

# The Urban Climate Challenge

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Rethinking the Role of Cities in the Global  
Climate Regime

**Edited by Craig Johnson, Noah Toly and  
Heike Schroeder**

First Published 2015

ISBN: 9781138776883 (hbk)

ISBN: 9781315772981 (ebk)

## Chapter 9

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**Relational Agency and the Local Governance of Climate Change:  
International Trends and an American Exemplar**

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This research was supported by the Social Sciences Humanities Research  
Council (Canada) under Grant 430-2012-0827.



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LONDON AND NEW YORK

# 9 Relational Agency and the Local Governance of Climate Change

## International Trends and an American Exemplar

*Alexander Aylett*

### INTRODUCTION

Since the first urban climate initiatives began in the early 1990s, urban responses to the climate challenge have progressively shed their narrow environmental framings. A technocratic focus on measuring and reducing emissions is being challenged by a more holistic conception of climate planning and action that embraces increasingly complex engagements with other issues like economic development, equity, spatial development, health, and quality of life.<sup>1</sup>

As a result, this chapter argues, a new form of agency is emerging to drive urban responses to climate change forward. A top-down vision of climate action focused on the regulatory powers of isolated local government agencies is being replaced by one that is horizontal, relational, and collaborative. This is in response to the fact that no one agency or organization can take the cross-cutting action that holistic responses to climate change require. Rather, climate-relevant policies and programs are driven forward by coalitions of multiple different actors. This collaborative and networked approach to urban climate governance capitalizes on the synergies between objectives across different subject areas (emissions reductions and health, for example) and also between different groups of actors that cut across scales and bridge the governmental, civil-society, and private sectors. This approach transforms relationships both inside and outside of local governments, by linking together traditionally siloed municipal agencies and also forging partnerships with civil-society and business actors.

This chapter delves into the realities of orchestrating that type of networked and collaborative response to climate change. It focuses on the internal dynamics of mainstreaming engagement with climate change across the institutional silos that characterize municipal bureaucracies. The empirical material for this exploration comes from an in-depth case study of Portland, OR (a North American leader in urban responses to climate change). To put this case study into a broader context, the discussion also draws from the results of the MIT-ICLEI Urban Climate Change Governance Survey

(UCGS). The UCGS is the first large-scale international survey to gather information on the relationships of governance that shape urban responses to climate change. Analytical concepts drawn from institutionalism, new institutionalism, and actor network theory will help structure the discussion of this material and provide the foundation for a broader discussion of how we theorize climate governance at the urban scale.

My goal is to balance empirical and critical richness in a way that satisfies readers interested in the particularities of Portland's journey to being a climate leader, as well as those more focused on expanding how we theorize the urban as a sphere for action on climate change.

## **BROADENING HORIZONS**

Local governments have progressively been moving towards more holistic engagements with climate change. This is a profound shift that is taking us from rational technocratic and state-dominated processes to broad-based networked undertakings that attempt to structure effective partnerships across silos, sectors, and scales. Conceptions of climate agency are moving away from hierarchical and legalistic conceptions of action to ones that are increasingly relational and emergent. Conceptions of the issue of climate change itself are expanding beyond narrow framing centered around the environment and energy to ones that are increasingly woven into, even subsumed by, other issues of concern.

This shift responds to a series of technical, institutional, and political realities. At its most basic, networked approaches to climate governance reflect the fact that only a small percentage of urban emissions (roughly 1 to 10%) are under the direct control of municipal governments.<sup>2</sup> Taking action beyond the scope of the assets directly owned by local governments requires a coordinated use of the different policy tools that local governments have at their disposal.<sup>3</sup>

Discussions of “mainstreaming” engagement with climate change across multiple municipal departments are rooted in a recognition of the fact that to act at this level necessarily means going beyond what can be accomplished by any one government agency acting in isolation. It also implies creating and maintaining effective partnerships with private and civil-society actors able to act as partners in designing and implementing emissions reduction programs in areas outside of municipal control.

From a political point of view, this more holistic approach to climate planning also has the added benefit of building a broader base of support by directly supporting efforts to meet other pressing social and economic development goals. While maximizing outcomes by effectively coordinating the use of limited resources, attention to synergies therefore also helps effectively position mitigation programs within the complex political economy of competing local priorities.

Certain aspects of this continuing transformation are increasingly well understood. There are growing literatures on synergies between climate change and other local development priorities, the multi-scalar nature of urban responses to climate change, and the role of non-governmental (particularly civil-society actors) in responses to climate change. The importance of political champions and strong leadership has also received an increasing amount of attention.

Less well understood is what this transition means for the internal dynamics within and across municipal agencies. This is problematic. Both climate change and the agencies or individuals responsible for climate change planning are recent arrivals on the municipal policy making scene. They are often marginal, underfunded, and poorly staffed. From this position of relative weakness, increasingly holistic and integrated responses to climate change require them to negotiate coalitions of support that span multiple municipal agencies each with their own pre-existing mandates and core responsibilities. Understanding the internal functioning of municipal institutions is essential if we are going to talk meaningfully about local responses to climate change. This chapter aims to help get that conversation started.

Bureaucracies are perceived to be highly resistant to change. Superficially it is easy to blame the challenges faced by climate policies on the path-dependency of reactionary institutions. But that does not tell the whole story. Despite their apparent intransigence, organizations clearly do change. As other institutionalist and new institutionalist work has shown, the key question is not “why are institutions resistant to change?” But rather “how do complex organizations adapt to changing circumstances, and why are certain new courses of action accepted while other are not?” (see March & Olsen 1989, Schoenberger 1997).

