International Round Table - Accelerating Climate Mitigation at City Level

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An International Round Table on Accelerating Climate Mitigation at City Level took place online on 20th April 2023, with participants from city and regional governments from the Netherlands, USA, Spain, France, Norway, Germany and the UK (see end for details). The round table was co-hosted by the Centre for Climate Change and Social Transformations (CAST), The Tyndall Centre for Climate Change Research and the Greater Manchester Combined Authority (GMCA). The invited participants were all officials tasked with implementing ambitious climate change mitigation plans. The purpose of the round table was to provide a space for people in these positions to share their experiences and learn from each other. In particular, we wanted to try to create a space where colleagues could share challenges as well as successes in delivery.

The round table was structured to focus on cross-cutting issues that were raised as important by participants in advance: tools for mainstreaming climate action, setting targets and making progress, engaging with the public, and maximising impact with limited resources. Specific technical sectors, in particular transport and buildings, featured heavily throughout the discussions.

What follows is a summary of key themes and questions that emerged from these discussions. It is not a list of solutions, but an indication of the pressing issues and current approaches being adopted by those at the forefront of making climate change mitigation happen at city and regional scales. As swift decarbonisation is not only a technical challenge, but a huge political and organisational challenge, it focuses on cross-cutting questions of strategy and governance. Examples from various technical sectors are given to illustrate how these questions arise in practice.
Mainstreaming climate action within the public administration: the role of climate checks and decision support tools

Mainstreaming climate action across the many different functions and departments of a public administration is widely seen as challenging. Cities use several different but similar mechanisms to achieve it: climate decision tools, climate assessments or checks, and climate budgets.

An Excel-based “Carbon and co-benefits” decision support tool has been developed in Greater Manchester, through collaboration between researchers from the CAST Centre and the Tyndall Centre at the University of Manchester and the Greater Manchester Combined Authority. This enables officials to create a short report on the impact of their proposals across all of GMCA’s strategic priorities, including decarbonisation but also social equalities, economic development, health, housing, etc. All proposals need to have an impact report from the tool before they can be considered for approval by the Combined Authority. The tool is also being developed in an online form, and adapted for use by other local authorities around the UK.

Several other participants noted that they also had tools or standardised climate assessments, which should be applied to new policies or projects. It was suggested that these various tools were useful for checking the impact of a project, but the important question was whether their use and results would make a difference to decisions. Will decision-makers actively prioritise pro-climate projects and policies, and block projects or policies with negative climate impacts? The ‘institutional home’ of the climate tool within the municipality was one factor that some participants felt was important in relation to the tool’s impact on decisions. Where use of the tool is driven by a department that is already powerful, e.g. the Finance Department, then some reported that it makes the tool more effective in promoting organisational change.

As well as influencing decision-making directly, standardised assessments and decision support tools also generate data that can be used to support climate action in various ways. Some participants spoke of making the data publicly available, to better demonstrate what cities were doing to tackle climate change, and enable citizens to hold administrations accountable for their progress. Others reported that they were investigating integration with GIS software to enable a spatial analysis of climate mitigation projects, giving a sense of how far climate action involved the whole city or region. It was also suggested that the data could be analysed to show the impact on climate goals of different kinds of projects (housing, transport, etc), or the progress made by different city departments towards climate goals.
Multi-level governance: managing relationships with other levels of government

No public body exists in a vacuum, and all our participants had experience of working with other levels of government: both larger scale (often national) governments, and more local or smaller scale bodies.

Larger scale institutions were often felt to be a valuable source of funding and policy support. However, these institutions can also set national policy that constrains local flexibility, even when it is supportive of decarbonisation as an overall goal. One example raised at the round table was that of national air quality targets, which in several countries effectively require municipalities to reduce the use of car transport. However, Clean Air Zones that charge for some vehicles - based on their level of emissions – for entering the city centre were widely discussed as provoking opposition and public dissatisfaction that was directed at the local rather than national government. In still other cases, it was noted that larger scale authorities may be controlled by different political parties to local administrations, with different priorities, and may even actively prevent cities from pursuing ambitious climate goals.

