Foreword

Gregory Hodkinson & Mark Watts

The Powering Climate Action report is the first of its kind: a comprehensive survey of the powers and governance approaches used by cities to deliver climate action. It spans all global regions, all urban sectors, and unlike any other study, is built on 125,078 data points reported directly by 66 C40 cities.

The report’s publication is very timely. The urgent need for meaningful international cooperation to reduce emissions is reaching fever pitch. As the leadership needed from nations continues slowly to take shape, it is action by cities that will help close the emissions gap and keep alive the possibility of a climate safe world. Cities, and other non-state actors such as regional government, the private sector, civil society and investors are ultimately responsible for delivering GHG reductions on the ground.

The data surveyed in this study tells a very clear message: cities have the tools to play their part. Cities have power across a huge range of assets and functions, enabling them to take meaningful action. To accelerate and expand urban climate action we need a better understanding of the conditions that help or hinder progress.

The New Climate Economy Global Commission has made a powerful case for why low-carbon leadership in cities is essential and the economic case for urban climate action. The Global Commission also strongly emphasises the importance of international cooperation in delivering this. Cooperation raises ambition, and allows sharing of expertise and learning, collective development of new standards and approaches and the pooling of resources.

Powering Climate Action firmly demonstrates that collaboration works. Cities that govern collaboratively deliver vastly more transformative action than those who rely on direct implementation. The report also establishes the basis for that cooperation. The data shows that C40 mayors have remarkably similar power profiles across regions and sectors, giving cities a strong foundation from which to share, collaborate and facilitate.

Finally, the report offers a firm message of empowerment for all C40 cities, and cities worldwide. The evidence shows that in specific areas, having direct power enables more action. However, in most areas, cities are able to deliver transformative action even where they have limited power, by collaborating with other cities and non-state actors. Limited power needn’t mean limited action.

Delivered as the first product of a three-year global research partnership between Arup and C40 Cities Climate Leadership Group (C40), we hope cities, their partners and the wider community will receive this report as a firm call to action, to collaborate and move forward together to deliver the kind of transformative climate action that is needed so urgently.

Executive Summary

Introduction

Powering Climate Action: Cities as Global Changemakers explores the complex interplay between the powers that city governments hold, the governance and decision making structures in which they operate, and the actions they are able to take to address climate change. The report identifies the characteristics of power and government that are conducive to climate action.

The research analyses data about city ‘powers’ collected from cities in the C40 network, supplemented by data about city climate actions (from C40’s Climate Action in Megacities 2.0) and urban governance characteristics (from University College London’s City Leadership Initiative). The findings are grounded in background research focusing on the existing understanding of city climate governance.

The study highlights the characteristics of urban climate governance that prevail in C40 cities, as well as the breadth and depth of powers cities hold over assets and functions. Together these dimensions of power combine to form power signatures, which describe the profile of power a city has over an asset or function, or even a whole sector such as transport. These can then be used to compare and contrast cities and to understand how they deliver action.

By assembling the critical components of a city’s governance and delivery infrastructure, the report presents a pathway to climate action that highlights the important aspects of cities’ climate governance, including political context and government structures, as well as potential delivery routes and partners who may be involved in the delivery of action.

Through the development of six urban governance typologies (Table 1), the study also examines the typical models of governance adopted by cities and demonstrates how governance – rather than just power – impacts a city’s capacity to take action. This link is further illustrated through regional snapshots of climate action, which illustrate how power profiles and delivery capacity compare across regions.

