



Transformational climate action at the city scale: comparative South–North perspectives

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TRANSFORMATIONAL
CLIMATE ACTIONS BY
CITIES

RESEARCH

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ABSTRACT

Conceptually grounded, integrated, city-scale and comparative studies remain rare and are based mostly on meta-reviews of the literature or broad surveys. Conversely, debates about the limitations of incremental or transitional change and exhortations towards more ambitious processes of system or transformative changes are rarely grounded in adequate empirical analysis. Accordingly, this paper examines city-scale plans and actions in order to throw light on these issues in a carefully contextualised Global South–North comparison between Cape Town, South Africa, and Greater Manchester, UK. Cape Town has a considerable pedigree of citywide climate policy and action but achieving cross-departmental integration remains a key challenge, along with operationalisation and monitoring. Greater Manchester has abundant climate ambitions to become a leading European green city, but recent innovative policy processes revealed a lack of capacity and in-house expertise. The comparative analysis therefore focuses on capacity constraints hampering fulfilment of progressive city aspirations that engage with global agendas, and on how they use innovative planning and implementation processes and different forms of knowledge to address integrative or cross-cutting issues, as well as on their relative success to date in doing so in the face of different extents of inequality and power asymmetry.

POLICY RELEVANCE

A comparative analysis of city-wide climate policy initiatives provides four insights that are highly relevant for policymakers. First, the political–institutional context in which local climate policy is designed invariably shapes the policy process, making it imperative to consider redesigning the ‘multilevel governance’ structures between the local governments that ‘hold the problem’ of climate change with the tools required to address the root causes. Second, policymakers need to grapple with and negotiate across the

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conflicting rationalities held by different professionals and stakeholders to bring together and integrate different types of knowledge into a comprehensive perspective. Third, local governments must find ways to address the underlying challenge of institutional inertia to embrace more ambitious, transformative policy agendas, moving away from incrementalist approaches. Finally, local governments should integrate debates on socio-spatial fairness and justice with climate policy, recognising the interdependencies between these agendas.

1. INTRODUCTION

The burgeoning literature on urban climate change mitigation and adaptation actions remains dominated by diverse single empirical case studies. Moreover, these focus predominantly on individual sectors or areas within a city. Conceptually grounded, integrated (cross-sectoral), city-scale and comparative studies remain all too rare, and are based mostly on meta-reviews of the literature or broad surveys (e.g. Bulkeley & Castán Broto 2013; Bulkeley 2019; Castán Broto & Bulkeley 2013; Castán Broto & Westman 2020). Conversely, debates about the limitations of incremental or transitional change and exhortations towards more ambitious processes of systemwide or transformative changes (e.g. Pelling 2014; Pelling *et al.* 2015; Revi *et al.* 2014; Simon & Solecki 2018; Bulkeley 2021) are rarely grounded in adequate empirical analysis, although the emphasis on feasibility is increasing (Patterson *et al.* 2021).

The Intergovernmental Panel on Climate Change's (IPCC) Working Group II *Sixth Assessment Report* (2022) recently underscored the urgent need for more informed and well-calibrated policy processes that can progress the political commitments of cities into practical action of sufficient ambition if the Paris Agreement target of keeping global warming to 1.5°C above pre-industrial levels is to be met. Sufficient time has also now elapsed to allow for rigorous assessment of the growing number of comprehensive citywide climate and resilience strategies, and the extent of potentially differential impacts on particular groups and areas and the extent to which they affect equity and socio-spatial justice (Castán Broto & Westman 2020; Westman & Castán Broto 2021). Also important is the extent to which these strategies engage with the global sustainable development agenda, especially the Sendai Framework for Disaster Risk Reduction, Paris Agreement, Sustainable Development Goals (SDGs) and New Urban Agenda. Furthermore, municipalities and city membership networks such as Local Governments for Sustainability (ICLEI), United Cities and Local Governments (UCLG) and the C40 Cities Climate Leadership Group are now increasingly prioritising actions deemed to have the highest potential impact on reducing emissions and on enhancing equity and resilience.

