms' and 'situated practices'* - specific characteristics that are unique to the governance models that are driving adoption of new approaches within cities.

5.1 Existing institutional infrastructure for economic growth and regeneration

The economic growth of a country or a region in today's day and age is influenced by a number of different factors. National and urban economic models and growth frameworks often used by national-level policy makers and urban economists (Henderson, 2014) serve as valuable tools for understanding and navigating the complexities of a nation's or a region's economy. However, as the global economic landscape continues to evolve, these models, often rooted in historical data and assumptions, may become less relevant in addressing contemporary challenges. Economic models and economic growth frameworks that were created even a decade ago may not be completely relevant to deal with today's challenges, as demonstrated in the subsequent paragraphs. (Acemoglu, 2008). Widely advocated ideas of growth, improving efficiency and productivity, privatisation, and other such models (Saeed, 2010) fail to address the challenges and issues that are currently prevalent in today's modern economies. New models and mechanisms to study and drive economic growth, alongside delivering environmental, and social benefits in today's day and age are fast evolving (Lynch, 2022).

> The rapid pace of technological advancement and developments, particularly in the realm of the digital economy, has reshaped industries and created new economic paradigms (De Propris and Bailey, 2020). Concepts such as the gig economy, blockchain technology, and artificial intelligence were not as prominent a decade ago. Economic models developed in the past may struggle to account for the profound impact of these innovations on employment, income distribution, and market dynamics (Frank *et al.*, 2019).
>
> Concerns about climate change, protecting bio-diversity, and environmental sustainability have gained significant prominence in the recent years. Traditional economic growth models often fail to adequately incorporate the ecological and environmental costs associated with economic activities. Models that focus solely on GDP growth without considering sustainability can lead to detrimental long-term consequences (Dasgupta, 2021).
>
> The global economic landscape has been shaped by shifting trade dynamics, geopolitical tensions, and the rise of protectionism. Traditional trade models, such as those that follow the comparative advantage theory (Widodo, 2009), may not fully capture complexities of

modern global trade relations, including issues relating to supply chain resilience and the impact of trade on income inequality (Baldwin, 2017).

Increasing income inequality has become a pressing social issue in many economies. Economic models that do not adequately account for the distributional effects of policies and economic growth may fail to address social and political challenges arising from disparities in wealth and income (Piketty, 2014).

The COVID-19 pandemic, which emerged in 2019, exposed vulnerabilities in many economic models. The pandemic's economic impact highlighted the importance of economic resilience, the role of government intervention, and the need for flexibility in economic policy frameworks (Blanchard and Pisani-Ferry, 2021).

In summary, existing economic models and growth frameworks may not fully and holistically address the multifaceted challenges of today's rapidly changing global economy, a majority activity of which occurs in cities and urban centres around the world. To effectively address contemporary issues such as technological advancements and disruptions, environmental sustainability, trade complexities, income inequality, and global crises, economists and policymakers must adapt and refine existing models or develop new ones. As highlighted earlier, a dynamic and adaptable approach to economic analysis and policy formulation is essential to navigate the complexities of the 21st-century economy. For example, circular economic principles are gaining attraction where resource consumption is decoupled from economic growth (Ellen Macarthur Foundation, 2022). Technology has automated jobs and as a result there is a need for us to create more high value jobs specially in the manufacturing sector thus focusing on regeneration in a completely different light (Frank *et al.*, 2019). This has a direct impact on how we train young people for new skills, how we go about delivering work, and how we measure productivity and efficiency (De Propris and Bailey, 2020) and most importantly how we do this in an inclusive way to improve standard of living and to reduce inequalities (Qureshi and Woo, 2022)

I have now provided a preliminary account of the context in which the institutional infrastructure for the field of economic growth and regeneration was designed. I have also provided some insight on the changing landscape and nature of challenges emerging in our national and regional economies. I will now articulate through some examples, the institutional frameworks that exist to

support economic growth amidst today's challenges, and how this links to concepts covered under institutional theory more broadly.

Institutional infrastructures, encompassing norms and rules, constitute foundational mechanisms driving regional and global economic growth (Barnes *et al.*, 2008). These institutions significantly shape and regulate economic policies, facilitate international trade, promote collaboration and innovation, and underpin economic development. In this section, I explore some institutional norms pertinent to regional economic growth, demonstrating their direct influence on city-level dynamics. The analysis includes both localised norms, such as zoning laws, and broader frameworks, such as trade agreements, traditionally viewed as national in scope. This approach underscores the evolving interplay between local and national norms in shaping urban economic growth.

For instance, contemporary developments illustrate cities entering into international investment agreements, exemplified by initiatives like Invest Liverpool (Invest Liverpool, 2017), which elevate city-to-city collaboration to unprecedented levels. Parallelly, local zoning regulations are increasingly influenced by national priorities, as governments look to address challenges such as migration, inadequate housing, and net-zero environmental targets. These examples illustrate the multifaceted interdependencies across institutional levels, highlighting the interconnected nature of global and local economic infrastructures.

This section provides a preliminary analysis of selected institutional infrastructures operating at different hierarchical levels including international, national, regional, and local illustrating their direct and indirect roles in shaping urban functionality. By presenting this analysis through a stratified framework, I aim to clarify the relationships and dependencies among these infrastructures, offering a comprehensive lens for understanding their collective impact on economic and policy landscapes. This is presented in Table 8 below. I further refer to some of these institutional infrastructures in the individual case chapters later to show deviations from the stipulated mechanisms.

Existing institutional infrastructures for economic growth and regeneration	
Hierarchy level	**Some examples of existing institutional infrastructures**
International	• Funding: Financial resources provided by global institutions to support urban economic growth and regeneration projects. • Standards: Universal benchmarks that guide city-level operations to ensure consistency and quality in development. • Guidelines: Frameworks established by international organisations to steer urban policies and practices toward global goals.
National	• Macro-economic Policies: Broad economic strategies designed by the central government to influence urban economic environments. • Trade Agreements: Nationally negotiated accords that facilitate international trade opportunities for city economies. • Fiscal Policies: Government tax and spending strategies aimed at shaping the economic conditions of cities. • Tax Incentives: Nationally granted tax reductions or exemptions to attract investment and stimulate city economies. • Regeneration Strategies: National frameworks focused on revitalising urban areas through targeted economic and infrastructure development.
Regional	• Land Use Regulations: Policies governing how land can be utilised, ensuring balanced urban growth within a region. • Tax Incentives and Abatements: Region-specific financial incentives to encourage investment and business growth in cities. • Partnerships: Collaborative efforts among regional entities to advance urban economic initiatives.
Local	• Zoning Laws: Local regulations determining the permitted use of land and property to balance urban development. • Economic Development Incentives: Locally provided benefits to attract businesses and stimulate city economic activity. • Regeneration Initiatives: Community-focused programmes aimed at revitalising underdeveloped or declining urban areas • Business Support: Services and resources provided by local governments to foster business growth and sustainability. • Workforce Development: Local training and education programmes designed to equip residents with skills for the urban job market. • Urban Development Programmes: Comprehensive city-specific projects aimed at enhancing infrastructure, housing, and economic vitality.

Table 8: Existing institutional infrastructures for economic growth and regeneration

International Institutional Infrastructures: International Institutional Infrastructures, influencing policy making in cities, are frameworks comprising funding mechanisms, global standards, and guidelines established by international organisations to align urban economic growth and regeneration with global priorities and practices.

International trade agreements and partnerships are a good example of institutional infrastructures at an international-level that help open up foreign markets to local businesses and attract foreign investment. By reducing tariffs and other trade barriers, these agreements can make it easier for businesses to export their products and services and for cities to attract foreign companies (Whiteman and Armstrong-Gibbs, 2024). This can increase a city's economic activity, leading to more jobs and a healthier economy. However, cities need to ensure that they are competitive in the global market and that the benefits of trade are broadly shared among their residents (Rodrik, 1997).

International Monetary Fund (IMF) offers policy advice to countries on economic issues and is another good example of an entity creating enabling infrastructure at an international level. It is an international organisation that aims to promote global monetary cooperation and exchange rate stability (SCHWARTZ *et al.*, 2020). The IMF also offers financial assistance to member countries facing economic problems. Cities around the world are increasingly investing in smart city initiatives, and programmes that leverage technology and data to improve efficiency, sustainability, and quality of life for all city stakeholders. Smart city projects can attract innovative businesses and entrepreneurs resulting in strategic partnerships. In their work on conceptualising smart cities, Ojo and Dzhusupova (Ojo, Dzhusupova and Curry, 2016) describe how institutional arrangements should be considered as a key component of any smart city government initiative or programme. The research also highlights that there are very few studies that address governance in smart cities highlighting some concepts such as wiki government and crowdsourcing in this space as best practice examples (Ruhlandt, 2018).

National Institutional Infrastructures: National Institutional Infrastructures, that have a direct impact on city-level policies, comprise of strategic policies, trade agreements, fiscal measures, and regeneration strategies implemented by central governments to shape the economic and developmental trajectories of cities.

The central, federal, or national government has significant responsibilities in driving national economic growth and is a good example of an entity that is responsible for creating national level institutional infrastructures (Acemoglu, 2008). It develops and implements fiscal and monetary policies, manages taxation, and provides a regulatory framework that supports investors, and businesses (Boettke, 1994a). In their work, Boettke highlights the importance of historical studies and patterns of development across countries and periods besides formal models of growth to understand the underlying institutional infrastructure for economic development in a particular region or country (Boettke, 1994a). Central banks, another key player in supporting a nations' economic growth, are responsible for developing and managing a country's monetary policy, currency, and supply of money. Their prime responsibility is to control inflation and promote economic growth using tools such as interest rates, etc., (Duarte *et al.*, 2022) which directly affects factors promoting local economic growth at a city level. In their work on understanding institutional behaviour, Winiecki argues that the lack of presence of general rules and market institutions shaping economic behaviour in Eastern Europe have led to institutions inherited from soviet-style economies and the advantages of reforming existing institutions over building new ones (Winiecki, 1994).

Regional Institutional Infrastructures: Regional Institutional Infrastructures, spanning multiple councils, or districts, or suburban areas, facilitate intermediary regulatory frameworks, tax incentives, and collaborative partnerships that connect national policies to local contexts, fostering cohesive economic development within regions.

Tax incentives and abatements are examples of regional institutional infrastructures that are widely used as strategic tools by cities to stimulate economic development (Agostinis and Palestini, 2021). These fiscal tools are designed to attract and retain businesses by offering temporary reductions or eliminations of taxes (Dalehite, 2006). The goal is to make the locality more attractive to businesses, leading to job creation, increased economic activity, and an expanded tax base in the long run. Tax incentives can be targeted at various sectors, including manufacturing, technology, and renewable energy, to promote specific industries (Somanathan *et al.*, 2014). However, while these incentives can be powerful tools for economic growth, they must be carefully managed to ensure they actually lead to

long-term benefits rather than just short-term gains or an excessive burden on public finances (Bartik, 1991).

Further at a regional scale, more local institutions set the rules for functions such as attracting foreign investments, promoting entrepreneurship, identifying regional levers for economic growth, and planning investments in local infrastructure. Other institutions such as the World Trade Organisation, regulatory authorities, stock exchanges, research and development institutions, think tanks, and other academic and educational institutions play a critical role in supporting economic development both globally and regionally (Mavroidis, 2016).

There are many other regional and local level institutions such as the chambers of commerce, economic development agencies, trade and investment promotion agencies, labour market and employment services all of which play a critical role in promoting economic growth (Popescu, 2016). A supporting, and conducive climate including factors such as political stability, organisational capability, and institutional capacity are important for these institutions to effectively perform their role (Asteriou and Siriopoulos, 2000). Most importantly, alignment between regional, local, and national institutions to ensure coherence between policy creation and policy implementation is essential to drive consistent and sustainable economic growth (Somanathan *et al.*, 2014).

Local Institutional Infrastructures: Local Institutional Infrastructures are ground-level mechanisms, including zoning laws (Fischel, 2015), economic incentives (Agostinis and Palestini, 2021), and urban development programmes (Saeed, 2010), designed to directly impact and drive economic growth and regeneration within cities.

Local-level institutional infrastructures such as urban planning and community development are comprehensive approaches to creating pleasant, efficient, and sustainable environments for people to live and work. Effective urban planning involves managing land use, infrastructure, transportation, and environmental resources to meet the city's current and future needs (Yigitcanlar and Teriman, 2015). Community development focuses on improving the quality of life in neighbourhoods, often with a particular focus on underserved areas. Both are crucial for attracting residents and businesses, improving property values, and fostering a sense of community and belonging. However, these efforts

require significant coordination, resources, and long-term commitment (Banerjee and Loukaitou-Sideris, 2019). City planning authorities and economic councils play an important role in shaping urban development. By developing and implementing suitable and appropriate regulations, and policies, they have the power to attract businesses, encourage investments, and support a vibrant commercial scene in cities (Yigitcanlar and Teriman, 2015). Brown, Keith, and Wong in their work on studying urban water management in Australian cities, highlight the importance of the presence of a future city state benchmarking tool and propose a framework to study transition policy research further (Brown, Keath and Wong, 2009).

Zoning laws and land use regulations are other examples of foundational institutional norms that significantly influence local economic growth in cities. These regulations are critical as they control the physical development of land and dictate ways in which individual properties may be put to use (Jepsen Jr and Haines, 2014). The essence of zoning is to segregate land into zones where certain activities are permitted or prohibited. The zoning laws essentially serve as a blueprint for the city's development, guiding where residential, industrial, commercial, and recreational areas are located (Fischel, 2015). The impact of zoning laws on economic growth is multifaceted. On one hand, they can encourage particular types of economic activities in certain areas. For example, a city might designate a particular area as a commercial district, encouraging the concentration of shops, offices, and restaurants, which can be a boon for economic activity (Jepsen Jr and Haines, 2014). On the other hand, overly restrictive zoning can limit the supply of housing and commercial spaces, increase costs, and stifle innovation by preventing mixed-use development or the repurposing of old buildings (Fischel, 2015).

Economic development incentives, another example of local level infrastructure, are direct measures taken to encourage the establishment, expansion, or retention of businesses in a city. These can include grants, loans, or services provided to businesses (Dalehite, 2006). The goal is to stimulate economic growth by making the city an attractive place for businesses to invest and create jobs. However, like tax incentives, these measures must be carefully designed and monitored to ensure they are effective and provide a good return on investment for the public (Bartik, 1991).

Going further down the hierarchy, in cities around the world, various institutional infrastructures exists to drive economic growth and sustainable development. These institutions often work closely with national and international institutions to create an environment that supports investments, growth, innovation, and economic prosperity in their respective cities. Several city-level entities including public-private partnerships, development agencies, incubators and accelerators amongst others play a part in growing and contributing to the local economy (Cohen and Muñoz, 2016). Their success depends on the resilience of the city's economy to sudden shocks, diversity of the economy, governance capacity, and collaboration across multiple stakeholder groups (Borsekova, Nijkamp and Guevara, 2018).

While there are robust institutional infrastructures in place, these are not consistent across cities around the world as discussed in some of the examples above. Adding another layer of complexity are the numerous challenges and opportunities that cities are now facing including but not restricted to aspects such as migration, climate change, decarbonisation, technology leapfrogging, housing crises, and many more. These require a rethink of how institutional norms work and evolve in cities. Several cities, specifically those in centralised states like the United Kingdom, are asking for greater freedom on financial aspects to enable local policy makers and politicians to plan and maximise the growth potential for their respective cities. In London, for example, only 7% of tax paid by the residents and businesses in London is redistributed directly by local elected bodies (Core Cities, 2020). There are several governance bodies and institutions around the world to tackle different challenges. However, with changing contexts, increasing city responsibilities, and unique city-level challenges, these institutional mechanisms have not evolved and have not been sufficiently matched with an increase in fiscal autonomy to support economic growth at the city-level (Government office for Science, 2014).

In this section, I have provided an account of the existing institutional infrastructures in the context of the institutional field of economic growth and regeneration. In the subsequent chapters, I refer back to the infrastructures discussed in this section to show the types of triggers that are occurring to help close the void that is not filled by these existing institutional infrastructures. I also refer to these to demonstrate the characteristics of the situated breaches that happen to manifest differently in different cities.

5.2 Existing institutional governance frameworks for local economic growth and regeneration

Governance frameworks and mechanisms exist to maintain the rules set by the supporting and underlying institutional infrastructure (Barnes *et al.*, 2008). These are pivotal in the pursuit of local economic growth and regeneration. These frameworks encompass a range of formal (structured, regulated, and often institutionalised processes that are legally or officially recognised e.g., public-private partnerships, economic development plans, etc.,) and informal arrangements (non-regulated, community-driven, or relational approaches e.g., community-led initiatives, academic collaborations, etc.,), often involving diverse stakeholders, to coordinate, plan, and execute strategies aimed at regenerating and revitalising local economies (Licciardi and Amirtahmasebi, 2012). The stakeholders to be engaged, and the interactions required between them are instrumental in driving and maintaining continuity in institutional logics.

In the previous section, I explored examples of institutional infrastructure frameworks that underpin local economic growth in urban contexts. This section shifts focus to examine the governance frameworks that operationalise and that hold the relevant stakeholders accountable to comply and deliver against those infrastructures. These governance mechanisms should not be understood as isolated interventions but as interconnected components that foster collaborative and inclusive economic landscapes. Accordingly, this section provides a preliminary analysis of select institutional governance mechanisms, emphasising their direct and indirect influences on city functionality. By presenting these governance frameworks in a hierarchical format - encompassing international, national, regional, and local governance levels - the discussion aims to illuminate their interdependencies and roles in shaping urban economic governance. This is presented in Table 9 below. I further refer to some of these institutional governance frameworks in the individual case chapters later to show deviations from the stipulated mechanisms.

Existing institutional governance mechanisms for economic growth and regeneration	
Hierarchy level	**Some examples of institutional governance mechanisms**
International	• United Nations: International organisation that influences city policies through global initiatives and programmes aimed at sustainable urban economic development. • The World Bank: A global financial institution providing funding and expertise for city infrastructure projects and economic growth strategies.

	• Organisation for Economic Cooperation & Development: An international body that offers policy guidance and best practices to enhance economic performance in cities.
National	• Central Banks: National financial authorities that impact city economies through monetary policies affecting lending, inflation, and investment. • Federal Ministries: National government departments that develop policies and allocate resources for urban economic development and regeneration. • National Policy Bodies: Organisations that create nationwide strategies influencing economic growth and regulatory environments within cities. • National Development Agencies: Government agencies that implement development projects and programmes to stimulate economic activity in urban areas. • Federal Regulatory Agencies: National entities that enforce laws and regulations shaping the business climate and economic health of cities.
Regional	• State Departments: Regional government bodies that administer policies and resources affecting economic development in cities within their jurisdiction. • Economic Development Boards: Regional organisations promoting investment, business growth, and job creation in cities. • Urban Planning Authorities: Agencies responsible for guiding the physical development and land use planning of cities to support economic objectives. • Regional Economic Growth Ministries: Government departments focused on enhancing economic prosperity and addressing regional challenges impacting cities. • Regional Development Authorities: Organisations that coordinate and implement development initiatives across multiple cities in a region. • Public-Private Partnerships: Collaborative arrangements between regional governments and private sector entities to fund and manage urban development projects.
Local	• Community Development Corporations: Non-profit organisations that work at the neighbourhood level to drive economic revitalisation and community improvement. • Business Support Services: Local programmes providing assistance, resources, and guidance to city businesses to foster economic growth. • City Councils: Elected municipal bodies that make decisions on policies, budgets, and initiatives directly affecting the city's economy. • Municipalities: Local government administrations responsible for managing city services and implementing economic development strategies. • Economic Development Departments: City agencies dedicated to attracting investment, supporting businesses, and creating jobs within the urban area. • Business Improvement Districts: Designated areas where local businesses fund and collaborate on projects to enhance economic activity and urban environment.

Table 9: Existing institutional governance mechanisms for economic growth and regeneration

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International governance bodies: International governance bodies are global institutions and frameworks, such as the United Nations, the World Bank, and the OECD, that provide guidance, funding, and policy coordination to align city-level and urban economic development with international goals and standards.

The World Bank, an example of a governance entity at an international level, offers grants and loans to the governments of low and middle income countries to drive grass-roots innovation in cities. The main objective of this institution is to support development of infrastructure, projects, and initiatives with a view to alleviate poverty and promote sustainable economic growth (Cammack, 2004). Regional Development Banks such as the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction Development provide financial advice and technical assistance to member countries in their respective regions to support economic growth and urban development. In their work on transnational governance in motion, Agostinis and Palestini discuss the role of regional development banks and explore the conditions leading to the breakdown of transnational governance in South America (Agostinis and Palestini, 2021).

National governance bodies: National governance bodies are centralised entities, including federal ministries, central banks, and national regulatory agencies, that establish policies, regulations, and development programmes to drive economic growth and regeneration within cities.

National development agencies promote economic growth, job creation, and industrial development at the national level. They often collaborate with regional and local authorities to implement economic development frameworks and strategies. Koh, in their work on infrastructure, institutions, and governments, describe the work done by the government of Singapore to remake itself as an innovation based economy (Koh, 2006a).

Regional governance bodies: Regional governance bodies are intermediary entities, such as state departments, economic boards, and regional development authorities, that adapt national policies and coordinate economic initiatives across cities within a region.

Regional development authorities are a good example a governance entity at a regional level. These are organisations that are responsible for coordinating and implementing

strategies to foster economic development in a specific geographic region. They often collaborate with local governments, businesses, and non-profit organisations to drive growth. For example, Tennessee Valley Authority (TVA) is a federal corporation in the United States that focuses on economic development and environmental stewardship across the Tennessee Valley region, covering parts of seven southern states (Tennessee Valley Authority, 2023). Another example is The Northern Powerhouse in the UK which is a government initiative to promote economic growth and investment in the North of England. It involves various regional development authorities, local governments, and businesses (HM Government, 2023). The Barcelona Regional Agency has been pivotal in strategic urban planning by providing strategic foresight (Blanco, Salazar and Bianchi, 2020);

Public-private partnerships (PPP) within cities facilitate collaboration between city governments and private sector to jointly invest in infrastructure development thus boosting economic growth (Koppenjan and Enserink, 2009). Wu and Peri in their work on this subject explore the differences between public-private partnerships in the water sector in cities in India and China (Wu, Schuyler House and Peri, 2016). For example, The Denver Union Station Redevelopment project in Denver, Colorado, transformed an aging transportation hub into a vibrant mixed-use development through a PPP that involved both public and private investments (Denver Union Station Project Authority, 2023). Public-Private Partnerships powering infrastructure projects, such as the Cross Rail, in London is another good example of regional governance entity enabling economic growth and development (Yescombe, 2011);

Local governance bodies: Local governance bodies are city-level organisations, including municipalities, economic development departments, and business improvement districts, that directly implement policies and programmes to enhance economic growth and urban revitalisation.

Business Support Services and Business Improvement Districts are classic examples of local governance bodies. Business support services often exist within cities in the form of departments or agencies to support local businesses and SMEs on matters relating to permitting, licensing, and providing access to market information (Oc and Tiesdell, 1999).

A research by Boter and Lundstrom explores how SMEs in Stockholm utilise the services offered by the business support system in the city (Boter and Lundström, 2005). These are often located in specific Business Improvement Districts (BIDs) where property owners and businesses agree to pay an additional tax or levy to fund services and improvements within the district (Oc and Tiesdell, 1999). These services often include enhanced security, cleanliness, and marketing efforts to attract visitors and investors. For example, London Bridge BID is one of the several BIDs in London that focuses on enhancing the local area by investing in infrastructure, events, and promotion to attract businesses and visitors (Foundation, 2023). New York City's Lower Manhattan BID has revitalised downtown business areas (Houstoun, 2003);

Community Development Corporations (CDCs) are non-profit organisations dedicated to revitalising and improving underserved communities through a range of initiatives, including affordable housing, small business support, and community programmes. For example, The Local Initiatives Support Corporation (LISC) operates across the United States, working with CDCs and local partners to provide funding and technical assistance for community development projects (LISC, 2023). The Eastside Community Network (ECN) in Detroit is a CDC that focuses on community and economic development in Detroit's East Side, including affordable housing, youth programmes, and neighbourhood revitalisation (ECN Detroit, 2023). In Cleveland, CDCs have championed affordable housing and economic inclusivity through grassroots economic initiatives (Silverman, Yin and Patterson, 2013).

In the quest for sustainable urban development, cities worldwide have become laboratories for innovative economic strategies (Hirschl, 2020). Central to this pursuit are key governance mechanisms designed to drive local economic growth and regeneration. These examples of governance frameworks demonstrate the diversity of governance mechanisms that exist to drive economic growth at a city or a regional level. Most often successful outcomes rely on effective collaboration and partnerships, resource allocation, knowledge sharing, and a shared vision among relevant stakeholders to drive growth in their cities and regions.

In this section, I have provided an account of the existing institutional governance mechanisms in the context of the institutional field of economic growth and regeneration. In the subsequent

chapters, I refer back to the governance mechanisms discussed in this section to show the types of 'situated' governance mechanisms that are now evolving to cater to the changing urban dynamics to help close the void that is not filled by these existing governance mechanisms. I also refer to these to demonstrate the situated practices and situated norms that are forming as part of the evolving governance frameworks.

5.3 Findings from select cities and city regions

In this section on economic growth, I examine three cities – Amsterdam, Humber, and Chicago – and their respective economic growth and regeneration initiatives. Each of these cities experienced a loss of coherence with existing institutional infrastructures, resulting in what I describe as 'situated breaches'. These breaches were characterised by unique contextual pressures, such as mismatches between legacy systems and emerging demands, governance failures, or gaps in institutional responses to local challenges. In response to these breaches, each city devised new governance mechanisms, referred to here as 'situated governance mechanisms', tailored to address their specific contexts and drive new institutional logics. The table below outlines the triggers for loss of coherence in institutional infrastructure – the reasons for the breach, the core characteristics of the situated breaches and the pivotal governance decisions explored in each case. In this section, I trace the evolution of these initiatives, highlighting the nature of the breaches and demonstrating how Amsterdam, Humber, and Chicago developed 'situated practices' and 'situated norms' that underpin their governance mechanisms. Through this analysis, I demonstrate the critical role of institutional breaches in prompting context-specific governance innovations that reflect the dynamic realities cities face today. A summary of the triggers, characteristics of situated breaches, and the type of situated governance mechanisms is shown in Table 10 below.

	Amsterdam	Chicago	Humber	The Humber Region
Trigger for loss of coherence in institutional infrastructure	• Contextual pressures (regulatory misalignment) • Aspirational shortfall	• Contextual pressures (social and economic disparity) • Stakeholder expectations	• Contextual pressures (Industrial transition) • Stakeholder expectations	• Contextual pressures (Industrial transition) • Stakeholder expectations
Characteristics of the 'Situated breach'	• Rooted • Targeted	• Rooted • Relational	• Rooted • Relational	• Rooted • Relational • Targeted
Type of 'Situated Governance' mechanism	• Collaborative • Incentivised	• Collaborative • Incentivised	• Collaborative • Adaptive	• Collaborative • Adaptive • Incentivised

Table 10: Summary of findings from select cities under economic growth and regeneration

5.3.1 The City of Amsterdam – Local circular economy policy

In this section, I provide insight into Amsterdam's effort to create a tailored policy for embedding circular economic principles in the city. I emphasise the challenges that are unique to Amsterdam, the approach followed by the city, and how that led to creation of new models for governing the implementation. Throughout this description, I take an institutional theory lens to uncover the 'situated breaches', the reasons underlying those breaches, and the resulting 'situated governance' mechanisms.

Context: The policy under consideration for the purposes of this research is the circular economy policy for Amsterdam. Amsterdam has set an ambition to become a circular city by 2050 and has identified three focus areas to achieve this (Amsterdam, 2021). These priorities align with the wider Dutch National Government Strategy to transition to circular economy as a country. However, the approaches, the timelines, and the incentives adopted by Amsterdam differ, reflecting the city's specific challenges and opportunities. Based on the outcomes of this policy implementation, a standard for the rest of the Netherlands will be developed (The Dutch Government, 2016).

Triggers for loss of coherence in institutional infrastructure: Amsterdam's reasons for adopting circularity are unique to the city and reflect a broader loss of coherence to the existing national institutional infrastructure.

- *Contextual Pressures:* Amsterdam faces several localised challenges that have necessitated its strategic shift towards a circular economy. Growing socio-economic inequality has widened divisions across the city, while biodiversity loss continues at an alarming rate. Compounding these issues, nearly a third of Amsterdam's food supply is wasted each year, adding pressure on the city's environmental footprint and highlighting inefficiencies in its resource management. Furthermore, sectors such as textiles and electronics manufacturing have become major contributors to pollution and resource depletion (City of Amsterdam, 2020). These interconnected challenges have elevated the urgency of reform beyond traditional environmental arguments. As one policymaker, who was interviewed as part of this research, put it…

"Amsterdam's waste crisis and the need to rethink resource flows are no longer just environmental imperatives but economic and social ones as well"

…..a statement that captures how sustainability concerns have become embedded in the city's broader governance and institutional priorities.

These pressures highlight the need for context-specific approaches to ensure sustainable economic development thus forcing Amsterdam to deviate from certain national macro-economic policies.

- *Aspirational Shortfall:* Amsterdam has set out an ambitious vision to become a fully circular city by 2050, with interim targets such as halving the use of new materials, shortening food supply chains, and reducing overall consumption by 20% by 2030 (City of Amsterdam, 2020). However, despite this high-level commitment, actual progress in certain key sectors has been uneven. The shift toward sustainable and recyclable materials in the built environment has been slow, hindered by a combination of regulatory inertia, technological limitations, and a lack of market readiness. These gaps between aspiration and implementation are especially evident in construction, where, as Circle Economy (Circle Economy, 2021) points out,

  "the built environment accounts for 40% of material use in Amsterdam, yet circularity in this sector remains nascent."

  The quote highlights the challenge of translating broad sustainability goals into meaningful change within established sectors revealing an aspirational shortfall that highlights the complexity of institutional transformation. This shortfall underscores the need for developing innovative governance mechanisms to bridge the gap between ambition and execution thus challenging the national infrastructure on their standards and aspirations.

Amsterdam's institutional breach is a result of deviations from macro-economic policies and setting greater ambitions compared to the national goals. The triggers for loss of coherence - contextual pressures such as inequality, declining biodiversity, and food waste, alongside an aspirational shortfall in transitioning to sustainable construction, highlight a divergence from broader international and national institutional infrastructures. Amsterdam's challenges required a localised response that extended beyond the Netherlands' overarching circular economy framework and the EU's broader sustainability goals. This breach underscores how international

institutional infrastructures, such as global sustainability standards and circular economy principles promoted by the European Union, were insufficiently tailored to Amsterdam's unique socio-economic and environmental context, necessitating adaptations at the city level – breach that I refer to in this case as 'situated breaches'.

Characteristics of situated breaches: Amsterdam's approach to achieving circularity exhibits distinct characteristics of situated breaches.

- *Rooted:* Amsterdam's circular economy framework is not imposed from above but emerges from the city's own cultural, environmental, and economic realities. Its approach is deeply rooted in the local context, drawing strength from the city's established values, community-driven innovation, and sectoral capabilities. Rather than treating circularity as an abstract or technical goal, Amsterdam has framed it as a practical and place-specific transformation. A central tool guiding this shift is the Amsterdam City Doughnut, developed in collaboration with economist Kate Raworth, which integrates global sustainability targets with local socio-economic needs (City of Amsterdam, 2020). As a Fellow from the Ellen MacArthur Foundation, who was interviewed for the purposes of this research, noted,

    > *"Amsterdam is pioneering a circular model that focuses not just on the small but on scaling solutions in ways that retain local benefits - this is a nutrient economy in action."*

  The quote underscores how Amsterdam's approach is not only ambitious but also grounded in the principle that circularity must serve the city's people and ecosystems, not just its infrastructure.
- *Targeted:* Amsterdam's strategy encompasses precise and sector-specific interventions to accelerate the transition towards a circular economy. The city is actively lobbying the Dutch Government to introduce fiscal instruments, such as tax incentives and subsidies, that promote sustainable production and consumption (The Dutch Government, 2016). Additionally, Amsterdam is working to influence consumer behaviour by encouraging the adoption of eco-friendly purchasing habits and waste reduction practices. At the same time, the city is pushing businesses to fundamentally restructure their value chains, integrating circular principles such as resource efficiency, product longevity, and closed-loop production processes (City of Amsterdam, 2020). These targeted efforts aim to create a comprehensive and systemic shift across industries, ensuring that sustainability becomes a core element of economic and social

development. Amsterdam's approach goes beyond influencing individual behaviours; it strategically targets systemic change. As the city's Deputy Mayor states…….

"We're not just changing behaviours - we're redesigning value chains and encouraging circular business models that serve the future economy" (City of Amsterdam, 2020).

These actions reflect a focused effort to drive transformation at the structural level, ensuring that businesses integrate circular principles into their operations, supply chains, and long-term strategies, thus helping achieve measurable progress in key areas, particularly food, construction, and textiles.

To summarise, Amsterdam's policy to adopt circular economy is tailored to the city's economic circumstances, challenges that are specific to Amsterdam, and timelines that are realistic for the city to become circular by 2050. While the policy broadly aligns with the central government's policy on circular economy, the approach reflects distinct localised characteristics and targeted initiatives to address the city's specific needs.

Situated governance mechanisms: To deliver on its comprehensive circular economy strategy, the City of Amsterdam has developed tailored governance mechanisms that are collaborative and incentivised, supported by situated norms and practices.

- *Collaborative:* Amsterdam's transition to a circular economy is fundamentally collaborative in nature. The city has adopted a governance approach that brings together actors from across the public, private, and civic sectors, ensuring that circularity is not pursued in isolation but co-produced through shared responsibility. This collaborative ethos is visible in the city's support for circular innovation hubs, which serve as platforms for cooperation between businesses, start-ups, academic institutions, and civil society actors (Heurkens and Dąbrowski, 2020). These hubs support pilot projects, living labs, and experimentation with real-world applications of circular principles. Through such initiatives, Amsterdam is actively facilitating environments where new ideas can be tested, adapted, and scaled. As one circular economy advisor, while responding to an interview question for this research, noted,

  "The success of Amsterdam's strategy lies in its ability to create partnerships across public, private, and civic sectors, ensuring circularity becomes part of everyday decision-making."

This emphasis on inclusive and ongoing collaboration has enabled the city to embed circular thinking into routine governance processes, making the transition more resilient, scalable, and context-aware.

Situated Norms and Practices: This collaborative approach is operationalised through local laws mandating circular materials in construction, regulations to minimise food waste, and legislative frameworks supporting green procurement. Practices include launching partnerships with stakeholders, providing financial incentives such as grants and subsidies, and implementing education campaigns to change consumption behaviours.

- *Incentivised:* Amsterdam's circular economy strategy is supported by a range of targeted incentives designed to lower the barriers to adoption and accelerate behavioural change. These incentives include grants and subsidies for businesses adopting circular practices, as well as tax benefits for those investing in sustainable innovation. The city also fosters public-private partnerships that provide financial and technical support to circular projects, particularly in resource-intensive sectors such as construction and manufacturing. Complementing these measures are public awareness campaigns aimed at engaging citizens and building a shared understanding of circularity. As one circular economy official who was interviewed explained,

> *"Incentives are essential to lower the barriers for businesses to innovate, especially in construction and manufacturing sectors."*

This statement highlights how financial tools are not simply support mechanisms but are viewed as strategic enablers that make systemic change feasible, especially in areas where upfront investment or risk may deter experimentation. By embedding incentives within its broader governance framework, Amsterdam ensures that innovation is both encouraged and sustained over time.

Situated Norms and Practices: Incentivisation is supported by policies that offer financial benefits for sustainable practices, such as tax reductions for circular businesses and subsidies for research into circular solutions. Practices involve the development of new projects like urban farms, partnerships with educational institutions to promote circular economy education, and community engagement initiatives to raise awareness and participation in circular activities.

Amsterdam's collaborative and incentivised governance mechanisms align with broader international and national governance frameworks but exhibit key adaptations to address the city's specific needs. While leveraging European Union circular economy policies and the Dutch national strategy as a foundation, Amsterdam tailored these frameworks to local realities by introducing city-specific norms and practices, such as the Amsterdam City Doughnut model and circular innovation hubs. These adaptations illustrate how city-level governance can serve as a bridge between global sustainability agendas and actionable local strategies, creating a model for urban governance that is both aligned with international goals and attuned to local challenges

City	Amsterdam, Netherlands
Policy	Local circular economy policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Increased inequality | Declining biodiversity | A third of Amsterdam's food is wasted | Textiles and electronics manufacturing are causing an environmental burden | Lack of sustainable and recyclable materials in the construction industry • Aspirational shortfall: Amsterdam is set to become fully circular by 2050
Characteristics of the situated breach	• Rooted: Model rooted in the economic fabric of Amsterdam - The Amsterdam Doughnut – an economic model that enables economic prosperity while respecting the boundaries of the planet. • Targeted: The interventions are targeted across multiple sectors e.g., textiles, construction, manufacturing, etc.,
Situated governance mechanisms	• Collaborative: Dedicated collaborative framework involving various city level stakeholders; Collaboration with businesses to develop circular economy agreements; Set-up of circular economic hubs, living labs, and pilot projects to bring together businesses, start-ups, and academia to demonstrate circular economic solutions • Incentivised: Incentivisation mechanisms to support adoption of circular practices | Invest in public awareness campaigns to engage citizens and businesses | Offer funds and grants to support circular projects and innovations

Table 11: Summary of Amsterdam's transition to circular economy

Amsterdam's transition to a circular economy provides a compelling case for understanding institutional breaches and their governance implications, as summarised above in Table 11.

- The triggers for loss of coherence in institutional infrastructure were primarily contextual pressures and aspirational shortfall, reflecting socio-economic and environmental challenges unique to Amsterdam.
- The characteristics of the situated breaches were rooted and targeted, addressing specific city challenges while delivering measurable local benefits.
- The resulting situated governance mechanisms, a combination of collaborative and incentivised approaches. emerged through new norms and practices tailored to the city's needs. These mechanisms showcase the role of context-specific governance in addressing institutional breaches while driving transformative urban agendas.

5.3.2 The Humber – Local economic regeneration by securing freeport status

In this section, I provide insights into the Humber's approach to securing Freeport status and its implications for local economic growth and regeneration. The analysis focuses on the region's unique collaborative proposition, involving local councils, private sector entities, and academic institutions. Through the lens of institutional theory, I uncover the 'situated breaches' observed in this case, the contextual triggers driving these breaches, and the governance mechanisms designed to achieve the shared objectives of the Freeport initiative for this region.

Context: The policy under consideration is the local economic regeneration spurred by the Humber region's bid to secure the Freeport status. In 2021, the UK Government introduced a proposal to develop Freeports, special areas that offer tax and customs benefits to businesses, as part of its agenda to boost economic growth, decarbonisation, and regional regeneration (Department of Levelling-up, 2021). Unlike other regions that submitted individual bids, the Humber region adopted a unique approach by creating a consortium comprising four councils - Hull City Council, Goole City Council, North Lincolnshire Council, and North-East Lincolnshire Council, along with private sector entities and academic institutions. This collaborative approach, led by the Humber Local Enterprise Partnership (LEP), resulted in a transformational bid that secured Freeport status for the region (Associated British Ports, 2023).

Triggers for Loss of Coherence in Institutional Infrastructure: The Humber region's adoption of a consortium-based approach represents a clear example of an institutional breach, deviation from regional and national institutional infrastructures, where traditional norms and approaches were altered to address the region's specific challenges and opportunities.

- *Contextual Pressures:* The Humber region stands as the UK's largest industrial quarter and the highest carbon-emitting cluster, creating a complex landscape of both opportunities and challenges. On one hand, its industrial strength positions it as a key player in the nation's transition to a low-carbon economy. On the other, the region faces immense pressure to reduce emissions, modernise infrastructure, and implement sustainable practices while maintaining economic competitiveness (Humber Industrial Cluster Plan, 2023). The urgency to attract investment, align with national and international decarbonisation targets, and address long-standing regional economic disparities has compelled stakeholders to move beyond traditional approaches. This shift involves fostering cross-sector collaboration, leveraging innovative

policy mechanisms, and integrating new technologies to ensure that the region remains both economically viable and environmentally responsible in the long term. As one director at a local council who was interviewed for the purposes of this research noted,

> *"The private sector, led by the Chamber of Commerce' was absolutely adamant that it had to be a single proposition and divorcing the two sides of the story for economic development purposes made no sense because it's one economy."*

This unified approach highlights how regional pressures necessitated a breach from established norms to create a single, cohesive bid.

- *Stakeholder Expectations*: In the Humber Freeport case, private sector involvement played a pivotal role in shaping the direction and legitimacy of the institutional breach. Local businesses and regional chambers of commerce were vocal in their support for a unified Freeport proposal, recognising that fragmented approaches across multiple authorities would weaken the region's competitive edge. Their advocacy not only accelerated coordination among public actors but also helped forge a shared institutional logic rooted in regional economic regeneration. This logic emphasised efficiency, inclusivity, and long-term economic opportunity. As outlined in the Humber Industrial Cluster Plan (Humber Industrial Cluster Plan, 2023), this alignment between public goals and private sector expectations was key to generating momentum and collective buy-in. One representative from Associated British Ports, in a workshop supporting this research, remarked that…

> *"the potential to generate over 7000 high-value jobs as a result of attracting investments into the region has been a huge motivation and driver for key stakeholders to continue to stay involved in the Freeport activity."*

This perspective underscores how stakeholder expectations were not simply external pressures but deeply intertwined with the design and persistence of the governance response. The promise of economic uplift created a compelling incentive for stakeholders to remain engaged and work collaboratively towards shared outcomes.