<table>
<thead>
<tr>
<th>Table 1: City governance typologies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commanding cities</strong></td>
</tr>
<tr>
<td><strong>Implementing cities</strong></td>
</tr>
<tr>
<td><strong>Providing cities</strong></td>
</tr>
<tr>
<td><strong>Legislating cities</strong></td>
</tr>
<tr>
<td><strong>Collaborating cities</strong></td>
</tr>
<tr>
<td><strong>Facilitating cities</strong></td>
</tr>
</tbody>
</table>

1 “C40 Cities Climate Leadership Group (C40)”
This pathway is a framework to understand how cities deliver climate action. The particular route a city takes along this pathway defines their governance approach. The political context and government structure that describes the type of city from an institutional perspective. The power that a city has to implement, defined as four main dimensions of power. The assets, such as road infrastructure, and functions, such as promoting economic development, that a city exercises power over. The levers used to deliver change within the city, defined as four main levers. The other organisations that a city may partner with to take more or better action than they could on their own. Finally, all resulting in delivery of climate action, for example a congestion charge.
Key Terms

Table 2: Key Terms

<table>
<thead>
<tr>
<th>Power</th>
<th>The degree of control or influence mayors exert over assets (such as buses) and functions (such as economic development) across all city sectors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>A set of formal administrative structures led by an elected or appointed leader with a mandate to govern a city or state.</td>
</tr>
<tr>
<td>Governance</td>
<td>The system of governing through which a range of public and private actors deliver core services.</td>
</tr>
</tbody>
</table>

The study investigates the types of power that cities typically hold over their assets and functions. Powers include: from ownership and operation of assets or development of policy and legislation, through to budgetary control or vision setting. The analysis shows that cities have a varying profile of different powers, depending on the particular assets or functions in question.

On the other hand, the individual characteristics of city governments have a clear influence on a city's capacity to deliver climate action. For example, the findings of the analysis suggest that cities with shorter mayoral terms and directly elected mayors, and which operate under non-hierarchical government structures, tend to deliver more action than those with alternative profiles.

While these individual characteristics may help to describe broadly the optimal conditions for delivering action in terms of government structures, it is the interrelationships between these and other factors that truly demonstrate how a city operates. Analysis of the city governance typologies reveals that cities that work in collaboration with other partners – including actors from the private sector, community groups and networks – deliver more actions across all sectors and regions of the C40 network.

Powers and Governance

It is sometimes the perception that cities are each of a different type that working with each city will be a new learning process, and that there is always some need to re-invent the wheel when transferring solutions between them. The analysis finds, however, that while cities use a variety of types of power to achieve action, many cities employ the same profile, or combination, of power types across their various assets and functions. The existence of such clusters, or power signatures, demonstrates that groups of cities use similar approaches to deliver action. These combinations provide a strong platform through which cities can collaborate, much like they do through the C40 network, sharing their knowledge and experiences in exercising power to deliver climate action.

When it comes to delivering action, the way cities use their powers is more important than the dimensions of power they have.

The research emphasizes that having less power to own and operate assets and functions – the powers traditionally associated with achieving more action – does not necessarily lead to cities delivering less action in practice. Instead, cities with powers that are typically considered “weaker” – such as vision setting – are in fact taking action at a significant scale. Cities are using innovative approaches to overcome an absence of ‘stronger’ powers by implementing softer policy tools – in combination with harder options – to achieve their goals. For example, the power to set and enforce policies that require others to act. An overview of types of city governance provides a better understanding of the potential delivery routes and actions involved in guiding and influencing climate action.

Cites are in a unique position to catalyse wider climate action.

Another perception about cities, for instance from the private sector, is that due to their complexity and scale, cities can be challenging partners to work with. However, the work demonstrates that many cities are ensuring comprehensive action is taken through collaboration, challenging this missheld perception. With their broad range of capabilities – to operate services, fund investments, and promote targets and goals – at multiple levels of city administration, cities are uniquely positioned to tackle the myriad challenges associated with climate change. In this report, the development of typologies enabled a more accurate picture of how cities operate. The typology analysis reveals that city governments are often more successful in delivering climate action when they cooperate with other with other actors from the private sector and civil society, for example. Nurturing partnerships with actors from both state and non-state actors may afford cities the opportunity to employ their powers most effectively and ultimately catalyse climate action.
Cities in **North America** have, on average, a moderate power score and the majority of actions are transformative or significant in scale. Action is carried out in the majority of sectors via the Collaborating typology, suggesting that cities are using both their conventional powers – to own or operate, for example – in combination with alternative forms of powers such as partnerships with other actors.