In earlier work, I have focused on the organizational cultures and path-dependency of municipal bureaucracies, as well as the role of power elites in steering processes of change so as to protect established assets and divisions of power (Aylett 2011a, b, c).

Building on that work, this chapter will take a closer look at the strategies used by change-makers in the municipal bureaucracy to bring about change despite their often marginal positions.

## **ACTOR NETWORK THEORY AND BUREAUCRATIC PATH-DEPENDENCY AND CHANGE**

The literature around local responses to climate change is rich with discussions of the synergies and co-benefits of climate policies (Betsill 2001, Gibbs et al. 2002, Wilbanks 2003, Swart et al. 2003, Pielke 2005, Van Asselt et al. 2005). Specific renewable energy strategies can simultaneously reduce emissions, increase access to electricity among marginalized communities, and increase the resilience of the local energy system. These synergies have

important *technical* advantages; they allow multiple real-world objectives to be realized simultaneously and efficiently. But they also have important *political* advantages; they allow for multiple political imperatives to be met by a single policy.

By changing the value narrative(s) that surround a given policy, attention to synergies changes the way a given policy moves through the complex political economy of municipal decision making and the multiple (sometimes conflicting) priorities of local governments. Latour's work on Actor Network Theory (ANT), and the concept of "translation" specifically, shows how this process functions and how it can be used intentionally to facilitate changing long-established practices and (eventually) the priorities that undergird them.

ANT proposes a relational theory of agency deeply at odds with the hierarchical and exclusive vision of power embodied in hierarchical institutions. Rather than sovereign actors imposing their will from above, ANT envisions the capacity for action as the result of working with, or through, various other actants. Agency, in short, is acquired and relational, rather than inherent and individually possessed.

If actants end up working together, it is not because of any inherent alignment of their goals, or the ability of one to dictate terms to another. Rather, through processes of translation, their different interests become aligned and they have come to see collaboration with other parties on a given project or policy as the most effective route towards achieving their own objectives.

As Latour points out, interests are not the same thing as goals; rather "interests are what lie in between actors and their goals" (1987, 108). As a result, very different goals ("access to affordable energy for all!" or "reduced carbon emissions!") can be achieved by advancing the very same interests. "Translation" in this context is used to denote the process through which this alignment of interests is created (Latour 1987, 108–121).

Latour outlines five specific translation strategies that those wishing to advance a specific issue or technology (people Latour refers to as "contenders") can use to gain the support of other parties. I would like to touch briefly on three that are particularly relevant to the history of municipal climate action in Portland.

The first and most basic of Latour's approaches to translation involves identifying ways in which your goals can be met by simultaneously catering to others' interests. "The easiest means to enroll people," he points out, "... is to let oneself be enrolled by them!" (1987, 110). Even when effective, however, this strategy has limited reach. Used alone it requires that the contender's goals be completely subsumed within the priorities of other actors, and gives them no say in strategic decisions.

To more directly transform interests and goals so that they align with the contenders' interest, Latour describes a process he refers to as "displacing goals" (*ibid.*, 114). In this scenario, the contender transforms the existing interests of a more powerful agency by convincing them that conditions

have changed and that—if they wish to reach their stated goals—they must pursue new interests. Latour gives the example of how atomic physicists approached the Pentagon and convincingly redefined the Second World War, not as a conventional armed conflict which they had to win, but as a race to create and control atomic weapons. The physicists’ research, and funding for it, thus became central to the Pentagon’s goal of winning the war.

Finally, Latour’s last approach to translation is “becoming indispensable” (ibid., 119). What becomes indispensable, in Latour’s analysis, is not the efforts and activity of the contender themselves, but rather the necessity of pursuing the course of action which they advocate. This is, in other words, the description of a state where the contender’s goals have become integrated into the operations of other agencies to the point that they have become a necessary part of doing business. In this new arrangement “[n]o negotiation, no displacement would be necessary since *the others would do the moving*, the begging, the compromising and the negotiation. They are the ones who would go out of their way” (ibid., 120).

As will become clear below, these critical concepts are productive tools for isolating the techniques used by contenders in Portland to mainstream climate change across the municipality as a whole. The account that follows begins with an overview of the historical foundations of Portland’s climate change work. It then moves into a detailed account of the work of the city’s Office of Sustainable Development (OSD) during the first eight years of its existence. Throughout I will overlay key findings from the UCGS to highlight how the Portland experience relates to broader international trends in the urban governance of climate change.

## PORTLAND AND THE URBAN CLIMATE GOVERNANCE SURVEY

Portland is a leader in urban climate policy. In 1993 it became the first city in the United States (and among the first in the world) to enact a climate change strategy. Since then it has maintained its position by setting and meeting challenging emissions reduction targets, and nurturing cutting-edge initiatives in areas like renewable energy, green building, and (most recently) neighborhood-scale sustainability planning. Now an international icon of green urbanism, it has come a long way since the 1950s when it was, as one local historian pithily described it, “a strikingly dull and derivative city, only a restaurant or two above a logging town” (Johnson 2008, 16).

This chapter takes a critical look at that transition. Concrete achievements, like reducing emissions to 6% below 1990 levels (BPS 2012), are what grab headlines. But far more interesting are the conditions that made this type of successes possible. Behind the scenes, two years of extensive interviews and policy analysis<sup>4</sup> show that significant systemic transformations have been taking place within Portland’s municipal structures. Portland has

managed to take climate change planning from being a marginal exercise conducted at the fringes to one that is central to the municipality's approach to operations and planning as a whole.