These triggers reflect a breach of national institutional infrastructures governing regional economic development. While the UK Government's Levelling-Up agenda (Department of Levelling-up, 2021) provided a broad framework, the Humber region's deviation from individual bids to a consortium-based approach represents an adaptation that aligned national goals with localised strategies to maximise regional benefits.

Characteristics of Situated Breaches: The Humber region's approach to securing Freeport status exhibits distinct characteristics of situated breaches.

- *Rooted:* The consortium-based proposition was designed to reflect and respond to the specific needs, challenges, and opportunities of the Humber region. Recognising the intricate economic interdependencies between the four councils, the initiative fostered a collaborative approach that leveraged the region's industrial strengths while addressing local priorities and deeply-rooted challenges. By aligning closely with regional decarbonisation goals, the Freeport initiative ensured that economic growth and sustainability were pursued in tandem. This integrated strategy generated localised benefits, such as job creation, supply chain development, and investment attraction, which would not have been achievable through isolated or fragmented bids. By tailoring solutions to the region's distinct industrial and economic landscape, the initiative positioned the Humber as a model for place-based economic transformation. As the Humber Industrial Cluster Plan highlighted,

  "The size of the opportunity, coupled with the fear of losing the competition, brought regional stakeholders together to deliver a truly transformational bid" (Humber Industrial Cluster Plan, 2023).

- *Relational*: The Humber Freeport initiative stands out for the strength of its relational dynamics, particularly between public and private sector stakeholders. Unlike other regions where ports submitted individual bids for Freeport status, Humber pursued a unified, collaborative approach by forming a consortium that brought together four ports across four different local council areas. This integrated proposition was not only a strategic move but also a reflection of pre-existing trust and mutual recognition among regional actors. The active participation of the Humber Local Enterprise Partnership (LEP), chambers of commerce, and academic institutions further reinforced this collaborative ecosystem, allowing diverse voices to contribute to a shared vision for economic regeneration. As a representative from Associated British Ports (Associated British Ports, 2023) noted,

  "This approach has gained traction and momentum owing to the private-sector involvement and the combined benefit for businesses and communities across the four councils involved."

This comment illustrates how the strength of inter-organisational relationships created not just a shared proposal, but a shared commitment grounded in the understanding that successful regional development depends on cooperation that spans institutional boundaries.

The Humber region's situated breaches reflect an alignment with regional institutional infrastructures while demonstrating significant local adaptations. The consortium approach bridged the gap between national levelling-up policies and the region's unique socio-economic and environmental landscape

Types of Situated Governance Mechanisms: The governance mechanisms for the Humber Freeport are designed to reflect collaborative and adaptive approaches, operationalised through specific norms and practices.

- *Collaborative*: The governance of the Humber Freeport is proposed to be led by a company limited by guarantee (CLG). A CLG is a company where members contribute financially through a guaranteed sum instead of shares, with the primary focus on achieving the company's objectives rather than generating profit for shareholders (North East Lincolnshire Council, 2021). With a board comprising stakeholders from both the public and private sectors, collaboration among local councils, private businesses, and academic institutions is central to achieving the Freeport's objectives. As a Humber LEP representative stated,

  "The collaboration between public and private sectors is vital in ensuring the Freeport delivers on its promise of regional regeneration" (Associated British Ports, 2023).

  Situated Norms and Practices: This approach was operationalised through the creation of a jointly governed entity under the Humber LEP (Greater Lincolnshire LEP, 2021). Formalised partnerships between councils, private sector actors, and academia ensured inclusive decision-making. Practices included establishment of joint forums to coordinate Freeport-related activities, stakeholder engagement initiatives to align investments with regional regeneration goals, and facilitation of inward investment through targeted outreach to international businesses (North East Lincolnshire Council, 2021).
- *Adaptive:* The governance mechanisms underpinning the Humber Freeport are designed to be adaptive, responding to both immediate and long-term regional needs. Rather than adhering to a rigid blueprint, the Freeport framework allows for flexibility in decision-making, enabling stakeholders to navigate shifting political, economic, and environmental landscapes. This

adaptability has proven particularly important in balancing the region's twin goals of industrial decarbonisation and economic regeneration. The Freeport governance structure supports initiatives aimed at creating high-value manufacturing jobs, while simultaneously fostering an ecosystem where green innovation and business growth can thrive (Associated British Ports, 2023). As a regional council representative, interviewed for the purposes of this research, explained,

> *"This governance framework enables us to balance long-term sustainability with immediate economic priorities."*

This statement reflects how Humber's approach is not only responsive to short-term pressures but also forward-looking, accommodating a range of ambitions from climate commitments to inclusive economic development through a governance model that is flexible, iterative, and context-sensitive.

Situated norms and practices: The governance frameworks are being implemented through the integration of decarbonisation priorities into governance structures. Policy frameworks are being designed to align Freeport activities with national levelling-up goals (Greater Lincolnshire LEP, 2021). Newly introduced practices include regular evaluation of Freeport outcomes to adapt strategies as needed and development of workforce training programmes to align with emerging job opportunities.

The Humber Freeport's governance mechanisms illustrate a blend of regional and national governance frameworks, adapted to address the region's specific economic and environmental needs. These mechanisms demonstrate how collaborative and adaptive governance can align local goals with broader national and international agendas.

City	Humber, United Kingdom
Policy	Local economic regeneration policy (Securing Freeports status)
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Largest industrial quarter in the UK | Region with the largest carbon emissions in the UK | Geographical setup | Fear of losing out in the competition • Stakeholder expectations: Private sector push | Need for creating high-value manufacturing jobs | Need for levelling-up

Characteristics of the situated breach	• Rooted: Economic benefits for businesses and communities in the Pan-Humber region were imminent. There is potential to attract inward investments into the region and develop a green economy corridor thus creating over 7000 jobs in a variety of sectors. • Relational: The joint Freeport proposition was developed by bringing together strengths across the four ports in the region and submitting a truly transformational approach for the entire Humber region.
Situated governance mechanisms	• Collaborative: Collaborative model between local government, private sector, research and academia and Local Enterprise Partnerships in the region are key to driving implementation to support local economic growth. • Adaptive: A new company limited by guarantee will govern the Humber Freeport with a board made up of stakeholders from both the public and private sector that will ensure that the region is equipped with resources to cater to the needs of today while continuing to adapt to address the needs of tomorrow at the same time.

Table 12: Summary of Humber's approach to local economic regeneration

The Humber region's approach to securing Freeport status provides valuable insights into institutional breaches and governance, as summarised above in Table 12:

- The triggers for loss of coherence were driven by contextual pressures and stakeholder expectations, highlighting the need for coordinated regional strategies.
- The characteristics of the situated breaches were primarily rooted and relational, reflecting the region's unique socio-economic landscape and interdependencies.
- The resulting situated governance mechanisms combined collaborative and adaptive approaches, demonstrating how regional governance frameworks can align with national priorities while addressing local challenges.

5.3.3 The City of Chicago – Local economic policy during COVID-19

In this section, I provide insights into Chicago's local economic policy and support measures during the COVID-19 pandemic. Cities like Chicago had to respond to an unprecedented crisis marked by uncertainty and misinformation at pace. As the closest entities to the people, cities were uniquely positioned to craft policies that accounted for local nuances and addressed urgent needs. I examine the decisions made by Chicago's local council and mayoral authorities to support local businesses and maintain economic continuity during lockdowns. Through the lens of institutional theory, I uncover the 'situated breaches' observed in Chicago's response, the contextual triggers that drove these breaches, and the governance mechanisms designed to address the challenges at hand.

Context: The policy under consideration for this research is Chicago's decision to keep bars and restaurants open during the early days of the COVID-19 lockdowns. While the national recommendation from the Centre for Disease Control and Prevention (CDC) was to close such establishments and strictly prohibit indoor gatherings, Chicago pursued a different path. The city allowed bars and restaurants to remain open without limits on capacity or numbers, driven by the need to support local businesses and ensure continuity of the local economy (Illinois Restaurants Association, 2020). This decision starkly deviated from the traditional approaches taken by other cities across the United States, reflecting Chicago's unique local pressures and priorities.

Triggers for Loss of Coherence in Institutional Infrastructure: Chicago's decision to breach traditional lockdown norms, deviation from national and in some cases international institutional infrastructures, can be traced to several contextual factors that triggered the need for a unique approach to local governance during the pandemic.

- *Contextual Pressures:* Chicago is marked by deep-rooted socio-economic inequality and pronounced segregation, which have historically influenced access to opportunities, services, and resources across its diverse communities. These disparities were further exacerbated by challenges in resource distribution, with lower-income neighbourhoods often facing systemic underinvestment in healthcare, education, and economic development (Blanchard and Pisani-Ferry, 2021). When the COVID-19 pandemic struck, these existing inequities shaped the city's response, compelling local authorities to implement targeted measures that prioritised the most vulnerable populations. Efforts focused on mitigating economic harm, ensuring equitable

access to healthcare and financial relief, and addressing the disproportionate impact of the crisis on marginalised communities. This strategic approach reflected a recognition that a one-size-fits-all response would not suffice, necessitating policies tailored to Chicago's unique socio-economic landscape. As noted by (Norris, Taylor Jr and Taylor, 2021),

> *"Chicago's unique demographic and economic divides necessitated context-specific policies to avoid exacerbating existing inequalities."*

The decision to keep bars and restaurants open was a calculated move aimed at mitigating the economic burden on small businesses and preserving livelihoods during a period of immense uncertainty (Illinois Restaurants Association, 2020).

- *Stakeholder Expectations:* The policy landscape in Chicago was significantly shaped by lobbying efforts from key constituencies, particularly those representing industries most affected by the pandemic. The Illinois Restaurants Association emerged as a prominent voice, advocating for greater flexibility in lockdown measures to prevent the widespread closure of restaurants and bars, a sector vital to the city's economy and employment. Their lobbying efforts highlighted the financial strain on small businesses, the risk of job losses, and the long-term economic consequences of prolonged restrictions. By engaging with policymakers, industry leaders pushed for measures such as outdoor dining allowances, streamlined permitting processes, and financial relief programmes. These efforts underscored the delicate balance between public health priorities and economic sustainability, influencing the city's approach to business regulations and pandemic recovery strategies. A member of a local think tank, while responding to a question as part of this research, reflected,

  > *"Chicago's stance on keeping bars and restaurants open during the early days of the pandemic drew intense criticism but also highlighted the power of local advocacy in shaping economic policy."*

  The city's decision reflected an attempt to balance the diverse and often conflicting expectations of stakeholders during a highly polarised time.

The triggers for Chicago's institutional breach - contextual pressures such as socio-economic inequality, segregation, and resource distribution challenges, alongside stakeholder expectations influenced by lobbying, highlight a significant divergence from national and regional institutional infrastructures. The decision to keep bars and restaurants open during the early COVID-19 lockdowns deviated from the CDC's national guidelines, which sought uniformity in pandemic

response. Chicago's breach illustrates the limitations of centralised institutional infrastructures in accommodating local complexities, necessitating a context-specific approach that prioritised economic continuity and social equity within the city.

While institutional breaches are typically viewed as deviations from broader norms or policies, Chicago's case demonstrates how such breaches can serve local purposes. The city's decision, though controversial, reflects a deliberate shift away from traditional logics to address urgent local challenges. These 'situated breaches' underscore the importance of contextualised governance mechanisms in addressing crises with localised impacts and benefits.

Characteristics of Situated Breaches: Chicago's response to the economic challenges posed by the pandemic exhibits distinct characteristics of situated breaches.

- *Rooted:* The decision to allow bars and restaurants to remain open was driven by Chicago's specific economic landscape and the deeply-rooted need to support its hospitality sector, a major contributor to local employment and economic activity. Recognising that many small businesses were at risk of permanent closure due to the financial strain of prolonged restrictions, city officials tailored their approach to balance public health concerns with economic sustainability. This measure was not a blanket policy but rather a targeted relief effort, acknowledging the city's economic dependencies and the livelihoods at stake. By implementing safety protocols such as capacity limits, outdoor dining provisions, and enhanced sanitation requirements, Chicago aimed to provide immediate support to struggling establishments while mitigating the risk of COVID-19 transmission. The approach reflected a nuanced understanding of local conditions, ensuring that economic relief measures were responsive to the unique challenges faced by the city's business community. As the Illinois Restaurant Association noted,

  > *"The hospitality industry is central to Chicago's economy, and our advocacy ensured that the voices of our members were heard during one of the most challenging times in recent history."* (Illinois Restaurants Association, 2020).

- *Relational:* Chicago's policy decisions were deeply shaped by the interactions and negotiations between various stakeholders, with industry associations playing a particularly influential role. Groups such as the Illinois Restaurants Association and other business coalitions actively

engaged with local policymakers, advocating for policies that would address the urgent needs of their members. These stakeholders leveraged their influence to highlight the economic hardships faced by small businesses, particularly in the hospitality and retail sectors, and worked to ensure that their voices were heard in decision-making processes. Their lobbying efforts resulted in policy adjustments, such as modified lockdown measures, targeted financial relief programmes, and operational flexibility for businesses. This collaborative approach underscored the city's responsiveness to stakeholder input, reinforcing the importance of dialogue and negotiation in shaping an effective and balanced pandemic response. The following quote evidences this approach.

> *"The relationships between policymakers, businesses, and advocacy groups in Chicago highlighted the importance of collaboration in navigating unprecedented challenges," observed a local business leader, who was interviewed for the purposes of this research.*

To summarise, Chicago's economic policy decisions during COVID-19 reflect a combination of rooted and relational characteristics. These measures were designed to address the city's specific socio-economic challenges while leveraging stakeholder relationships to implement practical solutions.

Situated Governance Mechanisms: Chicago's governance mechanisms during the COVID-19 pandemic reflected both collaborative and incentivised approaches. Each approach relied on situated norms and practices to operationalise solutions tailored to the city's needs.

- *Collaborative:* Chicago's response to the economic disruptions caused by COVID-19 was characterised by a strong emphasis on collaboration across public and private sectors. The city's Department of Business Affairs and Consumer Protection (BACP) led the effort by establishing a centralised resource hub that connected local businesses with financial assistance, regulatory guidance, and recovery tools. This initiative was not carried out in isolation; instead, it was developed through strategic partnerships involving city government, business associations, and advocacy groups. These collaborations ensured that policy responses were informed by on-the-ground realities and tailored to the diverse needs of the city's economic actors. As one senior official, as part of the interview for this research, explained,

"The success of Chicago's economic policy during COVID-19 lay in its ability to bring together diverse stakeholders and foster a shared sense of purpose during an incredibly challenging time."

This perspective highlights how collaborative governance was not simply about coordination, it was about building trust and collective resolve, which proved essential in navigating the uncertainty and urgency of the pandemic.

Situated Norms & Practices: The collaborative approach was operationalised through temporary regulatory changes, such as relaxed zoning laws, to facilitate outdoor dining, and streamlined processes for applying for permits and financial aid. Establishment of partnerships with advocacy groups like the Illinois Restaurant Association, running public awareness campaigns to encourage compliance with safety measures, and development of a centralised resource hub for sharing best practices and accessing financial support were some of the situated practices that manifested during the period.

- *Incentivised:* To mitigate the economic impact of the pandemic, Chicago implemented a range of financial incentives and regulatory flexibilities designed to support struggling businesses. These measures included direct financial relief, such as grants and low-interest loans, aimed at helping small businesses cover operational costs, retain employees, and adapt to evolving public health guidelines. Additionally, the city introduced regulatory adjustments, such as expedited permitting for outdoor dining, relaxed zoning restrictions, and temporary fee reductions, to enable businesses to continue operating under challenging conditions. By offering both financial and structural support, Chicago not only provided immediate relief but also created opportunities for long-term adaptation and recovery, allowing businesses to reimagine their operations in a post-pandemic landscape. These targeted incentives reflected a strategic effort to sustain local economic activity while fostering resilience within the business community, as quoted by a representative from the Illinois Restaurant Association below.

  "Incentives like grants and regulatory flexibility were critical in helping small businesses navigate the uncertainty of the pandemic and rebuild confidence." (Illinois Restaurants Association, 2020).

Situated Norms & Practices: This approach to incentivisation was made possible through introduction of targeted grants, subsidies, and deferred tax payments for small businesses. Relaxation of licensing and compliance regulations for restaurants and bars was also put in place. Practices such as the rollout of the Chicago Small Business Resiliency Fund to provide loans for cash flow needs, partnerships with financial institutions to ensure equitable access to funding, and tax waivers and grants specifically tailored to support the hospitality sector came to exist.

Chicago's collaborative and incentivised governance mechanisms align with national and regional governance frameworks but reflect critical adaptations to address local challenges. By establishing partnerships with local advocacy groups, introducing financial relief programmes, and relaxing regulatory norms, Chicago modified broader governance principles to suit its unique socio-economic landscape. These adaptations demonstrate how city-level governance mechanisms can act as extensions of national and regional frameworks, adapting them to the realities of localised crises while maintaining alignment with overarching institutional goals.

City	The City of Chicago, Unites States of America
Policy	Support for local economic growth (during COVID-19 lockdown)
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Tremendous segregation and inequality | Challenge in distribution of resources • Stakeholder expectations: Advocacy and lobbying by associations and constituencies
Characteristics of the situated breach	• Rooted: A bottom-up approach for Chicago for restaurants to remain open was rooted in local economic needs and targeted relief for Chicago's hospitality sector. • Relational: Influence from the Illinois Restaurants Association to keep the bars, and restaurants open during early days of the COVID-19 lockdown
Situated governance mechanisms	• Collaborative: Collaboration with state, and federal government agencies, businesses, and communities • Incentivised: Public messaging and awareness campaigns | Dedicated resource centre for local businesses to offer support | Financial incentives and regulatory flexibility to support businesses during the pandemic.

Table 13: Summary of Chicago's approach to local economic growth

Chicago's approach to local economic policy during COVID-19 provides valuable insights into institutional breaches and governance, as summarised above in Table 13:

- The triggers for loss of coherence in institutional infrastructure were primarily contextual pressures and stakeholder expectations, reflecting the city's unique socio-economic and political landscape.
- The characteristics of the situated breaches were rooted and relational, highlighting the city's ability to tailor solutions to specific challenges while leveraging stakeholder relationships.
- The resulting situated governance mechanisms, combining collaborative and incentivised approaches, demonstrate the importance of context-specific norms and practices in addressing crises while maintaining economic resilience and social equity.

5.3.4 The Humber Region – Local economic development and levelling-up

*In this section, I provide an in-depth analysis of the Humber Freeport initiative, exploring how the region harnessed national Freeport policy to drive local economic growth. I examine the mechanisms employed to secure stakeholder buy-in, the creation of new institutional logics and infrastructures, and the development of a governance framework that integrates diverse regional stakeholders. Through the lens of institutional theory, I reveal the adaptive strategies that enabled Humber to align local capabilities with national economic objectives while fostering innovation and sustainability***.**

Context: To understand the transformative potential of the Humber Freeport, it is essential to first grasp the overarching concept and strategic vision of UK Freeports. This national policy framework aimed to address regional disparities and create economic growth hubs in the post-Brexit era.

In the aftermath of Brexit, the United Kingdom embarked on a strategic initiative to bolster its economic landscape, aiming to address regional imbalances and stimulate economic growth. Central to this strategy was the introduction of Freeports, special economic zones designed to enhance trade, attract investment, and increase job creation (House of Commons, 2020). Positioned as hubs of business and enterprise, Freeports benefit from relaxed customs regulations, tax reliefs, and streamlined planning processes to foster an environment conducive to economic expansion (Department for International Trade, 2020).

The policy was envisioned not just as a means to enhance the economic output of designated areas but also to drive the national agenda of 'levelling up' the regions by distributing wealth across the country (Department of Levelling-up, 2021). By turning underutilised ports into thriving economic centres, the government aimed to create thousands of new jobs, enhance global trade relationships, and establish the UK as an attractive location for international business in the post-Brexit era.

The Humber region, with its significant port complex and strategic location, was uniquely positioned to leverage Freeport status, turning its ports into hubs of global trade and regional economic revitalisation. This opportunity necessitated a collaborative regional strategy that capitalised on the area's logistical advantages, development potential, and economic diversity.

Situated in the heart of the UK, the Humber region boasts the country's largest ports complex, including significant ports such as Hull, Goole, Grimsby, and Immingham. This area has historically been a vital cog in the UK's logistics and trade machinery, handling nearly 10% of the nation's trade, predominantly through Immingham, the largest port by volume (Greater Lincolnshire LEP, 2020). The strategic geographic positioning offers unparalleled advantages:

- Development Potential: The Humber region has extensive lands ready for development, more so than any other comparable region in the UK, making it an ideal candidate for large-scale industrial and commercial projects.
- Accessibility: The area serves as a logistical nexus, with 75% of the UK's manufacturing facilities within a four-hour drive, facilitating efficient distribution and logistics operations (Hull and East Yorkshire LEP, 2020).
- Economic Diversity: Humber's economy is multifaceted, encompassing sectors from manufacturing and logistics to emerging fields like renewable energy and digital technologies. This diversity positions the region to leverage a broad range of investment and development opportunities.

Triggers for Loss of Coherence in Institutional Infrastructure: The development of the Humber Freeport highlights the key triggers that created a need for tailored institutional approaches. These triggers, rooted in both local and external pressures, revealed gaps in national and regional infrastructures that demanded innovative solutions resulting in 'situated' breaches.

- *Contextual Pressures:* The Humber region faced a distinct set of challenges that necessitated a departure from the standard Freeport model offered by national policy. As the UK's largest industrial quarter and its most carbon-intensive cluster, the region had to confront overlapping pressures: the need to decarbonise, revitalise outdated port infrastructure, and stimulate inclusive economic growth. National Freeport frameworks did not sufficiently account for these unique regional dynamics, prompting local actors to pursue a more tailored and context-sensitive approach. The urgency to attract sustainable investment and address long-standing socio-economic disparities added further complexity to the institutional environment. As one local economic strategist, who was interviewed for the purposes of this research, put it,

  "Our challenge was not just securing Freeport status but creating a model that worked for the unique demands of the Humber."

This sentiment underscores the significance of context in shaping institutional responses and highlights how external pressures often act as catalysts for more locally grounded and adaptive governance solutions.

- *Stakeholder Expectations:* Local businesses, councils, and educational institutions expected tangible benefits from Freeport status, such as job creation, investment in sustainable technologies, and infrastructure improvements. Meeting these expectations required a coordinated effort and adaptive governance. Private sector involvement was a key driver of this institutional breach. Businesses and chambers of commerce strongly advocated for a unified proposal, recognising the shared benefits of regional regeneration and the inefficiencies of fragmented bids. This push from the private sector created the conditions for a collaborative institutional logic to emerge, ensuring the proposition aligned with the expectations of diverse stakeholders (Humber Industrial Cluster Plan, 2023), as expressed in the quote below.

  "The private sector was absolutely adamant that the Freeport needed to be a unified proposal, reflecting the collective vision of the region," noted a representative from the Humber LEP, who was interviewed for the purposes of this research.

The Humber Freeport initiative exemplifies the interplay between international, national, regional, and local institutional infrastructures in driving economic regeneration. While the UK Freeport policy provided a national framework, it lacked the specificity needed to address Humber's unique economic and geographic conditions. By adapting these broader infrastructures, the Humber region has successfully filled institutional gaps with contextual and targeted solutions. The Freeport initiative aligns with international trade frameworks by enhancing the UK's post-Brexit position in global trade, while also addressing regional disparities under the "levelling up" agenda (Department for International Trade, 2020).

At the regional level, Humber's Freeport strategy demonstrates how intermediary frameworks can be mobilised to translate national goals into actionable initiatives. The strategic positioning of Humber as a logistics hub with underutilised land highlights the importance of local institutional infrastructures, which were crucial in developing and delivering tailored solutions. For instance, the ABLE Marine Energy Park's role in renewable energy exemplifies how localised infrastructures can align with global sustainability goals, creating a symbiotic relationship between local innovation and international objectives (Able, 2023).

This case underscores the adaptability of institutional infrastructures in driving regional transformation and economic regeneration. By effectively utilising its geographic and economic advantages, Humber has established a replicable model for regions worldwide, balancing national ambitions with local needs and opportunities.

Characteristics of Situated Breaches: Humber's Freeport initiative is marked by unique characteristics of situated breaches, where established norms were adapted to address regional challenges. These characteristics offer insight into how institutional logics were redefined to drive local economic transformation.

- *Targeted:* Humber's Freeport strategy was designed to capitalise on the region's existing industrial strengths by focusing on key sectors with high growth potential, particularly renewable energy and logistics. By concentrating efforts on these strategic areas, the initiative aimed to drive economic transformation, create skilled jobs, and reinforce the Humber's position as a leader in the UK's decarbonisation agenda. A prime example of this targeted approach is the development of the ABLE Marine Energy Park (AMEP), a specialised hub for offshore wind manufacturing and assembly. This initiative not only attracted significant investments in sustainable industries but also strengthened supply chains and fostered innovation within the renewable energy sector, as evidenced in this quote below.

  > *"Humber is leading the way in creating a low-carbon, high-tech industrial base," said a renewable energy executive, who participated in a workshop as part of this research.*

  This logic was not only a response to economic incentives but also a strategic alignment of local capabilities and aspirations with broader governmental goals. By redefining its economic activities within this new framework, Humber aimed to catalyse innovation, foster sustainable development, and build a resilient economic structure that could thrive in the changing global landscape.

- *Rooted:* The Freeport initiative was designed to tackle Humber's unique economic and industrial challenges by leveraging its distinct assets and opportunities. One of the region's key issues has been the presence of underutilised land, much of which has significant potential for industrial and commercial development. The initiative aimed to unlock this potential by creating designated tax and investment zones that incentivise businesses to establish operations, fostering job creation and economic growth. Additionally, Humber's industrial

clustering particularly in energy, logistics, and manufacturing posed both a challenge and an opportunity. The Freeport strategy capitalised on these existing sectoral strengths by encouraging collaboration between businesses, streamlining supply chains, and enhancing infrastructure to support trade and innovation. By developing tailored solutions that align with local capabilities - such as targeted investment in port infrastructure, skills development, and incentives for green industries, the initiative ensures that economic growth is both sustainable and regionally beneficial, reinforcing Humber's role as a critical hub for the UK's low-carbon and global trade ambitions. The following quote evidences this decision.

> *"We've created a unified proposition that serves the specific needs of Humber's economy while contributing to national goals," said a regional council leader, who was interviewed specifically for the purposes of this research.*

From an institutional theory perspective, the Humber region's response to the Freeports initiative can be seen as an adaptive strategy shaped by both the opportunities presented by the national policy and the unique local conditions. The region developed its institutional logic, a framework that guides how new norms, values, and practices are created and sustained, reflecting a collective response to external pressures and opportunities.

- *Relational*: The Humber Freeport bid stands as a strong example of how relational dynamics between institutions can drive regional coordination and innovation. Unlike other regions where ports competed individually for Freeport status, Humber adopted a distinctive strategy by forming a consortium of four ports across four local councils. This collaborative structure enabled the region to present a unified and compelling proposition, leveraging shared assets and common interests. The active participation of the Humber Local Enterprise Partnership (LEP), chambers of commerce, and academic institutions further reinforced the network of trust and mutual commitment that underpinned the initiative. These inter-organisational relationships created a foundation for deeper cooperation and long-term planning. As noted in the words of Associated British Ports, in their press release (Associated British Ports, 2023),

> *"This approach has gained traction and momentum owing to the private-sector involvement and the combined benefit for businesses and communities across the four councils involved."*

This quote reflects not only the practical success of the model but also the relational glue that held diverse actors together, highlighting how institutional change is often enabled by the quality and depth of the relationships between stakeholders.

Situated Governance Mechanisms: Effective governance was critical to the success of the Humber Freeport. This section explores how collaborative, adaptive, and incentivised governance mechanisms were employed to align diverse stakeholders and operationalise Freeport policies**.**

- *Collaborative:* Humber's governance model involved partnerships among councils, businesses, and educational institutions, exemplifying a multi-stakeholder approach. The bid for Freeport status was not a unilateral decision by a single entity but a collaborative effort involving a consortium of local enterprises, councils, and educational bodies. Prominent businesses such as Siemens, Phillips 66, and Orsted played pivotal roles, aligning their corporate strategies with the regional economic goals (Associated British Ports, 2023). Additionally, local governance bodies including the Humber LEP and councils such as Hull City Council provided essential support, ensuring that the proposals aligned with local and national economic objectives, as highlighted in the quote below.

  "Collaboration has been key to turning Humber's Freeport vision into reality," said Councillor Daren Hale (Hull City Council, 2020).

  Situated Norms and Practices: Collaborative norms included regular stakeholder consultations, joint project development, and transparent decision-making processes. Practices involved co-developing Freeport strategies and aligning regional capabilities with national priorities. The governance structure of the Humber Freeport was strategically designed to promote effective collaboration among various stakeholders, ensuring that the benefits of Freeport status were maximised. This structure is a prime example of collaborative institutional governance, which allows for a range of voices including major corporations, small businesses, local governments, and educational institutions to contribute to policy implementation.

- *Adaptive:* The governance framework supporting the Humber Freeport is deliberately designed to be adaptive, enabling it to respond effectively to shifting external conditions and regional demands. As global trade patterns evolve and sustainability standards become more stringent, the framework allows for iterative improvements in both policy direction and operational strategy. This adaptability ensures that the Freeport remains not only reactive to immediate

challenges but also proactive in identifying emerging opportunities. It supports more than just the logistical and administrative functions - it also strengthens the underlying institutional infrastructure necessary for sustained economic development. The framework promotes synergy between traditional manufacturing industries and newer, innovation-driven sectors, enabling them to share services, infrastructure, and expertise to build a resilient and competitive economic cluster. As a representative from the Humber LEP, who was interviewed for this research, noted,

> *"Our governance model is designed to be responsive, ensuring that the Freeport evolves with the needs of the region."*

This perspective underscores how adaptability is not just a functional feature but a strategic imperative embedding flexibility into governance so that institutional arrangements can keep pace with the region's ambitions and challenges.

Situated Norms and Practices: Adaptive mechanisms included periodic reviews of Freeport initiatives, flexible funding allocations, and pilot projects for renewable energy solutions. Local educational institutions like the University of Hull also contributed, linking research and development directly to industrial applications, particularly in sustainable technologies and energy solutions. This synergy among various stakeholders was crucial in crafting a compelling case for Freeport status, aimed at fostering an innovative, sustainable, and economically vibrant region.

- *Incentivised:* The Humber Freeport's ability to attract business investment has been strongly supported by a range of targeted financial incentives. These include tax breaks, grants, and customs benefits, all designed to reduce barriers to entry and make the region more competitive for domestic and international investors. Such incentives not only stimulated business participation but also helped to catalyse wider economic benefits, including increased trade volumes, greater operational efficiencies in logistics, and enhanced supply chain integration. These gains align with the UK's broader post-Brexit strategic objectives of boosting exports and strengthening trade relationships (Invest East Yorkshire, 2024). As one economic development expert, interviewed for the purposes of this research, observed,

> *"Incentives have been crucial in attracting businesses to invest in Humber's Freeport"*

This insight reflects the instrumental role that economic inducements played not just in sparking interest but in anchoring long-term commitments from businesses and aligning market participation with public sector development goals.

Situated Norms and Practices: Incentivised practices included structured tax reliefs, funding for infrastructure projects, and targeted grants for sustainable technologies. Employment has seen a substantial boost, with thousands of jobs either created or anticipated across a range of sectors. The ripple effects of these jobs are felt not just locally but throughout the greater Yorkshire region, enhancing economic conditions far beyond the immediate area of the Freeport (Invest East Yorkshire, 2024). The success of the Freeport has also catalysed further investments in local infrastructure, from transportation links to digital networks, thereby enhancing the overall business environment.

The governance framework developed for Humber's Freeport initiative showcases the nuanced application of collaborative, adaptive, and incentivised governance models. At the international level, Humber's alignment with global trade and sustainability standards reflects the influence of governance bodies like the World Bank and the C40 Cities initiative, which promote frameworks for regional economic resilience and sustainability. These connections position Humber as a global actor in the post-Brexit trade environment.

Nationally, the Humber LEP and local councils have adapted governance principles to operationalise Freeport strategies, creating a transparent and participatory model. This governance framework is a testament to the value of multi-stakeholder collaboration in managing complex initiatives. Evidence from stakeholders such as Siemens and Orsted reveals how collaborative governance has driven investment in critical sectors like renewable energy and logistics (Humber Industrial Cluster Plan, 2023). The adaptive nature of this model is evident in its iterative approach, allowing the region to respond dynamically to shifts in trade patterns and technological advancements.

The incentivised mechanisms deployed such as tax breaks and funding for infrastructure projects have catalysed economic activity, demonstrating the effectiveness of financial incentives in attracting private-sector investment. Councillor Daren Hale’s statement on Hull’s strategic intent emphasises how local governance bodies have leveraged these incentives to align regional

capabilities with national objectives, thus creating a transformative model of economic development (Hull City Council, 2020).

In essence, Humber's governance approach bridges the gaps between international aspirations and local realities, creating a replicable framework for other regions, as summarised in Table 14 below. The combination of collaborative, adaptive, and incentivised mechanisms has not only operationalised the Freeport policy but also reshaped governance paradigms in regional economic development.

City	The Humber Region, United Kingdom
Policy	Local economic regeneration policy (Securing Freeports status)
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Largest industrial quarter in the UK	Region with the largest carbon emissions in the UK	Geographical setup	Fear of losing out in the competition • Stakeholder expectations: Private sector push	Need for creating high-value manufacturing jobs	Need for levelling-up
Characteristics of the situated breach	• Rooted: Economic benefits for businesses and communities in the Pan-Humber region were imminent. There is potential to attract inward investments into the region and develop a green economy corridor thus creating over 7000 jobs in a variety of sectors. • Relational: The joint Freeport proposition was developed by bringing together strengths across the four ports in the region and submitting a truly transformational approach for the entire Humber region. • Targeted: Humber's Freeport strategy focused on specific sectors, including renewable energy and logistics, to maximise regional strengths.
Situated governance mechanisms	• Collaborative: Collaborative model between local government, private sector, research and academia and Local Enterprise Partnerships in the region are key to driving implementation to support local economic growth. • Adaptive: A new company limited by guarantee will govern the Humber Freeport with a board made up of stakeholders from both the public and private sector that will ensure that the region is equipped with resources to cater to the needs of today while continuing to adapt to address the needs of tomorrow at the same time. • Incentivised: Financial incentives, such as tax breaks and grants, encouraged business participation and investment in the Freeport.

Table 14: Summary of the Humber Region's approach to local economic regeneration

Conclusion: The Humber Freeport offers significant theoretical and practical insights. The Humber Freeport initiative exemplifies how regional adaptation to national policies can catalyse profound economic transformations. Through a well-structured governance model and strategic stakeholder collaboration, the Humber region has successfully leveraged Freeport status to enhance its economic infrastructure, foster innovation, and create substantial job opportunities

- The triggers for loss of coherence were driven by contextual pressures and stakeholder expectations, highlighting the need for coordinated regional strategies. The ability to localise broader infrastructures highlights the role of institutional adaptability in addressing contextual pressures.
- The Freeport initiative exemplifies a targeted, rooted approach to institutional breaches, where new institutional logics are created to fill gaps left by traditional frameworks. This demonstrates the value of situated breaches in driving sustainable regional transformation.
- The interplay of collaborative, adaptive, and incentivised governance models in Humber illustrates how multi-tiered governance can operationalise complex economic policies. The region's approach provides a blueprint for integrating diverse stakeholders into cohesive, effective policy implementation.

This case study also demonstrates the power of institutional theory in understanding the dynamics of economic policy implementation. The creation of a new institutional logic in Humber, characterised by collaboration, innovation, and sustainability, has not only reshaped the local economic landscape but also influenced the broader institutional environment across the UK. As such, the Humber Freeport stands as a model for other regions, illustrating the potential for economic regeneration through strategic adaptation and institutional alignment.

5.4 Local economic growth – A consolidated picture

I have now demonstrated three examples of cities in the West that have had to deviate or breach an incumbent policy to alter or create their own policy given the context in which they operate. Each of these examples are different in how they link to local economic growth but the commonality across all of them is their decision to draft a tailored route of policy and decision making as against just following the institutional norm. I will now present some consolidated findings from these cases in this section, however, the detailed second-order examination of these findings is discussed in Chapter 8.

Triggers for loss of coherence in institutional infrastructure: The analysis of Amsterdam, Chicago, Humber, and the wider Humber Region reveals similar patterns in the triggers that disrupt coherence in institutional infrastructures, leading to 'situated breaches'. These breaches emerge as responses to specific contextual needs that existing institutional frameworks fail to address effectively.

> *Contextual Pressures:* Amsterdam faced sustainability challenges, such as increasing inequality, declining biodiversity, and the need to transition to circular economic principles. These pressures necessitated a tailored approach to align with the city's unique environmental and social circumstances. Humber and Wider Humber Region grappled with industrial decline, carbon emissions, and the urgency to secure investment for economic regeneration. The competition for Freeport status accentuated these pressures.
>
> *Stakeholder Expectations:* Chicago experienced intense lobbying from stakeholder groups, such as the Illinois Restaurants Association, which influenced policy decisions like keeping restaurants open during COVID-19 lockdowns to sustain the local economy. Humber Region stakeholders, including businesses like Siemens and Orsted, demanded cohesive regional strategies, resulting in the formation of a consortium for the Freeport bid.
>
> *Aspirational Shortfall:* Aspirations to achieve high-impact goals, such as Amsterdam's aim to become a circular city by 2050 or Chicago's drive to protect the local economy during the pandemic, highlighted gaps in existing institutional frameworks. These aspirational voids prompted innovative localised interventions.

It can be observed that in all the instances, the breach of institutional logic or the deviation from the known institutional norms has occurred for purposeful and beneficial reasons. The respective local or city level governments have used these very reasons as strong anchors and catalysts to help drive adoption of the new institutional logics within their respective city stakeholder groups and communities.

Characteristics of the 'Situated Breaches': 'Situated breaches' in this institutional field exhibit characteristics that align closely with the contextual demands and stakeholder landscapes of the respective cities:

> *Rooted:* Interventions are crafted to benefit the immediate urban or regional context while keeping them rooted in the fabric of the city. Amsterdam's adoption of the City Doughnut framework or Humber's pan-regional Freeport proposal reflect breaches designed to address specific local challenges, such as urban sustainability and economic regeneration.
>
> *Targeted:* These breaches are focused on specific goals, such as economic continuity in Chicago during the pandemic, the achievement of Freeport status in Humber, or the upskilling of stakeholders for circular economic practices in Amsterdam. In some cases they are tailored and targeted to specific sectors like construction and retail in the case of Amsterdam, or renewable energy in the case of Humber.
>
> *Relational:* Many breaches are deeply relational, leveraging partnerships and stakeholder trust. In Humber, the collaboration between councils, businesses, and academia exemplified this characteristic, with shared goals driving collective action. In Chicago, the lobbying and influencing by the Illinois Restaurants Association portrays this relational aspect of situated breaches.

Situated Governance Mechanisms: To navigate and sustain these situated breaches, cities implemented governance mechanisms that deviated from traditional approaches, aligning closely with their unique local contextual needs.

> *Collaborative Governance:* Across all cases, collaboration played a pivotal role. In Humber, a consortium-driven approach brought together councils, private sector actors, and educational institutions. Similarly, Amsterdam's initiatives were built on strong public-private partnerships and community involvement.

Incentivised Governance: Financial and operational incentives were instrumental in driving stakeholder engagement. Humber provided tax reliefs and streamlined processes to attract investment, while Amsterdam incentivised businesses to align with circular economy principles.

Adaptive Governance: Cities demonstrated agility in adapting their governance models to unforeseen challenges. Chicago's response to the pandemic and Humber's creation of a flexible, regional Freeport governance model underscored the importance of adaptive mechanisms to address evolving conditions.

In the context of local economic growth and regeneration, the concept of 'situated breaches' highlights how cities strategically deviate from established institutional logics to address their unique challenges. These breaches, though context-specific, often seem to be influencing regional and even national frameworks. The associated 'situated governance mechanisms' enable cities to operationalise these breaches effectively, embedding collaboration, incentivisation, and adaptability into their governance structures.

The findings underscore the necessity of rethinking institutional frameworks to allow for more flexible, context-sensitive approaches. These insights are not just applicable to the cities studied but offer broader lessons for other urban centres navigating similar challenges in local economic growth and regeneration.

The consolidated findings from the three cities and from the deep dive case linked to the institutional field of local economic growth and regeneration is presented in Table 15 below.