Conversely, local authorities may themselves be in the position of being the 'larger scale authority' to several smaller governments – whether at neighbourhood or town level. While the structures and distribution of powers varied considerably between different participants’ cities, in some cases the municipality was limited in its ability to mandate change at smaller scales. In such a situation, participants spoke of two possible approaches. Firstly, playing a convening role, e.g. encouraging local bodies to sign up to a climate declaration and plan. Secondly, playing a leadership by example role: implementing what decarbonisation projects they could in order to demonstrate what was possible and set an example for others to follow.
Urgency, trust, incentives and penalties: building and maintaining public support

Shifting the behaviours of citizens was recognised as complex and inherently time consuming, involving dealing with millions of individual decision-makers. Participants spoke of feeling a tension between the urgency and speed of action needed to respond to the climate emergency, on the one hand; and on the other hand, the speed of action possible when working with citizens, where you can only “move at the speed of trust”. It was recognised that, although trust was important for all citizens, it might be particularly lacking among communities that were historically disadvantaged.

While there was a consensus among participants around the need for social justice in decarbonisation, public perceptions of fairness in how climate policies impacted on different groups and communities were also widely felt to be important for achieving climate-related behaviour change. One case of a politically difficult trade-off that was raised is that of airports. While air travel is clearly associated with high GHG emissions, participants suggested that measures to reduce air traffic may be seen as damaging for city economies. In particular, they might provoke opposition from people working in the tourism sector, who could feel unfairly targeted. Yet one participant felt that if a municipality was attempting to cut residents’ use of petrol or diesel vehicles, but not tackling the emissions associated with air travel, this could also provoke opposition on the grounds of fairness. In this way, the apparently separate issues of local road transport and international tourism might become politically linked.

These issues of urgency, justice and perception surfaced in discussions of measures that mandated changes or penalised particular behaviours. Participants’ experience was that mandating change can enable faster transformation, but, as in the case of Clean Air Zones, it also risks political backlash. In particular, imposing penalties for not changing behaviour was generally felt to be politically challenging, but that it might sometimes be necessary to drive change at scale and speed. Questions were raised around the targeting and severity of penalties for non-compliance with climate mitigation regulations, and how to combine mandates and penalties with other, more facilitating and supportive measures.
Different capacities to change: fairness and justice in the low carbon transition

The differential capacity of people to change their behaviours and adopt new technologies or practices was discussed as a major issue in relation to the targeting of different measures to speed up decarbonisation. It was suggested that those most able to change could be targeted with mandates; those less able might instead be encouraged or supported to change - this was discussed in relation to both individual citizens and organisations.

Sometimes, capacity to change might relate to specific sectors. For example, in relation to building decarbonisation, housing tenure is a critical factor: people who rent their homes cannot take the decision to install low carbon heating but must depend on their landlord. However, in relation to Clean Air Zones and transport emissions, factors such as residential location and the type of job a person does are more important in determining capacity to change. In particular, it was discussed that the flexibility to work from home was not available in all jobs, and that, depending on the location and nature of work, some may feel they have no alternative but to use their car to commute. The potential for policies to be devised that treated these groups differently was discussed.

Alternatively, income and wealth were suggested as cross-cutting measures of ability to change. This might lead to e.g. a hypothetical city applying mandates to require residents to install low carbon heating, but providing financial support to enable lower income households to meet these standards. (This is a simplified example, of course; very likely a mixture of mandates, support and advice might be offered in various forms to a range of different households categorised by income, tenure, demographics etc.)

Another approach suggested was to target companies before individuals. Targeting private sector practices first was discussed as having both instrumental and moral value. Instrumentally, getting companies to change can create a demonstration effect that encourages and reassures others. Morally, it was discussed as a matter of social equity: government should not ask individuals (with limited resources) to make significant changes to their lives while organisations (arguably with more resources) continue with business as usual.

It was noted that it is important to develop approaches that engage all groups. As decarbonised services and ways of working become the 'new normal', it is important that people who are less able to change are not 'left behind' or made to feel that way.
Local capacity to support individual change: using local government’s financial power to stimulate provision

Participants noted that, for both practical and social justice reasons, where a policy mandates change (and especially where it penalises those who do not change), there should also be work to ensure that sufficient capacity exists in the local economy to support that change. For example, low carbon building retrofit requires both the manufacturing and delivery of products (heat pumps etc), and availability of skilled workers to install the products correctly. While the technology may largely exist, several participants discussed concerns as to the availability of sufficient manufacturing capacity to meet the scale of demand needed to meet building emission reduction targets, the affordability of existing products to most householders, and whether enough construction workers in their localities have the requisite installation skills. Or, in relation to transport, some participants argued that the provision of transport alternatives was a key precursor to introducing Clean Air Zones. However it was also noted that mandates can drive investment in manufacturing capacity and workforce skills, and that some uncertainty was an inevitable part of change on the scale of the low carbon transition.