Results from the Urban Climate Change Governance Survey (UCGS) show that a similar transition<sup>5</sup> is taking place in many other cities. Conducted in collaboration with ICLEI-Local Governments for Sustainability, the UCGS surveyed 736 ICLEI member cities across all five continents. Of these 350 (47.5%) responded to the survey. While cities report that initially their climate change plans were confined narrowly to plans specifically focused on climate change, we now see an increasing integration of climate change as a variable in sectoral and long-range planning across local government operations. The survey shows a 79% increase in the number of cities reporting that climate change is being integrated into sectoral plans, and a 55% increase in integration into long-range planning.

In Portland's case this process took nearly two decades, in other cities within the UCGS it appears to have happened more quickly. But in all cases those responsible for climate change planning had to negotiate the complex internal dynamics of hierarchical and siloized bureaucracies. Exploring the processes that made this transition possible are what we will turn to next.

## **PORTLAND: FROM LOGGING TOWN TO GREEN MECCA**

Portland's engagement with climate change dates back to the early 1990s, when it became one of the first cities in the world to commit to specific, citywide reductions in greenhouse gas emissions, and was part of the initial cohort of cities that helped to found ICLEI.<sup>6</sup> The municipality conducted its first community-wide GHG emissions inventory in 1990,<sup>7</sup> and passed its first "Global Warming Reduction Strategy"<sup>8</sup> three years later (Portland 1993).

But the foundations for the city's approach to climate change were laid decades earlier in an interesting confluence of environmental, energy, financial, and legislative factors that all positioned the city to be one of the first cities to later pursue municipal climate policies. The year 1979 was a critical one in the history of Portland's approach to energy and environmental issues. In that one year the municipality passed its first energy policy, founded its Energy Office, and adopted its first urban growth boundary. Enacted in response to a prolonged energy crisis that was affecting the region, and prior state-level legislation, these interventions laid the foundation for its later work on climate change (see Rutland & Aylett 2008 for a more detailed account of these events).

By 1998, Energy Office head Susan Anderson had developed a variety of program ideas that did not fit into the narrow focus on energy efficiency that had guided the Office's work since the late 1970s. Working with the support of key commissioners on Portland's City Council, Anderson won

support first for Green Building Initiative that kicked off in 1999, and then in 2000 into the creation of the Office of Sustainable Development, which she went on to direct.

OSD was created through the merger of the city's solid waste and recycling program with the Energy Office, the Green Building Initiative, and an existing advisory Sustainable Portland Commission. As well as a solid institutional home, this arrangement gave Anderson and her team a small but reliable source of funding derived from the fees and revenue associated with the waste and recycling functions they now supervised (OSD 2002).<sup>9</sup>

### **OSD First Years: Translation, Bridging, and Decentralization**

How to facilitate broad-based and creative engagement with climate change across the municipality as a whole became OSD's overarching goal. Echoing Latour's vision of becoming "indispensable" Anderson explained her ultimate objective: "Over time you want this just to be taken for granted as part of the way the world is. Something so normal that you don't even need to think about it" (Interview, 29 October 2008). By 2008, OSD had already come some way in making that goal a reality. But the challenge for the office when it began was how a marginal office with two staff and a small budget could have that kind of impact.

The initial approach was simple: "We worked with everybody" (*ibid.*). Putting into place the most basic of Latour's strategies of translation, Anderson met with the heads of all the municipal bureaus early on. From these meetings she identified ways that OSD could help them with their own mandates while beginning to integrate climate change and sustainability considerations:

One of the first things that I learnt [was that] we were nothing unless someone wanted us. So the first thing that I did when I had the job there was that I went around to each Bureau Head and got an hour or a half hour of their time and said "what do you need? What are your aspirations? Not from us, but what are you trying to get done?"

And then we would go and try to figure out how we could help them get their mission done. . . .[Say] they care about affordable housing. Well, we can work on that. Well they care about transportation modal splits, well we can work on that. (*ibid.*)

As Latour argued, this strategy of catering directly to others' interests is the most basic form of translation (Latour 1987). Summarizing this approach, OSD staff and senior officials describe the department as a "facilitator" or a "convener," even a "conciierge."

In this early stage of their work, this supportive role positioned OSD as a hub within the municipal bureaucracy (see Aylett 2013). It had partners in all the city's major bureaus and worked hard to maintain open



communication and collaborative relationships between them. In exchange, OSD began to see its own objectives of promoting energy efficiency and emissions reductions finding their way into other departments' work. They acted as a facilitator guiding creation and implementation, but the departments themselves did much of the work, provided funds, and received most of the public credit. OSD in fact strategically avoided claiming ownership of the projects.

Latour identified this kind of marginalization as one of the dangers of pursuing translation by catering to others' interests: "will [the contender's efforts] not be appropriated by others who say they did most of the work" (Latour 1987, 110)? Yes. But in this case it served OSD's larger goals to avoid the spotlight. Placing the focus on the bureaus helped develop their own internal capacities and slowly began to change their organizational culture. Mike O'Brien, of OSD's Green Building Program, described this shift: "Once they have to start thinking about sustainability as part of their job, it starts to change the culture of the agency. It starts to be OK to be concerned about sustainability" (Interview, O'Brien, 4 November 2008).