City & Policy area (local economic growth)	**Amsterdam -** Local Circular Economy Policy	**Chicago -** Support for local economic growth (during COVID-19 lockdown)	**Humber -** Local Economic Regeneration Policy (Securing Freeports status)	**The Humber Region -** Local Economic Regeneration Policy (Securing Freeports status)
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Increased inequality | Declining biodiversity | A third of Amsterdam's food is wasted | Textiles and electronics manufacturing are causing an environmental burden | Lack of sustainable and recyclable materials in the construction industry • Aspirational shortfall: Amsterdam set to become fully circular by 2050	• Contextual pressures: Tremendous segregation and inequality | Challenge in distribution of resources • Stakeholder expectations: Advocacy and lobbying by associations and constituencies	• Contextual pressures: Largest industrial quarter in the UK | Region with the largest carbon emissions in the UK | Geographical setup | Fear of losing out in the competition • Stakeholder expectations: Private sector push | Need for creating high-value manufacturing jobs | Need for levelling-up	• Contextual pressures: Largest industrial quarter in the UK | Region with the largest carbon emissions in the UK | Geographical setup | Fear of losing out in the competition • Stakeholder expectations: Private sector push | Need for creating high-value manufacturing jobs | Need for levelling-up
Characteristics of the situated breach	• Rooted: Model rooted in the fabric of Amsterdam - The Amsterdam Doughnut – an economic model that enables economic prosperity while respecting the boundaries of the planet. • Targeted: The interventions are targeted across multiple sectors e.g., textiles, construction, manufacturing, etc.,	• Rooted: A tailored approach for Chicago for restaurants to remain open was rooted in local economic needs and targeted relief for Chicago's hospitality sector. • Relational: Influence from the Illinois Restaurants Association to keep the bars, and restaurants open during early days of the COVID-19 lockdown	• Rooted: Economic benefits for businesses and communities in the Pan-Humber region were imminent. There is potential to attract inward investments into the region and develop a green economy corridor thus creating over 7000 jobs in a variety of sectors. • Relational: The joint Freeport proposition was developed by bringing together strengths across the four ports in the region and submitting a truly transformational approach for the entire Humber region.	• Rooted: Economic benefits for businesses and communities in the Pan-Humber region were imminent. There is potential to attract inward investments into the region and develop a green economy corridor thus creating over 7000 jobs in a variety of sectors. • Relational: The joint Freeport proposition was developed by bringing together strengths across the four ports in the region and submitting a truly transformational approach for the entire Humber region. • Targeted: Humber's Freeport strategy focused

				on specific sectors, including renewable energy and logistics, to maximise regional strengths.
Situated governance mechanisms	• Collaborative: Dedicated collaborative framework involving various city level stakeholders; Collaboration with businesses to develop circular economy agreements; Set-up of circular economic hubs, living labs, and pilot projects to bring together businesses, start-ups, and academia to demonstrate circular economic solutions • Incentivised: Incentivisation mechanisms to support adoption of circular practices | Invest in public awareness campaigns to engage citizens and businesses | Offer funds and grants to support circular projects and innovations	• Collaborative: Collaboration with state, and federal government agencies, businesses, and communities • Incentivised: Public messaging and awareness campaigns | Dedicated resource centre for local businesses to offer support | Financial incentives and regulatory flexibility to support businesses during the pandemic.	• Collaborative: Collaborative model between local government, private sector, research and academia and Local Enterprise Partnerships in the region are key to driving implementation to support local economic growth. • Adaptive: A new company limited by guarantee will govern the Humber Freeport with a board made up of stakeholders from both the public and private sector that will ensure that the region is equipped with resources to cater to the needs of today while continuing to adapt to address the needs of tomorrow at the same time.	• Collaborative: Collaborative model between local government, private sector, research and academia and Local Enterprise Partnerships in the region are key to driving implementation to support local economic growth. • Adaptive: A new company limited by guarantee will govern the Humber Freeport with a board made up of stakeholders from both the public and private sector that will ensure that the region is equipped with resources to cater to the needs of today while continuing to adapt to address the needs of tomorrow at the same time. • Incentivised: Financial incentives, such as tax breaks and grants, encouraged business participation and investment in the Freeport.

Table 15: Consolidated findings for the field of local economic growth and regeneration

6. Institutional breaches and emerging governance mechanisms in supporting energy transition and tackling climate crisis in cities

With increasing temperatures and the subsequent impact on our planet, there is a dire need to reduce the amount of carbon that is emitted and that is already present in the atmosphere. Industrialisation, over many decades, has led to unsustainable practices that are difficult to reverse but surely need rethinking to sustain the planet for future generations (Koo *et al.*, 2015). One way out is to reduce the usage of fossil fuels that are high carbon emitters and to look at alternate and renewable sources of energy (Achakulwisut *et al.*, 2023). This transition from non-renewable to renewable sources of energy such as wind, nuclear, electric, and hydrogen, while is promising, comes with its own challenges in terms of availability of skills, need for raw materials, ability to scale, and providing it at an affordable price (Araújo *et al.*, 2024). Some nations and states are pioneering with efforts to innovate in this space and some are lagging behind. Cities are crucial entities in this energy transition journey (Bulkeley *et al.*, 2012).

While energy transition is a solution there are other climate change related impacts that need addressing. Unprecedented floods, forest fires, loss of habitats, changing migratory patterns, food shortages are all downstream impacts of climate change (Molden *et al.*, 2016). These challenges, again, impact the cities at a ground level and force them to do what is right to either mitigate these impacts or to adapt to these changing circumstances.

In this chapter 6 I elaborate and explore this energy transition landscape in a bit more detail with some real case studies. This chapter is divided into four sections. In the first and second sections, I provide an insight into the existing institutional infrastructures and governance frameworks within this field, supported by some examples. In the third section, I present findings from three cities – Amersfoort, Singapore, and Antsirabe and articulate the characteristics of the breaches and the evolution of certain types of governance approaches in these cities. I then strengthen this argument by providing a detailed case on Cardiff. In the final section, I summarise the findings for this specific institutional field, energy transition and tackling climate crisis, and present the consolidated findings thus evidencing the existence of situated breaches and the evolution of situated governance mechanisms. Finally, I consolidate this in a table to summarise three important things that are central to this research:

1. *The type of trigger that has led to the loss of coherence in institutional infrastructure* - the reasons why these cities have tailored the traditionally known approaches to transition to cleaner forms of energy and to build resilience to climate change.
2. *The characteristics of the 'situated breach'* – the context in which these cities are going about creation of new institutional logics.
3. *The types of 'situated governance' mechanism that are emerging, resulting in the creation of 'situated norms' and 'situated practices'* **-** specific characteristics that are unique to the governance models that are driving adoption of new approaches within cities.

6.1 Existing institutional infrastructure for energy transition and mitigating climate crisis

Cities around the world are at the forefront of addressing climate change and advancing energy transition. Occupying just 2% of the earth's surface, urban areas are responsible for approximately 70% of carbon emissions and a substantial share of global energy consumption (International Energy Agency, 2021). However, it's in these densely populated areas that innovation and progress in sustainability are most evident. Initiatives like Copenhagen's commitment to becoming carbon-neutral by 2025 demonstrate the practical steps being taken towards reducing environmental impact (Carbon Neutral Cities Alliance, 2021). Similarly, Tokyo's renowned public transit system is contributing to substantial reductions in CO2 emissions annually (Tokyo Metropolitan Government, 2021). These efforts across various cities reflect a growing recognition of the vital role urban centers play in shaping a sustainable future, showcasing a collective commitment to creating a more resilient and environmentally conscious world.

There are a number of institutional infrastructures in the form of norms and rules that exist in the world today, such as green procurement policies, the Paris Agreement, building codes, etc., to support the transition to alternate, low-carbon, and renewable forms of energy. There are also a number of maturing and quickly emerging policies in the space of climate change resilience and mitigation. These institutions play a critical role in improving energy efficiency standards, regulating carbon pricing, facilitating green procurement, building climate resilience, and incentivising renewable energy generation and transmission.

Utilising a stratified framework, I examine institutional infrastructures at international, national, regional, and local levels, emphasising their interconnected roles in shaping urban responses to these crises (Lobao, Martin and Rodríguez-Pose, 2009). I refer to both local norms such as urban planning, and renewable energy incentives as well as norms such as carbon pricing, and building codes, traditionally seen as being nationally oriented, to evidence the fact that both these aspects in today's context have a direct impact on building climate resilience and supporting energy transition in a city (Wittmayer *et al.*, 2016). For example, cities are increasingly cultivating renewable energy penetration as a vehicle to drive local economic policy – Aspen in Colorado has been powered by a mix of 100% renewable energy since 2015. As a city whose economy is primarily dependant on the local skiing industry, the city decided to switch to renewables with a view to mitigate climate change impact (Clean Energy, 2020).

This section provides a preliminary exploration of institutional infrastructures operating within a hierarchical framework, outlining their direct and indirect contributions to address energy and climate challenges. By situating these mechanisms within a stratified structure, I aim to clarify the interdependencies across infrastructure levels, offering an integrated perspective on their collective impact in advancing energy transition and climate resilience in cities. This is presented in Table 16 below. I further refer to some of these institutional infrastructures in the individual case chapters later to show deviations from the stipulated mechanisms.

Existing institutional infrastructures for energy transition and mitigating the climate crisis	
Hierarchy level	**Some examples of existing institutional infrastructures**
International	• Global Climate Goals – The Paris Agreement: A universal framework that guides city-level efforts to align with global emission reduction targets and climate resilience. • Energy Standards: Internationally established benchmarks that ensure energy systems in cities meet efficiency and sustainability requirements. • Funding: Financial resources provided by global institutions to support urban renewable energy projects and climate mitigation efforts.
National	• Green Procurement Policies: Government-driven purchasing strategies that prioritise eco-friendly goods and services for urban applications. • Oversight & Guidance: Centralised governance providing strategic direction for cities in implementing climate and energy policies. • Emissions Standards: Nationally mandated limits on pollutants that guide city-level efforts to improve air quality and reduce carbon footprints. • Industry Regulations: Rules set by national bodies to ensure industries within cities comply with sustainability and emissions norms. • Energy & Environmental Laws: Legal frameworks at the national level that influence urban planning, renewable energy use, and conservation practices.
Regional	• Building Codes: Regional regulations ensuring energy efficiency and sustainability in urban construction practices. • Energy Efficiency Standards: Guidelines that cities within regions must follow to optimise energy consumption. • Renewable Energy Incentives: Financial or policy-based regional incentives to encourage renewable energy adoption in cities. • Green Investments: Regional funding initiatives aimed at urban projects supporting clean energy and climate resilience. • Urban Planning for reduced emissions: Regional frameworks that integrate sustainable planning to minimise city-level greenhouse gas emissions
Local	• Carbon Pricing: City-level economic strategies such as taxes or cap-and-trade systems to reduce carbon emissions.

	• Climate Action Plans: Comprehensive urban strategies detailing specific measures to mitigate climate change impacts. • Emission Reduction Guidelines: Local rules aimed at limiting carbon output from transportation, industry, and other urban sources. • Local Emission Reduction Projects: City-initiated programmes targeting the transition to renewable energy and improved energy efficiency. • Waste Management Policies: Local frameworks for reducing, reusing, and recycling to lower emissions from waste disposal. • Community Engagement & Education: Initiatives to involve residents in climate action and raise awareness about sustainable practices.

Table 16: Existing institutional infrastructures for energy transition and mitigating the climate crisis

International Institutional Infrastructures: International Institutional Infrastructures, influencing policy making in cities, are global frameworks, such as the Paris Agreement and international energy standards, that provide funding, policy alignment, and strategic direction for urban responses to climate and energy challenges.

As part of the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement (adopted in 2015) sets out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C. Cities are crucial to achieving the Paris Agreement's objectives, given their significant contribution to greenhouse gas emissions and their potential for impactful mitigation and adaptation measures. The agreement encourages nations to formulate and communicate long-term low greenhouse gas emission development strategies, which include urban planning and development policies aimed at sustainability (UNFCCC, 2015). Cities invest in workforce development programmes to ensure that the local population has the skills needed by businesses. These programmes might include vocational training, apprenticeships, continuing education, and partnerships with local businesses and educational institutions. By increasing the skill level of the workforce, cities can attract higher-paying industries and reduce unemployment. However, these programmes need to be closely aligned with market needs and include pathways for both youth and adults to ensure they effectively contribute to economic growth (Holzer, 1999).

National Institutional Infrastructures: National Institutional Infrastructures, that have a direct impact on city-level policies, are centralised policies and regulations, including

emissions standards, energy laws, and green procurement strategies, that shape and support city-level climate and energy initiatives.

Green procurement policies require or encourage the purchase of environmentally friendly products and services by city governments and their contractors. These policies can significantly influence the market for green products, promoting the development and adoption of sustainable technologies and practices (Brammer and Walker, 2011). The city of Paris, France, has implemented green public procurement policies, requiring that all city purchases meet certain environmental criteria. This includes using eco-friendly materials in public buildings, purchasing low-emission vehicles, and sourcing sustainable food for school cafeterias. These policies not only reduce the city's environmental impact but also drive the market for sustainable products and services (IISD, 2021).

Regional Institutional Infrastructures: Regional Institutional Infrastructures, policies spanning multiple councils, or districts, or suburban areas, are intermediary mechanisms, such as building codes, renewable energy incentives, and urban planning directives, that translate national policies into actionable frameworks for cities.

Cities are adopting stricter building codes and energy efficiency standards to reduce energy consumption and greenhouse gas emissions (Trencher *et al.*, 2016). These codes dictate the minimum energy performance for new and existing buildings, covering aspects such as insulation, windows, heating and cooling systems, and lighting. For example, the International Energy Conservation Code (IECC) serves as a model for many local governments looking to implement energy-saving measures in buildings (Department for Energy, 2021). To quote another example, the European Union (EU) has the Energy Performance of Buildings Directive (EPBD), which requires all new buildings to be nearly zero-energy by the end of 2020. Germany's Passivhaus standard is another notable example, setting rigorous energy efficiency criteria for buildings to dramatically reduce their ecological footprint. These standards are essential in reducing energy consumption and greenhouse gas emissions from the building sector (European Commission, 2020).

Many countries offer incentives for renewable energy adoption, including tax credits, rebates, and feed-in tariffs for solar, wind, and other renewable energy systems. These incentives aim to reduce the cost barrier for individuals and businesses to invest in

renewable energy, accelerating the transition away from fossil fuels. For instance, the Solar Investment Tax Credit in the United States has significantly increased solar installations by providing a tax credit for solar photovoltaic systems (Bolinger, Seel and Robson, 2019). The Inflation Reduction Act (IRA) in the US has allocated $5 billion to aid states and municipalities in the planning and execution of greenhouse gas reduction initiatives via the Climate Pollution Reduction Grant (CPRG). This allocation presents a significant opportunity for states and municipalities to leverage their distinct resources, economic conditions, and political landscapes to make considerable progress in their specific energy, economic, and climate objectives (Clean Air Task Force, 2023).

Local Institutional Infrastructures: Local Institutional Infrastructures are ground-level systems, including carbon pricing, climate action plans, and community engagement initiatives, that directly implement and drive energy transitions and climate resilience in urban areas.

Many cities are adopting climate action plans that set targets for emission reductions and outline strategies to achieve these goals. These plans often include measures such as carbon pricing, which assigns a cost to carbon emissions to encourage emission reductions (Trencher *et al.*, 2016). Carbon pricing can take the form of carbon taxes or cap-and-trade systems and has been implemented in various cities and regions to incentivise low-carbon choices (Rosenzweig *et al.*, 2010). For example, the Environmental Protection Agency (EPA) in the United States has unveiled the second phase of the Climate Pollution Reduction Grants (CPRG) programme, aimed at executing the Priority Climate Action Plan (PCAP) planning grants allocated in the first phase. This phase introduces a comprehensive $4.3 billion general competition designed to assist states and municipalities in enacting strategies to curb greenhouse gas (GHG) emissions and other forms of air pollution. Additionally, the EPA has allocated $300 million specifically for tribal and territorial initiatives. The core objective of these implementation grants is to support policies and projects that not only significantly reduce GHG emissions but also deliver substantial community benefits and represent a transformative approach to environmental protection and sustainability (Clean Air Task Force, 2023).

Urban planning plays a crucial role in reducing emissions through the promotion of compact, mixed-use developments that reduce the need for transportation and encourage walking, cycling, and public transit use. Cities are also creating more green spaces and implementing "cool roofs" and "green roofs" to combat the urban heat island effect and improve energy efficiency (Stone Jr, 2005). Investment in public transit and mobility infrastructure is another strategy to reduce emissions and promote energy efficiency. Efficient public transit systems and infrastructure for non-motorised transport can significantly reduce the reliance on personal vehicles and the associated emissions. Cities are also supporting the transition to electric vehicles through incentives and the development of charging infrastructure (Gössling, 2013). Tokyo, Japan, is renowned for its efficient and extensive public transit system, which significantly reduces the need for personal vehicle use (UITP, 2019). The city's network of trains, subways, and buses is integrated, punctual, and widely used, contributing to lower per capita greenhouse gas emissions from transportation. Similarly, cities like Bogota, Colombia, have invested in bus rapid transit systems (BRT) like TransMilenio, significantly improving public transit efficiency and reducing emissions (UITP, 2019).

Engaging communities and providing education on energy conservation, renewable energy, and sustainable practices are crucial for achieving widespread behaviour change. Cities are implementing programmes to raise awareness, provide information, and encourage citizens to participate in energy transition and climate change mitigation efforts (Ockwell, Whitmarsh and O'Neill, 2009). Melbourne, Australia, has actively engaged its community in sustainability and climate action through various programmes and initiatives. The city provides resources and support for citizens to improve energy efficiency, reduce waste, and increase water conservation. Melbourne's community engagement efforts are critical in creating a culture of sustainability and ensuring broad participation in climate action (City of Melbourne, 2021b).

These policies and norms illustrate the multifaceted approach cities are taking to promote energy transition and combat climate change. While the effectiveness of these strategies can vary based on local context, their widespread implementation is vital for global efforts to mitigate climate

change and promote sustainable urban development. While each city's approach is shaped by its unique context, the common thread is a commitment to a more sustainable and resilient future.

In this section, I have provided an account of the existing institutional infrastructures in the context of the institutional field of energy transition and climate resilience. In the subsequent chapters, I refer back to the infrastructures discussed in this section to show the types of triggers that are occurring to help close the void that is not filled by these existing institutional infrastructures. I also refer to these to demonstrate the characteristics of the situated breaches that happen to manifest differently in different cities.

6.2 Existing institutional governance frameworks for energy transition and climate crisis

As cities around the globe grapple with the urgent challenges posed by climate change, a number of focused and purposeful governance mechanisms are emerging in order to steer the urban areas towards greater resilience and a sustainable energy transition. These mechanisms include global governance frameworks like the Kyoto Protocol and the Copenhagen Accord, which set international benchmarks and goals (Betsill and Bulkeley, 2007); the multi-level action and urbanisation pavilion that fosters collaboration across different government levels; the global taskforce of local and regional governments which amplifies urban voices in global climate discussions; sub-national diplomacy that allows cities to engage directly on the international stage; and multi-stakeholder platforms like the Urban Transition Alliance, which promote knowledge exchange and joint action (Kern, 2009). Together, these mechanisms facilitate a holistic approach to climate governance, integrating local actions with global strategies, and ensuring cities are both contributors to and beneficiaries of global sustainability objectives.

In the previous section, I explored examples of institutional infrastructure frameworks that help combat climate change and that support energy transition. This section shifts focus to examine the governance frameworks that operationalise and implement these institutional logics. These governance mechanisms should not be understood as isolated interventions but as interconnected components that enable to drive impact. Accordingly, this section provides a preliminary analysis of select institutional governance mechanisms, emphasising their direct and indirect influences on city functionality. By presenting these governance frameworks in a hierarchical format - encompassing international, national, regional, and local governance levels - the discussion aims to illuminate their interdependencies and roles in combatting the climate crisis and in transitioning away from fossil fuels based energy. This is presented in Table 17 below. I further refer to some of these institutional governance frameworks in the individual case chapters later to show deviations from the stipulated mechanisms.

Existing institutional governance mechanisms for energy transition and mitigating climate crisis	
Hierarchy level	**Some examples of institutional governance mechanisms**
International	• Intergovernmental Panel on Climate Change: A global scientific body providing cities with research-based guidance on climate mitigation and adaptation strategies.

	• International Renewable Energy Agency: A global institution promoting renewable energy adoption and policy alignment for sustainable urban development. • United Nations: An international organisation facilitating collaborative frameworks and initiatives for cities to address climate and energy challenges. • World Bank: A global financial institution funding city-level climate resilience and renewable energy projects. • Green Funds: International funding mechanisms supporting urban climate adaptation, mitigation, and renewable energy initiatives
National	• Environmental and Energy Ministries: Central government bodies designing and implementing policies for urban energy transitions and climate resilience. • Multi-level action and urbanisation pavilion: Platforms for integrating urban climate action across different levels of governance. • Climate Policy Councils: National advisory bodies shaping urban climate strategies and ensuring alignment with national goals. • National Committees: Entities that coordinate urban climate and energy initiatives under a unified national framework • Regulatory Authorities: Agencies enforcing compliance with national climate laws and energy policies at the city level. • Planning Authorities: National organisations overseeing long-term urban planning with a focus on sustainability and emissions reduction
Regional	• State Environmental Agencies: Regional entities implementing state-level policies for climate and energy transitions in cities. • Climate Action Boards: Regional councils guiding urban climate adaptation and renewable energy initiatives. • Sub-national diplomacy: Regional collaborations fostering city-to-city partnerships for shared climate goals • Global taskforce of local and regional governments: Networks promoting collaborative governance between regions and cities for global climate action.
Local	• Multi-level Stakeholder Platforms: Local forums enabling collaboration among governments, businesses, and communities for urban climate strategies. • Urban Planning Authorities: Local entities managing sustainable development and emissions reduction through zoning and infrastructure planning. • City Council and Municipalities: Local government bodies driving the implementation of climate and energy policies within urban areas. • Climate Action Departments: Dedicated city departments leading climate adaptation and renewable energy programmes. • Sustainability Departments: Municipal divisions focused on integrating sustainability across city operations and policies.

Table 17: Existing institutional governance mechanisms for energy transition and climate resilience

International governance bodies: International governance bodies are global institutions, such as the UN, IPCC, and World Bank, providing funding, policy frameworks, and research support to guide urban climate action and energy transitions in city environments.

Since the United Nations Framework Convention on Climate Change (UNFCCC) was established at the Rio 'Earth Summit' in 1992, three pivotal international global governance models have emerged to confront climate change. The first significant commitment came with the Kyoto Protocol in 1997 (Hodson and Marvin, 2010), which obligated participating states and their respective cities to curtail their greenhouse gas emissions, acknowledging the scientific consensus on human-induced global warming. However, the protocol's impact was limited by varying commitments and enforcement challenges.

The Copenhagen Accord of 2009 marked a notable shift by eliciting explicit emissions containment pledges from major economies, including emerging ones. Despite this broadened engagement, the accord fell short of establishing a robust, actionable framework, leaving much of its potential unfulfilled (Rajamani, 2010).

In a historic turn, the Paris Agreement in 2015 garnered the signature and legal adoption of 196 parties, setting an ambitious target to cap the temperature increase to 1.5°C above pre-industrial levels (Held and Roger, 2018). This agreement stands as a watershed in international climate efforts, not only for its wide-reaching consensus but also for its binding nature, compelling countries to undertake and regularly update their pledged contributions (Held and Roger, 2018). All these agreements were named after the respective cities in which they were signed recognising the importance of city-level implementation and impact to achieve these goals.

Roger and Held further probe the efficacy and future of these global governance models, particularly the Paris Agreement. They underscore the necessity for ongoing research to comprehend and enhance the agreement's implementation, especially given the rapid evolution of governance structures and the need for complementary approaches in tackling climate issues both at a national and local level (Held and Roger, 2018).

National governance bodies: National governance bodies are centralised entities, including environmental ministries and regulatory authorities, that develop, coordinate, and enforce policies driving city-level sustainability and climate resilience.

The Multilevel Action & Urbanisation Pavilion is an innovative space that has been featured at several prominent national and international climate and sustainability events, such as the United Nations Climate Change Conferences (COP) (Hodson and Marvin, 2010). It serves as a platform for cities, regions, and other national and sub-national entities to showcase their actions, share best practices, engage in dialogue, and form partnerships to address urbanisation challenges and promote sustainable development.

The Pavilion typically hosts a variety of activities during international events, including panel discussions, workshops, networking events, and exhibitions. These activities provide valuable opportunities for knowledge exchange, capacity building, and consensus-building among diverse participants. It has had a significant impact on raising the profile of cities and regions as critical actors in climate action and sustainable development. It has helped to mobilise resources, catalyse action, and shape more inclusive and effective governance approaches to the complex challenges of urbanisation and global environmental change (LGMA in the UNFCCC, 2022).

By bringing together a wide array of stakeholders, the Pavilion strengthens the voice of sub-national entities in international policy debates. It helps ensure that the needs, challenges, and contributions of cities and regions are considered in global climate and sustainability frameworks (LGMA in the UNFCCC, 2022).

Regional governance bodies: Regional governance bodies are intermediary agencies and networks, such as state environmental boards and climate action councils, that adapt and implement national strategies to regional, city-level, and urban contexts

Sub-national diplomacy refers to the international engagement and activities conducted by sub-national entities such as cities, states, provinces, or regions (ICLEI, 2024). This form of diplomacy has gained prominence in recent years, as these entities increasingly participate in global affairs, especially on issues like climate change, trade, cultural exchange, and human rights. Sub-national diplomacy operates alongside traditional state-

centric diplomacy, providing a more localised or regional perspective involving direct interactions between sub-national authorities across national borders (Leffel *et al.*, 2023).

Subnational diplomacy is still new in the United States. In 2022, the Secretary of State in the US set up a team focused on the local level. The main objective of this team has been to deliver benefits of foreign policy at the ground level while at the same time understand how cities can act as innovation and knowledge hubs to tackle global challenges. This role titled the special representative for city and state diplomacy has been influential in its initial year functioning in that it has been able to convene over 250 mayors to share and exchange solutions to many transnational issues that cities face (US Department of State, 2022). Efforts are underway to develop options to make this role and function permanent. Though the main purpose of this function is to elevate the voices of cities, it is to be noted that this is a significant step in putting in place a governance mechanism that considers cities and local leaders as key stakeholders in solving challenges contextual to their respective regions. In April 2023, at the Cities Summit of the Americas, Mayors and other City Leaders from across the Western Hemisphere came together to discuss subjects such as energy transition, affordable housing, and sustainable infrastructure which are local issues but have regional and international implications (US Department of State, 2022). A clear example that shows how a collaborative governance mechanism can help advance conversations at a local level.

The Global Taskforce of Local and Regional Governments represents a collective effort by local and regional authorities worldwide to contribute effectively to global governance and international decision-making processes, particularly those related to sustainable development, climate change, and resilience (Bulkeley and Betsill, 2013). Established as a coordination mechanism to bring the voices of local and regional governments to the United Nations and other international forums, the Global Taskforce has been instrumental in advocating for the role of sub-national actors in global policy-making.

The Global Taskforce of Local and Regional Governments was established in 2013 as a response to the increasing recognition of the importance of local and regional governments in addressing global challenges. It was conceived as a platform for these entities to coordinate their advocacy efforts, particularly in the context of the United Nations'

development agenda. The taskforce brings together major international networks of cities and regional governments, including United Cities and Local Governments (UCLG), ICLEI - Local Governments for Sustainability, and the Commonwealth Local Government Forum, among others (Global Taskforce of Local and Regional Governments, 2021).

The Global Taskforce has been particularly influential in advocating for the localisation of global agendas. It has emphasised the importance of adapting global goals, such as the SDGs and the Paris Agreement on climate change, to local contexts and has promoted the development of local strategies to achieve these objectives (UCLG, 2020).

Local governance bodies: Local governance bodies are city-level governance structures, such as municipalities, urban planning authorities, and sustainability departments, that directly implement climate action plans and energy policies tailored to local needs.

Cities establish formal and informal multi-level stakeholder platforms where various stakeholders come together regularly to share information, discuss issues, and coordinate actions. The Urban Transition Alliance, for example, connects industrial and former industrial cities worldwide to share knowledge and collaborate on sustainable urban development strategies (Urban Transitions Alliance, 2021). This model of governance involves multiple stakeholders, including government agencies, businesses, non-profits, and citizens, working together to formulate and implement energy and climate policies. This approach recognises the complex, interconnected nature of urban sustainability challenges and leverages the diverse perspectives, skills, and resources of different sectors to achieve common goals.

These governance practices demonstrate the comprehensive and multifaceted approach cities are taking and also some global governance mechanisms that exist for cities and local governments to come together to foster energy transition and combat climate change. By combining regulatory measures, collaborative strategies, financial mechanisms, and community engagement, cities are paving the way for a more sustainable and resilient future.

The importance of these governance mechanisms in urban climate strategies cannot be overstated. They provide the institutional fabric that is needed to implement the logics that enable cities to align local initiatives with global sustainability targets, ensuring coherent and effective action. For

instance, through frameworks like the Kyoto Protocol, cities such as Kyoto itself have committed to robust carbon reduction targets. The Urban Transition Alliance has seen cities like Essen, Germany, transition from coal-based industrial hubs to leaders in green energy (Hodson and Marvin, 2010). Similarly, the global taskforce of local and regional governments has enabled cities to present a united front in global climate negotiations, influencing policies that directly affect urban sustainability (Bulkeley and Betsill, 2013). By harnessing these mechanisms, cities not only adapt to the impacts of climate change but also lead the charge in the global transition to renewable energy sources, setting a dynamic example for urban resilience and sustainability.

In this section, I have provided an account of the existing institutional governance mechanisms in the context of the institutional field of energy transition and mitigation of the climate crisis. As we advance, the continued evolution and support of these mechanisms will be crucial in maintaining momentum towards achieving a climate-resilient future and we will see some examples of this evolution in the next section. I later refer back to the governance mechanisms discussed in this section, to show the types of 'situated' governance mechanisms that are now evolving to cater to the changing urban dynamics to help close the void that is not filled by these existing governance mechanisms. I also refer to these to demonstrate the situated practices and situated norms that are forming as part of the evolving governance frameworks.

6.3 Findings from select cities and city regions

In this section on energy transition and mitigating the climate crisis, I look at four real examples and cases on energy transition and climate response from the cities of Amersfoort, Singapore, Antsirabe, and Cardiff that took the initiative to tailor and draft their own policy frameworks.

Each of these cities experienced a loss of coherence with existing institutional infrastructures, resulting in what I describe as 'situated breaches'. These breaches were characterised by unique contextual pressures, such as increased energy consumption, resource constraints, or geographical and climate-related vulnerabilities. In response to these breaches, each city devised new governance mechanisms, referred to here as 'situated governance mechanisms', tailored to address their specific contexts and drive new institutional logics. The table below outlines the triggers for loss of coherence in institutional infrastructure – the reasons for the breach, the core characteristics of the situated breaches and the pivotal governance decisions explored in each case. In this section, I trace the evolution of these initiatives, highlighting the nature of the breaches and demonstrating how Amersfoort, Singapore, Antsirabe, and Cardiff developed 'situated practices' and 'situated norms' that underpin their governance mechanisms. Through this analysis, I demonstrate the critical role of institutional breaches in prompting context-specific governance innovations that reflect the dynamic realities cities face today especially in this pressing context of energy transition and climate resilience. A summary of the triggers, characteristics of situated breaches, and the type of situated governance mechanisms is shown in Table 18 below.

	Amersfoort	**Singapore**	**Antsirabe**	**Cardiff Region**
Trigger for loss of coherence in institutional infrastructure	• Contextual pressures (Urban density and energy transition) • Stakeholder expectations	• Contextual pressures (Resource scarcity and climate vulnerabilities) • Stakeholder expectations	• Contextual pressures (Service disparities and infrastructure gaps) • Stakeholder expectations • Infrastructure void	• Contextual pressures (economic disparities and policy fragmentation) • Stakeholder expectations

Characteristics of the ‘Situated breach’	• Rooted • Targeted	• Rooted • Targeted	• Relational • Rooted	• Rooted • Targeted
Type of ‘Situated Governance’ mechanism	• Collaborative • Incentivised	• Collaborative • Incentivised	• Collaborative • Incentivised	• Collaborative • Adaptive • Incentivised

Table 18: Summary of findings from select cities under energy transition and climate resilience

6.3.1 The City of Amersfoort – Energy transition policy

In this section, I explore Amersfoort's energy transition policy, which aims to achieve carbon neutrality by 2050. The city's approach is centred on addressing grid congestion, reducing energy poverty, and scaling peer-to-peer energy trading and smart grid technologies. Through the lens of institutional theory, I examine the 'situated breaches' observed in Amersfoort's energy transition, the triggers driving these breaches and their characteristics, and the 'situated' governance mechanisms enabling the delivery of the goals of the city.

Context: The energy transition policy for Amersfoort aligns with the Dutch national energy policy, which sets legally binding targets to reduce carbon emissions by 49% by 2030 and achieve carbon neutrality by 2050 (International Energy Agency, 2023). Amersfoort's specific challenges including emissions from the built environment and transport, grid congestion, and energy poverty (Energy Transition Model, 2023), however, necessitated a tailored approach. To address these, Amersfoort developed a Heating Vision for neighbourhood-based solutions and initiated pilot projects to test innovative energy storage technologies and peer-to-peer trading models (Interreg North Sea Region, 2023). These initiatives, while aligned with national goals, demonstrate a need for localised adaptations to overcome unique barriers.

Triggers for Loss of Coherence in Institutional Infrastructure: Amersfoort's energy transition policy exemplifies an institutional breach of national and regional institutional infrastructures necessitated by local challenges that deviate from traditional frameworks.

- *Contextual Pressures:* Grid congestion, a critical issue for Amersfoort, poses a significant threat to the city's energy transition goals. As the demand for electricity rises due to the electrification of new developments and retrofits, the strain on the existing grid infrastructure increases, risking delays and inefficiencies in the transition to sustainable energy. To mitigate these challenges, the city must implement neighbourhood-specific heating solutions and explore innovative energy storage technologies that reduce peak demand and enhance grid resilience. Additionally, emissions from heating, cooling, and appliance use in the built environment remain persistently high, underscoring the urgency of coordinated action across sectors. As clearly emphasised in the Heating Vision,

"Preventing energy poverty and addressing grid congestion are central to Amersfoort's energy agenda, ensuring that the transition to sustainable heating solutions remains both equitable and feasible within the city's infrastructural constraints" (Feenstra *et al.*, 2021).

This reflects the city's commitment to balancing climate action with social responsibility, ensuring that vulnerable communities are not disproportionately affected by the energy transition.

- *Stakeholder Expectations:* The energy transition in Amersfoort has brought with it a complex set of stakeholder expectations, particularly from residents concerned about the impact of renewable infrastructure on their neighbourhoods. Resistance to the installation of wind turbines and solar panels in residential areas posed a significant barrier to implementation. To navigate this challenge, city leaders shifted their engagement strategy by moving from broad, individual-level outreach to more targeted collaboration with organised groups, including housing cooperatives and local energy start-ups. These intermediaries played a key role in building trust, aligning community interests, and accelerating uptake. As Gardner (Gardner, 2023) observed,

  "Scaling solutions required a shift from direct citizen engagement to working with organised groups, reducing time costs and increasing effectiveness."

  This quote reflects how stakeholder expectations were not only acknowledged but strategically managed through institutional adaptation, highlighting the importance of working through trusted networks to build legitimacy and ease policy adoption in complex urban environments.

Amersfoort's energy transition efforts highlight a breach of both national and local institutional infrastructures. The Dutch Climate Act provides broad targets for decarbonisation, yet Amersfoort's unique challenges including grid congestion, energy poverty, and community resistance necessitated localised adaptations to complement these frameworks (Energy Transition Model, 2023). By focusing on neighbourhood-based heating solutions and piloting peer-to-peer energy markets, Amersfoort has demonstrated how cities can extend the reach of national policies while addressing local gaps. These actions underscore the importance of creating dynamic institutional infrastructures capable of accommodating both global imperatives and urban-specific realities.

Characteristics of situated breaches: Amersfoort's approach to energy transition exhibits distinct characteristics of situated breaches, tailored to address its unique challenges.

- *Targeted:* Amersfoort's energy transition strategy is highly focused, prioritising specific, pressing challenges such as grid congestion and energy poverty. Rather than dispersing resources across multiple technology-driven initiatives, the city's approach is designed to create scalable, high-impact solutions that can be expanded over time. By concentrating on these key areas, Amersfoort ensures that its efforts are both strategic and replicable, laying the groundwork for long-term energy resilience. One of the city's most significant strategies involves pilot projects in energy storage and peer-to-peer energy trading, which aim to balance electricity supply and demand at the local level. These initiatives not only provide direct benefits to residents such as improved energy affordability and reduced dependence on centralised infrastructure but also contribute to broader systemic improvements in the energy market.

  > *As highlighted in a regional report, "The upscaling potential of smart grids and energy storage solutions positions Amersfoort as a pioneer in tackling urban grid congestion, demonstrating a forward-thinking approach that integrates innovation with real-world application"* (Interreg North Sea Region, 2022).

  This underscores the city's commitment to implementing solutions that are both adaptable and future-proof, ensuring a smoother transition to a more efficient and equitable energy system**.**

- *Rooted:* Amersfoort's Heating Vision takes a highly bottom-up and organic approach, recognising that a one-size-fits-all strategy is insufficient in addressing the city's diverse energy needs. By prioritising neighbourhood-specific heating solutions, the city ensures that infrastructure development is aligned with both grid capacity and socio-economic factors, making the energy transition more effective and inclusive. This tailored approach acknowledges that different areas face unique challenges - some may struggle with grid congestion, while others may have a higher prevalence of energy poverty.

  To address these disparities, Amersfoort is implementing heating solutions that are customised to local conditions, including district heating networks, heat pumps, and thermal energy storage systems. These initiatives not only enhance affordability but also mitigate strain on the grid,

ensuring that low-income households are not disproportionately affected by rising energy costs or infrastructure limitations. As emphasised in the Heating Vision…

> *"Neighbourhood-based solutions are essential to balancing grid demands and ensuring equitable access to energy, as they allow for tailored interventions that address both technical constraints and social vulnerabilities"* (Feenstra *et al.*, 2021).

This highlights the city's commitment to a place-based energy strategy that prioritises fairness, sustainability, and long-term resilience.

To summarise, Amersfoort energy transition policy is tailored to challenges, both present and future, faced by the city and the approach is aimed at reducing energy poverty and improving energy affordability. The institutional logics created by Amersfoort broadly align with local and regional institutional infrastructures while introducing significant adaptations. The targeted and localised approaches position Amersfoort as a model for addressing energy transition challenges locally in medium-sized cities.

Situated Governance Mechanisms: Amersfoort employs collaborative and incentivised governance mechanisms to implement its energy transition initiatives. These approaches integrate norms and practices tailored to specific challenges faced by the city.

- *Collaborative:* Amersfoort's energy transition strategy is rooted in a collaborative governance model that positions the city as a coordinator rather than a top-down regulator. By partnering with housing cooperatives, energy start-ups, and academic institutions, the municipality has fostered a network of actors capable of jointly addressing the technical and social challenges of transitioning to a flexible, low-carbon energy system. One of the key roles the city has assumed is that of an energy market coordinator, helping to align goals, share resources, and facilitate experimentation across sectors. This approach has proven especially effective in overcoming barriers to citizen engagement, which had previously slowed progress in residential energy projects. As noted in the ACCESS project report,

> *"Amersfoort joined ACCESS to tackle grid congestion in the residential sector. Partnering with Klimaatmissie, they overcame recruitment challenges for residential participation, focusing on managing energy demand and response effectively."* (Interreg North Sea Region, 2022).

This example highlights how collaboration has not only improved operational efficiency but also strengthened the city's capacity to deliver scalable, citizen-focused energy solutions in a rapidly evolving policy environment.

Situated Norms and Practices: Partnerships are governed by formal agreements that outline roles and responsibilities, including shared investment in pilot projects and subsidisation of battery purchases. Joint forums and workshops foster knowledge exchange, while local entities such as Energievannu play a critical role in aligning community efforts with city objectives.

- *Incentivised:* Incentives have played a central role in Amersfoort's strategy to accelerate the energy transition, particularly in supporting the deployment of decentralised energy solutions. By offering subsidies for energy storage systems and providing institutional backing for innovative start-ups, the city has been able to reduce adoption risks and encourage participation in experimental pilot projects. These financial and organisational incentives align municipal goals with stakeholder interests, helping embed energy innovation more deeply into the city's governance structures. One prominent example comes from Amersfoort's involvement in the ACCESS project, which aimed to resolve grid congestion and promote flexible energy systems. As described in the project report,

> *"In 2021, the municipality of Amersfoort prepared and executed two battery procurements for the pilots in Amersfoort within the ACCESS project. By partnering with local entities like housing cooperatives, renovation experts, and battery providers, Amersfoort assumed the role of an energy market coordinator. This approach involved uniting various stakeholders and subsidising battery purchases to facilitate the implementation of a storage-as-a-service solution"* (Interreg North Sea Region, 2022).

This example illustrates how the city's incentivised approach is not just financial in nature but also organisational—mobilising a local ecosystem of actors to co-develop and deliver sustainable energy solutions.

Situated Norms and Practices: Incentive schemes are underpinned by clear policies that provide financial support for battery installations and heating solutions. Practices include targeted outreach to organised groups, recruitment campaigns, and real-world demonstrations of technology benefits to build trust and participation.

Amersfoort's governance mechanisms reflect a compelling blend of collaborative and incentivised approaches, strategically designed to address the specific challenges of the city while aligning with broader energy transition goals. The city's role as an energy market coordinator, alongside its targeted subsidies and pilot projects, highlights the potential for cities to act as hubs of innovation within multi-level governance frameworks. By operationalising these mechanisms through structured partnerships and financial incentives, Amersfoort bridges the gap between community needs and national climate ambitions.

These governance strategies illustrate how local governance can adapt and enhance international and national governance models, paving the way for innovative solutions to urban energy transitions. Amersfoort's approach emphasises that meaningful progress on global sustainability targets depends on empowering cities to lead with locally tailored yet scalable solutions.

City	Amersfoort, Netherlands
Policy	Local Energy Transition Policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Grid congestion | Heating and cooling demand | Energy consumption from appliances and lighting | Alleviating energy poverty | Improving grid capacity • Stakeholder expectations: Push back from residents to not have windmills in their backyards or solar panels on their roofs
Characteristics of the situated breach	• Rooted: Heating Vision grounded and local to Amersfoort to set the pace for neighbourhood-based heating solutions and timeframes. • Targeted: Proposal to go all-electric for energy transition especially for heating
Situated governance mechanisms	• Collaborative: Collaborating with organised groups rather than engaging with residents directly. Dedicated collaborative framework involving various city level stakeholders and partnerships with local energy companies and start-ups. • Incentivised: Subsidising battery purchases to facilitate the implementation of solutions

Table 19: Summary of Amersfoort's approach to energy transition

Amersfoort's energy transition policy offers valuable insights into institutional breaches and governance mechanisms, as summarised in Table 19 above:

- The triggers for loss of coherence, including grid congestion and energy poverty, necessitated tailored responses beyond traditional frameworks.
- The characteristics of the situated breaches, particularly their targeted and rooted nature, underscore the importance of context-specific adaptations.
- The resulting situated governance mechanisms, combining collaborative and incentivised approaches, highlight the need for dynamic governance structures that integrate local and national priorities.