Action is delivered in the majority of sectors in **Southeast Asia & Oceania** using either the Facilitating or Collaborating typology. Cities in this region have on average a low to moderate level of power and approximately only half of the total actions are at a significant or transformative scale. This suggests cities are compensating for their lack of strong power over assets to coordinate actors and collaborate with partners to deliver action.

In **Latin America**, approximately half of all actions taken by cities are at a transformative or significant scale and have on average a moderate power score. On average, sectors in this region fall primarily into the Facilitating or Collaborating typologies.

In **Europe**, the Collaborating typology is most common across the different sectors, though the Facilitating and Providing typologies are also prominent in delivering action. The majority of actions are at a transformative or significant scale.

In **East Asia**, cities have a high average power score and a strong degree of power over their assets in each sector. The Legislating typology is the most common across the sectors, followed by Collaborating. Just over half of city actions are at a transformative and significant scale.

In **South and West Asia**, despite having a low average city power score, a substantial number of actions are at a significant scale. The majority of sectors have implemented climate action using the Facilitating typology, which suggests cities are using innovative ways of enabling action to overcome their lack of access to power.

In **Africa**, cities have a high average power score though they have implemented comparatively few actions. The Providing and Collaborating typologies are most commonly used by cities in this region. This reflects both a high level of control over assets and a tendency for cities to implement action through alternative means and partnerships.
Call to action

As urban populations continue to grow, so does the prominence of city-led action in tackling global challenges like climate change. The findings of this research confirm that cities are in a strong position to catalyse climate action. Indeed, many cities are already leading the way in taking strong and meaningful actions to reduce greenhouse gas emissions and increase urban resilience. In December 2015 the United Nations hosts a forum for cities at the international climate change negotiations (COP 21) in Paris. Here, under the Compact of Mayors cities will be making commitments on emission reductions that are analogous to the Independent Nationally Determined Commitments of nation states.

Based on the evidence, this study presents four main recommendations:

- **Cities should recognise that limited power need not necessarily mean limited action.** Cities have enormous potential to deliver action through a broader approach to governance. Through partnerships with other cities, government, private businesses, investors and civil society, cities are taking extensive action even where they don’t have strong power. For example cities have taken 1,027 actions where they have limited power over assets (around 13% of all action).

- **Cities should reach out to partners to collaborate in delivering action.** As this report shows, cities that collaborate deliver more action. In fact, on average, those cities that take a collaborative approach to governance deliver twice as many actions as those that implement a less partnership-based approach. As such, cities should reach out to the private sector and civil society, as well as other cities, to deliver more action, and get the most out of the actions they take.

- **The private sector should actively seek to partner with cities to capture unique economic opportunities.** Because cities share strong similarities in the types of power they hold, there is no need to reinvent the wheel when working with different cities. There are strong regional similarities in governance, for instance. The mix of governance approaches used by European and North American cities are on average almost exactly the same, with collaboration with partners being the most common governance approach for these cities. For instance, C40 cities have full direct control or ownership over 60% of all assets in the transport and buildings sectors.

- **The wider international community must empower cities to deliver climate action.** Although in the broad sense cities are taking extensive action where they have low power, in some areas lacking power may inhibit action. Powering Climate Action propagates a call to action for governments and other actors at all levels to help cities leverage the powers and resources they need to expand the scale and scope of climate actions. For example, in the buildings sector, where cities have strong power they deliver almost three times as much action per city as those with limited power. In addition, cities with strong power are taking 37 actions to deliver Building Energy Management Systems, and 20 actions to deliver Energy Performance Contracting.
C40
North West Entrance, City-Gate House
39-45 Finsbury Square, Level 6
London, EC2A 1PX
United Kingdom.
Tom Bailey: tbailey@c40.org

ARUP
13 Fitzroy Street,
London, W1T 4BQ
United Kingdom.
Paula Kirk: paula.kirk@arup.com