Starting with the 1993 City Energy Challenge that she ran while heading up what was then Portland's Energy Office, Anderson had successfully coordinated energy efficiency and building retrofit programs within the other municipal bureaus. This gave the bureaus hands-on experience with a concrete sustainability project that had tangible economic benefits.

This kind of concrete project opened the door to introducing the more complex synergies and overlaps between environmental objectives and other municipal priorities like health, walkable neighborhoods, and job creation. At a departmental level, OSD was then able to move beyond serving established priorities and to begin to more openly advocate for its own interests, but always on the basis of shared interests. Describing her current approach, Anderson explained that:

I don't feel like I need to convince everyone that global warming is real. I have to convince them that it is in their self-interest to take this action that I want them to take. (Interview, Anderson, 29 October 2008)

Initially OSD's work depended on its ability to cater to existing departmental needs. But here, Anderson is describing in general terms a shift towards a strategy of "displacing" established goals by showing that climate-relevant policies had redefined the strategies that bureaus needed to use to achieve their goals. This process of translation helped established climate change as a bridge issue that brought together various departments on the ground of common interest (see March and Olsen 1989, Callon 1986, Latour 1987, Rutland and Aylett 2008). Anderson's basic appeal to institutional self-interest managed, at least superficially, to lift the issue out of a narrowly environmental category and establish its broader relevance (Interviews, Armstrong, 11 June 2008, Anderson, 29 October 2008).

**INTERNAL POLYCENTRIC GOVERNANCE  
AND OPEN INNOVATION**

By 2008 the end result of OSD's work had been that engagement with climate change extended across the municipality as a whole. Tom Osdoba, who worked as a consultant for OSD and is currently director of the Centre for Sustainable Business Practices at the University of Oregon, summarized his view of this shift:

It is all very delicate, and it is all about relationships. I think Susan [Anderson] has a lot of success in figuring out those relationships and navigating that water from a position of relative weakness from an organizational perspective, to be able to put [ideas and policies] forward. (Interview, Osdoba, 22 October 2008)

Concretely this meant that OSD had strong working relationships with most of the municipality's major capital departments. For key relationships—such as those with the Planning Bureau, the permitting function at the Bureau of Development Services, and the Portland Development Commission—full-time staff were hired (occasionally at OSD's expense) to work within those bureaus to design and implement specific climate-related projects (Interviews, Debbie Cleek, Bureau of Development Services, 15 October 2008, Chris Dearth, Bureau of Planning 17 October 2008).

Overall, OSD's facilitative approach played a supportive role in a spectrum of projects that ran from the initiatives of single individuals (like Tom Ullman in the Maintenance Bureau, who installed solar panels on his own van to power his tools and then converted the Bureau's entire fleet) to large collaborative projects (like the Clean Energy Works energy retrofit and job creation program that involved OSD, the Portland Development Commission, and 12 other public, private, and non-profit partners in a city-wide effort to improve home energy efficiency). Crucially, none of these projects are the sole property of OSD. Rather they were created with OSD support, but are managed and operated by other units throughout the municipal bureaucracy.

All these cases demonstrate a form of relational, collaborative, and emergent agency where climate-relevant policies and programs are driven forward by coalitions of multiple different actors. Each individual initiative has a dominant public face—often the Bureau most directly responsible for the sector in question—but beneath the surface action is made possible by a network of actors. OSD fostered this open and unconstrained engagement with climate-relevant policies by feeding departments with a variety of sustainability options, and providing support and recognition for their accomplishments.

This is the antithesis of a centralized and hierarchical Weberian approach to creating and implementing climate policies (see Aylett 2011a) (vis.

Schoenberger 1997). The result is a body of projects that are innovative and varied, but also wildly uneven in terms of their scope and scale.

Mike Armstrong, OSD's deputy director and the principal coordinator of Portland's *Climate Change Action Plan*, spoke positively of what he called a state of "creative chaos" that surrounded sustainability initiatives in the city. He credited it for having encouraged broad and creative engagement with climate change across the municipality (Interview, Armstrong, 6 November 2008).

But successful as this approach has been, it also has an important weakness. This open facilitative approach comes at the expense of the ability to successfully establish an overarching strategy to guide the municipality's climate change efforts, and to ensure that these multiple atomized initiatives align to significantly reduce the city's emissions. Armstrong was open about this as well:

Portland is a cautionary tale of how you can do the right things for ten years, and still be nowhere near where you need to be. We are only just barely making our 1990 targets and that is a joke compared with where we really need to be. (Interview, Armstrong, 6 November 2008)

## THE LIMITS OF "STRATEGIC GRABBING"

Rather than "strategic planning," OSD's head Susan Anderson calls the department's approach "strategic grabbing": finding ideas and projects that at specific moments have traction with specific politicians or departments and facilitating their implementation. All of this depended on a relatively limited refocusing of various bureaus' attention on the financial rewards of energy efficiency and green building policies and programs. These approaches were designed to win general support for the issue of climate change within the municipality, and help nurture and support individual departmental policies. This facilitative approach had benefitted OSD, winning it internal recognition within the municipality, and allowing it to expand to the point where it had over 30 staff, and showcase offices within a prestigious green redevelopment in the city's Pearl district.

What this approach had not done was allow OSD to coordinate the strategic integration between the municipality's climate change goals and operational practices and plans in other departments. The relationship between OSD's climate objectives and the plans and the objectives of the Portland Bureau of Transportation (PBOT) for the period under study are a case in point.