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6.3.2 Singapore City – Green transition policy

In this section, I delve into Singapore's green transition policy, which aims to transform the city-state into a "city in a garden". Singapore's unique challenges, including its tropical climate, high per-capita emissions, and resource constraints, have shaped a sustainability vision centred on integrating nature into urban living. Through the lens of institutional theory, I examine the 'situated breaches' that emerge from Singapore's approach, the triggers underlying these breaches and their associated characteristics, and the governance mechanisms driving the city-state's ambitious vision.

Context: The policy under consideration for the purposes of this research is the green transition policy for Singapore. This policy for Singapore focuses on embedding nature into urban infrastructure, creating sustainable and liveable spaces, and addressing key challenges such as emissions, water scarcity, and resource limitations. Singapore's vision for sustainability and quality of life involves transforming into a city of water, parks, and gardens, promoting outdoor activities (Igini, 2022). Initiatives such as the eco-smart city of Tengah and the Green Mark building standards exemplify Singapore's tailored approach. Tengah, dubbed a 'forest town', integrates green spaces, pedestrian-friendly zones, and innovative technologies to balance urban living with environmental sustainability (Menon, 2022). Other initiatives include the LUSH (Landscaping for Urban Spaces and High-Rises) programme, which mandates developers to offset open space usage with greenery, and the introduction of green roofs and centralised cooling systems to reduce emissions and improve energy efficiency (Big Think, 2022). These measures highlight a rethinking of traditional urban planning norms to address Singapore's specific challenges, showcasing a need for tailored governance and infrastructure mechanisms that deviate from conventional frameworks.

Triggers for Loss of Coherence in Institutional Infrastructure: Singapore's green transition policy represents a breach from traditional building and urban planning norms classed as national and regional institutional infrastructures respectively, driven by localised challenges and stakeholder demands.

- *Contextual Pressures:* Singapore faces a distinct set of environmental pressures, shaped by its tropical climate, high population density, and limited natural resources. The city-state's reliance on air conditioning to combat heat and humidity results in high energy consumption, significantly contributing to carbon emissions and straining the national grid (Big Think,

2022). As temperatures continue to rise due to climate change, the demand for cooling is expected to increase, making energy efficiency a critical priority. In addition to its energy challenges, Singapore grapples with resource scarcity, particularly in water and raw materials. The nation's fluctuating water levels pose a risk to long-term water security, making desalination and water recycling essential components of its sustainability strategy. Furthermore, the lack of domestic raw materials means Singapore is heavily dependent on imports, increasing its vulnerability to global supply chain disruptions and price fluctuations (Igini, 2022), as highlighted in the quote below.

> *"Singapore's ambition to integrate nature into the city is not just about aesthetics; it's a necessity born out of its unique environmental and contextual constraints," noted a researcher from the Centre for Liveable Cities, who was interviewed for the purposes of this research.*

- *Stakeholder Expectations:* Singapore's well-educated and highly skilled population has fostered a society with elevated expectations for a high quality of life, which includes sustainable, clean, and green urban spaces (Big Think, 2022). As a global hub for innovation and economic growth, the city-state faces increasing public demand for environmentally responsible development, improved air and water quality, and access to green infrastructure that enhances both liveability and well-being (Igini, 2022). Citizens expect the government and businesses to prioritise climate resilience, energy efficiency, and urban biodiversity in planning and policymaking, ensuring that sustainability remains at the core of national development efforts (Menon, 2022), as evidenced in the quotation below.

> *"Urban planning in Singapore has always been citizen-centric, designed to meet the aspirations of its people while addressing resource challenges," observed Koh.* (Koh, 2006b).

These triggers underscore a breach of traditional urban development norms such as classic urban planning guidelines, industry regulations and standards, necessitated by Singapore's unique environmental and social challenges. While international standards like the UN Sustainable Development Goals provide a broad framework, Singapore's approach demonstrates how tailored local strategies can address gaps in existing institutional infrastructures.

Characteristics of Situated Breaches: Singapore's approach to its green transition exhibits distinct characteristics of situated breaches that align with its unique context.

- *Targeted:* Singapore's initiatives are highly focused, addressing specific issues such as emissions reduction, water scarcity, and green space creation. Programmes like Tengah and the Green Mark standards provide tangible benefits, improving liveability while advancing sustainability goals. Singapore promotes traditional and rooftop gardens, supporting over 300 community gardens. Urban planners in Singapore are introducing a centralised cooling system as a more energy-efficient alternative to individual units, complementing the 'forest town' concept with abundant parks, vegetation, and green spaces. Indeed, according to the Centre for Liveable Cities (CLC), in 2020 nearly 47% of Singapore's land was covered in green space, making it a true 'garden city' (Centre for Liveable Cities, 2020). The following extract from a report by the CLC highlights this feature.

  "The integration of green spaces into urban planning is a targeted response to Singapore's challenges, blending functionality with environmental benefits," (Centre for Liveable Cities, 2020).

- *Rooted:* Singapore's environmental governance is deeply rooted in the city-state's distinctive geographical, climatic, and socio-political context. Its policies address highly specific challenges, such as reducing emissions from widespread air conditioning use, while also leveraging opportunities unique to its setting such as promoting green roofs, vertical gardens, and protected nature reserves within a densely built environment. This context-sensitive approach ensures that sustainability measures are not only technically sound but also socially resonant and spatially feasible. The city's long-term vision has been shaped by a desire to reconcile rapid urbanisation with ecological wellbeing. As noted in a 2021 assessment of Singapore's urban strategies,

  "Singapore's transformation into a 'city in a garden' reflects a deeply localised vision, balancing urban density with green living" (Resilient Cities, 2021).

  This framing encapsulates how rootedness in local conditions can become a powerful asset, allowing sustainability policies to be both ambitious and attuned to the lived realities of place.

These breaches align with Singapore's local and regional governance frameworks while offering a scalable model for integrating sustainability into urban planning. The targeted and rooted nature of these policies positions Singapore as a global leader in green urban development.

These situated breaches represent a deliberate recalibration of traditional urban planning and sustainability frameworks to address Singapore's unique environmental and socio-economic challenges. While deeply targeted, rooted, and localised in focus, these approaches also exemplify how innovative, context-specific strategies can set global benchmarks for sustainable urban living. Singapore's actions demonstrate the potential for tailored solutions to extend and refine institutional logics, bridging the gap between local needs and broader sustainability goals. Though the institutional infrastructure in this case is different to other nation-city relationships, the unique issues pertinent to Singapore and its tailored approach to develop solutions to these issues is an indication for loss of coherence and the need for slightly different governance and infrastructure mechanisms to drive this agenda compared to other cities around the world.

Situated Governance Mechanisms: Singapore employs collaborative and incentivised governance mechanisms to implement its green transition policy, integrating stakeholders across multiple sectors.

- *Collaborative:* Singapore's approach to environmental and urban governance is underpinned by a highly coordinated and multi-sectoral framework, where collaboration across government agencies, academia, and the private sector is both deliberate and institutionalised. Urban planners, architects, and engineers work closely with policymakers to embed greenery into the built environment, from integrating vertical gardens and rooftop vegetation to designing walkable, climate-resilient public spaces. This model of governance is characterised by long-term planning, cross-sector alignment, and public engagement, all of which are essential for maintaining consistency and ambition in sustainability efforts. Importantly, collaboration is not limited to elite stakeholders; it extends to the broader public as well. As Tomarchio (Tomarchio, 2019) observed,

  > *"Singapore's citizen-centric approach to governance ensures that sustainability efforts are inclusive and aligned with public aspirations."*

This quote reflects how the city-state's collaborative ethos reinforces trust and legitimacy, enabling shared ownership of environmental goals and sustained progress toward a greener urban future.

Situated Norms and Practices: Partnerships are governed by clear agreements that define roles and responsibilities, ensuring alignment across stakeholders. Regular forums and workshops facilitate collaboration, while citizen engagement initiatives foster community support for green policies.

- *Incentivised:* Singapore's sustainability strategy is strongly underpinned by a set of market-based incentives that guide both developers and residents toward environmentally responsible behaviour. Programmes such as LUSH (Landscaping for Urban Spaces and High-Rises) and subsidies for green roofs are prime examples of how the government has used financial levers to promote ecological design within the constraints of high urban density (Resilient Cities, 2021). These incentives serve multiple goals such as reducing emissions, improving energy efficiency, and enhancing urban liveability, all while aligning private interests with public environmental objectives. Crucially, by embedding sustainability into development incentives and regulatory frameworks, Singapore fosters a self-reinforcing governance model, where the adoption of green practices becomes both economically appealing and institutionally normalised. As Big Think (Big Think, 2022) notes,

> *"The Landscaping for Urban Spaces and High-Rises (LUSH) programme has transformed Singapore's skyline, creating a balance between urban density and green living."*

This quote illustrates how targeted incentives can go beyond compliance to shape the city's identity, reinforcing a vision of sustainability that is aspirational, strategic, and scalable.

Situated Norms and Practices: Incentive schemes are underpinned by policies that mandate greenery offsets and promote the adoption of innovative technologies. Practices include targeted outreach to developers, demonstrations of environmental benefits, and financial support to facilitate green infrastructure projects. In the Marina Bay, for example, developers were required to compensate for any ground-level landscape lost due to construction by incorporating equivalent greenery in sky gardens or similar features (*How Singapore is Pioneering the Way to Creating a Greener Urban Environment*, 2022).

Singapore's governance mechanisms exemplify a sophisticated integration of international, regional, and local institutional infrastructures. While Singapore's context as a city-state precludes a distinct national layer, its policies align with global frameworks such as the Paris Agreement and UN Sustainable Development Goals, translating these ambitions into actionable strategies at the urban level. By embedding greenery into urban planning, incentivising sustainable development through initiatives such as the LUSH programme, and leveraging collaborative networks of stakeholders, Singapore bridges the gaps in existing governance frameworks. These efforts not only address local challenges but also contribute to global sustainability goals, showcasing the role of cities in operationalising international commitments through innovative local governance.

To summarise, Singapore's greening policy is tailored to the city's circumstances, challenges that are specific to Singapore, and solutions that are best for the residents of the city. The approach, the reasons, and the mechanisms to drive change are unique to Singapore relative to any other city in the world. To deliver on its comprehensive strategy, Singapore continues to believe in embracing a citizen-centric governance approach. Authorities, academia, citizens, companies, agencies, work together in a collaborative manner to deliver on the vision. Urban planners and architects in Singapore are committed to embedding nature into the urban fabric, integrating plant life through green roofs, vertical gardens, and green walls in new buildings and developments (Tomarchio, 2019). The tight network of stakeholders in Singapore combined with a legislated incentivisation scheme is helping the city progress at pace to become a 'city in the garden' (Resilient Cities, 2021).

City	Singapore
Policy	Green-transition policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Tropical climate | Scarce water resources | Fluctuating water level since being part of a delta | Lack of domestic raw materials • Stakeholder expectations: Well-educated population with high standard of living expectations Emissions resulting from excessive use of air conditioning
Characteristics of the situated breach	• Rooted: Urban planners in Singapore are introducing a centralised cooling system as a more energy-efficient alternative to individual units. Creation of sky terraces and gardens to meet green requirements are encouraged. • Targeted: Legislation mandating buildings to meet Green Mark standards. Building regulations mandate that developers offset any open space used by adding greenery elsewhere.

Situated governance mechanisms	• Collaborative: Citizen-centric governance approach involving various city level stakeholders. Tight network of industry, academia, and governments drives collaboration. Highly skilled and well-educated population in Singapore put their expertise to play. • Incentivised: LUSH (Landscaping for Urban Spaces and High-rises) incentives for incorporating greenery in buildings. Urban planners and architects in Singapore are committed to embedding nature into the urban fabric.

Table 20: Singapore's approach to green transition

While acknowledging the challenges that the city faces, and while at the same time not shying away from being innovative and bold, Singapore sets a vision for the future and a standard for other cities around the world to aspire to deliver differently, locally, and meaningfully. Singapore's green transition policy offers valuable insights into institutional breaches and governance mechanisms, as summarised in Table 20 above:

- The triggers for loss of coherence, including emissions, resource scarcity, and stakeholder expectations, necessitated tailored strategies that deviate from traditional norms.
- The characteristics of the situated breaches, particularly their targeted and rooted nature, highlight the importance of adapting global frameworks to local contexts.
- The resulting situated governance mechanisms, combining collaborative and incentivised approaches, demonstrate how cities can lead global sustainability efforts through innovative and inclusive strategies.

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6.3.3 The City of Antsirabe – Climate change policy

In this section, I explore Antsirabe's evolving approach to climate change, characterised by grassroots interventions and nascent collaboration between the local municipality and private sector actors. The city's efforts exemplify weak yet promising signals of 'situated' institutional breaches driven by unique local challenges. Through the lens of institutional theory, I examine these breaches, the triggers underlying them, their characteristics, and the governance mechanisms that are beginning to take shape in this emerging model of decentralised action.

Context: The policy under consideration for the purposes of this research is the climate change policy for Antsirabe in Madagascar. The climate change policy for Antsirabe aligns with Madagascar's National Adaptation Programme of Action (NAPA), which prioritises agriculture, public health, water resources, and forestry (Grantham Institute, 2022). However, Antsirabe has shifted focus to address its most pressing local challenges, including changing rainfall patterns, extreme weather events, and strained water resources. Recent cyclones, such as Batsirai in 2022, have heightened the city's urgency to act, prompting ad hoc yet impactful collaborations with private sector partners (Jones, 2022).

These collaborations have led to immediate local benefits, such as improved road maintenance and the provision of resources like textiles and banners, incentivised by tax waivers. While these measures remain unstructured and lack legislative backing, they reflect the city's commitment to addressing local priorities within the broader national climate strategy.

Triggers for Loss of Coherence in Institutional Infrastructure: Antsirabe's climate change initiatives highlight, to a certain extent, a breach of national institutional infrastructure, driven by multiple interconnected triggers that reveal the limitations of Madagascar's national frameworks in addressing localised challenges.

- *Contextual Pressures:* Antsirabe faces severe environmental challenges, including changes in rainfall patterns that threaten agriculture, increased frequency of cyclones, and pressures on already limited water resources. These vulnerabilities, exacerbated by the city's reliance on agriculture and natural resources, require urgent and tailored interventions (Grantham Institute, 2022). The shifting climate dynamics not only disrupt local livelihoods but also strain existing institutional infrastructures, exposing gaps in planning, resource management, and disaster

preparedness. These pressures demand adaptive governance responses that are context-sensitive and capable of integrating traditional knowledge with emerging climate data. Without targeted institutional action, the city risks compounding socio-economic vulnerabilities and undermining long-term resilience. As noted in a recent report,

> *"Antsirabe's vulnerability to extreme weather events makes it one of the most climate-sensitive regions in Madagascar, necessitating immediate action to protect its communities and economy"* (Jones, 2022).

- *Stakeholder Expectations:* The city's residents and local businesses increasingly expect decisive action from municipal authorities, particularly in the wake of disasters like Cyclone Batsirai. This has prompted the municipality to engage with private sector partners to address pressing needs, such as road maintenance and infrastructure repairs (Grantham Institute, 2022). These expectations are reshaping the role of local governance, pushing it toward more collaborative and responsive models of service delivery. As trust in institutions becomes contingent on visible outcomes, meeting stakeholder demands has become central to maintaining legitimacy and institutional coherence, as evidenced in the quote below.

> *A local business leader commented, "Our collaboration with the municipality shows that even with limited resources, collective efforts can address urgent challenges and benefit the community"* (Araújo *et al.*, 2024).

- *Infrastructure Void:* A critical gap in disaster management and resource allocation infrastructure has left Antsirabe ill-equipped to handle the impacts of climate change. The absence of decentralised funding mechanisms and inadequate communication between the central government and the city further constrain local action (Global Facility for Disaster Reduction and Recovery, 2011). This disconnect hampers the city's ability to implement timely and context-specific interventions, leading to delays in recovery and adaptation efforts. Over time, such infrastructural voids risk eroding institutional trust and amplifying the vulnerability of already at-risk communities, as highlighted in the quote below.

> *"Antsirabe's challenges are compounded by the lack of enabling infrastructure, both physical and institutional, to effectively address climate risks," observed a researcher at the Grantham Institute (Grantham Institute, 2022).*

The combination of contextual pressures, rising stakeholder expectations, and significant infrastructure voids underscores the inadequacy of Madagascar's national institutional frameworks in meeting Antsirabe's needs. These triggers have driven the city to adopt grassroots interventions and collaborative models, representing a nascent yet significant breach of traditional institutional logics.

Characteristics of Situated Breaches: Antsirabe's approach to climate resilience exhibits characteristics of situated breaches that, while weak and unstructured, are beginning to yield tangible local benefits.

- *Targeted:* Antsirabe's sustainability and development initiatives are carefully designed to address specific, pressing local needs, ensuring that resources are allocated efficiently to tackle the most urgent challenges. One of the city's primary concerns is the repair and restoration of cyclone-damaged infrastructure, as frequent extreme weather events have severely impacted roads, bridges, and public facilities (Grantham Institute, 2022). By prioritising reconstruction and climate-resilient infrastructure, Antsirabe aims to enhance disaster preparedness, improve mobility for residents and businesses, and reduce economic disruptions caused by severe storms. Another critical focus area is water resource management, as the city faces challenges related to water scarcity, contamination, and access disparities. Addressing these issues involves enhancing water distribution networks, investing in sustainable water conservation techniques, and implementing flood mitigation measures to prevent damage to homes, farmlands, and businesses. The quote below evidences the targeted nature of these actions.

  "Antsirabe's focus on delivering tangible outcomes for its community demonstrates the power of targeted, grassroots interventions," (Araújo *et al.*, 2024).

- *Relational:* The collaboration between the municipality and private sector partners underscores the relational nature of Antsirabe's development strategy, where mutual cooperation drives progress. Recognising the importance of public-private partnerships, the city has introduced incentives such as tax waivers to encourage businesses to actively participate in urban development and infrastructure improvement efforts (Grantham Institute, 2022). These incentives not only provide financial relief to local enterprises but also create a shared sense of responsibility in addressing key challenges, from repairing cyclone-damaged infrastructure to enhancing water resource management. By fostering a cooperative environment, the city

ensures that businesses see themselves not just as economic actors but also as partners in resilience-building and sustainability efforts. This collaboration has led to investment in local projects, such as upgrading roads, supporting community-driven water initiatives, and strengthening disaster preparedness (Jones, 2022). Ultimately, this relational approach promotes long-term engagement, ensuring that public and private stakeholders work together towards a more sustainable, inclusive, and economically stable Antsirabe, as evidenced in the quote below.

> *"This model of mutual support between the public and private sectors is a promising step towards building resilience in resource-constrained settings,"* (Jones, 2022).

These breaches align with Antsirabe's local context while challenging the rigidity of national frameworks. Although in their early stages, these initiatives signal the potential for grassroots action to influence broader institutional logics and governance models.

Situated Governance Mechanisms: Antsirabe employs emerging collaborative and incentivised governance mechanisms to implement its climate initiatives, creating a nascent model of decentralised action.

- *Collaborative:* In Antsirabe, collaboration has emerged as a practical and necessary response to limited institutional capacity and resource constraints. The municipality's governance approach is grounded in close partnerships with local businesses, where mutual trust and shared goals provide the foundation for coordinated action. These partnerships have been instrumental in addressing pressing needs such as road maintenance, disaster recovery, and access to essential services while also contributing to the city's long-term resilience. In a context where formal institutional frameworks are often weak or absent, collaboration becomes not just a strategy, but a survival mechanism. As Jones (Jones, 2022) observed,

> *"In the absence of formal structures, Antsirabe's collaborative efforts show how local governments can still drive impactful change."*

This highlights how collaboration, particularly in under-resourced urban settings, serves as both a governance tool and a source of legitimacy, enabling local actors to respond effectively to community needs despite structural limitations.

Situated Norms and Practices: The municipality fosters collaboration through informal agreements, focusing on specific projects like road repairs. Practices include direct engagement with local manufacturers and service providers, leveraging their expertise to deliver cost-effective solutions.

- *Incentivised:* Antsirabe has begun to experiment with incentivised governance mechanisms as a way to involve private actors in its climate and resilience efforts. Although formal legislation is still lacking, the municipality has employed informal tools such as tax waivers and targeted financial incentives to encourage business participation in local sustainability initiatives. These measures have helped lower barriers for engagement and foster a sense of shared responsibility between the public and private sectors. While modest in scale, these efforts reflect a growing recognition, among both officials and community members, of the value that incentive-based governance can offer in a resource-constrained environment. As Araújo et al. (Araújo *et al.*, 2024) note,

  > *"The use of targeted incentives in Antsirabe shows that even small-scale interventions can inspire significant private sector involvement."*

  This quote highlights how incentives, even when applied incrementally and outside formalised structures, can generate momentum and lay the groundwork for more institutionalised, long-term governance solutions.

  Situated Norms and Practices: Incentives are granted on a case-by-case basis, reflecting the municipality's focus on flexibility and responsiveness. Practices include negotiated agreements with businesses and recognition of their contributions to local climate action.

Antsirabe's governance mechanisms reflect an adaptation of international and national frameworks to its unique local context. These collaborative and incentivised approaches demonstrate how cities in resource-constrained settings can operationalise climate action through innovative grassroots strategies.

To summarise, Antsirabe has a long way to go in driving and delivering in a structured and consistent manner on its climate change priorities but the first steps are visible. The National Action Plan for Adaptation to climate change aims to empower the country to adopt urgent and immediate adaptation measures, addressing the adverse effects of climate change and targeting particularly the five priority sectors: agriculture and livestock, public health, water resources,

coastal zones, and forestry (Grantham Institute, 2022). All of these are not a priority for Antsirabe and the city is strengthening focus on aspects that are impactful for its communities and businesses.

Madagascar has progressed in disaster risk management, yet significant gaps remain, affecting prompt and effective response and readiness for future climate events. The current institutional capacity is scattered and needs consolidating. Efforts must focus on empowering local entities with tools and resources to manage disasters. Decentralisation is vital, enabling local leaders to allocate funds for infrastructure and resource management. Moreover, incorporating climate change into the National Strategy, with specific budget allocations for potential risks, is crucial (Grantham Institute, 2022). To continue making efforts to drive this local level action, Antsirabe is starting to demonstrate a pattern of collaboration especially with private sector partners to deliver on local priorities albeit ad hoc and unstructured at this stage. By providing tax waivers and incentives it is encouraging local businesses and manufacturers to play an active role in driving local action for the benefit of the city and its residents.

City	Antsirabe, Madagascar
Policy	Climate change policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Changes in rainfall patterns affecting agriculture	Increased frequency of extreme weather events	Pressures on water resources • Stakeholder expectations: Expectations from local businesses and residents to take action especially in the wake of natural disasters • Infrastructure void: Lack of transfer of resources from the central government	Lack of financial support	Restricted remit	Lack of proper communication between the centre and the city
Characteristics of the situated breach	• Targeted: Identifying and delivering on local priorities through targeted solutions. Supporting national implementation of local remit. • Relational: Advocating for the need for a more participatory role of cities in city agendas. Partnering with private sector for need-based support.
Situated governance mechanisms	• Collaborative: Collaboration between the local municipality and the private sector. Targeted collaboration to deliver things at pace locally. • Incentivised: Tax waivers and incentivisation for businesses and manufacturers. Incentivisation based on local remit for partners extending support for the city.

Table 21: Summary of Antsirabe's approach to climate resilience

Antsirabe's climate initiatives provide critical insights into institutional breaches and governance mechanisms, as summarised in Table 21 above :

- The triggers for loss of coherence, including environmental pressures, expectations from stakeholders, and absence of critical institutional infrastructure underscore the need for decentralised governance in addressing localised challenges.
- The characteristics of the situated breaches, particularly their targeted and relational nature, highlight the role of grassroots action in driving change.
- The emerging governance mechanisms, combining collaborative and incentivised approaches, illustrate how even weak signals of institutional adaptation can create pathways for meaningful local action.

6.3.4 Cardiff Metropolitan Region – Transport decarbonisation

In this section, I provide an in-depth analysis of the Cardiff and the wider Welsh region, exploring how the region went about developing recommendations and supporting future implementation of decarbonisation of transport in Wales. I examine the mechanisms employed to engage stakeholders, the creation of new institutional logics and infrastructures, and the development of a governance framework that meets wider national objectives. Through the lens of institutional theory, I uncover the adaptive strategies that enabled Cardiff to align local capabilities with national economic objectives while fostering innovation and sustainability. The work culminated in a comprehensive set of recommendations and is now being implemented to meet the targets as set out in the Wales Transport Strategy 2021.

Context: Wales operates under a unique devolved government system within the United Kingdom, allowing it to exercise autonomy over several key sectors, including transportation. This devolution is crucial for tailoring policies to local needs. Cardiff, as the capital and largest city, serves as a central hub for policy innovation and implementation, particularly in sustainability and technological advancement (House of Commons, 2024). The Cardiff Capital Region, which extends beyond the city to encompass surrounding areas, benefits from this governance structure, enabling coordinated efforts in regional development and environmental initiatives (Cardiff Capital Region, 2020).

Wales' unique position within the United Kingdom provides a critical lens to examine how devolved governance supports tailored solutions to global challenges like climate change. The Welsh Government has leveraged its autonomy to align with the UK's net-zero goals while crafting locally relevant policies to decarbonise transport.

The urgency of the climate crisis has led the UK to set ambitious targets for achieving net-zero emissions, with transportation identified as a critical sector for intervention due to its significant carbon footprint. In Wales, the Welsh Government has aligned with these targets through its 'Net Zero Wales' plan, which commits to specific and actionable steps for decarbonisation (Welsh Government, 2021). The 'Llwybr Newydd' strategy further outlines these commitments, emphasising the need for a modal shift to more sustainable forms of transport, prioritising public transport, walking, and cycling as preferred modes over private car use (Transport for Wales,

2021). These documents reflect a strategic institutional response to the dual challenges of climate change and sustainable development.

Triggers for Loss of Coherence in Institutional Infrastructure: To fully understand the emergence of innovative and tailored transport policies in Wales, it is important to identify the factors that exposed limitations in the existing national, and regional institutional framework. These triggers necessitated adaptive approaches that aligned with the region's unique challenges.

- *Contextual Pressures:* Cardiff and the wider Cardiff Metropolitan Region face unique contextual challenges that have shaped their approach to transport decarbonisation. The region's geographical diversity, which includes a mix of dense urban centres and dispersed rural communities, exposed critical gaps in the national transport strategy's applicability at the local level. Infrastructure limitations such as inconsistent public transport coverage and constrained access in peripheral areas made it difficult to implement standardised zero-emission solutions across the region. These challenges created a clear imperative for place-specific responses that reflected the social, environmental, and economic realities of the area. In this context, transport decarbonisation has been reframed as not just a climate priority but also an opportunity to promote regional economic regeneration and address inequalities in mobility. As one member of the Task and Finish Group, who participated in a workshop contributing to this research, observed,

  > *"Our unique landscape in Cardiff, and more broadly in Wales, demands bespoke solutions to decarbonise our transport network effectively."*

  This sentiment was echoed by senior Welsh Government officials, who positioned Cardiff's transport ambitions within a broader shift toward integrated, locally led climate governance (Future Generations Commissioner for Wales, 2015). Cardiff's case demonstrates how contextual pressures can drive institutional adaptation, leading to more grounded, inclusive approaches to sustainability.

- *Stakeholder Expectations:* In Cardiff, growing expectations from a broad coalition of stakeholders including local councils, business networks, and community organisations played a significant role in shaping the city's approach to transport decarbonisation. These groups collectively emphasised the importance of ensuring that sustainability efforts did not come at

the cost of equity or accessibility. There were strong calls for a transport system that prioritised affordability, inclusion, and geographic fairness, especially for residents in outlying or underserved areas. These expectations contributed to a shift in institutional focus from top-down infrastructure planning to more community-informed and socially grounded decision-making. As one local official, who was interviewed for the purposes of this research, put it,

> *"The voice of the community here locally was integral in shaping Wales' transport decarbonisation strategy."*

In Cardiff's case, stakeholder expectations acted as more than a consultative influence - they helped build the legitimacy and urgency for a decarbonisation agenda that sought to meet climate goals while addressing longstanding social inequalities in mobility and access.

These triggers highlight the need to adapt institutional frameworks to local realities, illustrating how contextual pressures and stakeholder expectations drive the evolution of new norms and practices resulting in 'situated' breaches. The Deputy Minister for Climate Change also emphasises the role of enhanced infrastructure and incentivisation schemes in achieving Wales' decarbonisation goals (The Institute of Welsh Affairs, 2019). This strategic direction is rooted in institutional theory, which posits that policy directions are influenced by broader societal values and the institutional environment that prioritises sustainability and public welfare. The quote below from the Welsh Minister for Climate Change highlights this ambition.

> *"The Welsh Government is developing a new approach to transitioning the bus fleet to zero-emission in Wales. Planned rollout of bus franchising in Wales will be the catalyst for a wholesale move of the country's bus fleet towards zero-emission" – Welsh Minister for Climate Change* (The Institute of Welsh Affairs, 2019).

Characteristics of Situated Breaches: Wales' approach to transport decarbonisation reveals certain breaches from traditional institutional logics, showcasing tailored strategies designed to address the region's unique needs.

- *Targeted:* The prioritisation of transitioning the bus fleet to zero emissions and developing active travel networks reflects Wales' commitment to focused, high-impact interventions that directly tackle major sources of emissions (Future Generations Commissioner for Wales, 2015). By targeting public transport electrification, the Welsh government aims to significantly

reduce air pollution, lower carbon emissions, and enhance urban air quality, contributing to broader climate goals. Meanwhile, investments in active travel infrastructure, such as expanded cycling lanes, pedestrian-friendly streets, and improved connectivity, encourage sustainable mobility choices, reducing reliance on cars and fostering healthier, low-carbon communities (Welsh Government, 2021). These targeted measures demonstrate a strategic, outcome-driven approach, ensuring that resources are directed where they can create the greatest environmental and social benefits, as highlighted in the quote below.

> *"The rollout of zero-emission buses signifies our targeted approach to reducing transport emissions," remarked a Welsh Minister* (Welsh Government, 2022).

- *Rooted:* Solutions such as integrating renewable energy resources into the transport system are carefully designed to align with Wales' unique geographic and socio-economic context, ensuring that decarbonisation efforts are both impactful and achievable (The Institute of Welsh Affairs, 2019). Given Wales' abundant renewable energy potential, particularly in wind and hydro power, leveraging these natural assets to power public transport and electric vehicle infrastructure provides a sustainable, regionally appropriate solution. At the same time, the approach takes into account local economic factors, ensuring that the transition to low-carbon transport supports job creation, energy security, and affordable mobility options for communities across urban and rural areas (Transport for Wales, 2021). By tailoring its strategies to local strengths and needs, Wales is ensuring that its decarbonisation pathway is both practical and beneficial to residents, businesses, and the wider economy. The following quote made by a member of the Task and Finish Group, at a workshop highlights this.

> *"Green energy solutions tailored to Wales' unique needs highlight the importance of localised and ground-up strategies," shared a Task and Finish Group member.*

The strategic implementation of decarbonisation policies in Cardiff and in wider Wales focuses on actionable recommendations from the Task & Finish Group. These include investments in technology and infrastructure tailored to the unique needs of Wales' transport network (i.e., the geographical condition – the valleys), the development of an asset register to inform policy decisions, and innovative funding models to support transition (Welsh Government, 2022). Each of these steps is informed by an understanding of the local context, which shapes the specific interventions chosen to achieve the goals of the decarbonisation strategy (The Institute of Welsh

Affairs, 2019). The quote below from a TFG member who was interviewed for the purposes of this research evidences this.

> *"We have to look at green energy resources in Wales to power buses and aggregate demand for fleet to maximise wider economic benefit from the investment. We should also understand experience from elsewhere and see how this can be applied to Wales" – Member of the Task and Finish Group for Decarbonisation*

These situated breaches demonstrate Wales' capacity to redefine institutional norms, creating pathways for sustainable development that align with its regional priorities and global obligations.

Situated Governance Mechanisms: The governance framework supporting transport decarbonisation in Wales exemplifies collaborative, adaptive, and incentivised approaches, ensuring stakeholder alignment and effective implementation.

- *Collaborative:* Cardiff's approach to transport decarbonisation was strongly shaped by a collaborative governance model, exemplified by the formation of the Task and Finish Group. This group brought together a wide array of stakeholders from across the public, private, and academic sectors to co-develop strategies tailored to the regional context (Welsh Government, 2022). Rather than relying solely on top-down directives, the group operated through shared ownership of the problem and a collective commitment to designing implementable solutions. It became a site of institutional convergence, where diverse actors aligned around common sustainability goals and a commitment to regional equity. As one participant at a workshop, conducted for the purposes of this research, noted

  > *"Collaboration was key to overcoming institutional barriers and identifying actionable solutions to achieve the goals as set out in the transport decarbonisation strategy."*

  The process demonstrated how collaboration can act as a mechanism of governance, enabling innovation through dialogue, negotiation, and cross-sectoral cooperation.

  Situated Norms and Practices: Within this collaborative framework, a distinct set of situated norms emerged anchored in voluntary participation, mutual respect, and consensus-driven decision-making. The Task and Finish Group organised workshops, consultations, and knowledge exchange sessions that encouraged open dialogue and iterative learning. These

practices not only enabled technical problem-solving but also built trust among stakeholders, aligning their efforts despite differing mandates and institutional roles. This situated model of engagement reflects how collaborative governance can be both adaptive and grounded in context responding to Cardiff's specific challenges while reinforcing broader institutional coherence.

- *Adaptive:* Cardiff's approach to transport decarbonisation reflects a clear commitment to adaptive governance, where policies are treated as evolving rather than fixed (Welsh Government, 2022). This was particularly evident in the iterative development of zero-emission bus initiatives, which began with pilot projects designed to test feasibility, user uptake, and infrastructure compatibility before scaling. The Task and Finish Group played a central role in navigating the sector's complex interdependencies such as funding structures, planning responsibilities, and regional coordination by fostering a governance model that encouraged experimentation, learning, and adjustment. As one Cardiff-based transport planner, interviewed for the purposes of this research, noted,

  "In the context of decarbonisation of transport in Cardiff, and Wales more broadly, we view adaptation as a cornerstone of sustainable policy implementation."

  This perspective reflects a broader recognition within the region that decarbonisation is not a one-time policy event, but a process that must respond to changing technologies, shifting public needs, and institutional feedback. Adaptive governance in Cardiff allowed for greater resilience and responsiveness, ensuring that solutions remained effective as conditions evolved (Welsh Government, 2022).

  Situated Norms and Practices: The adaptive model was underpinned by a set of situated norms and practices that enabled flexibility and responsiveness in decision-making. These included built-in feedback loops, regular evaluations of ongoing initiatives, and strategic adjustments based on technological progress and stakeholder input. These practices helped institutional actors remain attuned to emerging challenges and opportunities, reinforcing Cardiff's ability to deliver not just on sustainability goals, but on equitable and realistic implementation as well.
- *Incentivised:* Financial incentives, such as grants for zero-emission bus operators and infrastructure upgrades, played a crucial role in mobilising stakeholder participation in Cardiff's low-carbon transport initiatives (Welsh Government, 2021). These incentives lowered the entry barriers for private operators and encouraged investment in sustainable

mobility solutions, aligning commercial interests with the city's broader decarbonisation goals. By offering tangible economic benefits, the city was able to foster early adoption of clean technologies and build momentum for wider system-level change (Transport for Wales, 2021), as highlighted in the quote below.

"Incentives were critical in fostering industry buy-in and driving adoption," shared a government official, who was interviewed for the purposes of this research.

Situated Norms and Practices: Incentivised practices included targeted subsidies and innovative funding models to support the transition to sustainable transport. By dedicating significant time and effort through workshops and consultations, the Task and Finish group addressed both the practical and strategic aspects of transport decarbonisation.

The 'situated' governance mechanisms employed in Wales reflect a nuanced and multi-faceted approach to policy implementation, blending collaboration, adaptability, and incentives to achieve ambitious decarbonisation goals.

Cardiff and wider Wales' approach to transport decarbonisation exemplifies how local adaptations of national policies can lead to significant environmental and societal benefits. The governance of the Cardiff Capital Region is designed to leverage institutional strengths to foster economic development and sustainable practices across a broader metropolitan area. This approach allows for the pooling of resources, alignment of strategies, and synchronisation of policies across multiple jurisdictions, which is essential for tackling wide-ranging issues like transport decarbonisation. The region's governance structure facilitates the integration of various transport modes, enhancing the overall efficiency and sustainability of the transportation network (Cardiff Capital Region, 2020).

City	The Cardiff Metropolitan Region, Wales
Policy	Transport decarbonisation policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Wales' geographic characteristics, including its valleys | Dispersed rural communities | Lack of existing infrastructure to accommodate zero-emission initiatives • Stakeholder expectations: Need for equitable and sustainable transport options | Calls for inclusive policies to prioritise accessibility and affordability

Characteristics of the situated breach	• Targeted: Transitioning the bus fleet to zero emissions | Developing active travel networks • Rooted: Integrating renewable energy resources into the transport system are deeply rooted in Wales' geographic and socio-economic context.
Situated governance mechanisms	• Collaborative: The formation of the Task & Finish Group is a prime example of institutional collaboration, where entities within a sector converged around a set of shared norms and practices. • Adaptive: The iterative development of policies, such as pilot projects for zero-emission buses, highlights Wales' commitment to adaptive governance. • Incentivised: Financial incentives, such as grants for zero-emission bus operators and infrastructure upgrades.

Table 22: Summary of Cardiff Metropolitan Region's approach to transport decarbonisation

Conclusion: The Cardiff and Wales decarbonisation case offers profound theoretical insights into the interplay of institutional adaptation, governance mechanisms, and sustainability objectives, as summarised in Table 22 above:

- These triggers highlight the need to adapt institutional frameworks to local realities, illustrating how contextual pressures and stakeholder expectations drive the evolution of new norms and practices resulting in 'situated' breaches.
- The targeted and rooted approaches reveal the evolution of institutional logics, illustrating how tailored strategies can align regional aspirations with global climate goals.
- The Task and Finish Group exemplifies collaborative governance, highlighting the potential for inclusive and adaptive frameworks to drive systemic change.

The collaborative efforts facilitated by the Task & Finish Group illustrate the potential for institutional actors to drive change that aligns with both regional aspirations and national objectives, providing a model for other regions aiming to integrate similar institutional approaches for effective governance and environmental management.

6.4 Energy transition and climate crisis – A consolidated picture

I have now demonstrated four examples of cities that have had to deviate or breach an incumbent policy to alter or create their own policy given the context in which they operate. Each of these examples are different in how they link to energy transition and mitigating the climate crisis but the commonality across all of them is their decision to draft a tailored route of policy and decision making as against just following the institutional norm. I will now present some consolidated findings from these cases in this section, however, the detailed second-order examination of these findings is discussed in Chapter 8.

Triggers for loss of coherence in institutional infrastructure: The cases of Amersfoort, Singapore, Antsirabe, and Cardiff Region in the institutional field of energy transition and climate crises reveal specific triggers that disrupt coherence in institutional infrastructures, leading to 'situated breaches.' These triggers reflect a combination of global imperatives and unique local conditions.

> *Contextual Pressures:* Amersfoort faced challenges of grid congestion, energy poverty, and high emissions from the built environment. These pressures necessitated neighbourhood-based heating solutions and the adoption of innovative battery technologies. Singapore confronted constraints like a tropical climate, and limited natural resources. These challenges underpinned the creation of green infrastructure and innovative urban planning solutions. Antsirabe dealt with extreme weather events and limited national resource transfers, requiring localised interventions for disaster management and climate adaptation.
>
> *Stakeholder Expectations:* Cities often navigated the expectations of various stakeholders. For example, Amersfoort involved housing cooperatives and residents to pilot peer-to-peer energy solutions, balancing the technical needs of the energy grid with community concerns. Singapore had to deliver on the demands of a well-educated population with high living standards.
>
> *Aspirational Shortfall:* Aspirational goals like Singapore's ambition to become the 'City in a Garden' or Antsirabe's focus on climate resilience exposed the gap between existing infrastructure and the envisioned outcomes, necessitating innovative, locally tailored interventions.

It can be observed that in all the instances, the breach of institutional logic or the deviation from the known institutional norms has occurred for purposeful and beneficial reasons. The respective local or city level governments have used these very reasons as strong anchors and catalysts to help drive adoption of the new institutional logics within their respective city stakeholder groups and communities.

Characteristics of 'Situated breaches': Situated breaches in this institutional field are defined by their ability to cater specifically to local and contextual needs while aligning with global sustainability goals:

> *Rooted:* The breaches focus on addressing city-specific challenges and the solutions are rooted in the city's context. Amersfoort's neighbourhood heating solutions and Singapore's integration of vertical greenery reflect solutions tailored to the urban and climatic conditions of each city.
>
> *Targeted:* Interventions are designed with clear, measurable objectives. Amersfoort's pilots for energy storage and Singapore's Green Mark certification standards for buildings are examples of targeted breaches aiming to address specific energy and sustainability goals.
>
> *Relational:* Breaches in the cities observed are often relational, built on collaboration and trust. Antsirabe's partnerships with local businesses and Amersfoort's engagement with organised groups demonstrate the importance of stakeholder networks in delivering sustainable outcomes.