Accordingly, this paper seeks to advance the understanding of these issues by examining relevant city-scale plans and actions in a carefully contextualised Global South–North comparison between Cape Town, South Africa, and Greater Manchester, UK, in order to compare and contrast processes and outcomes between cities in very different geopolitical and socio-environmental contexts, which have often been argued in the past to render such exercises implausible. By contrast, such a comparative analysis is valuable in terms of its potential to illuminate how global processes of climate change and the global academic and policy discourses around them are received, internalised and acted upon in the respective city and national contexts.

2. CONCEPTUAL PERSPECTIVES

The ways in which local governments are addressing and, in turn, are being affected by climate change and its impacts have been addressed in diverse ways in the literature. This reflects the evolution of debates over time and perceived inadequacies of more instrumentalist approaches. The range of approaches has recently collectively been termed 'climate urbanism' and engaged with by means of critical urban theoretical perspectives (Castán Broto & Robin 2021). Similarly,

Bulkeley (2021) suggests that we are now in a third phase of evolving approaches to climate change over the last 30 years, characterised by integral connections between climate change actions and wider sustainability and resilience agendas. This paper contributes to the debate on transformational urban climate change politics and policies by assessing the two case studies from a similar perspective across the so-called Global North–South Divide, which appears increasingly outdated in relation to global environmental and climate change and related phenomena and associated discourses.

Climate and related environmental changes are particularly challenging because of their all-encompassing, intractable and global nature, and therefore because no one stakeholder or political entity can have much impact by acting alone within specific jurisdictional boundaries or activity spheres. Hence, they are commonly referred to as a wicked problem. Indeed, it is now well established in the academic literature (e.g., Bulkeley & Betsill 2005; Leck & Simon 2013, 2018), and explicit in Agenda 2030 and the New Urban Agenda, that tackling climate change effectively requires collaborative multilevel and horizontal transboundary governance, characterised by clear divisions of labour between national, regional and local governments and appropriately matched resourcing. Particularly in the current context of often substantial local government budget cuts since the financial crisis of 2008–09, this is rarely the case, with municipalities, in particular, often having additional roles assigned—as recently in the battle against Covid-19—but without commensurate extra funding. Hence, mismatches are often substantial and even growing, so that having champions in key positions to push the importance of climate change agendas is often crucial (Leck & Roberts 2015). UN-Habitat's (2022) recent guide to effective multilevel governance in the Global South is intended to assist countries in formulating and implementing appropriate arrangements and divisions of powers and responsibilities to enable cities to act effectively. It cites South Africa as a positive example. The situation is assessed in relation to the two case study cities.

One potential external influence on governance and policy is a city's membership of transnational municipal networks (TMNs) and how well the information exchange and networking and peer-learning opportunities to adopt good practice thus offered are used or create self-referential 'lock-ins' (Acuto & Ghojeh 2019; Acuto & Rayner 2016; Bansard *et al.* 2017; Bellinson 2018; Castán Broto 2017; Cortes *et al.* 2022). For instance, the C40 Climate Cities Leadership Network—to which the City of Cape Town (CoCT) belongs—recently reported on how member cities have increased their levels of ambition and progress in relation to integrated climate actions through progress against five so-called high-impact declarations (C40 2022). These address net zero carbon buildings; good food cities; advancing towards zero waste; clean air cities; and green and healthy streets, respectively. Cape Town is one of 23 C40 city signatories of the net zero declaration, which has influenced its recent 2021 Climate Strategy. It is also one of 29 signatories of the green and healthy streets declaration, focusing on pedestrianisation and electric vehicle charging facilities in the city's main business areas, linked to its Transit Oriented Development Strategy (2016) (C40 2022). CoCT is also a member of the Global Resilient Cities Network (the legacy organisation of the Rockefeller 100 Resilient Cities Network), UCLG and ICLEI. Meanwhile, Greater Manchester is also a member of the Global Resilient Cities Network (GRCN) as well as the Milan Urban Food Policy Pact.