Between 1990 and 2008, transportation-related emissions have remained stable for roughly 40% of the city's overall emissions (see Figure 9.1 on sources for Portland's emissions).<sup>10</sup> To tackle this, OSD's 2001 Global Warming Action Plan set out to reduce transportation-related emissions by

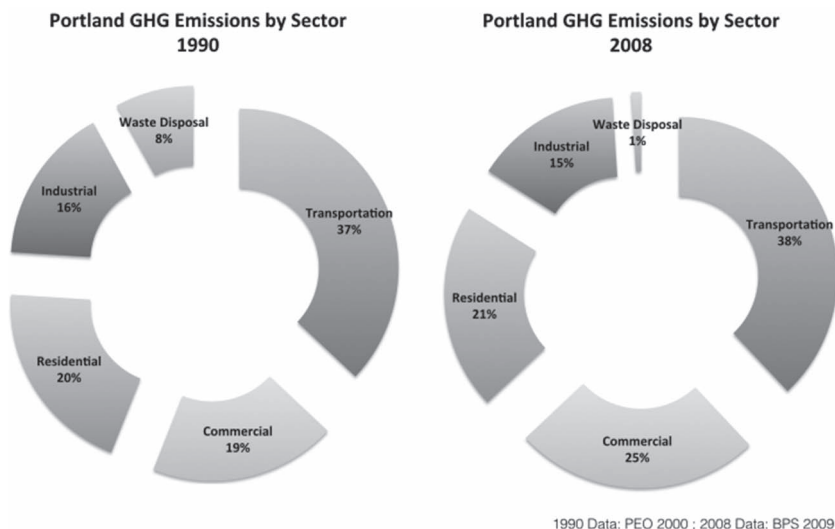


Figure 9.1 Portland GHG emissions by sector, 1990 and 2008.

Source: 1990 data: PEO (2000); 2008 data: BPS (2009).

roughly one third by 2010. But by 2008, rather than a decrease, we in fact see a slight increase in transportation-related emissions. The bureau with the most direct influence over these emissions is PBOT, and a closer look at its own objectives for this period go some way towards explaining why emissions in the sector failed to decline.

Commuters in Portland (as in all North American cities) are overwhelmingly dependent on their cars. A total of 62% of commuters drove to work alone in their cars in 1994, and this figure stayed almost unchanged into the early 2000s. To reach OSD's goal of a one-third reduction in transportation emissions, reducing the number of single-occupancy vehicle (or SOV) trips would be crucial. But PBOT's 2006 Transportation Systems Plan proposed something much more modest: a reduction of 5 percentage points (from 62% to 57%) in SOV trips by 2020. This is a far cry from what OSD's emissions reduction goals would require.

It is clear elsewhere in the 2006 plan that PBOT is generally supportive of the role that transportation planning can play in reducing the city's environmental impact and its GHG emissions. Other documents (PBOT 2009) also show that the PBOT had engaged in many of the types of operational energy efficiency actions promoted by OSD (installing high-efficiency lighting, for example). But the disparity between the objectives proposed by OSD and PBOT shows to what extent OSD's facilitative approach could fail to effectively coordinate a unified municipal response to climate change, or to influence the plans and objectives of key municipal agencies when it

came time to go beyond minor efficiency gains and to modify their core strategic decisions.

### AIMING FOR “INDISPENSABLE”

From Armstrong’s frank appraisal of OSD’s work up to that point, quoted earlier, it is clear that by 2008 OSD was keenly aware of a need to adjust its strategy. Somehow, in the transportation sector and elsewhere, OSD needed to provide stronger direction and more effective support in a way that could spark a deeper operational engagement with climate change among the city’s key bureaus. But it needed to do so while maintaining its facilitative role as a hub within multiple networks of relational agency. It needed to find a way, in Latour’s language, to move closer to being “indispensable.” To spark that transition, OSD centered its strategy around the creation of the 2009 Climate Change Action Plan.

Portland’s third CAP, released in 2009, was dramatically different in both its content and—crucially—the process through which it was created than those that came before it. Committing the city and county to reduce their overall emissions by 80% below 1990 levels by 2050, the plan remains one of the most ambitious municipal climate change action plans in North America.<sup>11</sup> To implement such an ambitious plan, its targets needed to be supported by the departments and staff who would be responsible for enacting them. Pursuing what Armstrong called “a tricky balance between too much control and not enough,” it needed to create a document that was both ambitious enough to address the true scope of the climate challenge, and also widely supported.

To achieve that, OSD designed a process for drafting the plan that—as well as creating the text of the plan—built and maintained collaborative relationships across departments that would enable implementation. Michelle Crim, a program manager within OSD, described the type of shift that was involved:

The other two [earlier Climate Action Plans] were essentially OSD plans. It was the carbon and climate plan for the city but other bureaus didn’t have ownership over it. They probably didn’t even know it existed. . . . It was very much: “That’s what OSD does.”

[This time] we had a lot of city staff involvement. We were purposely really responsive [to internal feedback]. . . . Ultimately what ended up happening is a lot of the actions that are in that strategy helped to further the bureaus’ own priorities. (Interview, Crim, 29 June 2010)

In this, Portland is a leading example of a more general finding from the UCGS. A majority of cities (61%) reported that their plans were created with regular input by other municipal agencies throughout the planning

process. More specifically, over one third of respondents (37%) report that the person/unit specifically tasked with climate planning oversees a collaborative planning process that *extensively* involves other multiple local government agencies/departments.<sup>12</sup>

Working with a Latourian logic, Armstrong and Crim used the process of creating the CAP to translate climate change in such a way that it “displaced” already established goals within major municipal departments (cf. Latour 1987). This time, however, this process of translating climate change had to engage with more complex processes of coalition building than simply showing that changing light bulbs would save departments money.