Situated Governance Mechanisms: The governance mechanisms supporting these situated breaches showcase the adaptive and collaborative efforts cities employ to tackle energy transition and climate crises:

> *Collaborative Governance:* Collaboration was foundational across the cases. Amersfoort partnered with housing cooperatives and start-ups to implement energy storage solutions, while Singapore integrated input from government, academia, and private stakeholders to achieve its sustainability vision.

Incentivised Governance: Financial and operational incentives were crucial in gaining buy-in from stakeholders. Singapore's LUSH (Landscaping for Urban Spaces and High-rises) initiative provided tangible incentives for developers to incorporate greenery into their projects. Similarly, Amersfoort subsidised battery purchases to encourage adoption of energy solutions.

Adaptive Governance: Cities displayed agility in adapting their governance models to evolving needs. Antsirabe, despite resource constraints, adopted informal mechanisms to engage private sector partners, while Singapore integrated climate adaptation seamlessly into urban planning through forward-thinking policies.

In the institutional field of energy transition and mitigating climate crises, 'situated breaches' demonstrate how cities can navigate the gap between global sustainability frameworks and local challenges. These breaches are uniquely positioned to leverage local strengths while addressing immediate needs, fostering innovations that often influence broader governance practices. The associated 'situated governance mechanisms' highlight the importance of collaborative, incentivised, and adaptive approaches. These mechanisms ensure that cities not only meet their energy and climate goals but also align with global frameworks like the Paris Agreement and the Sustainable Development Goals.

The findings reveal the critical need for flexible, context-sensitive governance frameworks to address the multifaceted challenges of energy transition and climate crises. These insights provide a template for cities worldwide seeking to integrate localised solutions with global sustainability objectives.

The consolidated findings from the three cities and from the deep dive case linked to the institutional field of energy transition and mitigating the climate crisis is presented in the table 23 below.

City & Policy area (local economic growth)	**Amersfoort –** Energy Transition Policy	**City of Singapore** – Green Transition Policy	**Antsirabe –** Climate Change Policy	**Cardiff Metropolitan Region** – Transport Decarbonisation Policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Grid congestion | Heating and cooling demand | Energy consumption from appliances and lighting | Alleviating energy poverty | Improving grid capacity • Stakeholder expectations: Push back from residents to not have windmills in their backyards or solar panels on their roofs	• Contextual pressures: Tropical climate | Scarce water resources | Fluctuating water level since being part of a delta | Lack of domestic raw materials • Stakeholder expectations: Well-educated population with high standard of living expectations Emissions resulting from excessive use of air conditioning	• Contextual pressures: Changes in rainfall patterns affecting agriculture | Increased frequency of extreme weather events | Pressures on water resources • Stakeholder expectations: Expectations from local businesses and residents to take action especially in the wake of natural disasters • Infrastructure void: Lack of transfer of resources from the central government | Lack of financial support | Restricted remit | Lack of proper communication between the centre and the city	• Contextual pressures: Wales' geographic characteristics, including its valleys | Dispersed rural communities | Lack of existing infrastructure to accommodate zero-emission initiatives • Stakeholder expectations: Need for equitable and sustainable transport options | Calls for inclusive policies to prioritise accessibility and affordability
Characteristics of the situated breach	• Rooted: Heating Vision local to Amersfoort to set the pace for neighbourhood-based heating solutions and timeframes. • Targeted: Proposal to go all-electric for energy transition especially for heating	• Rooted: Urban planners in Singapore are introducing a centralised cooling system as a more energy-efficient alternative to individual units. Creation of sky terraces and gardens to meet green requirements are encouraged. • Targeted: Legislation mandating buildings to meet Green Mark standards. Building	• Rooted: Identifying and delivering on local priorities through bottom-up solutions. Supporting national implementation of local remit. • Relational: Advocating for the need for a more participatory role of cities in city agendas. Partnering with private sector for need-based support.	• Targeted: Transitioning the bus fleet to zero emissions | Developing active travel networks • Rooted: Integrating renewable energy resources into the transport system are deeply rooted in Wales' geographic and socio-economic context.

		regulations mandate that developers offset any open space used by adding greenery elsewhere.		
Situated governance mechanisms	• Collaborative: Collaborating with organised groups rather than engaging with residents directly. Dedicated collaborative framework involving various city level stakeholders and partnerships with local energy companies and start-ups. • Incentivised: Subsidising battery purchases to facilitate the implementation of solutions	• Collaborative: Citizen-centric governance approach involving various city level stakeholders. Tight network of industry, academia, and governments drives collaboration. Highly skilled and well-educated population in Singapore put their expertise to play. • Incentivised: LUSH (Landscaping for Urban Spaces and High-rises) incentives for incorporating greenery in buildings. Urban planners and architects in Singapore are committed to embedding nature into the urban fabric.	• Collaborative: Collaboration between the local municipality and the private sector. Targeted collaboration to deliver things at pace locally. • Incentivised: Tax waivers and incentivisation for businesses and manufacturers. Incentivisation based on local remit for partners extending support for the city.	• Collaborative: The formation of the Task & Finish Group is a prime example of institutional collaboration, where entities within a sector converged around a set of shared norms and practices. • Adaptive: The iterative development of policies, such as pilot projects for zero-emission buses, highlights Wales' commitment to adaptive governance. • Incentivised: Financial incentives, such as grants for zero-emission bus operators and infrastructure upgrades.

Table 23: Consolidated findings from cities in the field of energy transition and mitigating the climate crisis

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7. Institutional breaches and emerging governance mechanisms in implementation of the wider sustainable development goals in cities

While climate change and energy transition are two challenges that are substantial and have a huge impact equally important are the other sustainable development goals (Greene and Meixell, 2017). Ensuring good health and wellbeing, providing quality education, enabling digital inclusion, maintaining clean air in cities, influencing sustainable behaviours of consumption and production are some of the other important subjects that are also instrumental in sustaining the future of our planet (Phipps *et al.*, 2013). Underpinning all these goals is the need to partner and work together to deliver on these goals which is a goal in itself. In their entirety, the seventeen sustainable development goals provide us with a comprehensive and holistic framework to promote prosperity while protecting our precious planet (United Nations, 2017). While there is no one size fits all approach for countries and cities to deliver on the targets associated with each of the goals, the framework does provide a structure to think about the solutions that can help deliver on those targets.

This chapter 7 is divided into four sections. In the first and second sections, I provide an insight into the existing institutional infrastructures and governance frameworks within this field, supported by some examples. In the third section, I present findings from three cities – London, Rotterdam, and Melbourne and articulate the characteristics of the breaches and the evolution of certain types of governance approaches in these cities. I then strengthen this argument by providing a detailed case on Bristol. In the final section, I summarise the findings for this specific institutional field, implementation of sustainable development goals, and present the consolidated findings thus evidencing the existence of situated breaches and the evolution of situated governance mechanisms. Finally, I consolidate this in a table to summarise three important things that are central to this research:

1. *The type of trigger that has led to the loss of coherence in institutional infrastructure* - the reasons why these cities have tailored the traditionally known approaches to help drive implementation of the sustainable development goals.
2. *The characteristics of the 'situated breach'* – the context in which these cities are going about creation of new institutional logics.

3. *The types of 'situated governance' mechanism that are emerging, resulting in the creation of 'situated norms' and 'situated practices'* - specific characteristics that are unique to the governance models that are driving adoption of new approaches within cities.

7.1 Existing institutional infrastructure for driving sustainable development

The implementation of sustainable development goals (SDGs) within cities is underpinned by a series of global institutional policies and frameworks designed to facilitate local action towards global sustainability objectives (ICLEI, 2024). These mechanisms range from agreements and initiatives led by the United Nations to collaborations and networks that include a diverse array of stakeholders from across sectors. Key frameworks such as the 2030 Agenda for Sustainable Development, The New Urban Agenda, The Paris Agreement, the Sendai Framework for Disaster Risk Reduction 2015-2030, and The Buildings Breakthrough, collectively forge a comprehensive path towards sustainability (Ningrum *et al.*, 2023).

These frameworks are not mere guidelines but are dynamic blueprints that cities around the world utilise to tailor global objectives to local realities in order to make sure that the interventions are relevant to the local needs and requirements and to also ensure that the beneficiaries of such programmes are the local stakeholders. Together, they enhance resilience, promote sustainable urban development, and mitigate climate change impacts, demonstrating a strategic synthesis of global standards and localised execution that is crucial for the SDGs' success. For example, Copenhagen's integration of the 2030 Agenda into local development plans (City of Copenhagen, 2022), and San Francisco's alignment with The Buildings Breakthrough by advancing net-zero buildings initiatives (SF Environment, 2019) spell the way cities are attempting to tailor global initiatives to local contexts. The realisation of the Sustainable Development Goals (SDGs) necessitates robust institutional infrastructures that can bridge global ambitions with local actions.

This section provides a preliminary exploration, through some examples, of institutional infrastructures operating within a hierarchical and multi-layered framework, as described in the previous chapters, outlining their direct and indirect contributions to deliver the sustainable development goals. By situating these mechanisms within this stratified and hierarchical structure, I aim to clarify the interdependencies across infrastructure levels, offering an integrated perspective on their collective impact in advancing implementation of sustainable development goals in cities. This is presented in Table 24 below. I further refer to some of these institutional infrastructures in the individual case chapters later to show deviations from the stipulated mechanisms.

Existing institutional infrastructures for implementation of Sustainable Development Goals	
Hierarchy level	**Some examples of existing institutional infrastructures**
International	• Global Climate Targets – The Paris Agreement: A universal framework guiding city-level actions to meet emission reduction and climate resilience targets. • Global Sustainable Development Frameworks – 2030 Agenda for Sustainable Development: A comprehensive roadmap aligning urban planning and policies with globally agreed SDG priorities. • Global Policy: Internationally established norms and strategies that steer sustainable development practices in cities worldwide. • Funding and Guidance: Financial resources and policy direction from global institutions to enable cities to advance SDG-related initiatives.
National	• National Targets: Country-level benchmarks shaping city contributions toward achieving SDGs. • Sector-Specific Policies: National strategies targeting key sectors such as energy, transportation, and housing to promote urban sustainability. • National Priorities - The Buildings Breakthrough: A focused initiative driving energy-efficient and sustainable building practices across cities.
Regional	• Resource and Risk Management Frameworks: Regional strategies ensuring equitable resource distribution and climate risk mitigation for cities. • State-level policies: Policies adapted at the regional level to address specific urban challenges in achieving SDGs. • Tailored SDG Policies: Customised regional frameworks aligning with both national priorities and local urban needs.
Local	• The New Urban Agenda: A city-focused initiative advocating for inclusive, resilient, and sustainable urban development in alignment with SDGs.

Table 24: Existing institutional infrastructures for implementation of Sustainable Development Goals

International Institutional Infrastructures: International Institutional Infrastructures, influencing policy making in cities, are global frameworks such as the Paris Agreement and the 2030 Agenda for Sustainable Development that provide funding, policy guidance, and shared goals to align city efforts with international sustainability targets.

The cornerstone of global efforts towards sustainability, the 2030 Agenda for Sustainable Development, was adopted by all United Nations Member States in 2015 (United Nations, 2015). This agenda outlines 17 SDGs, which serve as a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. SDG 11 specifically targets the sustainability of cities, aiming to make them inclusive, safe, resilient, and sustainable. The United Nations plays a central role in guiding and supporting

cities through its various agencies, such as the United Nations Development Programme (UNDP) and the United Nations Human Settlements Programme (UN-Habitat), to implement these goals. UN-Habitat plays a crucial role in implementing this goal, offering guidance and support to cities around the globe in their sustainable urban development efforts.

As part of the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement (adopted in 2015) sets out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C. Cities are crucial to achieving the Paris Agreement's objectives, given their significant contribution to greenhouse gas emissions and their potential for impactful mitigation and adaptation measures (Rosenzweig *et al.*, 2010). The agreement encourages nations to formulate and communicate long-term low greenhouse gas emission development strategies, which include urban planning and development policies aimed at sustainability (UNFCCC, 2015). Cities invest in workforce development programmes to ensure that the local population has the skills needed by businesses. These programmes might include vocational training, apprenticeships, continuing education, and partnerships with local businesses and educational institutions (Bartik, 1991). By increasing the skill level of the workforce, cities can attract higher-paying industries and reduce unemployment. However, these programmes need to be closely aligned with market needs and include pathways for both youth and adults to ensure they effectively contribute to economic growth (Holzer, 1999).

National Institutional Infrastructures: National Institutional Infrastructures, that have a direct impact on city-level policies, are centralised or national level policies, targets, and sector-specific strategies, such as the Buildings Breakthrough, that drive urban contributions toward achieving national SDG commitments.

The Buildings Breakthrough initiative (UNEP, 2023) is a component of the wider Breakthrough Agenda, designed to offer a structured platform for nations, corporations, and civil society to synchronise and amplify their efforts annually across major emitting sectors. This initiative is facilitated through a collaboration among leading entities from the public sector, the private realm, and public-private partnerships worldwide and was

launched at COP28 in 2023. It is jointly spearheaded by France's Ministry for Ecological Transition and Territorial Cohesion, along with the Ministry of National Territory Planning, Land Planning, Housing, and City Policy from the Kingdom of Morocco. Coordination efforts are managed under the guidance of the UNEP-hosted Global Alliance for Buildings and Construction (GlobalABC). This innovative endeavour seeks to bolster global cooperation with the goal of reducing carbon emissions in the building sector. By 2030, it aims to elevate clean technologies and sustainable solutions to the status of the most cost-effective, accessible, and appealing options across all regions.

Regional Institutional Infrastructures: Regional Institutional Infrastructures, policies spanning multiple councils, or districts, or suburban areas, are intermediary frameworks, including resource management and state-level policies, that adapt and translate national goals into actionable strategies tailored to regional urban contexts.

Adopted in 2015, the Sendai Framework (UNDRR, 2015) aims to substantially reduce disaster risk and losses in lives, livelihoods, and health. For cities, this means incorporating risk reduction strategies into urban planning and development processes, ensuring that infrastructures, new and existing, are resilient to natural and human-made disasters. This framework complements SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action) by emphasising the need for resilient infrastructure and adaptive urban planning. Its integration into the broader 2030 Agenda for Sustainable Development ensures that disaster risk reduction is a core component of sustainable development efforts worldwide. The implementation of the Sendai Framework involves all stakeholders, including governments, the private sector, civil society, and international organisations. It emphasises the need for a more people-centred approach in disaster risk reduction and calls for stronger international cooperation and partnership.

Local Institutional Infrastructures: Local Institutional Infrastructures are urban-focused initiatives like the New Urban Agenda that directly implement and localise sustainable development goals within cities, ensuring alignment with broader regional, national, and international priorities.

Adopted at the Habitat III Conference in 2016, the New Urban Agenda provides a roadmap for building cities that can serve as engines of prosperity and centres of cultural and social

well-being while protecting the environment (UN Habitat, 2016). It offers guidance for the implementation of SDG 11 by advocating for the development of cities that are equitable, sustainable, and inclusive. The Agenda emphasises the importance of local action and the role of urban policies in achieving sustainable development objectives. The Urban Agenda for the EU, established in 2016 (European Union, 2016), aims to strengthen the recognition of the urban dimension by EU and national policymakers by encouraging cooperation between member states, cities, the European Commission, and other stakeholders. It focuses on making cities better places to live and work through initiatives targeting sustainability, innovation, and inclusivity, thereby indirectly supporting the global SDGs by sharing best practices and lessons learned with a broader international audience.

Integrating these institutional infrastructures is essential not just for aligning global and local efforts, but also for putting in place the institutional logics needed to advance the Sustainable Development Goals (SDGs). Cities like Yokohama and Paris show how this works in practice. Yokohama has used the Sendai Framework to strengthen disaster resilience through better urban planning, typhoon protection, and smart warning systems (City of Yokohama, 2019). Paris has taken bold steps under the Paris Agreement to cut carbon emissions, including expanding low-emission zones, planting trees, reducing waste, and improving building energy (City of Paris, 2018). These examples show how adapting global frameworks to local needs can lead to meaningful, practical change. Such frameworks help ensure that sustainable development moves beyond theory and becomes part of everyday urban life, shaped by each city's specific context.

In this section, I have provided an account of the existing institutional infrastructures in the context of the institutional field of implementation of sustainable development goals. The policies and institutional frameworks discussed in this section along with several other pan-regional initiatives illustrate the global envelope that exists within which cities are playing a role to deliver, implement, and embed the sustainable development goals tailored to their respective contexts. The specific examples offer a grounding in how specific cities are actively aligning with and benefiting from these frameworks, providing a solid foundation for understanding their impact.

In the subsequent chapters, I refer back to the infrastructures discussed in this section to show the types of triggers that are occurring to help close the void that is not filled by these existing institutional infrastructures. I also refer to these to demonstrate the characteristics of the situated

breaches that happen to manifest differently in different cities. As cities continue to grow as epicentres of human activity, the coherent application of these institutional infrastructures will be paramount in steering global civilisation towards a sustainable, resilient future.

7.2 Existing institutional governance frameworks for driving sustainable development

As cities across the globe become central actors in the global sustainability agenda, a range of institutional governance frameworks has been instrumental in catalysing efforts to meet the Sustainable Development Goals (SDGs). Key examples among these are the Global Platform for Sustainable Cities, the Sustainable Development Solutions Network, the Global Covenant of Mayors for Climate & Energy, the C40 Cities Climate Leadership Group, and ICLEI – Local Governments for Sustainability, each contributing unique resources and networks to facilitate urban sustainability transformations. For example, New York City, under the C40 Cities Climate Leadership Group, has launched ambitious greenhouse gas reduction initiatives (C40 Cities, 2022) while Medellín has utilised ICLEI's frameworks to integrate biodiversity into urban planning (ICLEI, 2021).

In the previous section, I explored examples of institutional infrastructure frameworks that help deliver sustainable development goals in urban contexts. This section shifts focus to examine the governance frameworks that operationalise and implement these institutional logics. These governance mechanisms are not exhaustive but offer a view on the governance that exists today alongside their advantages and shortcomings which are pushing cities to develop tailored mechanisms or alter the proposed approaches to suit their needs. Accordingly, this section provides a preliminary analysis of select institutional governance mechanisms, emphasising their direct and indirect influences on city functionality. By presenting these governance frameworks in a hierarchical format - encompassing international, national, regional, and local governance levels - the discussion aims to illuminate their interdependencies and roles in enabling cities today to help deliver and embrace the implementation of the sustainable development goals. This is presented in Table 25 below. I further refer to some of these institutional governance frameworks in the individual case chapters later to show deviations from the stipulated mechanisms.

Existing institutional governance mechanisms for implementation of Sustainable Development goals	
Hierarchy level	**Some examples of institutional governance mechanisms**
International	• World Bank – Global Platform for Sustainable Cities (GPSC): A global initiative offering cities technical assistance, funding, and best practices to integrate SDG goals into urban planning.

	• International Agencies/ Alliances: Collaborative networks that support cities in aligning policies and programmes with global sustainable development targets • United Nations Development Programme: A UN agency that provides policy guidance and resources for urban SDG implementation and capacity-building. • United Nations Environment Programme: A global institution supporting cities in addressing environmental aspects of SDGs, such as climate resilience and resource efficiency.
National	• National Sustainable Development Coordination Bodies/ Networks: Entities coordinating efforts among various stakeholders to implement SDGs across cities. • Central Government Ministries: National-level agencies crafting policies and allocating resources to advance SDGs in urban areas. • National Statistics Offices: Agencies collecting and analysing data to track and guide city progress toward achieving SDGs. • SDG Implementation Councils: Advisory and decision-making bodies ensuring urban alignment with national SDG strategies.
Regional	• Regional Development Agencies / Taskforces: Organisations managing the adaptation and implementation of SDG-related policies across multiple cities within a region. • State-Level Departments: Regional governance bodies overseeing sustainable development initiatives and fostering urban compliance with SDG goals.
Local	• City Councils and Municipalities: Local government bodies implementing and monitoring SDG-related policies and programmes in urban areas. • Local SDG Task Forces - ICLEI: Networks of local leaders and experts driving urban sustainability initiatives aligned with SDGs.

Table 25: Existing institutional governance mechanisms for implementation of Sustainable Development Goals

International Governance Bodies: International Governance Bodies include global institutions, such as the World Bank, UNDP, and UNEP, that provide technical assistance, funding, and policy frameworks to guide cities in aligning targets and implementing sustainable development goals.

Led by the World Bank and supported by the Global Environment Facility (GEF), the Global Platform for Sustainable Cities (GPSC) is a knowledge platform that provides cities

with access to best practices, case studies, and financial resources to implement sustainable urban planning and development. The platform emphasises integrated urban planning, green growth strategies, and sustainable financing, supporting cities in their efforts to achieve the SDGs (World Bank, 2016). The GPSC adopts an integrated approach to urban development, moving away from isolated sector-specific projects towards a more comprehensive strategy that looks at urban sustainability in its entirety. It encompasses about 30 cities within 11 pilot nations, including Brazil, China, Cote d'Ivoire, India, Malaysia, Mexico, Paraguay, Peru, Senegal, South Africa, and Vietnam. Each of these countries benefits from specific Global Environment Facility (GEF) grants, which are managed by one or more executing agencies. In a bid to facilitate the exchange of knowledge and encourage dialogue on both the programme itself and the broader topic of sustainable urban development, the GPSC initiated its Community of Practice in October 2016. As a platform that champions inclusivity, the GPSC welcomes the participation of other cities, organisations, and experts interested in its activities and educational events (World Bank, 2016).

Global Covenant of Mayors for Climate & Energy is the largest global alliance for city climate leadership, uniting thousands of cities across the globe committed to implementing ambitious climate and energy initiatives (Global Covenant of Mayors, 2023). The covenant provides a platform for cities to share best practices, engage in mutual learning, and access financial and technical resources. This initiative directly supports the implementation of SDG 13 (Climate Action) at the city level by fostering local climate resilience and low-emission development. More than 12,500 cities stand ready to partner with national and international institutions to tackle both climate and economic crises through local initiatives, innovative financing models, and sustainable infrastructure.

The C40 Cities Climate Leadership Group (C40 Cities, 2023) stands as a pivotal alliance of the globe's major cities, united in their mission to combat climate change. Led by a committee of C40 mayors worldwide, it sets the strategic course and oversees the governance of the network. The C40 enables effective collaboration, knowledge exchange, and the implementation of impactful, measurable, and enduring climate change initiatives. It addresses multiple areas, such as cutting greenhouse gas emissions, evaluating climate

risks, devising adaptation strategies, and launching sustainability projects in sectors like energy, waste management, transportation, and infrastructure. With more than 90 of the planet's largest cities as members, the C40 Cities Climate Leadership Group is at the forefront of pioneering climate action, steering these urban centres towards a healthier, more sustainable future. It is acclaimed internationally for its progressive stance on climate leadership, with C40 initiatives aiming to diminish greenhouse gas emissions and climate risks, thereby enhancing the health, wellbeing, and economic prospects of city dwellers. The cities involved in the C40 network undertake the measurement and reporting of their greenhouse gas emissions and climate risks through the CDP-ICLEI Unified Reporting System (C40 Knowledge Hub, 2023), ensuring a uniform method for data gathering and sharing that aids in comparative analysis and benchmarking. Through its coordinated initiatives, governance model, and reporting processes, the C40 empowers cities to pursue aggressive climate action strategies. This collaborative effort among the world's metropolitan giants is essential for advancing urban contributions towards achieving global climate objectives, positioning cities at the forefront of the battle against climate change (C40 Cities, 2023).

National Governance Bodies: National Governance Bodies are centralised, federal, or national-level bodies, including coordination networks, ministries, and SDG councils, that integrate and direct urban and city-level efforts toward achieving national and global SDG targets.

Launched by the United Nations in 2012, the Sustainable Development Solutions Network (SDSN) (United Nations, 2012) mobilises global scientific and technological expertise, by bringing together experts with capabilities across different subjects, to promote practical solutions for sustainable development, including the implementation of the SDGs and the Paris Agreement on Climate Change. The network supports cities through its thematic groups and national networks, offering research, policy analysis, and global advocacy for sustainable urban development. The Sustainable Development Solutions Network (SDSN) and its extensive global network are intensifying their efforts to achieve the Sustainable Development Goals (SDGs) by 2030 and beyond. Established in 2012 following the Rio+20 Summit, the SDSN has been instrumental in rallying support from universities,

think tanks, and national laboratories globally to advance the SDGs (United Nations, 2012). United Nations member states and UN agencies can rely on the ongoing commitment and vigour of the SDSN across the globe to assist all governments, businesses, and civil society organisations in adopting and integrating the principles of sustainable development in line with the SDGs.

Regional Governance Bodies: Regional Governance Bodies include intermediary organisations, such as regional development agencies and state-level departments, that tailor and execute SDG-related strategies for cities within a regional context.

The Global Taskforce orchestrates the World Assembly of Local and Regional Governments, which serves as the collective voice of local and regional authorities worldwide (WACLA, 2021). This Assembly is a continuation of the foundation laid by the inaugural World Assembly of Cities and Local Authorities (WACLA), which took place shortly before the Habitat II Conference in Istanbul in 1996. WACLA saw the participation of over 500 mayors, emphasising the crucial contribution of local governments to urban development and advocating for a permanent framework to facilitate their collaboration with the United Nations. This advocacy was instrumental in the establishment of the United Cities and Local Governments (UCLG) and the UN Advisory Committee on Local Authorities (UNACLA), entities designed to enhance the coordination and influence of local governments on the global stage.

The World Assembly of Local and Regional Governments has evolved to become a pivotal platform for dialogue and partnership between local and regional leaders and the international community, including the United Nations (WACLA, 2021). It aims to ensure that the voices of local and regional governments are heard in global policy discussions, particularly in areas affecting urban development, sustainability, and climate change. The Assembly actively contributes to the implementation and localisation (translation to local and situational contexts) of global agendas such as the Sustainable Development Goals (SDGs), the Paris Agreement on climate change, and the New Urban Agenda, demonstrating the critical role of local and regional governments in achieving these objectives. Moreover, the World Assembly fosters exchange and collaboration among its members, offering opportunities to share best practices, innovative solutions, and strategies

for tackling common challenges. Through its work, the Global Taskforce and the World Assembly empower local and regional governments to play a more pronounced role in shaping a sustainable and equitable future for all communities (WACLA, 2021).

Local Governance Bodies: Local Governance Bodies encompass city councils, municipalities, and local task forces, such as ICLEI, that directly implement and monitor sustainable development goals at the urban level.

ICLEI is a global network of more than 1750 local and regional governments committed to sustainable urban development (ICLEI, 2024). It aims to promote global sustainability through local initiatives, with a strong focus on ecological and environmental objectives. ICLEI provides technical consulting, training, and information services to build capacity, share knowledge, and support local governments in the implementation of sustainable development goals. It also advocates for sustainable urban development at the international level. ICLEI champions numerous programmes and initiatives to support its members such as the GreenClimateCities Programme, Resilient Cities Congress, and the Cities Biodiversity Centre (ICLEI, 2024). ICLEI plays a pivotal role in shaping global sustainability agendas and influencing policy at the international level, including contributing to the United Nations Framework Convention on Climate Change (UNFCCC) negotiations and the Sustainable Development Goals (SDGs). It provides tools and resources for local governments to report their emissions, set targets, and track progress towards sustainability goals, facilitating accountability and transparency in environmental governance. As a hub for knowledge, leadership, and advocacy in urban sustainability, ICLEI continues to empower local governments around the world to take effective action towards a sustainable, resilient, and inclusive future (ICLEI, 2024).

The example governance frameworks discussed in this section offer a platform for cities and local governments to engage, gain best practices, learn from peers, obtain technical advice, and collaborate with partners and other relevant stakeholders while leaving it to the cities to do what is right for them. This is where cities look to tailor their approach depending on the specific needs of their residents and communities.

In this section, I have provided an account of the existing institutional governance mechanisms in the context of the institutional field of implementation of sustainable development goals. The

strategic alignment of city actions with global sustainability frameworks is not merely beneficial; it is imperative for achieving the SDGs. These governance mechanisms exemplify how structured collaboration and shared expertise can result in impactful sustainability achievements. Ultimately, they support local governments with the implementation of institutional logics necessary to navigate the complexities of sustainable development, empowering cities to become proactive, resilient leaders in the global pursuit of a sustainable future. I later refer back to the governance mechanisms discussed in this section, to show the types of 'situated' governance mechanisms that are now evolving to cater to the changing urban dynamics to help close the void that is not filled by these existing governance mechanisms. I also refer to these to demonstrate the situated practices and situated norms that are forming as part of the evolving governance frameworks.

7.3 Findings from select cities and city regions

In this section on the implementation of the sustainable development goals, I look at four real examples and cases on implementation of the sustainable development goals from the cities of London, Melbourne, Rotterdam, and Bristol that took the initiative to go down a tailored route as against adhering to the rules set by the wider institutional and governance bodies.

Each of these cities experienced a loss of coherence with existing institutional infrastructures, resulting in what I describe as 'situated breaches'. These breaches were characterised by unique contextual pressures, such as socio-economic disparities, health inequities, and environmental challenges. In response to these breaches, each city devised new governance mechanisms, referred to here as 'situated governance mechanisms', tailored to address their specific contexts and drive new institutional logics. The table below outlines the triggers for loss of coherence in institutional infrastructure – the reasons for the breach, the core characteristics of the situated breaches and the pivotal governance decisions explored in each case. In this section, I trace the evolution of these initiatives, highlighting the nature of the breaches and demonstrating how the cities of London, Melbourne, Rotterdam, and Bristol developed 'situated practices' and 'situated norms' that underpin their governance mechanisms. Through this analysis, I demonstrate the critical role of institutional breaches in prompting context-specific governance innovations that reflect the dynamic realities cities face today in the context of implementation of the sustainable development goals. A summary of the triggers, characteristics of situated breaches, and the type of situated governance mechanisms is shown in Table 26 below.

	London	**Rotterdam**	**Melbourne**	**Bristol**
Trigger for loss of coherence in institutional infrastructure	• Contextual pressures (Urban congestion and air quality crisis) • Stakeholder expectations • Aspirational Shortfall	• Contextual pressures (Environmental justice and public health inequalities) • Stakeholder expectations • Aspirational Shortfall	• Contextual pressures (Climate resilience challenges) • Stakeholder expectations • Infrastructure void	• Infrastructure void • Contextual pressures (Digital infrastructure gaps and sustainability constraints) • Aspirational Shortfall

Characteristics of the ‘Situated breach’	• Rooted • Targeted	• Targeted • Relational	• Targeted • Rooted	• Targeted • Rooted • Relational
Type of ‘Situated Governance’ mechanism	• Collaborative • Incentivised • Adaptive	• Collaborative • Incentivised • Adaptive	• Collaborative • Incentivised • Adaptive	• Collaborative • Adaptive

Table 26: Summary of findings from select cities under implementation of Sustainable Development Goals

7.3.1 The City of London – Clean air and active travel policy

In this section, I explore London's Clean Air and Active Travel policy as a tailored response to the city's acute air quality and urban transportation challenges. This policy exemplifies how cities adapt national strategies to local contexts, showcasing a deviation from broader institutional frameworks to meet unique urban needs. Using the lens of institutional theory, I analyse the triggers driving 'situated' institutional breaches, the characteristics of these breaches, and the 'situated' governance mechanisms that facilitate London's sustainable development agenda.

Context: London's Clean Air and Active Travel policy is an integral part of the city's strategy to combat air pollution and promote sustainable transportation (Reuters, 2023). The Ultra Low Emission Zone (ULEZ), first introduced in central London in 2019 and expanded in 2021, is a cornerstone of this policy. This policy imposes stringent emission standards, and urban greening initiatives that integrate active travel into urban planning. The city's emphasis on walking, cycling, and urban greenery not only mitigates air pollution but also enhances public health and social equity. The policy also recognises the social justice aspect of air pollution, acknowledging that it disproportionately affects poorer communities in London (Mayor of London, 2022b). These measures are more immediate and aggressive compared to the broader UK National Air Quality Strategy, reflecting London's unique challenges of scale, density, and pollution. Plans are underway to further extend the ULEZ, potentially covering the entirety of Greater London, to include more of the most polluting vehicles (Mayor of London, 2022b). These measures collectively represent London's robust approach to tackling air pollution, encouraging active travel, and progressing towards a greener, zero-carbon future by 2030.

The city's initiatives also prioritise the integration of active travel with its extensive public transport network, a feature less pronounced in the national framework. These distinctions underscore London's deviation from national institutional norms to address its context-specific needs, highlighting the necessity for a tailored governance model.

Triggers for Loss of Coherence in Institutional Infrastructure: London's approach demonstrates a clear breach of national institutional frameworks, driven by three interconnected triggers:

- *Contextual Pressures:* London faces a unique and complex set of environmental and social challenges, driven by its high population density, traffic congestion, and severe air pollution.

As one of Europe's largest and most dynamic cities, London's urban sprawl and continued reliance on road transport contribute to significant greenhouse gas emissions and poor air quality, with levels of nitrogen dioxide and particulate matter frequently exceeding safe limits (Reuters, 2023). These environmental burdens are not distributed evenly - poorer communities are disproportionately affected, as they tend to live in areas with higher exposure to traffic emissions and fewer green spaces thus exacerbating health inequalities. Given these urgent issues, the city sees the need to implement immediate and aggressive measures that go beyond the UK's broader national strategy, tailoring interventions to London's specific urban context, as highlighted in the quote below by the Greater London Authority.

> *"London's air quality crisis requires policies that are both ambitious and urgent, reflecting the city's unique position as a global urban centre," observed a report by the Greater London Authority* (Mayor of London, 2022).

- *Stakeholder Expectations:* In London, residents, businesses, and advocacy groups are increasingly vocal in their demand for effective solutions to pollution, congestion, and transport inefficiencies. With growing awareness of the health risks associated with poor air quality and the economic costs of traffic congestion, there is mounting pressure on policymakers to implement bold, forward-thinking measures that ensure a cleaner, more efficient, and healthier urban environment (Reuters, 2023). Businesses seek smoother transport logistics and reduced congestion, while advocacy groups push for greener alternatives that prioritise public health, sustainability, and equity. A key response to these demands has been London's strong emphasis on active travel, including expanding cycling networks, pedestrian-friendly infrastructure, and low-traffic neighbourhoods. This reflects a broader societal shift toward healthier, low-carbon urban living, reinforcing the need for policies that prioritise people over cars (Mayor of London, 2022). As a result, London has been compelled to go beyond national standards, adopting stricter emissions policies, more ambitious transport electrification goals, and larger-scale investments in sustainable mobility. The following quote from a former Senior Personnel at Transport for London strengthens this narrative.

> *"Londoners have made it clear that they want a city where walking, cycling, and public transport are the easiest and most appealing choices," noted a former Transport for London official.*

- *Aspirational Shortfall:* While London is committed to meeting the UK's national air quality goals, its ambitions extend far beyond the minimum standards set at the national level. The city's goal of achieving a zero-carbon future by 2030 and promoting greater equity in urban design demands bolder, more localised action to address challenges that are uniquely intensified in the capital (Mayor of London, 2022). High population density, traffic congestion, and socio-economic disparities create complexities that national policies alone cannot fully resolve, requiring London to implement targeted, high-impact strategies that go beyond the broader UK framework. Recognising these gaps, the city has pioneered initiatives such as the Ultra Low Emission Zone (ULEZ), active travel expansion, and public transport decarbonisation to accelerate its transition to sustainability. Furthermore, efforts to redesign urban spaces with a focus on accessibility, walkability, and green infrastructure reflect London's commitment to an equitable transformation, ensuring that all communities, not just affluent areas, benefit from cleaner air, reduced emissions, and improved quality of life. By acknowledging and addressing these aspirational shortfalls, London is demonstrating its determination to exceed national benchmarks, setting an ambitious precedent for urban sustainability and climate resilience. The following quote from the Mayor of London as stated in the report by the Greater London Authority emphasises this ambition.

> *"The ULEZ is a step towards our ambition of a greener London, but more needs to be done to meet the city's long-term goals," stated the Mayor of London* (Mayor of London, 2022).

London's Clean Air and Active Travel policy reflects a strategic adaptation of global, national, and local institutional infrastructures. At the international level, the policy aligns with frameworks such as the 2030 Agenda for Sustainable Development (particularly SDG 11 and SDG 13) and the Paris Agreement's goals for reducing urban emissions. While the UK's national air quality strategy provides overarching guidance (Department for Environment, Food & Rural Affairs, 2023), London's deviations reflect a necessity to address specific urban challenges not adequately captured by broader frameworks.

The ULEZ and active travel initiatives demonstrate London's ability to translate global and national goals into localised strategies that directly benefit its residents. These actions also signal a gap in the existing infrastructure, where national policies do not fully address the complexities of large metropolitan areas. By integrating urban greening and active transport within its strategy,

London exemplifies how cities can act as innovation hubs for localising and operationalising sustainable development goals.

Characteristics of Situated Breaches: London's Clean Air and Active Travel policy exemplifies characteristics of situated breaches, reflecting its targeted and rooted approach.

- *Targeted:* The Ultra Low Emission Zone (ULEZ) is a highly targeted policy aimed specifically at reducing vehicle emissions, one of the biggest contributors to London's air pollution. By enforcing strict emission standards and charging non-compliant vehicles, the ULEZ is helping to significantly improve air quality in some of the city's most polluted areas. Meanwhile, urban greening initiatives are designed to deliver measurable health and environmental benefits, such as reducing heat island effects, improving biodiversity, and enhancing mental well-being through increased access to green spaces (Reuters, 2023).

  A key element of this precision-driven strategy is the focus on active travel, ensuring that new transport and infrastructure developments actively support walking and cycling. As part of this, London is mandating that new developments prioritise pedestrian-friendly spaces, integrate cycling infrastructure, and incorporate natural vegetation to support urban greening. This aligns with the Mayor of London's broader sustainability vision, which aims to make developments greener, more energy-efficient, and better adapted to climate resilience (Coules, 2021). As a Transport for London (TfL) spokesperson put it,

  > *"Our measures are not just about reducing emissions; they are about improving lives, one neighbourhood at a time."*

  This statement reflects how London's approach goes beyond simply cutting carbon - it seeks to enhance public health, promote social equity, and create a cleaner, more liveable city for future generations.

- *Rooted:* The integration of active travel with public transport and the prioritisation of densely populated, pollution-prone areas demonstrate a deeply rooted and localised strategy tailored to London's unique urban challenges. Unlike many other UK cities, London faces high congestion levels, severe air pollution, and significant reliance on private vehicles, particularly in areas with limited access to efficient public transport (Transport for London, 2022). By targeting interventions where pollution is most concentrated, such as busy road networks and

low-income neighbourhoods disproportionately affected by poor air quality, London is implementing a place-based approach that prioritises environmental justice and public health.

While London's Clean Air and Active Travel policy aligns with broader national sustainability goals, its implementation is more immediate and aggressive, recognising the urgent need for intervention in a high-density metropolitan environment. Policies such as expanding the Ultra Low Emission Zone (ULEZ), creating car-free zones, and improving cycling infrastructure are designed to address London's specific local conditions rather than applying a one-size-fits-all national model (Transport for London, 2022). This reflects a pragmatic yet ambitious approach to reducing vehicle emissions and encouraging sustainable transport tailored to the city's complex mobility patterns and public health challenges. As noted by Coules (Coules, 2021),

> *"London's policies are a testament to how urban areas can tailor global sustainability goals to fit their local realities."*

This highlights how London is setting a precedent for other cities by demonstrating that effective climate action must be locally adapted, ensuring that sustainability policies are not just ambitious but also practical and impactful for the communities they serve.

These breaches demonstrate how rooted and targeted strategies can effectively complement broader institutional frameworks, showcasing London's role as a leader in urban sustainability. Challenges unique to the City of London including aspects relating to density, social equity, emphasis on public health, and integrating with the public transport network stress for the need for a tailored approach for the city thus indicating a loss of coherence and the need for a tailored governance framework to take this forward.

Situated Governance Mechanisms: London employs collaborative and adaptive governance mechanisms to implement its Clean Air and Active Travel policy, ensuring alignment with its unique urban context.

- *Collaborative:* The governance of air quality and transportation policies in the City of London is shaped by a multi-tiered, highly coordinated approach, involving key governmental and non-governmental stakeholders. At the core of this framework are the Mayor of London, the Greater London Authority (GLA), Transport for London (TfL), and local borough councils, each

playing a distinct yet interdependent role in policy formulation, implementation, and oversight councils (Mayor of London, 2022b). This governance model ensures that air quality and transport strategies are not only citywide but also tailored to the specific needs of individual boroughs, allowing for localised solutions within a broader strategic framework.

Beyond government bodies, collaboration extends to NGOs, academic institutions, and private sector stakeholders, whose involvement enhances research, funding, and innovation in clean transportation and urban air quality improvement. Universities and research institutions provide scientific data and impact assessments, guiding evidence-based policymaking. NGOs and advocacy groups ensure that policies remain socially inclusive and equitable, advocating for low-income communities disproportionately affected by pollution. Meanwhile, private sector partnerships with businesses and technology firms help advance electric vehicle adoption, smart mobility solutions, and emissions-reduction technologies, ensuring that sustainability goals align with economic growth and technological progress (Finance Commission, 2013).

This cross-sectoral cooperation has been instrumental in delivering policies such as the Ultra Low Emission Zone (ULEZ), pedestrian-friendly urban designs, and the expansion of active travel infrastructure. The governance structure fosters continuous dialogue and knowledge exchange, ensuring that London's policies remain adaptive, effective, and forward-thinking. As a Greater London Authority (GLA) representative put it,

> *"Collaboration across sectors is essential to achieving London's ambitious sustainability goals. Our success depends on breaking down silos between departments, between public and private actors, and between city leaders and local communities. It's only through these partnerships that we can deliver bold, lasting change."*

This reflects the city's commitment to shared responsibility, emphasising that achieving a low-carbon, healthier urban environment requires strong coordination, stakeholder engagement, and long-term partnership-building across all sectors of society.