This debate raises questions about the specific measures and timeframes for increasing local capacity in different sectors and different places: the costs and impacts of particular technical measures (e.g. promoting walking and cycling compared to promoting electric transport, or EVs compared to public transport); and the role of local government as facilitator or direct provider. In addition, it also introduces issues of delay and dependency - if it is felt that it is not possible to implement certain interventions or policies until extensive improvement and investment in alternatives has occurred.

In discussing how to build local capacity, the power of local government as an actor in the local economy was highlighted. Public procurement regulations were held up as important: decisions to only procure services from companies that adopt certain low carbon practices (e.g. electric transport) were said to be proving helpful in speeding up private sector climate mitigation action. In addition to procurement for their own operations, the possibility of local governments using their purchasing power to act as brokers and market makers for low carbon goods and services was also explored. It was suggested that bulk buying could facilitate economies of scale for manufacturers, enabling the cost of e.g. heat pumps to be reduced. In some cases it was reported that it could also facilitate the creation of products modified for a specific market or local conditions, e.g. to fit local housing stock.
There were areas where local government powers were felt to be limited in affecting the changes needed to deliver decarbonisation. For example, access to decarbonised electric power is fundamental to climate change mitigation strategies around the world. However, participants noted that providing this access can be challenging, even for those municipalities that owned an energy utility. Local government areas - especially cities - are rarely large enough to be able to meet all their local energy needs from renewable generation on their own territory: they must typically negotiate with/rely on energy system actors elsewhere for the provision of low carbon electricity. Where the wider electricity system was already largely renewable, that of course helped minimise associated local emissions; where it was not, it could slow the pace of local decarbonisation significantly. Finally, despite the enthusiasm for using city spending power to leverage change, it was recognised that city budgets varied widely, and that local government resources were not always equal to the weight of expectations placed on them by citizens.
Funding and finance for effective and equitable climate mitigation

How to secure the funding to support climate policies and implement projects was a question that concerned all participants. Starting with public sector funding, larger scale government institutions were found to be valuable sources of funding in several cases. Such funding was said to typically come with policy conditions attached, but if these conditions aligned with the policy priorities of the local administration, then this need not be a problem. In fact, it can be taken as ‘higher’ support for local policies, strengthening local climate advocates’ position in some contexts. However, where conditions attached are very restrictive, or where larger scales of government are less supportive of climate action, such funding may be less helpful or simply less available.

Looking beyond the public sector, participants reflected on often hearing it said that private sector finance for low carbon projects was “out there” in large volumes. However, they said that they struggled to reconcile the priorities of commercial investors with the demands of a socially just approach to climate change mitigation. This was because they felt that commercial investors were mainly interested in those projects that were larger scale, and that promised the highest financial returns or clearest short-term profitability; yet climate mitigation and social justice required the implementation of many projects that may make little or any short-term profit. Participants heard how some cities are working on securing packages of funding from diverse sources, and on ways to package combinations of energy transition projects with different levels of profitability together into investment opportunities that offer security of financial return to investors, while enabling the environmentally and socially necessary work to be done.
Topics for future discussions

A number of additional or more detailed areas were identified as being of interest to attendees for further discussion. CAST and the Tyndall Centre are open to working with the city and region participants to host further discussions. An initial set of potential topics were discussed:

**Scopes** – what scopes of greenhouse gas emissions are included in city or regional targets? What are the arguments for and against including different scopes in official targets, and how do the politics of this work in different contexts? Are carbon budgets useful for stimulating local action?

**Funding** – in particular, how to access private sector finance while still funding projects needed for a just transition?

**Sector specific technical roadmaps and pathways** – what are the technical solutions for decarbonisation in specific contexts? Depending on existing power grid supply mix, local geography and building stock, transport patterns, etc.

**Workforce development** – how to understand where the workforce (and business) development needs are for decarbonisation? How to address any gaps in skills or local organisational capacity? What role for local government to stimulate workforce retraining as fast as is required?

**Clean air zones** – how to make them work for the environment in a politically survivable and socially just way?

**Adaptation** – how are cities and regions forecasting impacts and vulnerabilities and enhancing resilience? How to combine mitigation and adaptation - are there challenges in communicating the need for implementing both sorts of measures?
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CAST is a global hub for understanding the systemic and society-wide transformations that are required to address climate change.

We research and develop the social transformations needed to produce a low-carbon and sustainable society; at the core of our work is a fundamental question of enormous social significance: How can we as a society live differently – and better – in ways that meet the urgent need for rapid and far-reaching emission reductions?

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