To achieve this, technical groups were assembled for each of CAP’s eight key subject areas.<sup>13</sup> These were made up of both municipal employees and outside experts. These groups created individual action plans in each subject area. The plan could therefore not be narrowly pigeon-holed as “what OSD does.” This approach also ensured that multiple perspectives would be incorporated into the finished document, and helped avoid a plan which reflected only the situated knowledge of a limited constituency within the city (vis. Haraway 1991, Schoenberger 1997).

At the same time, a more informal process vetted each action with the bureaus that would be most impacted by it. For each area of the CAP, Armstrong, Crim, and John Tydlaska (from the Portland Development Commission) would identify the most relevant program managers within municipal bureaus and work with them personally on the objectives and the text of the plan. The goal of this process was to ensure that both the objectives and the way in which the objectives were expressed resonated with established institutional priorities and discourse.

Interestingly, the tactics employed during the CAP process also figured prominently in the responses captured by the UCGS. As was noted earlier, a majority of cities reported an increase in the integration of climate change into the plans of multiple municipal departments. Respondents were asked which strategies had been most effective in promoting this cross-departmental mainstreaming.<sup>14</sup> Tactics for building internal networks between departments dominated the strategies that were identified as most effective. Among these were more formal interventions such as creating climate change or sustainability-focused working groups that brought together staff from various agencies (ranked fourth). But even more effective were informal interventions based on person-to-person exchanges and trust. Specifically, the top two strategies were:

- “creating informal channels of communication between the person/team responsible for climate planning and staff within other local government agencies” and
- “cultivating personal contacts and trust between the person/team responsible for climate planning and staff within other local government agencies.”

These results confirm the role of personal networks and relationships of trust in creating the conditions necessary for shifts in policy direction within complex urban systems that has been noted in other research (see Campbell 2012). They also echo Anderson's personal approach to building connections within Portland's bureaucracy, and the less formal vetting process that the OSD team built into the process of creating the CAP.

But this should not downplay the importance of more formal interventions that aim to directly build bridges between the climate planning team (and the climate plan) and other local government agencies. The third-ranked strategy was to address the issue directly by hiring or designating staff within local government agencies to coordinate that department/agencies' engagement with climate responses. The fifth-ranked strategy approached the same issue through the planning process by creating climate policies and programs that also help meet the existing (non-climate related) priorities, goals, and core mandates of local government agencies.

As we have seen, all of these tactics featured prominently in Portland's approach to mainstreaming engagement with climate change.

## THE UCGS: CHALLENGES OF UNEVEN ENGAGEMENT

But the Portland case study and the results of the UCGS both bring to light other more complex and problematic aspects of this collaborative and relational approach to climate change planning. In the UCGS, as mentioned above, a strong majority report that their climate plans are created with significant input from other municipal agencies. While this may be the case, this participation is in fact highly uneven.

To understand the engagement of different local government agencies in greater detail, respondents were asked to rank the degree to which specific agencies contributed to designing and/or implementing climate change adaptation and mitigation plans.<sup>15</sup> What emerged was a portrait of deep divisions. The agencies that contributed most heavily were those responsible for environmental planning, land-use planning, solid waste management, water, and transportation. Those that contributed the least were the locally operated electrical utility (where these existed), and the agencies responsible for health, and economic development. These agencies were also those where respondents reported the least alignment between climate change mitigation plans and the existing objectives of the government agencies responsible for those issues. The distance between high- and low-ranking agencies was considerable, with 61% of respondents reporting that land-use planning agencies contributed significantly, in contrast to only 29% for health agencies.

In other words, while local governments are reporting a general turn towards collaborative climate planning and a mainstreaming of climate change across municipal affairs, this movement is distributed unevenly across the institutional landscape. In some areas collaborations have been

effectively built around common interests. But in others processes of translation have yet to effectively build the necessary foundations for joint action.

## PORTLAND: THE VALUE OF INTERNAL CONFLICT

This unevenness seen in the UCGS manifests itself in a different way when you scratch beneath the surface of the Portland story to get to a second grittier dimension of the 2009 CAP planning process.

The objectives proposed in the CAP are a significant diversion from the standard approaches of the city's bureaus. Practices like a modal shift in transportation from private vehicles towards public transit and cycling had their supporters. But they were still the subject of internal debate and conflict.

The CAP played into these conflicts. It provided an opportunity for staff already engaged in efforts to change bureau practices to gain legitimacy and leverage by embedding their position in a high-profile city-wide policy. OSD therefore also tactically applied the CAP process to support contested processes of organizational transformation already taking place within other municipal agencies. As Crim explains:

[Within the Transportation Bureau there is] an internal struggle that they have had around the priority of cars versus other modes of transportation. . . . Their traditional mission is to make sure that cars can get from A to B and as quickly and efficiently as possible. But there's another segment there that needs to get people from A to B in something other than a car. [Transportation planners trying to reduce the role of the private automobile] came to a place where they saw the Climate Action Plan as a tool that can help to strengthen their side of the argument.