Situated Norms and Practices: Collaboration is underpinned by formal agreements and joint initiatives, including partnerships for urban greening and infrastructure development. TfL's management of cycling infrastructure and the ULEZ reflects the city's coordinated approach. The Mayor of London is a key figure in setting the city's strategic direction for air quality and transportation. The Mayor works in conjunction with the GLA to develop and enforce these

policies. The GLA ensures that the strategic plans set by the Mayor are realised effectively, including those related to air quality and active travel (Mayor of London, 2022b).

- *Adaptive:* London's governance model is inherently flexible and responsive, allowing national policies to be customised to the city's unique urban landscape. Given its high population density, complex transport network, and significant pollution challenges, London requires more nuanced and proactive interventions than standard national policies may provide. By adapting these policies to its specific needs, the city has been able to introduce bold and innovative measures, such as the Ultra Low Emission Zone (ULEZ), Low Traffic Neighbourhoods (LTNs), and tailored active travel initiatives (Transport for London, 2022). These solutions go beyond national requirements, ensuring that air quality improvements, emissions reductions, and sustainable transport systems are implemented at a pace and scale necessary to meet London's immediate environmental and public health challenges.

  A key aspect of this adaptive governance is its multi-tiered structure, which enables the Mayor of London, the Greater London Authority (GLA), Transport for London (TfL), and local borough councils to collaboratively fine-tune policies based on real-time data, community feedback, and technological advancements (Transport for London, 2022). For example, the ULEZ expansion has been guided by ongoing air quality monitoring, ensuring that adjustments can be made to optimise effectiveness while addressing concerns from residents and businesses. Similarly, neighbourhood-specific active travel initiatives allow local boroughs to shape policies that enhance walkability and cycling infrastructure based on their particular urban layouts and mobility needs, rather than enforcing a one-size-fits-all approach.

  This adaptability also ensures that London's policies remain aligned with broader national and global sustainability goals, including the UK's Net Zero Strategy and the United Nations Sustainable Development Goals (SDGs). By maintaining a governance structure that allows for local customisation within a national framework, London has positioned itself as a leader in urban sustainability and policy innovation. As Transport for London (TfL) stated in 2022,

  > *"By tailoring national goals to local needs, London is setting a precedent for how cities can lead in implementing SDGs. Our policies are shaped by the communities they serve, but anchored in a global commitment to sustainable, inclusive growth. This makes our governance not only effective but replicable." (Transport for London, 2022).*

This highlights how London's ability to interpret and refine national policies to fit its local context not only benefits the city itself but also serves as a model for other global metropolitan areas striving to balance sustainability with urban complexity.

Situated Norms and Practices: Adaptive practices include piloting new technologies, such as real-time air quality monitoring systems, and using public feedback to refine policies are some practices that London is encouraging. London is divided into several boroughs, each governed by a local council. These councils are responsible for implementing local initiatives that align with the Mayor's strategies.

- *Incentivised:* Financial and behavioural incentives are central to London's governance approach, encouraging compliance with emission standards and promoting sustainable travel choices. By using both disincentives and positive reinforcements, the city effectively reduces pollution while fostering greener behaviours (Transport for London, 2022). The Ultra Low Emission Zone (ULEZ) applies daily charges to high-emission vehicles, discouraging their use and accelerating the shift toward electric and low-emission transport. Its expansion ensures broader air quality improvements and pushes businesses and individuals toward cleaner mobility options.

  Alongside financial penalties, London offers positive incentives, such as subsidies, tax benefits, and grants for EV adoption, cycling infrastructure, and community-led greening projects. Cycle to Work schemes, discounted public transport, and pedestrian-friendly zones further encourage low-carbon travel. As a TfL official, who was interviewed for the purposes of this research, observed,

  > *"The ULEZ has transformed how Londoners think about air quality by linking economic incentives to environmental outcomes. It's not just about penalising polluters; it's about rewarding cleaner choices and making sustainable behaviour the easy, attractive option."*

  This highlights how London's strategy balances regulation with rewards, ensuring a cultural shift toward cleaner, more sustainable living.

  Situated Norms and Practices: Incentivised practices, as discussed above, include financial penalties for high-emission vehicles and subsidies for businesses and residents adopting

greener technologies or practices. Active travel campaigns also highlight personal health and economic savings as incentives for walking and cycling.

London's governance mechanisms illustrate a sophisticated interplay between international, national, regional, and local frameworks. The Global Covenant of Mayors and ICLEI serve as international governance platforms that provide London with access to best practices, funding, and technical support. Nationally, coordination between the Greater London Authority (GLA) and Transport for London (TfL) enables the city to adapt and implement broader UK strategies while addressing local challenges.

TfL's management of the ULEZ and active travel initiatives aligns with the governance principles outlined by ICLEI and the C40 Cities Climate Leadership Group, emphasising collaborative and adaptive governance. Furthermore, the involvement of local borough councils ensures that global and national strategies are effectively localised while incentivised mechanisms provide economic and behavioural nudges to drive compliance and participation. London and many other cities across the UK have rallied for greater devolution to be able to deliver for their cities and address their context specific challenges.

By combining collaborative approaches with adaptive and incentivisation strategies tailored to its unique urban context, London not only enhances its sustainability but also sets a benchmark for other cities navigating similar challenges

City	London, United Kingdom
Policy	Clean-air and active travel policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: High population density | Public health and social equity related challenges | Higher pollution levels | Traffic congestion • Stakeholder expectations: Need for integration with the public transportation network | Acute air-quality and transportation challenges | Need for healthier and more sustainable living • Infrastructure void: Goal to become net-zero by 2030
Characteristics of the situated breach	• Rooted: Integration of active travel with public transport and the prioritisation of densely populated, pollution-prone areas demonstrate a deeply rooted and localised strategy.

	• Targeted: ULEZ directly addresses vehicle emissions, and urban greening initiatives targeting specific health and environmental outcomes.
Situated governance mechanisms	• Collaborative: Collaboration between the Mayor of London, TfL, GLA, Local Borough Councils, businesses and academic institutions • Adaptive: Effective public and stakeholder involvement managed by the GLA or TfL	Information and outreach campaigns to drive behavioural changes	Public transport upgrades to make it more attractive for commuters	Local Borough Councils taking ownership to implement local initiatives • Incentivised: Financial incentives for cleaner vehicles such as grants and subsidies for purchasing electric or low-emission vehicles	Scrappage schemes to offer financial incentives to scrap old, more polluting vehicles

Table 27: Summary of London's approach to clean air and active travel

London's Clean Air and Active Travel policy offers critical insights into institutional breaches and governance in SDG implementation, as summarised in Table 27 above:

- The triggers, including contextual pressures and stakeholder expectations, highlight the need for local adaptation of national frameworks.
- The characteristics of the breaches, particularly their targeted and rooted nature, reflect the necessity of tailored approaches in urban sustainability.
- The resulting governance mechanisms, combining collaborative and adaptive strategies, demonstrate how cities can operationalise SDGs through innovative and inclusive models.

7.3.2 The City of Rotterdam – Health, safety, security and well-being policy

This section explores Rotterdam's unique approach to health, safety, and well-being, which deviates from the prescribed national remit. Rotterdam's policy is not just a compliance mechanism but a locally adapted strategy that reflects the leadership's drive to address the city's specific challenges and priorities. Using institutional theory, I analyse the triggers for 'situated' institutional breaches, the characteristics of these breaches, and the 'situated' governance mechanisms shaping Rotterdam's sustainability agenda.

Context: Rotterdam's health, safety, and well-being policy encompasses public health measures, safety interventions, and community well-being initiatives. Under this policy the aspects that are covered include the police services, hospital services, and fire brigade services. Rotterdam's policy on health and safety is focused on improving the overall health the people of Rotterdam. While aligned with national mandates, the city's focus on addressing localised challenges, such as air quality, drug misuse, and community engagement, reflects a departure from conventional approaches. For example, the Mayor's advocacy for stricter anti-drug measures and the Alderman's focus on air quality demonstrate the city's prioritisation of resident-specific issues (Boztas, 2024).

Rotterdam also integrates health and safety with broader sustainability goals. Projects like green roofs, urban gardens, and data-driven air quality improvements illustrate how environmental initiatives contribute to healthier living spaces (Erasmus University, Rotterdam, 2024b). These measures go beyond the national agenda, positioning Rotterdam as a leader in adapting institutional frameworks to meet local needs.

Triggers for Loss of Coherence in Institutional Infrastructure: Rotterdam's approach reflects a breach of national and regional institutional infrastructure, driven by three primary triggers:

- *Contextual Pressures:* Rotterdam faces complex urban challenges that require a more aggressive, targeted approach than the broader national framework provides. As a densely populated, highly industrialised port city, air quality issues are a significant concern, with high levels of nitrogen dioxide (NO_2) and particulate matter (PM) due to heavy traffic, shipping emissions, and industrial activity. These pollutants disproportionately affect lower-income neighbourhoods, exacerbating respiratory illnesses and cardiovascular diseases.

Additionally, the city is tackling safety concerns linked to drug misuse, particularly in areas affected by organised crime, trafficking, and substance abuse-related violence. This has led to a push for harm reduction programmes, stricter enforcement measures, and community-based intervention strategies to maintain public safety.

Rotterdam also grapples with health inequities, particularly in historically underserved areas, where residents face limited access to green spaces, healthy food, and healthcare services. These disparities contribute to chronic illnesses and reduced life expectancy, requiring localised health initiatives and urban development strategies that prioritise well-being.

Recognising these challenges, Rotterdam has implemented stricter emissions regulations, public health interventions, and neighbourhood-specific safety initiatives, ensuring that sustainability, public health, and social equity remain at the forefront of urban planning and governance. For example, the Port of Rotterdam Authority launched ‘sustainability discounts’ on port dues and rent to encourage eco-friendly operations, while investing in heat recovery systems, shore power, and carbon capture partnerships to reduce local pollution (Port of Rotterdam, 2024). Complementing these efforts, the city's Resilient Rotterdam Strategy (2022–2027) emphasises neighbourhood-level air quality monitoring, green infrastructure, and inclusive public health responses (Bonte and Aboutaleb, 2022). The following quote from a public health expert at Erasmus University exemplifies this.

> *“Rotterdam’s unique challenges demand tailored solutions, and the leadership here is committed to going beyond the national remit to address them, ” said a public health expert as highlighted in the Resilient Rotterdam Strategy* (Bonte and Aboutaleb, 2022).

- *Stakeholder Expectations:* Rotterdam’s residents increasingly expect tangible solutions that directly enhance their quality of life, particularly in areas such as air quality, public safety, and equitable urban development. With growing awareness of environmental and health challenges, citizens are demanding more transparency, accountability, and participatory decision-making in city governance. A prime example of this community-driven approach is Luchtclub, a grassroots air quality monitoring initiative that empowers residents to collect and analyse real-time pollution data in their neighbourhoods (Dimitrova, 2021).. This initiative reflects a broader shift toward participatory governance, where policymakers actively engage communities in shaping environmental and public health policies. By involving residents in

data collection and decision-making, the city not only ensures greater public trust and awareness but also creates more actionable, locally relevant solutions.

Beyond air quality, Rotterdam's urban sustainability efforts such as green infrastructure projects, climate adaptation initiatives, and social equity programmes are increasingly shaped by stakeholder input, ensuring that policies align with the needs and expectations of the city's diverse communities (Bonte and Aboutaleb, 2022). This collaborative approach highlights the city's commitment to delivering results that improve daily life, while fostering stronger engagement between residents, policymakers, and local organisations. The following quote from a local community leader personifies this.

> *"Engaging residents and stakeholders ensures that policies are rooted in the realities of the city," observed a community leader involved in the Luchtclub* (Dimitrova, 2021).

- *Aspirational Shortfall:* While the national framework provides broad policies addressing health and safety, it often lacks the granularity needed for cities like Rotterdam, where urban density, industrial activity, and socio-economic disparities amplify these challenges. Rotterdam faces unique pressures that require locally tailored solutions, as national policies often fail to account for the distinct environmental, economic, and social realities of highly urbanised areas (Bonte and Aboutaleb, 2022). For example, air pollution and public health risks are more pronounced in Rotterdam due to its status as Europe's largest port, leading to higher emissions from traffic, shipping, and industry. National guidelines on air quality and emissions reduction set broad targets but do not fully address localised pollution hotspots, requiring Rotterdam to implement stricter monitoring and mitigation strategies such as Luchtclub's community-led air quality initiatives (Dimitrova, 2021).

  Similarly, socio-economic disparities mean that national-level health and safety policies often overlook the specific needs of vulnerable communities, where access to clean air, healthcare, and green spaces is more limited. Rotterdam's initiatives, such as neighbourhood-based social programmes, targeted crime prevention strategies, and climate adaptation efforts, highlight these gaps and underscore the need for city-led interventions that go beyond national directives (Bonte and Aboutaleb, 2022). By bridging these policy shortfalls, Rotterdam is demonstrating how local governance can play a crucial role in addressing urban challenges with precision and impact, ensuring that policies not only meet national standards but exceed them where

necessary to improve quality of life for all residents. The following quote emphasises the effectiveness of this approach.

> *"The national policy offers a broad outline, but Rotterdam's focus on specific priorities like air quality and community safety is what makes it effective," noted an international governance committee member, who was interviewed for the purposes of this research.*

Rotterdam's health, safety, and well-being policy illustrates how local adaptation of global and national institutional infrastructures can address city-specific challenges. International frameworks, such as the 2030 Agenda for Sustainable Development, set the overarching goals for urban health and safety, with SDG 11 (Sustainable Cities and Communities) and SDG 3 (Good Health and Well-Being) providing the guiding principles. At the national level, the Dutch government's health and safety strategies create a baseline framework for cities to implement (Interreg North Sea Region, 2024).

Rotterdam's local priorities, such as its focus on air quality and community safety, reflect the limitations of existing infrastructures in addressing the nuanced challenges of an urban centre with significant socio-economic disparities (Bonte and Aboutaleb, 2022). By leveraging local institutional infrastructures such as partnerships with the Erasmus University and community-led initiatives like the Luchtclub, Rotterdam demonstrates how cities can operationalise SDGs to create tangible impacts. The city's proactive measures also reveal gaps in broader infrastructures, underscoring the need for more flexible and responsive frameworks at the national and international levels.

Characteristics of Situated Breaches: Rotterdam's health, safety, and well-being initiatives showcase characteristics of situated breaches, demonstrating how local contexts drive institutional adaptation.

- *Targeted:* Rotterdam's policies address specific challenges such as air pollution, health inequities, and drug misuse. Initiatives like air quality monitoring and drug misuse prevention are highly focused on immediate and tangible outcomes. Rotterdam has a history of addressing public health through comprehensive urban planning and public policies. The city focuses on preventive health measures, aiming to reduce health inequalities by improving access to healthcare services, especially in underserved communities (Interreg North Sea Region, 2024).

Efforts to promote healthy lifestyles include campaigns around nutrition, physical activity, and smoking cessation, targeting both adults and children. Programmes to increase access to healthcare services, vaccination campaigns, and public health awareness campaigns focused on preventing diseases and promoting healthy lifestyles, especially around the COVID-19 pandemic were prioritised (Erasmus University, Rotterdam, 2024a). The following quote from a municipal official evidences this.

"Targeted policies ensure that resources are directed where they are needed most, reflecting the city's commitment to its residents," said a senior municipal official (Boztas, 2024).

- *Relational*: Rotterdam's approach to health, environmental, and social challenges is deeply collaborative, leveraging partnerships with universities, public health institutes, and community organisations. These alliances ensure that policies are evidence-based, inclusive, and responsive to residents' needs. By working with academic institutions like Erasmus University Rotterdam, the city benefits from cutting-edge research on urban sustainability and public health (Bonte and Aboutaleb, 2022). Public health institutes provide insights into pollution-related health impacts, while community organisations help ensure policies are rooted in local experiences, fostering trust and civic engagement. However, leadership plays a critical role in making this collaboration effective. The city's willingness to engage with stakeholders, facilitate open dialogue, and drive ambitious policies is key to ensuring that cross-sectoral cooperation translates into tangible outcomes, as highlighted in this quote from a researcher at Erasmus University.

  "Rotterdam's collaborative model demonstrates the power of partnerships in driving sustainable urban transformation" (Erasmus University, Rotterdam, 2024b).

These characteristics highlight Rotterdam's ability to localise broader institutional goals, ensuring that policies are both effective and contextually relevant.

Rotterdam's approach to health, safety, security, and well-being is influenced by the remit that is assigned to the city government by the national government. While this is a prescribed remit with certain specific mechanisms to report and monitor progress, the uniqueness in this case comes from the Mayor of Rotterdam's personal interest and drive to prioritise health, safety, and well-being for its residents and visitors (Boztas, 2024) . For example, the Mayor has been vocal about

mis-use of drugs in the city and has been driving initiatives and measures to control this. Similarly, the Alderman for Sustainability in Rotterdam has been advocating and driving a programme to utilise data to improve air quality in the city (Dimitrova, 2021). These are specific issues that the city has prioritised compared to the national agenda for how these issues are addressed.

Situated Governance Mechanisms: Rotterdam employs collaborative, adaptive, and incentivised governance mechanisms to implement its health, safety, and well-being policy, aligning global goals with local priorities.

- *Collaborative:* Rotterdam's governance approach is highly collaborative, involving academia, public health bodies, private sector partners, and community organisations to ensure inclusive and effective policies. By engaging diverse stakeholders, the city integrates expert knowledge and local insights, leading to more equitable and impactful outcomes. A key example is Luchtclub, a community-led air quality monitoring initiative that enhances data collection, policy responsiveness, and public trust. Partnerships with Erasmus University Rotterdam provide research-driven insights on urban resilience and health, while public health institutions help shape clean air and active travel policies to improve well-being in vulnerable communities (Bonte and Aboutaleb, 2022). Collaboration also extends to private sector stakeholders, who support sustainable transport, green infrastructure, and energy-efficient housing solutions. By fostering cross-sector partnerships, Rotterdam ensures its policies are participatory, adaptive, and aligned with long-term sustainability goals, as exemplified by the quote below.

  > *"Rotterdam's partnerships are key to translating policy into action," noted a researcher at the Erasmus University* (Erasmus University, Rotterdam, 2024a).

  Situated Norms and Practices: Collaboration is institutionalised through partnerships with research bodies and community organisations. Practices include co-creating health and safety initiatives and leveraging academic expertise for evidence-based policymaking.

- *Adaptive:* Rotterdam's governance model adapts national frameworks to address local challenges, ensuring policies are data-driven and community-focused. While national policies set broad guidelines, Rotterdam refines them to better suit its urban density, industrial activity, and socio-economic disparities. For instance, the city's air quality initiatives go beyond national standards by using real-time monitoring and predictive analytics to target pollution

hotspots (Bonte and Aboutaleb, 2022). Programmes like Luchtclub engage residents in tracking air pollution, ensuring policies are locally responsive. Similarly, community-focused health campaigns tailor national health initiatives to Rotterdam's needs, with neighbourhood-based wellness programmes, active travel incentives, and targeted outreach in vulnerable areas. By continuously adjusting policies based on local data and stakeholder input, Rotterdam ensures national frameworks are not just implemented but optimised for long-term impact, as suggested by this quote below.

> *"Rotterdam's ability to adapt and innovate sets a benchmark for urban health governance,"* (Dimitrova, 2021).

Situated Norms and Practices: Adaptive practices include piloting new technologies for environmental monitoring and using public feedback to refine policies. Efforts to enhance community policing, along with initiatives to engage citizens in neighbourhood watch programmes, are part of the broader strategy to maintain a safe urban environment.

- *Incentivised:* Incentives, such as grants for community health projects and support for green infrastructure, encourage stakeholder participation. These mechanisms drive grassroots engagement and align public and private sector efforts. The Mayor is keen to explore a tolerance policy for illegal drugs (Halsema, 2024) and is keen on taking a stance against the national government on this matter while promising an incentive for an illegal-drug free city where everyone, irrespective of their socio-economic, and ethnic background, can thrive. The quote below from a local policy maker in Rotterdam personifies this.

> *"Providing incentives ensures broader participation in achieving urban health goals," said a local policymaker* (Halsema, 2024).

Situated Norms and Practices: Incentivised practices include financial support for community-led projects and recognition programmes for businesses contributing to health and safety goals. Rotterdam recognises the importance of social well-being and actively works to foster a sense of community and belonging among its residents. This includes support for community centres, recreational programmes, and cultural events that bring people together (Erasmus University, Rotterdam, 2024a). The city also focuses on inclusive policies to ensure that all residents, including migrants and refugees, have access to services and opportunities to participate fully in city life.

Rotterdam's governance mechanisms align closely with the multi-tiered governance hierarchy of SDG implementation. At the international level, platforms like ICLEI and the Global Covenant of Mayors provide a collaborative space for knowledge exchange and best practices, influencing the city's sustainability agenda. Rotterdam's governance aligns with national frameworks while adapting them to its unique urban context, embodying principles championed by the Sustainable Development Solutions Network (SDSN).

Locally, Rotterdam's collaborative efforts between academia, public health bodies, and community organisations reflect the participatory ethos central to ICLEI's initiatives. Adaptive measures, such as piloting innovative air quality solutions, resonate with the principles of the C40 Cities Climate Leadership Group, which prioritises localised solutions for global challenges (Bonte and Aboutaleb, 2022). Incentivised governance practices, including grants for community health projects and support for green infrastructure, align with global trends promoting economic nudges to foster sustainable behaviour. Rotterdam's approach exemplifies how cities can localise global governance frameworks to create effective, inclusive, and impactful policies tailored to their residents' needs.

City	Rotterdam, The Netherlands
Policy	Health, safety, security, and well-being policy
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Drug-abuse and mis-use | Illegal drugs | Poor air-quality | Largest port city | Increased criminal activity • Stakeholder expectations: Improved quality of life | Reduced violence | Reduced health inequities • Aspirational Shortfall: Improved regulation on illegal drugs | Reduction in the Socio-economic gap
Characteristics of the situated breach	• Targeted: Proposals to develop complementary policies to tackle the drug problem | City-level campaign showing links between violence and drug-abuse | Enhanced security at the port to seize illegal drugs • Relational: The Mayor's personal leadership style and interest in driving safety | Leveraging media to garner support and promote best practices | Campaigns and advocacy efforts to create awareness

Situated governance mechanisms	• Collaborative: Collaboration between the Mayor, the Alderman, academic institutions, national government, and local community groups | Interactions with international networks is currently viewed by the city as being transactional | Facilitating forums to encourage citizens and businesses to share best practices • Incentivised: Incentive of a better life free of drugs, abuse, and violence • Adaptive: Influencing national policy on illegal drugs | Adapting national frameworks to address local challenges, such as data-driven air quality initiatives and community-focused health campaigns.

Table 28: Summary of Rotterdam's approach to health, safety, security, and well-being

Rotterdam's health, safety, and well-being initiatives provide critical insights into institutional breaches and governance in SDG implementation, as summarised in Table 28 above:

- The triggers, including contextual pressures and stakeholder expectations, highlight the need for local adaptation of national frameworks.
- The characteristics of the breaches, particularly their targeted and relational nature, demonstrate the importance of tailored approaches.
- The resulting governance mechanisms, combining collaborative, adaptive, and incentivised strategies, illustrate how cities can localise and operationalise SDGs through innovative governance.

7.3.3 The City of Melbourne – Sustainable Development Goals policy

In this section, I examine Melbourne's policy for implementing the Sustainable Development Goals (SDGs) within the city's urban framework. Melbourne's tailored approach highlights the importance of localising global targets to address context-specific challenges, filling the void left by national strategies, and fostering partnerships to deliver effective urban sustainability. Through the lens of institutional theory, I explore the triggers for 'situated' institutional breaches, the characteristics of these breaches, and the 'situated' governance mechanisms that underpin Melbourne's efforts to embed SDG principles.

Context: The City of Melbourne is recognised as the first Australian city to localise the SDGs, demonstrating its leadership in addressing global challenges through local action. The city utilises the 'Hacking the Sustainable Development Goals' methodology to adapt global targets and indicators to its urban context. This approach allows Melbourne to identify relevant metrics while enabling city-to-city benchmarking and learning (Greene and Meixell, 2017).

Melbourne's SDG efforts span all 17 goals, with interactive dashboards and voluntary reviews to track and communicate progress (Melbourne Centre for Cities, 2022). Notable initiatives include collaborations with the University of Melbourne's Connected Cities Lab, data-driven decision-making frameworks, and community engagement platforms that prioritise inclusive governance (University of Melbourne, 2020).

Unlike the broader Australian national strategy, which focuses on high-level targets, Melbourne's methodology emphasises localised action, stakeholder engagement, and project-specific indicators. This deviation highlights a loss of coherence with national frameworks and the need for a tailored governance model to achieve urban sustainability goals effectively.

Triggers for Loss of Coherence in Institutional Infrastructure: Melbourne's approach to localising the SDGs illustrates national and international institutional breaches driven by the following triggers:

- *Contextual Pressures:* Melbourne's dense urban environment and unique sustainability challenges require a localised approach that national frameworks alone cannot fully address. As a rapidly growing city, Melbourne faces mounting pressures related to climate change resilience, clean energy adoption, and equitable urban development, each requiring targeted,

place-based solutions (Melbourne Centre for Cities, 2022). The city is particularly vulnerable to climate change risks, including heatwaves, bushfire smoke exposure, and rising sea levels, which necessitate adaptive urban planning, increased green infrastructure, and advanced cooling strategies. Similarly, while Australia's national policies promote clean energy adoption, Melbourne must tailor these initiatives to its urban density and infrastructure constraints, accelerating the transition to renewable energy in buildings, transport, and industry.

Equitable urban development is another pressing challenge, as housing affordability, public transport access, and environmental justice disproportionately impact low-income and marginalised communities. Addressing these inequalities requires localised interventions that go beyond national policy directives, ensuring that Melbourne's sustainability efforts are inclusive and socially responsive. The quote from a researcher at The University of Melbourne exemplifies this.

> *"Cities like Melbourne operate within complex ecosystems that require tailored responses to sustainability challenges." observed a researcher at The University of Melbourne as part of the interview for this research.*

Melbourne's commitment to sustainable urban development is reflected in initiatives such as the Melbourne Principles for Sustainable Cities, adopted at the 2002 Earth Summit (UNEP & ICLEI). These principles emphasise equity, biodiversity, and participatory governance tailored to each city's unique character, as highlighted in the report from UNEP.

> *"Melbourne's approach isn't just about greening. It's about embedding socio-economic equity and local character into sustainability strategies, ensuring the benefits reach all communities."*(UNEP, 2002)

- *Infrastructure void:* Melbourne has taken a proactive approach to sustainability, stepping in where national leadership has fallen short. A policy vacuum at the national level, caused by fragmented governance, unclear responsibilities, and limited expertise in implementing the SDGs, has left cities to develop their own solutions. National gaps in public transport, affordable housing, and climate resilience have forced Melbourne to lead on urban greening, smart energy grids, and community-driven sustainability initiatives (University of Melbourne,

2020). Lacking strong federal coordination, the city has relied on research institutions, private sector partnerships, and local engagement to drive carbon-neutral development, circular economy models, and climate adaptation projects. By filling this policy void, Melbourne is not just addressing its own needs but setting an example for other cities, proving that local leadership and innovation can drive sustainable progress despite national inaction, as noted in the quote below.

"The disconnect between national ambitions and local realities necessitates city-led interventions to bridge the gap," noted a representative from the Connected Cities Lab who was interviewed for this research.

- *Stakeholder Expectations:* Businesses, residents, and community groups in Melbourne expect targeted initiatives that address climate resilience, urban mobility, and sustainable development. Rising awareness of environmental and social challenges has increased pressure on city leaders to deliver measurable, high-impact solutions that improve quality of life and long-term sustainability. Melbourne's focus on participatory governance ensures stakeholders have a voice in policy decisions, fostering public trust and accountability (Melbourne Centre for Cities, 2022). Citizen-led climate action plans, sustainability forums, and real-time urban data monitoring reflect a shift toward evidence-based, community-driven decision-making. Businesses also seek clear sustainability guidelines, green incentives, and resilient infrastructure investments to maintain Melbourne's global competitiveness. The city's data-driven approach, including air quality tracking and smart mobility planning, ensures adaptive, responsive policies that align with stakeholder needs, as exemplified in this quote by a city official.

"Our goal is to ensure that all voices are heard, and that the SDGs are embedded into every aspect of city planning," said a Melbourne city official (City of Melbourne, 2021a).

Melbourne's approach to SDG implementation reflects a sophisticated adaptation of global, national, and local institutional infrastructures. The 2030 Agenda for Sustainable Development provides the overarching framework, with SDG 11 (Sustainable Cities and Communities) offering specific guidance for urban centres like Melbourne. While Australia's national strategy outlines general commitments to the SDGs, Melbourne's actions reveal the gaps in translating these commitments into actionable, city-level solutions.

The city's innovative use of the “Hacking the Sustainable Development Goals” methodology bridges these gaps by localising global targets and benchmarks (Melbourne Centre for Cities, 2022). This approach highlights the limitations of broader national and regional infrastructures, such as the lack of cohesive leadership and technical expertise. By developing its own tailored indicators and interactive dashboards, Melbourne exemplifies how cities can effectively operationalise international frameworks while addressing their unique challenges. Melbourne’s efforts also underscore the importance of leveraging local institutional infrastructures such as partnerships with the Connected Cities Lab and engagement platforms with residents to fill the voids left by broader frameworks (City of Melbourne, 2022).

Characteristics of Situated Breaches: Melbourne’s SDG implementation highlights characteristics of situated breaches, showcasing how cities can adapt institutional logics for local benefit.

- *Targeted:* Melbourne’s use of tailored indicators and city-specific initiatives reflects its focus on immediate and measurable outcomes. Projects addressing climate resilience, sustainable buildings, and clean energy exemplify this targeted approach. The city has one or more ongoing projects or initiatives linked to each and every one of the 17 sustainable development goals. The case studies are comprehensively described on the city’s website and every project has a clear set of identified stakeholders to support and drive the implementation of the initiatives (City of Melbourne, 2022). The quote below evidences this localised and targeted nature of the interventions.

  > *“Our initiatives are designed not just to align with global goals but to solve real problems faced by our communities,” said a city sustainability advisor, who was interviewed for the purposes of this research*

- *Rooted:* Melbourne’s approach to localising the Sustainable Development Goals (SDGs) is grounded in a deeply contextual and participatory model of governance. Rather than adopting global targets, the city emphasises a bottom-up process where goals are translated and adapted to reflect local priorities, needs, and capacities, particularly in cases where global metrics may not align with on-the-ground realities (City of Melbourne, 2021a). Community engagement, cross-sector partnerships, and inclusive policy-making play a central role in shaping the city’s SDG agenda, ensuring that the localisation process is not only technically sound but socially embedded. At the same time, Melbourne maintains a strong commitment to global and regional

benchmarking, selecting indicators that align with broader frameworks to support city-to-city learning and accountability. As Greene and Meixell (Greene and Meixell, 2017) observed,

> *"Melbourne's approach to localising the SDGs serves as a model for how urban centres can lead global sustainability efforts."*

This statement underscores how rootedness in local context can coexist with global alignment allowing cities like Melbourne to act as both local innovators and global standard-bearers in sustainability governance.

The targeted and rooted nature of Melbourne's breaches highlights its ability to transform institutional frameworks into effective and contextually relevant strategies for urban sustainability.

Situated Governance Mechanisms: Melbourne employs collaborative, adaptive, and incentivised governance mechanisms to implement its SDG framework, aligning global goals with local priorities.

- *Collaborative:* Melbourne's partnership with the University of Melbourne's Connected Cities Lab is key to aligning urban planning and governance with the Sustainable Development Goals (SDGs). This collaboration ensures policies are evidence-based, data-driven, and co-created with stakeholders, fostering a more inclusive and effective approach to sustainability. By integrating academic research with city planning, the Connected Cities Lab helps Melbourne identify policy gaps, track sustainability progress, and develop innovative urban solutions (City of Melbourne, 2021a). The partnership supports climate adaptation, digital governance, and resilience planning, ensuring ambitious yet practical sustainability efforts. Working closely with community groups, businesses, and policymakers, Melbourne ensures SDG policies reflect local needs and real-world challenges, as noted in the quote below.

> *"Melbourne's collaboration with the Connected Cities Lab enhances its capacity to deliver on the SDGs effectively," said a Connected Cities Lab* representative (University of Melbourne, 2020)

Situated Norms and Practices: Collaborative norms include joint data collection, policy alignment workshops, and academic-community partnerships. Practices involve leveraging research expertise to guide project planning and impact assessment. The city has embarked on a partnership with the University of Melbourne's Connected Cities Lab to integrate the SDGs into Melbourne's planning and governance framework (University of Melbourne, 2020). This

collaboration aims to use data and evidence as the foundation for setting priorities and planning city projects, thereby strengthening Melbourne's global profile in sustainability (Ningrum *et al.*, 2023).

- *Adaptive:* Melbourne's governance model adapts global sustainability frameworks to its local context, ensuring policies remain flexible, responsive, and community-driven. By allowing for iterative improvements and continuous feedback, Melbourne refines its approach to climate resilience, urban mobility, and sustainable development, making adjustments based on real-world data and stakeholder input (City of Melbourne, 2021a). This adaptability reflects a city-level commitment to sustainability that prioritises direct community involvement and tailored initiatives. Programmes such as neighbourhood-based climate action plans, smart urban infrastructure, and active transport expansion are designed to be scalable and locally relevant, addressing the city's specific environmental and socio-economic challenges. The quote below from a researcher at the Connected Cities Lab highlights the adaptability of the city.

  > *"The city's adaptability is key to its success in embedding the Sustainable Development Goals into its urban fabric"* (Melbourne Centre for Cities, 2022).

  Situated Norms and Practices: Adaptive practices include the use of interactive dashboards for real-time monitoring and voluntary reviews to refine strategies. The Connected Cities Lab works across various council branches to ensure that planning and projects align with the SDGs, focusing on issues such as poverty, climate change, clean energy, sustainable buildings, economic development, and water use (City of Melbourne, 2022).

- *Incentivised:* Melbourne uses financial and reputational incentives to drive stakeholder participation in its sustainability initiatives, ensuring that businesses and communities are actively engaged in achieving the city's climate and urban development goals. By offering grants, subsidies, and recognition programmes, the city encourages businesses to adopt sustainable practices, reduce emissions, and invest in green technologies. Programmes such as sustainability grants for small businesses, tax incentives for energy-efficient buildings, and public awards for climate leadership not only provide tangible financial benefits but also enhance the reputation and visibility of participating organisations (City of Melbourne, 2021a). These initiatives mobilise corporate and community efforts, ensuring that sustainability

transitions are both economically viable and widely supported, as noted by a city official in the quote below.

> *"Incentives play a crucial role in mobilising community and business participation in Melbourne's SDG journey."* (City of Melbourne, 2021a).

Situated Norms and Practices: Incentivised mechanisms include financial support for clean energy projects and awards for SDG-aligned business practices. Furthermore, the City of Melbourne prioritises community engagement and the participation of key stakeholders, including businesses, in its sustainability efforts. They have created platforms for collecting feedback and engaging with the public on sustainability projects and policies, reinforcing their commitment to transparent and inclusive governance (City of Melbourne, 2021a).

City	City of Melbourne, Australia
Policy	United Nations Sustainable Development Goals
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: Climate change resilience | Clean energy adoption | Equitable urban development • Stakeholder expectations: Businesses, residents, and community groups expect targeted initiatives that directly address their priorities | City's emphasis on participatory governance and data-driven solutions • Infrastructure void: Policy vacuum | Lack of leadership | Lack of capability and expertise | Disconnect between authority and responsibility
Characteristics of the situated breach	• Rooted: Adoption of the 'Hacking the SDGs' approach to tailor to the city's needs | Defining custom targets to meet the city needs • Targeted: Identification of indicators relevant to the city | Projects and programmes clearly aligned with the 17 Goals
Situated governance mechanisms	• Collaborative: Partnerships to deliver real impact - City of Melbourne is working with the University of Melbourne, Monash Sustainable Development Institute, Connected Cities Lab, the wider public through consultations, think tanks, and various experts within government departments • Adaptive: Data-driven approach to driving implementation of SDGs | Clear and transparent communication of the rationale | Evidence and solutions based approach to show progress

	• Incentivised: Examples include incentives for energy efficient buildings | investments through the Environmental Upgrade Finance fund | Grants for businesses adopting sustainable practices

Table 29: Summary of Melbourne's approach to sustainable development

Melbourne's SDG implementation offers critical insights into institutional breaches and governance, as summarised in Table 29 above:

- The triggers, such as contextual pressures and stakeholder expectations, highlight the need for local adaptation of global frameworks.
- The characteristics of the breaches, particularly their targeted and rooted nature, demonstrate the necessity of tailoring institutional logic.
- The resulting governance mechanisms, including collaborative, adaptive, and incentivised strategies, illustrate how cities can lead in operationalising SDGs through innovative and inclusive models.

7.3.4 Bristol Cosmopolitan Region – Digital inclusion, innovation, and sustainability

In this section, I provide an in-depth analysis of The Bristol Cosmopolitan region, exploring Bristol's innovative approach to translating national opportunities into local and regional benefits. It examines the mechanisms employed to collaborate with the regional stakeholders, the unique governance framework, and the creation of institutional logic that enabled the city to deliver tangible local benefits while influencing the wider institutional infrastructure. Through the lens of institutional theory, I explore how Bristol navigated and translated a national opportunity to its local context, and created a tailored institutional logic that had the ability to deliver local benefits that could be scaled to the entire nation. Going one step further, it also influenced the wider institutional infrastructure, leading to the formation of UK Telecoms Innovation Network (UKTIN), delivered by adopting a governance model that worked on core principles of a partnership and a consortium based approach. This story is one of innovation, collaboration, and strategic foresight, highlighting Bristol's role in shaping the wider institutional infrastructure for the digital age (UKTIN, 2022).

Context: Bristol, a city known for its vibrant culture, innovative spirit, and significant historical maritime trade, has transitioned into a modern hub for technology and sustainability. The city's demographics reflect a diverse and dynamic population, which has been at the forefront of embracing change and innovation (TMForum, 2015). With a population that is diverse both in terms of ethnicity and socio-economic status, Bristol presents a compelling landscape for implementing sustainable development goals, especially those aimed at fostering inclusivity, digital innovation, and sustainable economic growth.

The UK government's approach to telecom supply chain diversification is designed to enhance national security, promote competition, and drive innovation in the 5G sector (UK Government, 2020). The reasons behind this policy include concerns over reliance on a limited number of suppliers, which poses risks to national security and economic resilience. The plan of action, detailed in government publications, outlines strategies for fostering a more diverse and competitive marketplace. This meant opening the market for both international and local players to set-up and scale quickly without having to commit to heavy upfront investments (UK Government, 2020).

Bristol, seizing the opportunity presented by the national diversification policy, aimed to leverage its existing strengths in digital innovation. With some strong historical credentials in this space (TMForum, 2015), and with institutions like the Bristol Digital Futures Institute (BDFI, 2024), and the University of Bristol's Smart Internet Lab (University of Bristol, 2021) leading digital technology research and application, Bristol was well-positioned to capitalise on this opportunity. This foundation facilitated Bristol's ambition to become a centre of excellence for digital innovation, aligning closely with the SDGs related to economic growth, infrastructure, sustainable cities, and reduced inequalities. Bristol set out to develop a proposition called the 'Digital Nation' to further accelerate the delivery of the objectives stated in the 5G Supply Chain Diversification Strategy, while also delivering on the long term needs of the UK telecommunications sector, thus creating a distinct institutional logic (UKTIN, 2022). This included skills development, telecommunications infrastructure resilience, and digital inclusion. This proposition was critical to address the market failures in the UK telecommunications sector, and aimed to do this through a national scale programme. This programme was set to centre around an alliance of industrial, academic and public sector organisations.

Triggers for Loss of Coherence in Institutional Infrastructure: Bristol's response to the UK Telecoms policy was driven by its unique challenges and aspirations, which highlighted a deviation from national frameworks but alignment to local needs.

- *Infrastructure void:* The development of a strategic assessment and a subsequent business case for the 'Digital Nation' proposition highlights Bristol's collaborative and forward-thinking approach to addressing infrastructure gaps in the digital economy. Recognising the economic and social potential of digital transformation, this initiative was designed to enhance connectivity, digital inclusion, and smart city capabilities, ensuring that local communities and businesses could benefit from improved digital infrastructure and services. By integrating advanced data analytics, smart technologies, and digital governance frameworks, Bristol positioned itself as a testbed for scalable, innovative solutions that could be replicated at a national level. The initiative also prioritised equitable access to digital resources, ensuring that marginalised communities and small businesses could fully participate in the digital economy.

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"Bristol's technological foundation offered a great starting point, but achieving inclusivity required rethinking and reshaping national policies for local impact" commented a member of the Bristol Digital Futures Institute, as part of this research.

The Government reviewed the strategic case and subsequently made an announcement to scale the proposition to create a nation-wide entity called the UK Telecoms Innovation Network (UKTIN), the foundations for which were evidently embedded in the Digital Nation proposition.

- *Contextual pressures:* Bristol's efforts to localise telecom and digital infrastructure policy were shaped by a pressing need to address digital inclusion and support economic opportunity across a diverse, socio-economically mixed population. While the city has long been recognised for its technological leadership and innovation ecosystem, persistent gaps in digital access and infrastructure risked deepening inequalities, particularly for underserved communities lacking affordable or reliable connectivity (TMForum, 2015). These contextual pressures made clear that national-level telecom strategies alone would not adequately address local needs. Instead, Bristol required solutions that were tailored to the specific technological, social, and spatial dynamics of the city. The importance of aligning these efforts with broader innovation goals was underscored by the Secretary of State for Science, Industry, and Technology, who stated,

  "…this government investment will see top UK universities join forces with industry to develop the nuts and bolts underpinning new networks, create skilled jobs testing the security of the latest telecoms tech and ensure our plan for a more diverse and innovative 5G market is sustained in the future." (UK Government, 2020).