Notwithstanding this increasing emphasis on transnational networks, many other elements and complexities of city leadership institutions, tools and processes often exert stronger localisation pressures (McGuirk *et al.* 2016; Van der Heijden & Hong 2021). A systematic review of over 200 cities worldwide found that the tools used remained predominantly very local in nature, the strategic urban plans commonly had downward linkages to localised plans but few contained upward links to national and global agendas, and that actors participating in such plans were often very localised (Rapoport *et al.* 2019: 100). However, the research predated implementation of the global sustainable development agenda from 2016 onwards, and the picture today appears rather different, at least in terms of upward linkages, as the C40 (2022) evidence cited above and the case studies presented here reveal. This probably reflects the evolving nature of city networks—especially those like C40 and GRCN which were formed with those specific objectives—to help address the global agendas, the growth of study visits (Perry & Russell 2020; Haupt 2021) and other strategies to learn from elsewhere.

The growing emphasis on transformative agendas and actions recognises the limitations of hitherto often incremental or other limited interventions, the so-called ‘low-hanging fruit’ that have often already been implemented when deemed helpful, affordable and relatively straightforward socio-technical interventions. Such approaches are often characterised as the building blocks of urban sustainability transitions (Hölscher *et al.* 2018). However, they are also commonly argued to be too limited in scope and ambition to address any of the fundamental structural problems and associated unequal power relations that provide institutional inertia or defend the status quo. Instead, more ambitious programmes are required to implement a structural step change if net zero or the sustainable development agenda targets are to have a far greater likelihood of being met. This applies to urban areas as well as other scales or spatial entities (Pelling 2014; Revi *et al.* 2014; Hölscher *et al.* 2018; Simon & Leck 2015; Simon & Solecki 2018). For instance, Aylett (2014) and Romero-Lankao *et al.* (2018a: 587–589) demonstrate the transformative ambition and impact that can be achieved by integrating urban climate change mitigation and adaptation programmes rather than acting on each separately, which generates only incremental change.

Recent research has, nevertheless, challenged the notion that transformative adaptation (or adaptive transformation) necessarily requires major step changes. Indeed, Termeer *et al.* (2017) argue that this is unrealistic in most cases and there is little evidence of existing urban local governments or other governance institutions having done so or being able and willing to undertake such fundamental change. Instead, drawing on a long tradition of organisation theory research in which concepts such as the ‘reflective practitioner’ (Argyris & Schön 1978) were coined, they argue—with a logic reminiscent of the rationale of earlier incrementalist or reformist arguments—that accumulations of deliberate and interlocking smaller, incremental changes can and do generate continuous transformative change. In other words, even under such processes, the whole can and does become more than the sum of the parts. Similarly, Patterson *et al.* (2021) underline the importance of an insider view for understanding the myriad of constraints in urban planning in practice when seeking to undertake transformation in non-ideal institutional settings. Such critiques of transformation discourses appear to have validity, yet they may also, at least in part, constitute accommodationist responses when initially radical or progressive discourses become institutionalised, thereby losing their critical edge and being constrained by practicability within those institutional parameters (Pelling 2014; Simon 2003: 20–21). The extent to which organisational champions as discussed above (Leck & Roberts 2015) can bridge such constraints is probably context dependent. This conundrum is discussed further under governance below.

Furthermore, uncertainty and risk constitute key inhibitors of more far-reaching change, especially in relation to the outcomes of substantive changes and in situations of scarce resources that now constrain urban governments almost universally. This challenge has often been overlooked as a result of focusing on structural opposition to change and, in contrast to the perspective of Pelling (2014) and others cited above, Roslan *et al.* (2021) argue that a transformation to risk-sensitive urban planning and development is required to mitigate the uncertainties associated with climate-related disaster risks. Their schema identified seven principal risk themes, of which negotiating trade-offs and governance of multiple stakeholders were the top priorities for attention to enable such a transformation. Reducing differential vulnerabilities is also crucial to coping with urban risk (Romero-Lankao *et al.* 2018b; Romero-Lankao & Gnatz 2019), as examined in the next subsection.