There were disagreements like these within other bureaus as well. By having this longer process we were able to deliver what's essentially a policy document for the city that furthered these priorities at least among certain programs and staff within those bureaus and added [to their] legitimacy. As a result of that I would say this plan has tons of shared ownership. I've constantly been amazed to hear not only other city bureaus talking about the Climate Plan as their plan—not just the city's plan. (Interview, Crim, 29 June 2010)

The presence of internal conflict meant that the CAP was valuable to those pushing to shift the organizational culture and technical practices of their bureaus. The situation within the Transportation Bureau appears to have been similar to accounts of “guerrilla warfare” within private corporations, where internal factions fight to shift the established methods and organizational culture of the organization (see Schoenberger 1997, for example).



New Institutionalist research has also called attention to the dynamic but contested process through which bureaucratic organizations respond to changing circumstances (cf. March and Olsen 1989, 2004).

Recognizing the significance of these moments of contestation, OSD allied itself with key actors in those internal conflicts. It presented the CAP as a powerful overarching municipal document, which could provide legitimacy for the changes that departmental “guerillas” were seeking to create. Bringing together these two bodies of theory expands on Latour’s original conception of the function of processes of translation. It highlights the fact that acts of translation can target counter-cultures within existing organizational cultures, not only dominant actors and established objectives.<sup>16</sup>

## DISCUSSION

[When I started] I was still not really hired by the city or anything. I was this little intern person who was walking around and talking to city council members saying ‘global warming is real’ and they began to really believe that it was too. . . . I wouldn’t say ‘sustainability’, no one knew what it meant, it had too many syllables.

—Susan Anderson, Head, Portland Office of Sustainable Development, Interview, 29 October 2008

Anderson’s experience of trying to create significant change from a marginal position within municipal structures is not unique. Other researchers have also called attention to the fact that the people or teams tasked with climate planning are often marginal players within municipal structures, and are rarely directly in control of key policy areas (such as transportation, or spatial planning) needed to respond effectively to the problem (Bulkeley 2010, Alber & Kern 2008, Bulkeley et al. 2009). Fully 63% of cities in the UCGS report that they have only a single staff member or a small team of 1–5 people in charge of their climate change planning. Given the cross-cutting nature of climate change, effective urban responses therefore rest on the ability of small teams on the sidelines of municipal structures to mainstream and coordinate engagement with climate change across the various departmental silos that control individual pieces of a larger coordinated response.

The story of the first period of Portland’s engagement with climate change is one of important institutional successes. Anderson built up a highly skilled team to carry Portland’s climate and sustainability work. But beyond that OSD succeeded in gradually integrating awareness and engagement with the climate issue across the municipality’s key bureaus. OSD staff achieved this through perceptive and persistent networking and facilitation within the municipal bureaucracy.

Beginning with its early work on energy efficiency through to the collaborative approach it adopted for the 2009 CAP, OSD’s work was rooted in

an understanding of the necessity to coordinate collaborative relationships with other municipal departments. Portland's experiences are mirrored in the results of the UCGS, which shows a more general shift towards integrated, collaborative and inter-departmental approaches to climate change planning.

What impact does this have on the way in which we think about the governance of climate change at the urban scale? What does it say about the dynamics and processes of urban climate governance?

Mirroring Latour's arguments on the nature of agency, the material presented here is a strong argument for conceptualizing urban climate governance as a relational, collaborative, and emergent process. A process where no single team or department possesses exclusive agency to act. Rather, governance relationships are made up of coalitions of multiple different actors that together are able to push climate-relevant policies and programs forward.

From an internal institutional perspective, this highlights the role of the core climate planning team as a strategic convener and facilitator. Rather than simply determining technically sound policies, they have the added work of negotiating a place for the climate agenda within the context of multiple pre-existing urban priorities, and building internal coalitions of support for climate action. In Latour's vocabulary, they are a contender who must first cater to, then displace, and finally become indispensable to the established interests and goals of existing municipal agencies.

Likewise, climate change plans themselves are re-imagined. Rather than focus solely on the technical merits of the final plan, this analysis highlights the importance of the planning process itself in creating and maintaining connections between climate policy supporters across the municipality, and creating a document that enables their work and that is aligned with their specific institutional contexts. The plan *as process* becomes as important as the plan *as document*. It is not something created in isolation—rather, it is itself a result of the relational form of agency needed for its implementation.

This has implications for the conceptualization of climate change itself as an issue. There are very real ethical and technical reasons to approach climate change in relationship to other pressing local priorities. To these, this analysis adds a clearer understanding of the institutional importance of identifying synergies and co-benefits to help climate policies negotiate the complex political economy of municipal decision making, and to provide the foundation for cross-departmental coalitions of support. Climate change itself becomes a relational issue, an issue that acts as a nexus for the intersection of multiple other institutional interests.

Latour's work on the relational nature of agency, and the processes of translation through which coalitions of support can be created for new policies or technologies is particularly useful here. Latourian analysis can help make clear crucial aspects of the internal institutional work that surrounds designing and enacting urban climate change policies. As has been argued

elsewhere, the complexity of governance relationships that surround climate change at the urban level requires a broad-based theoretical armory (vis. Bulkeley 2010). Very different theoretical tools are necessary to study the interaction between the local state and other levels of government (for example), and those that structure the relationships between actors *within* the local state. In this chapter I have continued my work to synthesize a set of critical concepts appropriate to understanding the internal governance relationships within municipal institutions that surround urban responses to climate change (Aylett 2010a, 2010b, 2011a, 2011b, 2013).

But calling attention to the increasingly relational and networked nature of urban climate governance within local government institutions is as much a question as it is an answer. Techniques like collaborative planning, translation, and facilitative network building have their uses. But they also clearly have their limitations. This is apparent in the unevenness of internal governance relationships highlighted by the UCGS. It is also a key aspect of the Portland story.