  This statement reinforces the strategic urgency and collaborative potential of Bristol's localised response where place-based challenges become opportunities for driving inclusive innovation and shaping the future of digital infrastructure from the ground up. The investment in Bristol indicates a transformative period, promising to deliver local benefits with the potential for national scalability.

- *Aspirational Shortfall:* Despite national support, the lack of sufficient frameworks for localised implementation created a gap Bristol sought to fill through its 'Digital Nation' proposition. Bristol's divergence from the national framework reflects a 'situated' institutional breach that bridges local and national priorities. The breach demonstrates how cities can innovate within

existing constraints to meet their unique needs while influencing broader governance frameworks. Beyond local impact, the 'Digital Nation' strategy serves as a blueprint for nationwide adoption, demonstrating how cities can harness digital infrastructure to drive economic growth, sustainability, and social inclusion, as highlighted in the quote below.

“This was an opportunity to address systemic gaps in our local economy while showcasing our ability to lead national transformation efforts,” quoted a Research Director at the University of Bristol (University of Bristol, 2022a).

Bristol’s strategic response to the UK Telecom Supply Chain Diversification Strategy exemplifies how a city can leverage institutional hierarchies to deliver local benefits while influencing broader systems. By aligning its ‘Digital Nation’ proposition with the global framework of SDG 9 (Industry, Innovation, and Infrastructure) and SDG 10 (Reduced Inequalities), Bristol not only addressed its local challenges but also created a scalable model for national adoption. The establishment of the UK Telecoms Innovation Network (UKTIN) demonstrates the power of adapting institutional infrastructure to local contexts while achieving broader policy goals.

At the international level, frameworks like the SDGs and the Global Innovation Index provided guiding principles that Bristol tailored to meet its unique needs. Nationally, the UK Telecoms Diversification Strategy offered a policy umbrella under which Bristol crafted its bespoke ‘Digital Nation’ approach. Regionally, Bristol leveraged its position as a technology and innovation hub, drawing on partnerships with other UK cities and institutions. Locally, the city mobilised resources, expertise, and community engagement to ensure that its initiatives were not only relevant but transformative.

Characteristics of Situated Breaches: The unique approach of Bristol to adapt and localise national policies exemplifies how situated breaches emerge as opportunities for institutional innovation. Here I discuss the specific characteristics of the breach in Bristol’s context.

- *Rooted:* Bristol’s ‘Digital Nation’ initiative exemplifies a deeply rooted approach to policy localisation, one that aligns digital innovation with the city’s unique socio-economic landscape. In response to long-standing challenges related to digital exclusion and economic inequality, the initiative developed a framework that prioritised inclusivity, resilience, and regional capacity-building. The strategy deliberately grounded national telecom ambitions within the local context, resulting in a suite of projects designed to deliver tangible community

benefits. One standout example is MyWorld, an ambitious effort to establish a 'creative media powerhouse' in the Bristol region, which leverages the city's cultural and technological strengths to drive innovation in digital media. These projects illustrate not only a commitment to cutting-edge development but also to ensuring equitable outcomes for all residents. As a representative from UKTIN, who was interviewed for this research, explained,

> *"Our work ensured that no one is left behind in this digital transition, setting a standard for equitable technological growth."*

The strategic use of local partnerships including collaborations with universities, technology firms, and civic organisations further enabled Bristol to address existing gaps in the telecom sector while embedding digital transformation within a broader vision of social inclusion and community empowerment (UKTIN, 2022).

- *Relational:* Bristol's alignment with national goals has reinforced its relationships with key stakeholders, improving access to resources, expertise, and funding opportunities. By working closely with industry leaders, research institutions, and government agencies, the city has created an ecosystem of collaboration that accelerates digital transformation and urban innovation. Partnerships with organisations such as Digital Catapult and WM5G exemplify this relational approach (Digital Catapult, 2021), enabling Bristol to leverage cutting-edge research, emerging technologies, and best practices in areas like 5G connectivity, smart city infrastructure, and digital inclusion initiatives. These collaborations have helped bridge knowledge gaps, de-risk investments, and drive scalable solutions that benefit both local communities and businesses, as highlighted in the quote below.

  > *"Partnerships are the bedrock of innovation in Bristol. This effort demonstrated how multi-level collaboration can drive transformative change" quoted a Programme Director at University of Bristol, who was interviewed for the purposes of this research*

- *Targeted:* The initiative prioritised digital infrastructure and skills development, addressing specific gaps in the telecom sector to ensure Bristol remains at the forefront of digital transformation. A key focus has been enhancing local expertise to meet the evolving demands of next-generation connectivity, supporting both industry growth and workforce development. Project REASON is set to tackle technological hurdles in delivering comprehensive open network solutions, covering every segment of the telecom infrastructure and pushing the boundaries of connectivity (University of Bristol, 2022b). This project not only seeks to

advance 5G and future network technologies but also ensures that solutions are scalable and applicable beyond Bristol, influencing national telecom strategies. The quote below emphasises the scalable nature of this project while centred in Bristol.

> *"We aimed to make Bristol the epicentre of digital innovation, addressing specific challenges and opportunities within the telecom sector"* (BDFI, 2024).

These situated breaches demonstrate Bristol's capacity to redefine institutional norms, creating pathways for sustainable development that align with its regional priorities while delivering on national objectives.

Situated Governance Mechanisms: Bristol's governance mechanisms reflect a collaborative and adaptive approach, providing a framework for achieving its digital inclusion and sustainability goals.

- *Collaborative:* The consortium-led approach exemplifies collaborative governance, engaging stakeholders from academia, industry, and government to develop the strategic case for change. Bristol adopted a consortium-led approach, assembling a task force comprising various stakeholders from the then Department for Digital, Culture, Media & Sport (DCMS) (now Department for Science, Industry, and Technology (DSIT)), Digital Catapult, University of Bristol, WM5G, UK5G, and University of Newcastle (University of Bristol, 2022b). This consortium embarked on developing a strategic assessment to articulate a case for change to position Bristol as a centre of excellence to drive the supply chain diversification activities, as highlighted in the quote below.

  > *"This government investment will see top UK universities join forces with industry to develop the nuts and bolts underpinning new networks..."* (University of Bristol, 2022a)

  Situated Norms and Practices: The consortium's weekly meetings, community consultations, and joint strategic assessments reflect a governance model rooted in transparency and inclusivity. A taskforce, comprising of representatives from the entities in the consortium, met weekly to develop and monitor the progress of the tender response. Further engagement with major telecommunication organisations, technology companies, and other local small and medium enterprises was deemed necessary and critical to realise the local benefits. Consultations with leading industry players like BT, Samsung, Ericsson, Parallel Wireless, and

Nokia were instrumental in identifying challenges and opportunities within the sector, paving the way for tailored solutions that would benefit Bristol and beyond.

- *Adaptive:* The tendering process encouraged stakeholders to align their efforts with broader national and local goals, ensuring foresight, accountability, and efficiency. The UK Telecoms Innovation Network (UKTIN) stands at the forefront of this ambitious effort, guiding businesses and researchers as they navigate the landscape of funding and testing facilities within the UK (UKTIN, 2022). It's role is pivotal in maximising the impact of public and private investment in R&D, while also ensuring that knowledge is shared efficiently across the telecoms sector, as evidenced in the quote below.

  "This programme encouraged every participant to think beyond their organisational boundaries for the collective good of Bristol and the UK" quoted a representative from UKTIN, who was interviewed for the purposes of this research.

  Situated Norms and Practices: Projects like DETI (Digital, Engineering, Technology & Innovation) and partnerships with Digital Catapult demonstrate the adaptive nature and the role of incentives in fostering innovation and collaboration (Digital Catapult, 2021). Adding to this ecosystem of innovation, the University of Bristol has launched Bristol Innovations (Bristol Innovations, 2022), a virtual network designed to amalgamate its extensive research capabilities with the practical knowledge of global partners. This initiative is poised to spearhead sector-wide and multidisciplinary breakthroughs, setting a new standard for collaborative research and development.

Bristol's governance approach reflects a multi-level alignment of institutional governance mechanisms. International governance bodies like the Global Innovation Index and ITU (International Telecommunication Union) influenced its strategic orientation towards innovation and inclusivity. National governance, through the Department for Digital, Culture, Media & Sport (DCMS), provided funding and policy direction that Bristol tailored through collaborative and adaptive mechanisms.

At the regional level, partnerships with entities like WM5G and Digital Catapult exemplify the role of intermediary frameworks in translating national policies into actionable strategies. Locally, Bristol's institutions, including the Bristol Digital Futures Institute and the University of Bristol, provided the expertise and research backbone to drive the initiative forward.

This initiative underlines the government's commitment to fostering a collaborative environment that merges academic research with industry expertise to drive innovation and diversity in the 5G marketplace (University of Bristol, 2022a).

City	Bristol Cosmopolitan Region
Policy	Digital inclusion, innovation, & sustainability policy
Triggers for loss of coherence in institutional infrastructure	• Infrastructure void: Lack of nationwide approach to scale digital and telecoms innovation | Gaps in driving digital inclusion locally and regionally • Contextual pressures: Need for digital inclusion | Improved access to digital skills | Furthering economic opportunities • Aspirational Shortfall: Leveraging Bristol’s strength in technological innovation and creativity
Characteristics of the situated breach	• Rooted: Tailored to Bristol’s unique socio-economic challenges to enhance digital inclusion and economic resilience. • Targeted: Prioritise digital infrastructure and skills development addressing specific gaps in the telecom sector | Establish a ‘creative media powerhouse’ in the Bristol region, harnessing the potential of creative media to inspire and innovate. • Relational: Bristol’s alignment with national goals strengthened relationships with stakeholders, enhancing access to resources and expertise | Collaboration with entities like Digital Catapult and WM5G exemplifies relational characteristics
Situated governance mechanisms	• Collaborative: Bristol adopted a consortium-led approach, assembling a task force comprising various stakeholders to drive the supply chain diversification activities. • Adaptive: Efforts were aligned to broader national and local goals, ensuring foresight, accountability and efficiency

Table 30: Summary of Bristol Cosmopolitan Region's approach to digital inclusion, and sustainability

Conclusion: The case of Bristol provides a nuanced understanding of how institutional theory can explain the dynamics of translating national policies into locally tailored, yet scalable, initiatives, as summarised in table 30 above:

- Bristol’s actions were driven by contextual pressures unique to its role as a technological and economic hub within the UK. The region's proactive engagement with the broader national agenda exemplifies an infrastructure void and a purposeful deviation from traditional norms to create value for local communities.
- The ‘situated’ institutional breach in Bristol demonstrates characteristics that are rooted, relational, and targeted that highlight the importance of tailoring institutional logics to local strengths.
- Bristol adopted a collaborative governance model, engaging stakeholders across sectors to design and implement the initiative, while adaptive practices were reflected in Bristol’s ability to innovate and scale its approach nationally.

Bristol's endeavour to translate a national policy opportunity into a local and national triumph serves as a compelling case study in institutional innovation and collaboration. By focusing on key SDGs and adopting a strategic, consortium-led approach, Bristol not only aims to enhance digital inclusivity and economic growth but also sets a precedent for sustainable urban development and the reduction of inequalities. Spearheading a carefully crafted institutional logic, gaining buy-in from city-level stakeholders by articulating the associated incentives and benefits, and driving this through a collaborative governance approach offers valuable insights for cities and regions worldwide.

7.4 Driving wider sustainable development goals – A consolidated picture

I have now demonstrated four examples of cities in Europe and Australia that have had to deviate or breach an incumbent policy to alter or create their own policy given the context in which they operate. Each of these examples is different in how they are delivering against the different sustainable development goals but the commonality across all of them is their decision to adopt a tailored approach to policy and decision making as against just following the institutional norm. I will now present some consolidated findings from these cases in this section, however, the detailed second-order examination of these findings is discussed in Chapter 8.

Triggers for Loss of Coherence in Institutional Infrastructure: The cases of London, Rotterdam, Melbourne, and Bristol reveal how local adaptation of global frameworks for SDG implementation often triggers loss of coherence in institutional infrastructures resulting in 'situated breaches'. These triggers are deeply rooted in the interaction between local needs and global mandates, with similar context-specific patterns emerging.

> *Contextual Pressures:* London's focus on clean air and active travel highlights how densely populated urban areas face unique challenges, such as severe air pollution and transportation congestion, requiring locally adapted measures like the Ultra-Low Emission Zone (ULEZ). Rotterdam's emphasis on health, safety, and well-being underscores the role of demographic diversity and urban density in shaping sustainability initiatives. Melbourne experienced policy vacuums at the national level, prompting the city to localise and adapt the SDG framework to address localised issues of sustainability and economic resilience.
>
> *Stakeholder Expectations:* Local stakeholders often demand tailored interventions that align with community-specific priorities. Bristol engaged stakeholders to address digital inclusion as a pathway to meet SDG objectives, integrating economic, social, and technological priorities into its strategy. London's focus on active travel reflects a societal push for healthier, more sustainable urban living.
>
> *Aspirational Shortfall:* Aspirational goals like Melbourne's voluntary review of SDG progress or Bristol's digital inclusion initiatives highlight gaps between existing institutional frameworks and desired sustainability outcomes. These shortfalls necessitated institutional breaches to bridge the gap between global goals and local realities.

It can be observed that in all the four instances, the breach of institutional logic has occurred for purposeful and beneficial reasons. The respective local or city level governments have used these very reasons to help with adoption of the new institutional logics. They have also adopted their own governance mechanism to drive the implementation of these new logics.

Characteristics of the 'Situated Breaches': 'Situated breaches' in the context of SDG implementation reflect the adaptation of global frameworks to address local needs, marked by the following characteristics:

> *Rooted:* The breaches are rooted in city-specific challenges and opportunities. London's ULEZ targets urban pollution and congestion, while Rotterdam addresses health and safety through tailored local policies that extend beyond the national remit.
>
> *Targeted:* Interventions are strategic and issue-specific, focusing on measurable impacts. Melbourne's SDG localisation tailored global indicators to fit the city's unique context, and the initiative in Bristol prioritised digital infrastructure and skills development, addressing specific gaps in the telecom sector
>
> *Relational:* Collaboration among stakeholders is a hallmark of these breaches. Bristol's consortium-led approach to digital innovation involved academia, industry, and government, fostering partnerships that extended beyond the city.

Situated Governance Mechanisms: The governance mechanisms employed to support these situated breaches are dynamic and adaptive, ensuring alignment with global SDG frameworks while addressing local priorities. The common thread that can be seen across all the four examples is a clear case of collaboration, be it with think tanks, central governments, state governments, private sector, academia, and communities. Another common pattern is the need for creating associations - the consortium in the case of Bristol, city level partnerships in Melbourne, an integrated collaborative model in London, or engagement with international networks and local community groups in Rotterdam.

> *Collaborative Governance:* Partnerships are integral to the success of SDG implementation. Bristol's consortium led approach united various actors to establish the UK Telecoms Innovation Network (UKTIN). Collaborations with entities such as the

Luchtclub in Rotterdam enhance policy effectiveness by ensuring inclusivity and stakeholder buy-in.

Incentivised Governance: Incentives played a crucial role in driving participation and commitment. Rotterdam's tax waivers encouraged private-sector involvement in health and safety initiatives, while Melbourne's stakeholder engagement fostered alignment through transparent communication and participatory platforms.

Adaptive Governance: Flexibility and responsiveness were essential in navigating evolving challenges. Melbourne adapted its SDG framework to address the lack of national leadership, and London's governance structure adjusted its approach to integrate active travel into broader air quality initiatives.

In the institutional field of SDG implementation, 'situated breaches' emerge as a critical mechanism for cities to reconcile global sustainability goals with local contexts. These breaches illustrate how cities innovate within their governance frameworks to address the nuances of urban sustainability, fostering outcomes that are both impactful and scalable. The 'situated governance mechanisms' employed, including collaborative, incentivised, and adaptive approaches, highlight the importance of integrating diverse stakeholder voices, aligning incentives, and remaining responsive to shifting conditions. These mechanisms ensure the successful translation of global SDG frameworks into actionable, locally relevant strategies.

This synthesis of findings demonstrates that the implementation of SDGs requires institutional flexibility, stakeholder collaboration, and the ability to tailor global frameworks to the specific challenges and opportunities faced by cities. By leveraging these insights, urban policymakers and city-level stakeholders can enhance their strategies for sustainable development, to build a resilient and inclusive future for their respective communities.

The consolidated findings from the three cities and from the deep dive case linked to the institutional field of implementation of sustainable development goals is presented in table 31 below.

City & Policy area (local economic growth)	**City of London –** Clean Air and Active Travel Policy	**City of Rotterdam** – Health, Safety, Security, & Well-being Policy	**City of Melbourne –** Sustainable Development Policy	**Bristol Cosmopolitan Region –** Digital Inclusion and Sustainability
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures: High population density | Public health and social equity related challenges | Higher pollution levels | Traffic congestion • Stakeholder expectations: Need for integration with the public transportation network | Acute air-quality and transportation challenges | Need for healthier and more sustainable living • Infrastructure void: Goal to become net-zero by 2030	• Contextual pressures: Drug-abuse and mis-use | Illegal drugs | Poor air-quality | Largest port city | Increased criminal activity • Stakeholder expectations: Improved quality of life | Reduced violence | Reduced health inequities • Aspirational Shortfall: Improved regulation on illegal drugs | Reduction in the Socio-economic gap	• Contextual pressures: Climate change resilience | Clean energy adoption | Equitable urban development • Stakeholder expectations: Businesses, residents, and community groups expect targeted initiatives that directly address their priorities | City's emphasis on participatory governance and data-driven solutions • Infrastructure void: Policy vacuum | Lack of leadership | Lack of capability and expertise | Disconnect between authority and responsibility	• Infrastructure void: Lack of nationwide approach to scale digital and telecoms innovation | Gaps in driving digital inclusion locally and regionally • Contextual pressures: Need for digital inclusion | Improved access to digital skills | Furthering economic opportunities • Aspirational Shortfall: Leveraging Bristol's strength in technological innovation and creativity
Characteristics of the situated breach	• Rooted: Integration of active travel with public transport and the prioritisation of densely populated, pollution-prone areas demonstrate a deeply rooted and localised strategy. • Targeted: ULEZ directly addresses vehicle emissions, and urban greening initiatives targeting specific health and environmental outcomes.	• Targeted: Proposals to develop complementary policies to tackle the drug problem | City-level campaign showing links between violence and drug-abuse | Enhanced security at the port to seize illegal drugs • Relational: The Mayor's personal leadership style and interest in driving safety | Leveraging media to garner support and promote best practices | Campaigns and advocacy efforts to create awareness	• Rooted: Adoption of the 'Hacking the SDGs' approach to tailor to the city's needs | Defining custom targets to meet the city needs • Targeted: Identification of indicators relevant to the city | Projects and programmes clearly aligned with the 17 Goals	• Rooted: Tailored to Bristol's unique socio-economic challenges to enhance digital inclusion and economic resilience. • Targeted: Prioritise digital infrastructure and skills development addressing specific gaps in the telecom sector | Establish a 'creative media powerhouse' in the Bristol region, harnessing the potential of creative media to inspire and innovate. • Relational: Bristol's alignment with national goals strengthened

				relationships with stakeholders, enhancing access to resources and expertise | Collaboration with entities like Digital Catapult and WM5G exemplifies relational characteristics
Situated governance mechanisms	• Collaborative: Collaboration between the Mayor of London, TfL, GLA, Local Borough Councils, businesses and academic institutions • Adaptive: Effective public and stakeholder involvement managed by the GLA or TfL | Information and outreach campaigns to drive behavioural changes | Public transport upgrades to make it more attractive for commuters | Local Borough Councils taking ownership to implement local initiatives • Incentivised: Financial incentives for cleaner vehicles such as grants and subsidies for purchasing electric or low-emission vehicles | Scrappage schemes to offer financial incentives to scrap old, more polluting vehicles	• Collaborative: Collaboration between the Mayor, the Alderman, academic institutions, national government, and local community groups | Interactions with international networks is currently viewed by the city as being transactional | Facilitating forums to encourage citizens and businesses to share best practices • Incentivised: Incentive of a better life free of drugs, abuse, and violence • Adaptive: Influencing national policy on illegal drugs | Adapting national frameworks to address local challenges, such as data-driven air quality initiatives and community-focused health campaigns.	• Collaborative: Partnerships to deliver real impact - City of Melbourne is working with the University of Melbourne, Monash Sustainable Development Institute, Connected Cities Lab, the wider public through consultations, think tanks, and various experts within government departments • Adaptive: Data-driven approach to driving implementation of SDGs | Clear and transparent communication of the rationale | Evidence and solutions based approach to show progress • Incentivised: Examples include incentives for energy efficient buildings | investments through the Environmental Upgrade Finance fund | Grants for businesses adopting sustainable practices	• Collaborative: Bristol adopted a consortium-led approach, assembling a task force comprising various stakeholders to drive the supply chain diversification activities. • Adaptive: Efforts were aligned to broader national and local goals, ensuring foresight, accountability and efficiency

Table 31: Consolidated findings from cities in the field of implementation of sustainable development goals

To summarise the three chapters on findings - In chapter 5, chapter 6, and chapter 7, I first set out the context for why institutional breaches are occurring, the characteristics of these breaches, and the resulting governance transformations requiring introduction of new norms and practices. I presented these findings in the case of three broad institutional fields – economic growth and regeneration in chapter 5, energy transition and tackling the climate crises in chapter 6, and implementation of sustainable development goals in chapter 7. I specifically highlighted the occurrence of 'situated breaches' resulting in 'situated governance mechanisms' through the lens of specific institutional actors, in this case – cities from around the world. I explored case studies from several cities and at the end of each chapter, I consolidated the findings in table 31. In table 32 below, I further consolidate these findings in the context of the individual institutional fields:

Institutional Field	**Local Economic Growth and Regeneration**	**Energy Transition & Mitigating Climate Crisis**	**Implementation of the Sustainable Development Goals**
Triggers for loss of coherence in institutional infrastructure	• Contextual pressures (4) • Aspirational shortfall (1) • Stakeholder expectations (3)	• Contextual pressures (4) • Infrastructure Void (1) • Stakeholder expectations (4)	• Contextual pressures (4) • Infrastructure Void (2) • Stakeholder expectations (3) • Aspirational shortfall (3)
Characteristics of the situated breach	• Rooted (4) • Targeted (2) • Relational (3)	• Rooted (4) • Targeted (3) • Relational (1)	• Rooted (3) • Targeted (4) • Relational (2)
Situated governance mechanisms	• Collaborative (4) • Incentivised (3) • Adaptive (2)	• Collaborative (4) • Incentivised (4) • Adaptive (1)	• Collaborative (4) • Incentivised (3) • Adaptive (4)

Table 32: Consolidation of findings across institutional fields

Note: The number in brackets indicates the number of cases (in this case the number of cities as part of this research) in which the respective triggers for 'situated breaches', the characteristics of the situated breaches, and the 'situated governance mechanisms' have been observed.

Insights from across institutional fields: I discuss some consolidated findings from across the three institutional fields in the section here.

Triggers for Loss of Coherence in Institutional Infrastructure: It is evident from the table above that contextual pressures are the most frequently observed trigger for situated breaches across all three institutional fields. This highlights how unique local challenges, such as demographic, environmental, or economic conditions, necessitate deviations from traditional institutional logics. Stakeholder expectations are a consistent driver of situated breaches, reflecting the critical role of diverse stakeholder needs in shaping institutional actions. Aspirational shortfall, while less dominant, is notably significant in the case of implementation of SDGs. This suggests that the ambitious nature of the SDGs often exceeds existing institutional capacities, necessitating localised adaptations. The infrastructure void as a trigger is uniquely observed in Energy Transition and Implementation of SDGs. This highlights a gap between institutional frameworks and the required physical or operational infrastructure to address challenges in these fields.

Characteristics of the Situated Breaches: Breaches that are bottom-up and rooted are prevalent across all fields emphasising the critical role of tailoring interventions to meet specific local contexts. Targeted breaches are particularly notable in SDG implementation, underscoring the need for specific, outcome-driven solutions aimed at specific topics to align global goals with local contexts. Relational breaches are prominent in Local Economic Growth but are less frequent in Energy Transition. This indicates that relationship-driven solutions, involving trust-building and stakeholder collaboration, are more central in fields like economic regeneration.

Situated Governance Mechanisms: Collaborative governance mechanisms are consistently observed in all fields. This highlights the importance of multi-stakeholder engagement and partnerships in addressing complex institutional challenges. Incentivised mechanisms are especially prominent in Energy Transition, reflecting the critical role of financial or regulatory incentives in driving climate action and renewable energy adoption. Adaptive governance mechanisms are most prominent in the implementation of SDGs. This indicates that flexibility and iterative approaches are vital for integrating the diverse and evolving dimensions of the SDGs into local governance systems.

Across all the institutional fields discussed, the concept of situated breaches and situated governance mechanisms emerges as a critical lens to understand institutional adaptations. While contextual pressures consistently trigger breaches, the nuances of targeted, rooted, and

relational characteristics vary by field. Similarly, governance mechanisms emphasise collaboration universally but shift towards incentivisation or adaptiveness based on the unique demands of each institutional field. This demonstrates the importance of tailoring institutional frameworks and governance models to align with field-specific challenges and opportunities – in this case the context-specific issues and challenges that cities of today are facing.

8. Contribution of this research to the field of institutional theory

This chapter synthesises the contributions of this research to the field of institutional theory, specifically focusing on the concepts of *Situated Breaches and Situated Governance.* Rather than contributing to the entirety of institutional theory, this research is more precisely positioned within the discussions on institutional fields and institutional infrastructure, institutional breaches, and institutional governance, offering insights into how these concepts interact and evolve in specific contexts. These contributions emerge from a detailed exploration of urban governance and policy adaptation in response to evolving socio-economic and environmental challenges. By consolidating insights across the institutional fields of local economic growth and regeneration, energy transition and climate resilience, and the implementation of sustainable development goals, this chapter illustrates the critical role of cities as dynamic entities capable of innovating in governance and policy. It also highlights the implications of these findings for both academic theory and practical applications in urban governance. In section 8.1, I uncover the second-order analysis for this research. In sections 8.2 and 8.3, I discuss the implications of this research to the field of institutional theory, and to practice respectively.

8.1 From institutional breaches to institutional governance: Theorising institutional change through situated dynamics

Institutional Theory has long provided a foundation for understanding how institutions are structured, maintained, and adapted. However, the complex interrelationships between institutional fields, actors, infrastructures, breaches, and governance mechanisms, on one side, and external disruptions and uncertainties, on the other, remain underexplored. This study advances Institutional Theory by introducing new concepts that explain how institutional coherence is lost and reconfigured through dynamic relationships, as illustrated in Figure 4 below.

First, it identifies four types of triggers - Contextual Pressures, Infrastructure Void, Stakeholder Expectations, and Aspirational Shortfall which create misalignment between the infrastructure of institutional actors and that of the broader institutional fields in which they operate, disrupting the stability of institutional infrastructure and governance mechanisms. These disruptions manifest as Situated Breaches, a newly proposed category of institutional breaches that are inherently localised, targeted, and relational, emerging in specific contexts, affecting particular institutional arrangements, and unfolding through interactions between actors.

Importantly, these breaches necessitate institutional responses that are equally situated in context. To address this, the study introduces Situated Governance Mechanisms, which function as collaborative, incentivised, and adaptive processes designed to drive forward new institutional logics. Crucially, this research illustrates how institutional triggers, breaches, and governance mechanisms are not isolated events but part of a continuous, recursive process of institutional evolution, where breaches reshape governance, and governance, in turn, redefines institutional infrastructures and actor behaviours.

By introducing these new concepts and mapping their interdependencies, this study provides a more nuanced understanding on how institutions dynamically adapt in response to context-specific challenges and uncertainties.

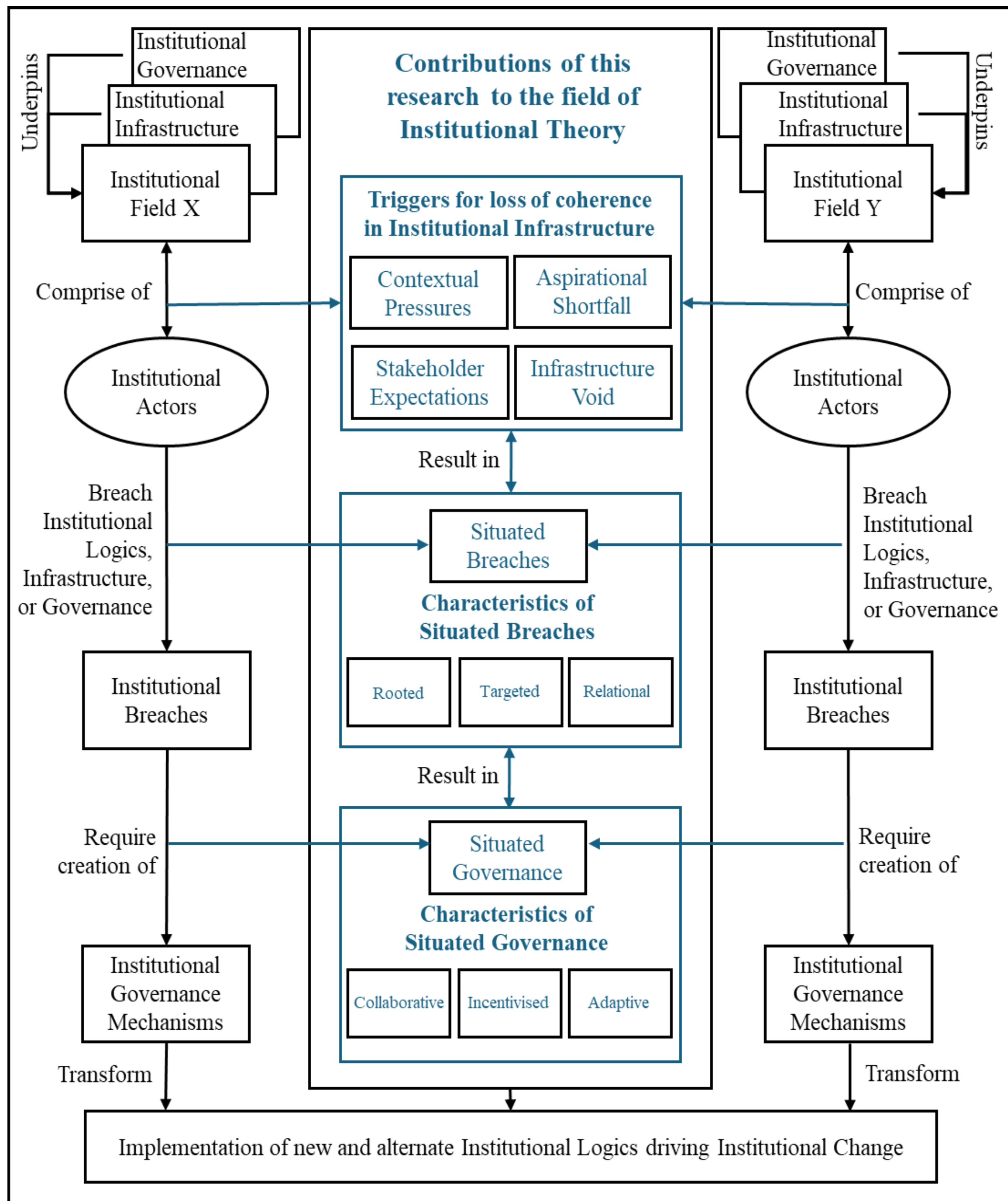

Figure 4: Illustration showing the contributions of this research to the field of Institutional Theory

8.1.1 Triggers for loss of coherence in institutional infrastructure

Institutional infrastructure operates across hierarchical levels, as discussed in the previous chapters, namely international, national, regional, and local each with distinct roles in shaping governance and policy. International frameworks, such as the Sustainable Development Goals (SDGs) or the Paris Agreement, set broad, aspirational objectives that guide national and local actions. National institutional infrastructures provide more specific strategies, funding mechanisms, and legislative frameworks to operationalise these global priorities. Regional infrastructures act as intermediaries, translating national goals into actionable plans tailored to sub-national contexts. Local institutional infrastructures, however, are where policies meet practice, directly addressing the needs of communities through targeted programmes, regulations, and initiatives. At the interfaces between these hierarchical layers, misalignments emerge due to differences in goals, capacities, and institutional logics, creating structural vulnerabilities that act as triggers for Situated Breaches. This research identifies four such types of triggers.

Contextual Pressures: Contextual pressures arise when unique local conditions challenge the relevance or effectiveness of existing institutional infrastructures. These pressures often include demographic shifts, environmental challenges, economic fluctuations, or sociopolitical dynamics that demand tailored responses. Institutional theory posits that organisations adapt to their respective contextual environments by realigning institutional logics to address such pressures (Scott, 2013). For example, in the context of the Humber Freeport initiative, the Humber region faced specific economic pressures stemming from its status as a major industrial and logistics hub. The need to revitalise its ports and leverage its geographic advantages to attract investments created a situated breach, prompting the region to develop new institutional logics centred around collaborative and regionally focused governance mechanisms. This example demonstrates how contextual pressures serve as a trigger for adaptive governance and institutional innovation.

Stakeholder Expectations: Stakeholder expectations often require cities to deviate from traditional institutional frameworks to meet the diverse and evolving demands of their constituencies. Urban governance often necessitates engaging with multiple actors, including businesses, civil society, and residents, whose priorities may diverge from broader institutional goals. From an institutional theory perspective, such shifts can be

understood as responses to institutional complexity, where multiple, and sometimes conflicting, logics coexist within the same field (Greenwood *et al.*, 2010). Urban governance, in this light, is shaped by the interplay of formal rules, stakeholder pressures, and cognitive frameworks that actors must navigate (Scott, 2013).

In Rotterdam, stakeholder expectations around public health and safety catalysed a situated breach. The city prioritised addressing drug misuse and air quality issues, driven by community demands and public health imperatives. This required redefining institutional norms and practices to create targeted interventions. This illustrates how actors embedded in urban governance structures respond to institutional misalignments by innovating new configurations, reshaping governance to reflect context-specific expectations (Smets, Morris and Greenwood, 2012) (Zietsma and Lawrence, 2010).

Aspirational Shortfall: Aspirational shortfall occurs when the ambitions of institutional actors exceed the capabilities or provisions of existing institutional frameworks. Institutional theory highlights that gaps between aspirational goals and operational realities that often necessitate adjustments in governance and policy (Powell and DiMaggio, 1991). Melbourne's approach to localising the Sustainable Development Goals (SDGs) exemplifies this trigger. The city's aspirations to lead in sustainability and social equity exceeded the scope of national frameworks, prompting a situated breach that tailored global SDG targets to Melbourne's local context. Through partnerships with the University of Melbourne and stakeholder engagement, the city developed innovative governance mechanisms to address this gap, aligning its ambitions with actionable local interventions.

Infrastructure Void: Infrastructure voids represent the absence or inadequacy of physical, technological, or institutional infrastructure required to address emerging challenges. Institutional voids, as theorised by (Webb, Khoury and Hitt, 2020) highlight how gaps in formal institutions prompt actors to create adaptive solutions. Antsirabe, Madagascar, exemplifies this dynamic, as its limited institutional and physical infrastructure for climate resilience created a void that necessitated grassroots-level interventions. The city's partnerships with private sector actors to address infrastructure deficiencies, such as road maintenance and disaster response, reflect a situated breach where governance mechanisms were adapted to overcome systemic voids. This case

underscores how cities innovate to fill infrastructural gaps and meet immediate local needs.

These four types of triggers emerge for various reasons mainly influenced by the interactions between actors, and the relationships between the different levels of institutional infrastructures. Some noted observations from the current research for reasons for occurrence of these triggers include:

Difference in institutional priorities and interpretations – Each level of institutional infrastructure interprets and operationalises governance differently due to its unique mandates, resources, and stakeholder pressures. At the interface between layers, gaps and contradictions arise. For example, while international frameworks emphasise ambitious climate targets, national governments may prioritise economic stability, regional bodies may struggle with administrative coordination, and local institutions may lack the capacity or resources to enforce policies effectively. These misalignments create policy fractures, weakening institutional coherence and generating the conditions for Situated Breaches.

Fragmentation in resource allocation and decision-making – The distribution of financial, regulatory, and administrative authority across levels is rarely seamless. National governments may allocate funding based on standardised metrics that fail to account for regional disparities, while local authorities often face bureaucratic constraints, legal ambiguities, or political inertia that limit their ability to implement top-down mandates effectively. At the interface of these interactions, actors must negotiate governance responsibilities, often leading to delays, inefficiencies, or contested decision-making. These resource bottlenecks and administrative voids create instability within institutional infrastructures, triggering Situated Breaches.

Asymmetries in institutional capacity and accountability – Governance institutions at different levels operate with varying capacities, levels of autonomy, and mechanisms of oversight. Higher-level institutions often assume that lower levels will act as implementation agents, yet local governments frequently face capacity shortfalls, conflicting stakeholder demands, or lack of enforcement mechanisms. At these pressure points, informal governance arrangements, ad-hoc solutions, or localised rule-breaking may emerge as actors attempt to bridge governance gaps. This bottom-up institutional

divergence disrupts coherence, as actors craft their own context-specific logics that challenge the standardised rules imposed by higher levels of governance

The case studies explored in this research demonstrate how cities have adapted their institutional infrastructures and governance mechanisms in response to modern challenges that were not prevalent or mainstream even a decade ago. These challenges include transitioning from fossil fuels, adopting renewable energy, building climate resilience, embracing circular economic principles, and tackling social issues like inequality and digital inclusion and many more. In all these cases, the triggers for these breaches typically arise from contextual pressures, stakeholder expectations, aspirational shortfalls, and infrastructure voids. For instance, Amsterdam's focus on fostering local economic growth was shaped by pressures to support its dynamic business environment and address stakeholder demands for innovation. Similarly, the Humber region's Freeport initiative emerged from a combination of local economic pressures and stakeholder alignment, seeking to leverage regional strengths to address national policy gaps.

8.1.2 Situated breaches

Institutional breaches are widely understood as deviations from established frameworks and practices due to inadequacies in addressing new or emergent circumstances (Herepath and Kitchener, 2016). However, existing conceptualisations often treat breaches as generalised disruptions, overlooking the situated nature of institutional misalignment - how breaches materialise in specific contexts, interact with localised governance structures, and shape institutional adaptation in distinct ways.

This research advances Institutional Theory by introducing the concept of the Situated Breach, a category of institutional breach that is intrinsically tied to localised, context-specific pressures faced by institutional actors, cities in this context. Unlike broader breach typologies such as Severe Breaches, which result in large-scale institutional breakdowns, Collisions, where conflicting institutional logics clash, or Hybrid Breaches, which arise from the blending of divergent governance structures, Situated Breaches emphasise the place-based, relational, and contingent nature of institutional breakdowns.

This contribution to the field of Institutional Theory, and more specifically to Institutional Breaches, is significant because it allows us to:

1. Acknowledge the embeddedness of institutional disruptions: Situated Breaches highlight that institutional disruptions are not abstract failures of governance but rather emergent responses to tensions at specific institutional interfaces. Unlike Severe Breaches, which often lead to large-scale system failures (Daskalopoulou and Palmer, 2021), Situated Breaches arise from local-level frictions, governance misalignments, and infrastructural voids. By emphasising the role of place, actors, and governance layers, this concept allows for a more nuanced understanding of institutional fragility and adaptation within urban contexts.
2. Regard institutional breaches as interactive and dynamic, rather than static events: Traditional perspectives often depict breaches as one-off failures that require top-down corrections. For example, Collisions are framed as conflicts between competing institutional logics that demand resolution (Farid and Waldorff, 2022), while Hybrid Breaches assume that institutional blending is either a problem to be managed or a transitional phase before stability is restored (Heaphy, 2013). Situated Breaches, however, emerge relationally through interactions between actors, governance mechanisms, and infrastructural voids. This means they are not just failures but also

adaptive responses to institutional misalignment. This shifts our perspective from treating breaches as exceptions to seeing them as integral to institutional evolution.

3. Recognise localised logics as legitimised forms of institutional order: Previous breach frameworks tend to frame disruptions as violations of institutional coherence that necessitate a return to an established norm (Herepath and Kitchener, 2016). However, Situated Breaches reveal that actors often develop alternative, context-specific logics in response to governance failures. Unlike Severe Breaches, which suggest institutional collapse, Situated Breaches highlight how actors craft situated governance solutions - valid, adaptive governance strategies that emerge in resource-constrained, fragmented, or rapidly changing environments.
4. Move beyond a one-size-fits-all approach to institutional resilience: Traditional breach frameworks imply that institutional corrections should be universal and top-down (Heaphy, 2013). Situated Breaches challenge this assumption by showing that urban institutions often require differentiated governance responses. Understanding breaches through a situated lens encourages governance mechanisms that are adaptive, incentivised, and collaborative, rather than rigid or imposed from higher institutional levels.

By introducing the concept of Situated Breaches, this study reshapes how we understand institutional change and adaptation. Rather than viewing breaches as mere anomalies or deviations from institutional order, Situated Breaches allow us to see them as context-sensitive processes. These help us reveal the limitations of existing institutional infrastructures, the agency of local actors, and the need for governance mechanisms that are more appropriate to place-based realities.