Accordingly, one objective of this paper is to examine, by means of a comparative study of Cape Town and Greater Manchester, how the plethora of interventions of all scales and levels of ambition to address climate and environmental change interact. The respective local governments, the City of Cape Town and the Greater Manchester Combined Authority (GMCA) (and its 10 constituent local authorities), understand the challenges and have undertaken many actions and formulated climate, environmental, resilience, mobility and economic regeneration strategies and plans to this end. These differ in comprehensiveness and ambition within and between cities, as revealed by the previous cross-city comparative research (e.g., Perry *et al.* 2021; Valencia *et al.* 2021). However, these have been produced with differing extents of public consultation and active engagement, and often remain the responsibility of individual municipal departments or sections. Hence, the

extent to which these suites of actions and strategies interconnect is assessed, and whether, taken together they represent, or over time are generating, continuous transformative change. For reasons explained above, the potential value of TMN membership in such policy formulation and implementation is also addressed.

2.2 URBAN JUSTICE AGENDAS

Though differing in extent over space and time, persistent poverty, racial inequality and other forms of non-normativity that produce exclusion are defining features of unsustainability and poor resilience that result in injustice. The notion that sustainability cannot be attained with substantial poverty and inequality has been globally recognised at least since the Brundtland Commission Report (WCED 1987) and underpins the current global sustainable development agenda (see below). It has become increasingly understood in recent years that ‘the good city’—one based on ‘utopian thinking’ where there is the capacity to imagine and strive towards an emancipatory and equitable future that departs transformatively from present conditions (Friedmann 2000)—is also a sustainable city where goods, resources and space are distributed equitably to meet the needs of local people while conserving the environment for the future.

Achieving this ambition of conjoining just and sustainable urbanism, however, requires action to change the structural relations that generate and maintain inequalities, such as land and housing tenure and security systems, access to health and education and effective governance—the key bases for accumulating social power, as Friedmann (1992) put it. Since those who hold power very rarely surrender or loosen it willingly, the challenges are formidable and concerted resistance can lead to violent conflict. In this sense, just urbanism has often been conceived as a normative agenda, envisioned and defined by power holders as an agenda which can be achieved through incremental actions rather than transformational structural changes (Fainstein 2014). This underlines the necessity for actively pursuing transformative change that links sustainable urbanism with justice agendas.

Concerns with urban justice, albeit expressed in diverse terms over time, have resonated through the history of urban planning since the utopian visionaries such as Ebenezer Howard, Frank Lloyd Wright and Le Corbusier. More recent articulations have focused on notions of the good city and just city as articulated by progressive urban planners and sociologists such as John Friedmann (Friedmann 2000) and Susan Fainstein (Fainstein 2014), respectively, as well as rights-based, participatory and inclusive approaches such as the right to the city, participatory budgeting and the like (Parnell 2016). These ideas and approaches now underpin the urban components of the global sustainable development agenda, SDG 11 and the New Urban Agenda, and advance urban debates by clearly linking justice with sustainability and other urban agendas. As Parnell’s (2016: 137) detailed review concludes:

Achieving greater urban fairness presupposes a capacity to learn and to do things differently; this is not a new agenda and there is a rich legacy of urban utopian thinking, albeit largely European and North American, from which we can and should draw while thinking innovatively about a collective, more fair, urban future.

Building on these legacies, Realising Just Cities became the organising framework for the innovative comparative urban research agenda of Mistra Urban Futures from 2016 to 2019 (Simon *et al.* 2020), which also provided the framing context to the research reported here.

The focus within most climate change and disaster risk reduction literature naturally falls on extreme events and the differential human and spatial vulnerabilities exposed and deepened by one-off and repeated exposure to such hazards in various kinds of human settlement (Simon 2012; IPCC 2022). However, chronic or everyday risk exposure to climate-related hazards (Ziervogel *et al.* 2017), often compound other ongoing environmental and health exposures that create chronic vulnerability and low resilience, especially among the urban poor, whose capacities have systematically been diminished by economic and social structures. This constitutes one often-overlooked dimension that must be incorporated into transformative risk-sensitive urban