These breaches are not random disruptions; they arise systematically at points of institutional friction where governance structures fail to align, forcing institutional actors to develop new, rooted, targeted, and relational responses to maintain institutional order. Thus, by analysing the triggers of this particular type of breach, it becomes evident that Situated Breaches are not merely reactive responses to external pressures but rather strategic adaptations that institutional actors actively construct to navigate systemic challenges. Unlike other traditional breach typologies, which often emphasise exogenous shocks such as regulatory failures, economic crises, or policy inconsistencies as primary triggers (Heaphy, 2013), Situated Breaches are inherently endogenous. They emerge from within institutional environments, shaped by local

actors who exercise agency in response to external shocks, governance voids, stakeholder demands, and infrastructure constraints.

This means that Situated Breaches are not just imposed disruptions but are instead deliberate, agentic actions. These are intentional deviations from established institutional logics that allow actors to circumvent rigid structures, bridge governance gaps, or realign institutional priorities in ways that better reflect localised realities. Cities, in this sense, do not merely absorb institutional misalignments; they actively reshape governance structures by fostering new institutional arrangements that accommodate contextual, stakeholder-driven, aspirational, and infrastructural pressures.

This process enriches Institutional Theory by illustrating the complex interplay between local contexts and broader institutional frameworks, highlighting how institutions are not static, rule-enforcing entities but dynamic systems continuously shaped by actors embedded within them. While traditional perspectives on institutional change have placed significant emphasis on top-down corrections such as policy reforms, regulatory interventions, and centralised governance responses, Situated Breaches reveal how bottom-up, context-specific governance strategies contribute to institutional evolution.

More importantly, this perspective allows us to see Situated Breaches as more than disruptions – as mechanisms of institutional innovation. By strategically engaging with institutional misalignments, local actors develop alternative governance arrangements that enable institutions to function under conditions of fragmentation, uncertainty, and contested legitimacy. Unlike traditional breaches, which tend to be framed as breakdowns that require institutional stabilisation (Micelotta and Washington, 2013), Situated Breaches act as catalysts for new governance logics, fostering institutional evolution from the ground up.

8.1.3 Characteristics of situated breaches

Situated breaches are characterised by their rooted, targeted, and relational nature. These breaches are fundamentally localised and deeply-rooted in the place, responding directly to the specific needs and contexts of urban environments. They are targeted, focusing on defined outcomes that align with the city's strategic goals, such as addressing climate resilience in Singapore or reducing digital inequalities in Bristol, or targeting specific sectors and industries in the case of Amsterdam. Additionally, these breaches are relational, often involving collaborations that redistribute power among stakeholders, such as the partnerships observed in Cardiff's decarbonisation efforts or Rotterdam's emphasis on public health and safety.

Rooted Characteristic of Situated Breaches: Situated breaches are fundamentally rooted, emerging from the embedded practices, interactions, and challenges that define a specific urban context. Rather than broad institutional adjustments, these breaches are deeply grounded in place, responding to specific socio-political, environmental, or economic conditions within a city or region. They are shaped by the lived experiences of local actors and reflect a governance logic that is attuned to the everyday realities of the urban landscape. Theoretical perspectives on institutional adaptation suggest that such rooted breaches arise when standardised, top-down approaches fail to capture the complexity and diversity of urban environments (Sherman and Ford, 2014).

For instance, in Amsterdam, the tailored policy for economic regeneration was explicitly designed to leverage the city's cultural identity and entrepreneurial ecosystem, enabling a focused intervention that resonated with local stakeholders and reinforced place-based economic renewal. Similarly, Singapore's green infrastructure initiatives, such as the City in a Garden concept, reflect a rooted breach, one that draws from the city's tropical climate, land constraints, and historical planning ethos to reimagine urban nature. These examples illustrate how Situated Breaches are not simply reactions to external pressures, but contextually embedded processes that reconfigure institutional logics from within, delivering tangible, situated outcomes that reflect the unique identity and needs of a place.

Targeted Characteristic of Situated Breaches: Situated breaches are characterised by their targeted nature, focusing on specific goals or challenges that are critical for a city's sustainable development. Institutional theory highlights the importance of precision in reconfiguring institutional logics to achieve clear, measurable objectives (Reay and

Jones, 2016). For instance, the Humber Freeport initiative represents a targeted breach, with its governance and operational structure explicitly designed to stimulate trade and green industrial growth in a region historically reliant on port-based industries. Similarly, Melbourne's localisation of the SDGs is a targeted effort to address gaps in the national implementation of the goals, focusing specifically on urban sustainability challenges such as equitable economic growth and inclusive community engagement. By honing in on particular areas of need, select sectors, targeted breaches enable cities to allocate resources and stakeholder efforts effectively, ensuring that the outcomes are both impactful and aligned with the local context.

Relational Characteristic of Situated Breaches: Relational dynamics are a defining characteristic of situated breaches, as these interventions are often deeply embedded in the social, economic, and political relationships that shape urban governance. Drawing from institutional theory, relational breaches are understood as efforts to renegotiate power dynamics, align stakeholder interests, and build coalitions necessary for driving institutional change (Cao and Lumineau, 2015). In Rotterdam, the relational breach is evident in the collaborative governance structures that prioritise public health and social well-being, involving partnerships between the municipality, local businesses, and community organisations. Similarly, Cardiff's transport decarbonisation efforts relied on relational dynamics within the Task and Finish Group, which brought together diverse stakeholders to co-create actionable recommendations. These relational aspects not only facilitate the acceptance and implementation of new institutional logics but also ensure that governance mechanisms are inclusive, participatory, and reflective of the city's socio-political fabric.

These characteristics distinguish situated breaches from established typologies, such as hybrid or severe breaches, by demonstrating their direct focus on localised impact and context-driven innovation. The idea of situated breaches contributes significantly to institutional theory by introducing a lens to analyse and theorise deviations that are intrinsically tied to contemporary challenges and urban complexities.

8.1.4 Situated governance mechanisms

The governance mechanisms identified in this research reflect a new model, termed Situated Governance. Unlike traditional governance models such as normative, performative, or negotiated governance, situated governance emphasises collaboration, incentivisation, and adaptability. Collaborative governance in cities like Chicago and Melbourne fosters partnerships across public and private sectors, leveraging shared expertise and resources. Incentivised governance, as seen in Singapore and Rotterdam, aligns stakeholder interests through financial and regulatory incentives. Adaptive governance, evident in Cardiff and Antsirabe, emphasises flexibility to address emergent challenges and future scenarios.

Collaborative Governance Mechanisms: Collaborative Governance Mechanisms are at the heart of Situated Governance, relying on partnerships and coordinated efforts among diverse stakeholders, including government entities, private sector organisations, academic institutions, and civil society. From an Institutional Theory perspective, collaborative governance represents a performative shift, where legitimacy is no longer solely derived from hierarchical authority but rather through inclusive participation, negotiated consensus, and shared decision-making (Cao and Lumineau, 2015). This shift is particularly relevant in contexts where institutional misalignments or governance voids necessitate multi-actor engagement to reconfigure institutional logics.

Collaborative governance mechanisms operate by facilitating multi-stakeholder dialogue, distributing decision-making authority, and pooling collective expertise to address governance challenges that cannot be effectively tackled by a single institutional actor alone. These mechanisms play a crucial role in co-producing institutional solutions, ensuring that governance is context-responsive, knowledge-driven, and institutionally embedded. However, their effectiveness depends on how well power asymmetries, resource dependencies, and conflicting institutional logics are managed within these collaborations.

For instance, Cardiff's Task and Finish Group for transport decarbonisation exemplifies collaborative governance in action. This initiative brought together public, private, and academic stakeholders to develop actionable policies aimed at aligning local transportation systems with climate goals. The process was characterised by structured deliberation, evidence-based policy formulation, and the co-creation of targeted

interventions that reflected both policy imperatives and the operational realities of transport providers. From an institutional perspective, this governance model enabled institutional alignment across multiple stakeholders, fostering legitimacy through consensus-building rather than top-down enforcement. However, challenges emerged in resolving competing stakeholder interests, particularly between environmental advocates pushing for ambitious carbon reduction targets and industry actors concerned about economic viability and infrastructural feasibility. These tensions highlight a core challenge of collaborative governance: balancing inclusivity and efficiency while ensuring that negotiated solutions remain actionable within institutional constraints.

Similarly, in Amsterdam, collaborative governance played a pivotal role in fostering public-private partnerships to advance economic regeneration goals. The city engaged with business leaders, research institutions, and local communities to develop strategies for revitalising economic zones that had experienced industrial decline. This collaborative model allowed governance actors to leverage private-sector investment, academic expertise, and municipal regulatory capacity to design place-based interventions. In institutional terms, this case illustrates how collaborative governance mechanisms enhance institutional resilience by embedding governance processes within multi-actor networks rather than relying on rigid bureaucratic structures. However, a key challenge in this model was ensuring sustained stakeholder commitment over time, as economic regeneration projects require long-term financial and political stability, which can be disrupted by shifting policy priorities, electoral cycles, or private sector disinvestment.

These governance frameworks demonstrate the strengths and limitations of collaborative governance within Situated Governance. On the one hand, collaboration leverages collective knowledge, resources, and legitimacy to navigate institutional complexity and enable cities to address multifaceted challenges effectively. On the other hand, collaborative governance mechanisms must constantly mediate power dynamics, sustain cross-sectoral engagement, and manage tensions between institutional actors with divergent priorities. By recognising both the opportunities and constraints of collaborative governance, this research underscores its role in institutional adaptation, emphasising how Situated Governance Mechanisms evolve not

through unilateral decision-making but through iterative, negotiated, and context-sensitive processes of collaborating and co-creating.

Incentivised Governance Mechanisms: Incentivised governance mechanisms focus on creating value propositions that encourage adherence to new norms and practices, often through financial incentives, subsidies, or policy benefits. This approach aligns with theories of institutional change that emphasise the role of strategic interests and material benefits in motivating stakeholders to adopt new institutional logics (Lok, 2010). By leveraging economic incentives, these mechanisms enable institutional transitions without direct enforcement, allowing governance structures to reconfigure institutional behaviours through reward-based alignment rather than coercion.

Incentivised governance mechanisms operate by embedding institutional change within stakeholder interests, ensuring that actors, whether businesses, developers, or municipalities, see tangible benefits in complying with new regulatory frameworks. However, their effectiveness depends on careful policy design, as incentives can create negative effects, such as short-term compliance without long-term commitment or the misalignment of economic rewards with broader institutional objectives.

For example, Singapore's LUSH (Landscaping for Urban Spaces and High-Rises) programme exemplifies an incentivised governance mechanism aimed at reshaping urban development norms. Recognising the ecological and social benefits of urban greenery, Singapore introduced regulatory advantages, tax benefits, and increased floor area allowances for developers who incorporate green infrastructure, such as rooftop gardens, vertical greenery, and biodiversity-friendly design elements. This incentive-based approach strategically aligns urban planning goals with private-sector motivations, encouraging developers to integrate sustainability into real estate projects rather than seeing environmental regulations as cost burdens. From an institutional theory perspective, LUSH represents a performative shift in governance where environmental sustainability is institutionalised through economic logic rather than imposed as a rigid constraint. However, a key challenge in this model is ensuring that incentives drive substantive, long-term change rather than tokenistic compliance. For example, developers may integrate minimal green elements to qualify for benefits without making meaningful ecological contributions. This raises concerns about how

incentivised governance mechanisms maintain accountability and prevent strategic gaming of regulatory benefits.

Similarly, the Humber Freeport initiative in the UK leverages incentivised governance to drive regional economic development by offering tax reliefs, simplified customs procedures, and investment benefits to businesses operating within the Freeport zones. This mechanism is designed to stimulate trade, attract foreign investment, and promote innovation, using economic rewards to encourage firms to establish operations in designated areas. In institutional terms, this initiative represents an attempt to redefine regional economic governance by positioning Freeports as engines of institutional change. By reducing regulatory and tax burdens, policymakers create a self-reinforcing cycle of investment and economic activity, demonstrating how institutional transitions can be market-driven rather than solely policy-imposed. However, this model faces challenges related to governance oversight and equitable benefits distribution. One could argue that such incentives may disproportionately benefit larger corporations while failing to support small and medium-sized enterprises (SMEs), leading to spatial and economic disparities. Additionally, concerns around regulatory adjustments and potential loopholes highlight the need for strong institutional safeguards to prevent exploitation of Freeport tax incentives for unintended purposes.

These cases illustrate how incentivised governance mechanisms function as strategic institutional tools, reshaping stakeholder behaviours by aligning economic gains with broader policy objectives. Unlike direct enforcement mechanisms, which rely on top-down regulatory compliance, incentivised governance fosters controlled alignment with institutional goals, creating self-reinforcing dynamics where adherence generates mutual benefits. However, the effectiveness of these mechanisms hinges on careful institutional design, long-term sustainability, and the prevention of unintended consequences, ensuring that incentives do not merely drive short-term compliance but foster lasting institutional change.

Adaptive Governance Mechanisms: Adaptive governance mechanisms are characterised by their flexibility and responsiveness to evolving challenges, uncertainties, and opportunities. Unlike static governance models that rely on fixed institutional logics, adaptive governance mechanisms function as iterative, learning-based approaches that allow institutions to adjust policies, strategies, and decision-

making processes based on real-time feedback, emerging trends, and shifting socio-political conditions. From an institutional theory perspective, adaptive governance aligns with the concept of dynamic capabilities, which emphasises that institutions must continuously evolve to remain effective in rapidly changing environments (Klein *et al.*, 2019). These mechanisms are particularly relevant in the context of Situated Governance, as they allow cities to respond to place-specific pressures while ensuring long-term institutional resilience.

Adaptive governance mechanisms operate by embedding experimentation, stakeholder feedback loops, and real-time data-driven decision-making into governance structures. However, they also require strong institutional coordination, robust monitoring frameworks, and the ability to balance flexibility with stability ensuring that governance remains responsive without becoming inconsistent or fragmented.

For instance, Melbourne's localisation of the SDGs exemplifies adaptive governance in action. Recognising that global sustainability goals must be tailored to local contexts, Melbourne developed a decentralised, participatory model for implementing the Sustainable Development Goals (SDGs) using the 'Hacking the SDGs' methodology. This initiative enabled policymakers, civil society actors, and private sector representatives to continuously refine priorities, test policy interventions, and adjust strategies in response to emerging challenges and stakeholder insights. By employing an iterative approach to priority-setting and monitoring progress, this model ensures that institutional goals remain aligned with real-world conditions rather than rigidly adhering to predefined targets. From an institutional perspective, this demonstrates how adaptive governance fosters institutional agility, allowing cities to incorporate bottom-up knowledge production into governance frameworks. However, a key challenge in this model is maintaining long-term coherence, policy continuity, and accountability. Adaptive mechanisms must avoid fragmentation, governance drift, or stakeholder disengagement over time.

Similarly, Rotterdam's climate resilience initiatives embody adaptive governance by integrating foresight methodologies, emerging climate data, and scenario planning into urban decision-making. Faced with rising sea levels and increasing extreme weather events, Rotterdam has institutionalised real-time monitoring, multi-stakeholder collaboration, and dynamic risk assessment techniques to ensure that climate adaptation

policies remain responsive to changing environmental conditions. The city's approach involves constantly refining urban sustainability strategies, testing new flood protection systems, and incorporating innovative water management solutions based on live data and predictive analytics. This embedded institutional flexibility allows Rotterdam to anticipate, rather than merely react to, climate risks, ensuring that urban planning and governance remain future-proof. However, a significant challenge in this model is balancing adaptability with regulatory certainty. Frequent policy shifts can create uncertainty for investors, infrastructure planners, and community stakeholders, potentially undermining long-term governance stability. Moreover, resource constraints and political cycles may limit the extent to which adaptive policies can be continuously updated and implemented at scale.

These cases illustrate how adaptive governance mechanisms function as critical institutional tools, enabling cities to remain resilient, responsive, and forward-looking in the face of complex, evolving challenges. Unlike rigid governance structures that struggle with institutional inertia, adaptive governance fosters continuous learning, multi-actor engagement, and iterative policymaking, ensuring that governance remains situated, relevant, and effective over time. However, the effectiveness of adaptive governance mechanisms depends on its ability to maintain institutional coherence, avoid governance fragmentation, and ensure long-term accountability, making them a powerful yet complex approach to institutional transformation.

These governance mechanisms drive the creation of new norms and practices, such as local laws, regulations, partnerships, and community engagement initiatives. They also deliver tangible benefits across social, economic, environmental, and financial domains, contributing to national and international commitments such as the SDGs or the Paris Agreement.

By framing governance through the lens of situated breaches, this research highlights how cities are reconfiguring their institutional logics to address global challenges through localised interventions. This approach underscores the growing significance of cities in shaping national and global policy landscapes.

8.2 Implications to institutional theory

This research contributes to Institutional Theory by advancing the debate on institutional change and adaptation, specifically within the context of city governance and policy. It offers a nuanced exploration of how institutions respond to contextual disruptions through Situated Breaches and Situated Governance Mechanisms, demonstrating the interdependencies between institutional infrastructures, triggers, breaches, and governance responses in urban settings. Cities, as central actors in addressing global and local challenges, are rarely the focus of institutional theory discussions (Lambooy and Moulaert, 1996). This gap highlights the novelty and critical importance of this research, providing a new perspective on institutional dynamics and governance models in the face of 21st-century urban challenges. Aiming to fill this gap, this research highlights the need for tailored institutional responses to modern urban challenges. The introduction of the concepts of Situated Breaches and Situated Governance into institutional theory represents a significant evolution of the field. By acknowledging and theorising the need for institutions to dynamically adapt to emerging global challenges and local contexts, this research enhances our understanding of institutional effectiveness in contemporary governance. It underscores that as cities innovate in response to new types of pressures, institutional theory itself must evolve to adequately describe, explain, and guide these transformations. By doing so, it lays the groundwork for future research while enriching the existing theoretical framework.

Institutional infrastructures function across multiple levels as discussed in chapter 5, 6, and 7. The international, national, regional, and local infrastructures in the context of cities, provide the scaffolding for policy implementation and governance. While international frameworks set overarching goals, national policies provide specific directives. Regional and local infrastructures adapt and operationalise these policies within specific contexts. This research highlights how modern challenges such as climate change, digital inclusion, and economic regeneration amongst others expose gaps in these existing institutional infrastructures. Cities, often at the forefront of these challenges, encounter triggers for breaches due to the misalignment of top-down directives with local realities (Loorbach *et al.*, 2016). For example, Humber's Freeport initiative revealed how contextual pressures arising from economic disparities led to the emergence of situated breaches that necessitated new situated governance mechanisms.

Rethinking Institutional Breaches Through Situatedness

This research advances institutional theory by introducing the concept of Situated Breaches, a novel and distinct type of institutional breach or disruption that arises from deeply contextualised dynamics in urban governance. While much of the existing literature on institutional breaches focuses on how organisations repair or accommodate disruption to maintain institutional continuity (Meyer and Hammerschmid, 2006), (Lok and Rond, 2013), this study highlights breaches as opportunities for transformative change, particularly in urban fields characterised by complexity, interdependence, and institutional fragmentation.

While the literature on institutional breaches includes Severe, Collision, and Hybrid breaches, these generally lead to forms of institutional repair - efforts aimed at restoring or reconciling existing logics rather than transforming them. For instance, Severe Breaches (Herepath and Kitchener, 2016) refer to major disruptions that destabilise institutions but often result in reinstating modified versions of existing structures. Collision Breaches (Scott, 2013) arise when incompatible logics clash, typically prompting negotiation or compromise between competing frameworks. Hybrid Breaches (Meyer and Hammerschmid, 2006) describe situations where multiple logics are blended, leading to organisational accommodations that preserve continuity. These breach types, while significant, ultimately reinforce the persistence of institutional stability through repair and recalibration (Lok and Rond, 2013).

These perspectives share an underlying commitment to the restorative function of institutional responses that breaches are followed by institutional repair mechanisms aimed at re-establishing a stable normative and cognitive order (Zietsma and Lawrence, 2010). Situated Breaches, by contrast, mark a more profound shift. They are not temporary ruptures followed by restoration but context-driven reconfigurations that result in the emergence of new institutional logics. Rather than repairing coherence, they redefine it through mechanisms rooted in ground-up innovation, shaped by the unique pressures of specific urban contexts. These breaches are endogenous adaptations and not externally imposed shocks. They are rooted, targeted, and relational, constructed through deliberate, collaborative responses by local actors facing complex socio-economic, environmental, and infrastructural pressures.

This reframing builds on established concepts of embedded agency (Battilana, Leca and Boxenbaum, 2009), field-level change (Hoffman, 2016), and institutional work (Lawrence, Suddaby and Leca, 2011). While prior work acknowledges the role of actors in reconfiguring

institutional arrangements, it often assumes that institutional change is either driven by elite entrepreneurs or catalysed by macro-level shocks. Situated Breaches instead emerge through the interaction of actors embedded within local governance environments, where power is dispersed, resources are constrained, and solutions are co-created.

The analysis presented in this research shows that these breaches are triggered by four distinct conditions: Contextual Pressures, Stakeholder Expectations, Aspirational Shortfall, and Infrastructure Voids. These triggers emerge at the interface between different layers of institutional infrastructure where international, national, regional, and local governance systems intersect but do not align. It is at these junctures that actors experience a loss of coherence, finding that existing frameworks are insufficient for addressing situated challenges. Rather than defaulting to top-down correction, institutional actors initiate Situated Breaches to navigate these mismatches in ways that are both contextually informed and future-oriented.

In their recent work, Galleli and Amaral (Galleli and Amaral, 2025) theorise how place-based innovation hubs spark multi-level institutional reorientation influenced by local actors. This monograph supplies the complementary empirical detail - it traces situated breaches across a number of cities and shows, step-by-step, how local actors translate those ruptures into new governance logics. In doing so, the study grounds their macro-level model in the concrete practices, coalitions, and context-specific mechanisms through which urban institutional change actually unfolds.

These Situated Breaches result in the development of Situated Governance Mechanisms, which are defined by collaboration, incentivisation, and adaptation. As shown in the flow diagram (Figure 4) there is a clear recursive dependency between breaches and governance responses. Triggers disrupt the coherence of institutional infrastructure, resulting in Situated Breaches. These, in turn, necessitate the creation of Situated Governance Mechanisms that are designed not to restore the previous state but to institutionalise new norms and logics. This recursive loop ensures that institutional change is not linear but cyclic, shaped by the interplay between actors, infrastructures, and governance mechanisms.

Thus, Situated Breaches challenge the field's underlying assumption of institutional stability (Meyer and Rowan, 1977) instead positioning institutions as iterative systems undergoing continuous recalibration. This framing extends theories of institutional complexity by showing how coherence is re-established not through top-down negotiation but via relational, actor-

driven re-composition, grounded in the realities of place and practice. It supports calls for iterative and non-linear understandings of institutional evolution (Lawrence, Leca and Zilber, 2013), while also deepening recent insights on the spatially bounded and practice-based nature of institutional adaptation (Clegg *et al.*, 2016).

The current research complements and extends existing work that ascertains plural logics in care (Dunn and Jones, 2010), that emphasises the context-specific and place-based nature of interventions in defining organisational identity (Zafar and Reay, 2024), and that articulates benefits of institutional deviations in driving entrepreneurial innovation (Elert and Henrekson, 2017).

Recent work on new institutional theory and artificial intelligence underscores how emerging technologies can themselves become agents of institutional change, supporting the narrative around contemporary challenges demanding tailored institutional level interventions (Rudko *et al.*, 2024). Future research could therefore explore how AI-enabled tools might catalyse or mediate situated breaches in urban governance, and whether bespoke governance mechanisms are needed to embed such technologies responsibly in city contexts.

By conceptualising Situated Breaches as both diagnostic and transformative, this research extends the conversation on institutional complexity and pluralism (Greenwood *et al.*, 2010). The study shows how institutional coherence is disrupted not just by exogenous shocks or conflicting logics, but by misalignments between institutional infrastructure and the socio-political realities of place. It also highlights the limits of existing breach typologies, which tend to under-theorise the role of locality and situated governance capacity in institutional transformation.

In doing so, this study offers a more nuanced lens for understanding institutional change in complex governance fields, particularly urban contexts where institutional fragmentation, overlapping jurisdictions, and dynamic stakeholder coalitions are the norm. Situated Breaches thus mark a shift in how we theorise institutional disruption, not as an exception to be corrected, but as a normal and necessary feature of institutional life in an increasingly uncertain and contested world.

Situated Governance as an evolving institutional mechanism

If Situated Breaches represent a new type of disruption in institutional infrastructures, then Situated Governance Mechanisms represent a novel institutional response, one that extends and reorients our understanding of how governance functions within institutional theory. Rather than relying on rule-based stability, Situated Governance reflects a dynamic and evolving process, emerging from context-specific responses to institutional misalignments. Historically, institutional governance has been explained through three primary mechanisms: Normative, Performative, and Negotiated.

Normative Governance refers to rule-setting processes underpinned by shared values and professional norms (Scott, 2013), (DiMaggio and Powell, 1983). It operates by socialising actors into conforming behaviour based on legitimacy conferred by tradition, expertise, or established practice. While this mechanism is effective in stable environments, it often proves inflexible in the face of contemporary disruptions that demand rapid and context-specific adaptation.

Performative Governance, in contrast, derives authority from demonstrable results and efficiency. Institutional legitimacy here rests on evidence of impact or performance against predetermined metrics. This mode of governance can be traced to institutional work literature that highlights how legitimacy is maintained through visible enactments of effectiveness (Lounsbury and Boxenbaum, 2013). Although performative models introduce a results-oriented dynamic into governance, they risk narrowing institutional priorities to what is measurable, sometimes overlooking more nuanced or community-rooted concerns that do not align with performance indicators.

Negotiated Governance involves consensus-building across institutional actors, where authority emerges from processes of bargaining and compromise. This approach draws from early institutional studies that recognised how institutions evolve through political contestation and negotiated settlements (Oliver, 1991). While this approach acknowledges pluralism in institutional fields (Greenwood *et al.*, 2010), it can be slow-moving and susceptible to deadlocks, especially in high-stakes or urgent governance scenarios. Moreover, it assumes that all actors operate from relatively equal footing in negotiations, which is rarely the case in complex urban environments.

In contrast, Situated Governance Mechanisms emerge not from predefined rules, measurable outputs, or negotiated settlements, but from the strategic orchestration of collaboration, incentivisation, and adaptation, tailored to local institutional realities. These mechanisms evolve as institutional actors confront Situated Breaches that demand bespoke solutions. Collaboration brings together diverse actors with differentiated capacities. Incentivisation embeds compliance within mutual benefit, and adaptation enables continuous recalibration as conditions change. Rather than relying on legitimacy from hierarchy or tradition, Situated Governance derives legitimacy from its responsiveness and contextual relevance.

Importantly, this form of governance is not an exception or anomaly. It is a systematic response to a growing pattern of misalignment between existing institutional infrastructures and contemporary urban pressures. It is institutionally generative, enabling the formation of new logics and practices that are not simply reactive but forward-looking and norm-creating. This type of governance builds on the work of Zietsma and Lawrence (Zietsma and Lawrence, 2010), who emphasise the concept of institutional work as a relational and place-based process. It also reflects Smets, Morris, and Greenwood's (Smets, Morris and Greenwood, 2012) argument that practical, on-the-ground problem solving often precedes and shapes formal institutional change. Moreover, this approach expands recent work on field-level heterogeneity and institutional complexity (Hinings, Logue and Zietsma, 2017) illustrating how cities navigate multiple, overlapping logics by crafting bespoke responses. Situated Governance thus prioritises practical responsiveness over normative conformity, making it particularly salient in urban contexts where governance must be both fast and flexible.

This monograph complements and extends the more recent framework proposed by Mityushina and Hehenberger (Mityushina and Hehenberger, 2025) by empirically grounding the concept of collaborative governance through the lens of Situated Governance Mechanisms within city-level institutional fields. While the original work theorises Interactional Governing Activities (IGAs) and governance modes across sectors, the monograph applies these ideas in urban contexts, demonstrating how local actors through recursive, breach-triggered responses build governance frameworks that are collaborative, incentivised, and adaptive. It also adds a spatial and infrastructural dimension to the study of field governance, enriching our understanding of how institutional change unfolds in place-based environments like cities.

This contribution to institutional theory is twofold. First, it expands the repertoire of governance mechanisms beyond the established triad, recognising Situated Governance as a

distinct and necessary response to institutional change in complex, heterogeneous fields. Second, it reveals how governance mechanisms themselves are not static categories, but evolving institutional arrangements that emerge from specific relational and contextual dynamics. In doing so, it encourages a rethinking of governance in institutional theory, not as a rigid, top-down structure, but as a flexible and ongoing process shaped by local context, evolving needs, and continuous interaction among actors.

The recursive relationship between breaches and governance

One of the central theoretical contributions of this study lies in revealing the recursive relationship between breaches in institutional coherence and the emergence of new governance mechanisms. Traditionally, institutional theory has often conceptualised change as either the result of exogenous shocks (Meyer and Rowan, 1977) or as intentional agency-driven reform (Greenwood, Suddaby and Hinings, 2002). However, the findings of this study suggest a more dynamic and mutually constitutive relationship between disruption and institutional repair: Situated Breaches generate the need for new governance forms, while Situated Governance Mechanisms emerge in response to these breaches, helping to stabilise and legitimise the new logics they set in motion.

This recursive relationship aligns with recent calls in institutional theory to reframe change not as a linear process but as a series of iterative, interactive cycles (Lawrence, Leca and Zilber, 2013), and to emphasise the temporality in institutional stability (Reinecke and Lawrence, 2023), that better capture the emergent and embedded nature of institutional evolution. The model proposed here (Figure 4) shows how local actors reconfigure governance mechanisms in direct response to situated breaches, thereby creating new institutional logics grounded in context. This insight pushes institutional theory to better account for context-specific change that operate outside of formal reform or crisis. As the findings show, breaches are not simply moments of rupture but ongoing episodes of misalignment that unfold within specific relational and spatial contexts. In turn, governance responses are rarely final or complete; they are adaptive practices developed iteratively through engagement, experimentation, and negotiation with local stakeholders (Smets, Morris and Greenwood, 2012).

Together, the concepts of Situated Breaches and Situated Governance offer a new way to understand how institutions change in real-world settings. They show that change often comes not from sweeping reforms or external shocks, but from grounded, local efforts to solve complex problems. These changes are shaped by the relationships between people,

organisations, and the systems they work within. It shifts the analytical focus away from crisis and rupture toward more subtle, recursive, and place-specific forms of institutional evolution. In doing so, it responds to a longstanding critique of institutional theory, its tendency to overlook the spatial, relational, and incremental nature of change in favour of more dramatic accounts (Clegg et al., 2016).

This study contributes to institutional theory by offering a situated model of change that is grounded in everyday governance work. Whereas much of the literature focuses on field-level restructuring or macro-level institutional entrepreneurship, this research draws attention to the micro-processes and meso-level adaptations through which institutions evolve in practice (Hinings, Logue and Zietsma, 2017). Cities, in particular, are sites where institutional coherence is continuously challenged and reconfigured in response to complex demands, from sustainability and public health to digital inclusion and economic resilience. This study encourages scholars in institutional theory to pay closer attention to these local, ongoing processes of change, especially in cities, where challenges are urgent and diverse. By connecting theory with what happens in practice, this research helps make institutional theory more responsive to today's realities and more useful for shaping future change.

8.3 Implications for practice

From a practical perspective, the findings of this research offer insights for cities seeking to navigate contemporary challenges through situated breaches and governance mechanisms. Cities can adopt the ideas and mechanisms presented in this paper by fostering cross-sectoral collaborations, leveraging financial and regulatory incentives, and maintaining adaptability to address emergent needs. For instance, creating city-level institutional infrastructures, such as partnerships with universities or business consortia, can enable targeted responses to unique challenges, as demonstrated by Bristol's Digital Nation initiative.

City-level actors, such as mayors, municipal authorities, and urban planners, must develop a heightened sensitivity to the triggers that signal the need for situated breaches. These triggers including contextual pressures, stakeholder expectations, aspirational shortfalls, and infrastructure voids manifest differently across local contexts. For example, mayors and municipal authorities can monitor patterns of public dissatisfaction or resistance to existing frameworks, indicating that current institutional logics are failing to address emerging challenges. Signs such as strained transportation networks, rising energy bills, or community protests against inadequate healthcare facilities are early indicators of triggers that demand a need for situated institutional logics and supporting situated governance mechanisms. Similarly, councillors can leverage community feedback mechanisms, such as surveys or town halls, to identify unmet aspirations or evolving needs, which may necessitate targeted interventions.

These insights are applicable across geographies and demographics. Cities in developing regions, such as Antsirabe, can use situated governance to address basic infrastructural needs, while advanced urban centres like Amsterdam can focus on integrating circular economy principles. Tailoring the approach to the local context ensures that governance mechanisms remain relevant and effective, regardless of the city's developmental stage.

Several new challenges are reshaping the urban governance landscape, requiring tailored approaches that are context-specific and localised (Government office for Science, 2014). In cities with aging populations, the strain on healthcare systems is growing (Hirschl and Shachar, 2019). Municipal authorities must address issues like insufficient geriatric care facilities, high medical costs, and inadequate support for home-based care. For example, in Tokyo, the local government is experimenting with robotics and AI-driven solutions to provide caregiving support, reflecting a situated breach in the traditional healthcare infrastructure (Lau, Hof and

Est, 2009). In cities experiencing rapid urbanisation, such as Nairobi or San Francisco, housing shortages and affordability crises (Nzau, 2020) necessitate innovative governance mechanisms. Policies promoting mixed-use zoning, incentivising private developers to build affordable housing, or leveraging public-private partnerships can address these situated breaches effectively.

Beyond urban contexts, the principles of situated breaches and governance can be applied to sectors such as healthcare, education, disaster management, or other domains where localised challenges often necessitate tailored interventions. In regions heavily reliant on agriculture, situated breaches may arise from contextual pressures like droughts, soil degradation, or market fluctuations. Local governance bodies can adopt adaptive mechanisms, such as introducing drought-resistant crops or blockchain-based supply chain systems, to address these specific needs.

Outside urban centres, healthcare challenges may differ significantly. For instance, in remote areas of India, the absence of healthcare infrastructure represents an infrastructure void (Haenssgen, 2017), requiring mobile clinics or telemedicine solutions. These interventions are adaptive and tailored to the region's specific needs.

Within large corporations, triggers like stakeholder expectations or regulatory gaps can lead to breaches in traditional governance models. Companies adopting Environmental, Social, and Governance (ESG) frameworks, such as Unilever's sustainable sourcing practices (Krishnamoorthy, 2021) illustrate how situated governance can manifest in corporate contexts.

The adaptability of this framework makes it a valuable tool for addressing diverse institutional fields, fostering resilience, and thus enabling innovation. Finally, this research reinforces the need for cities to be empowered as key actors in addressing global challenges. By adopting situated governance models, cities can drive meaningful change that aligns with both local priorities and global objectives, setting a precedent for innovative and inclusive governance in the 21st century.

9. Conclusion

Cities are transitioning – transitioning from being mere delivery vehicles for national policies to creators and implementors of their own context-specific policies, from adhering to national guidelines to aligning to local needs, from being static spatial entities to becoming dynamic actors in the delivery of international goals. This transition is real and is happening now.

This transition is not sudden and the signs of it have been visible in the past decade, around the world. This is becoming increasingly pronounced of late given the pace and nature of the challenges that the world is having to deal with – effects of climate change, exploitation of natural resources to cater to the increasing needs of the populace, loss of biodiversity, need for reducing social inequality, and the list goes on. The negative effects of these challenges are experienced the most at the ground-level – in cities and towns.

Cities are increasingly starting to realise this as they are having to face the consequences of these global challenges and as their local communities are having to experience the associated negative impacts. It is not just these contextual pressures, but increasing awareness on these issues is also encouraging stakeholders to take a stand and influence actions in their local contexts. Be it businesses, local governments, academic institutions, think tanks, or even the public, they are all wanting to voice their opinions with a view to affect positive change. These aspirational goals in some instances also lack the policy framework and infrastructure that is needed for their proper consideration and execution.

These triggers are influencing cities to deviate from traditional and existing policy norms and to create their own context-specific, localised, and targeted policy frameworks to deliver for their local communities. To deliver these policies effectively they are also having to craft and design their own governance mechanisms that suit their respective contexts. Collaborative models of governance involving multiple stakeholder groups, mechanisms that provide attractive incentives for stakeholders to act, and most importantly mechanisms that consider future scenarios and that can adapt are increasingly shaping the approaches to governance.

Cities are making these bold moves with a sole view to deliver for their communities. Be it driving local economic growth, delivering social value, protecting the environment, or securing our planet and its resources for future generations, the main purpose is to deliver the benefits where they rightly belong. Cities should be encouraged and supported in this endeavour and provided with the required resources and infrastructure to deliver their agendas. While this is

increasingly taking place, there is much more to do, for instance, in cities in developing economies, in cities where population overflow is imminent, in cities that are running short of resources, and in cities where there are aspirations to deliver more. Thriving and resilient cities will be the backbone of tomorrow's economy.

In this research, I have studied this significant evolution in the city scape through the lens of Institutional Theory. There are several research papers that have studied cities through the urban and place-making lens, and likewise, there are many papers on institutional theories that focused on organisations, or industries. There is very little evidence of any research that brings these two areas together – Institutional theory in the context of cities.

More specifically, I refer to the streams of Institutional Breaches and Institutional Governance and draw parallels to how cities are breaching international and national policies for the benefit of their own communities and how they are developing tailored governance mechanisms to deliver on the local agendas. I gather observations from three different institutional fields – economic growth and regeneration, energy transition and climate resilience, and implementation of the sustainable development goals. Across these three institutional fields, I have gathered evidence from cities to understand how they have breached conventional policy norms, the characteristics of these breaches, and the complementary governance frameworks that they have created to deliver on the new institutional logics.

The findings show that the triggers for these breaches are usually one or more of – contextual pressures, infrastructure void, aspirational shortfall, or stakeholder expectations. These breaches are essentially rooted, targeted, and/or relational in nature. The governance mechanisms they design are collaborative, incentivised, or adaptive in how they manifest themselves through the associated norms and practices.

Situated Breaches and Situated Governance Mechanisms is the terminology I use to refer to these kinds of breaches and the associated governance mechanisms – 'situated' in the context of the needs of the city and the dynamics of the institutional field. These 'situated' breaches are different to the presently known types of institutional breaches – collision, hybrid, severe, etc., owing to the nature of the trigger and the intended purpose of the breach. Most importantly, these breaches don't result in institutional level repair to revert to a stable state, rather these signify a new pathway for institutional evolution. Likewise, situated governance mechanisms differ from the presently known types of institutional governance – performative, normative, negotiated, owing to the collaborative, incentivised, and adaptive nature of these mechanisms.

These concepts provide a new dimension to the streams of institutional breaches and institutional governance and more so in the context of cities. The contribution of this research to the field of institutional theory creates scope for future work especially in the light of current events happening around the world – geo-political tensions, natural disasters, emergencies, and the many more occurrences that are impacting humanity.

Cities are 'situating' themselves in the light of worldly events to ensure that they are doing the right thing for their people and places rather than just doing things right. They are transitioning and in the process are breaching conventional policies and norms and are transforming how they are structured and organised to deliver for their respective cities. It is not a one-off but a movement that is gaining momentum and voice. This is fuelled by numerous entities and organisations that are absolutely backing this move not as a show of political prowess but as an absolute necessity as we all work towards making this planet safe, secure, and resilient for us and for the coming generations to thrive.

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List of abbreviations

This section lists the abbreviations and their respective full forms used in this monograph, in alphabetical order.

AMEP — ABLE Marine Energy Park

BACP — Business Affairs and Consumer Protection

BDFI — Bristol Digital Futures Institute

BIDs — Business Improvement Districts

BRT — Bus Rapid Transit Systems

BT — British Telecom

CDC — Center for Disease Control and Prevention

CDCs — Community Development Corporations

CLG — Company Limited by Guarantee

COP — Conference of Parties

COVID — Corona Virus Infectious Disease

CO2 — Carbon Dioxide

CPRG — Climate Pollution Reduction Grant

DCMS — Department for Digital, Culture, Media & Sport

DETI — Digital, Engineering, Technology & Innovation

ECN — Eastside Community Network

EPA — Environmental Protection Agency

EPBD — Energy Performance of Buildings Directive

ESG — Environmental, Social, and Governance

EU — European Union

GDP — Gross Domestic Product

GEF	Global Environment Facility
GHG	Greenhouse Gas
GLA	Greater London Authority
GlobalABC	Global Alliance for Buildings and Construction
GPSC	Global Platform for Sustainable Cities
ICLEI	International Council for Local Environmental Initiatives
IECC	International Energy Conservation Code
IGA	Interactional Governing Activities
IMF	International Monetary Fund
IRA	Inflation Reduction Act
IT	Institutional Theory
ITU	International Telecommunication Union
LEP	Local Enterprise Partnership
LGMA	Local Governments and Municipal Authorities
LISC	Local Initiatives Support Corporation
LTNs	Low Traffic Neighbourhoods
LUSH	Landscaping for Urban Spaces and High-Rises
NAPA	National Adaptation Programme of Action
NGO	Non-Governmental Organisation
NIE	New Institutional Economics
NO2	Nitrogen Dioxide
OECD	Organisation for Economic Co-operation and Development
PM	Particulate Matter
PPP	Public-Private Partnership

SDGs	Sustainable Development Goals
SDSN	Sustainable Development Solutions Network
SME	Small Medium Enterprise
TFG	Task and Finish Group
TfL	Transport for London
TVA	Tennessee Valley Authority
UCLG	United Cities and Local Governments
UK	United Kingdom
UKTIN	UK Telecoms Innovation Network
ULEZ	Ultra Low Emission Zone
UN	United Nations
UNACLA	UN Advisory Committee on Local Authorities
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSDGs	United Nations Sustainable Development Goals
US	United States
WACLA	World Assembly of Cities and Local Authorities