How to build coalitions of support that more evenly engage all municipal agencies is one key question that emerges from this analysis. Are there strategies of translation that would allow agencies so far only tenuously engaged in climate planning and implementation (such as health or economic development) to be enrolled more effectively?

Where basic support has been won, how can it be amplified to engage even more meaningfully with the operational practices and planning processes that guide the development of our cities? How can climate change “contenders” strike the tricky balance needed to establish institutional networks of urban climate governance that are broadly inclusive, widely supported, and open, but also coherent, strategic, and ambitious enough to have a significant impact? Future research in these areas would contribute significantly to this conversation.

## NOTES

1. This mirrors a more general shift in the treatment of climate change as a policy issue at the national and international level (see, for example, Banuri et al., 2001).
2. See, for example, eThekweni 2007, New York, City of 2012, Portland 2009, Toronto 2007, Vancouver 2009.
3. Good examples of this policy coordination include coordinating transportation and land use planning; or effectively incentivizing green building practices through permitting practices, taxation, and education.
4. The case study that follows is built from interview material gathered as part of a larger comparative study focused, in part, on the institutional dynamics that affect a municipality’s capacities to design and implement ambitious climate policies (Aylett, 2011a). In Portland, I conducted 63 semi-structured qualitative interviews spread across two field seasons during the period from Autumn 2008 to Spring 2010. These interviews (lasting between 45 minutes

and 1 hour 15 minutes) were conducted with expert and elite respondents from the municipal, civil society, research, and private sectors. These included high-ranking municipal officials and political staff, the heads of local NGOs, community groups, and businesses. A selection of relevant middle management and project-level staff and community members were also interviewed. This broad sample allowed me to triangulate responses and attempt to correct for any biases in individual accounts. In preparation for these interviews, I read extensively within the municipal reports, best-practice notes, and other publications produced by municipal staff (for a complete list of interviewees, see Aylett, 2011c).

Interviews began with municipal officials from Portland's Office of Sustainable Development (OSD) who were most directly engaged with climate policies and programs. Subsequently, I pursued respondents in municipal departments that, while not tasked with climate policy, controlled key portfolios related to urban form, energy use, and emissions. Specifically, this meant the heads, middle and project-level managers from the departments dealing with the Planning, Water, Development and Permitting, and Economic Development. I also conducted interview with a small number of key political respondents who oversaw OSD, or who worked in the mayor's office.

Interviews often centered on specific projects, ranging from campaigns to reduce industrial emissions to large residential green energy projects. These individual projects were used as concrete examples around which to structure questions covering the institutional dynamics that surrounded attempts to integrate and mainstream climate change across municipal institutions.

5. The UCGS was conducted in partnership with ICLEI—Local Governments for Sustainability. It ran from May to August 2013. In total 736 cities were contacted via the ICLEI member contact database. Respondents were primarily the municipal officials most directly responsible for climate change planning. Participants were contacted via e-mail with correspondence being conducted in English, French, Spanish, and Korean. The survey was conducted online and was composed of approximately 64 questions (length varied slightly depending on respondents' answers). The response rate was 48%, with 36% completing the survey in full.
6. ICLEI, formerly the International Coalition for Local Environmental Initiatives, is the largest non-governmental organization working on local responses to climate change. ICLEI counts over 1,000 local government members worldwide, and its Cities for Climate Protection Program (CPP) and emissions inventorying software are among the most widely used tools for structuring and guiding local climate change planning.
7. It carried out a second one in 2000, and began annual inventories in 2005. Its inventories follow guidelines and employ emissions tracking software developed by ICLEI.
8. Also sometimes called the "Carbon Dioxide Reduction Strategy."
9. In 2002, for example, of the US\$3million received into the Solid Waste Management Fund, roughly US\$600,000 (20%) was transferred to activities outside of OSD's waste management division (OSD 2002).
10. That the city has held transit stable at a time when there has been a general increase in transit-related emissions in the U.S. is itself an accomplishment.
11. While not unique, that target places them among a small group of climate leaders (including the states of California and Florida, as well as the E.U.) that were considering or had adopted the same target. This target was also endorsed by President Obama and proposed by the (now failed) federal Global Warming Pollution Reduction Act (Sanders-Boxer) S.309 and Safe Climate Act of 2007 (Waxman) H.R.1590.

12. This leaves 32% of cities reporting that mitigation planning is conducted in a more isolated fashion either by core climate planning staff or among individual agencies/departments within their own silos (7% report carrying out their planning in other ways).
13. The eight focus areas of Portland's 2009 CAP are: Buildings and Energy, Urban Form and Mobility, Consumption and Solid Waste, Urban Forestry and Natural Systems, Food and Agriculture, Community Engagement, Climate Change Preparation, Government Operations.
14. Respondents were presented with a list of 14 commonly employed strategies that covered educational outreach, network building, and formal institutional reforms and interventions. They were then asked to identify the strategies that their local governments had employed and to rank their effectiveness on a scale from 0 "not effective" to 4 "highly effective".
15. Respondents were presented with a list of 11 key sectors (listed below) and asked to rank how the agency responsible for that sector in their municipality contributed to designing and/or implementing climate change policies and programs, ranked on a scale from 0 "no contribution" to 4 "contributes heavily." This question was asked twice, once for mitigation and once for adaptation. The sectors listed were: land-use planning, water, waste water, solid waste, transportation, economic development, health, local publicly owned electrical utility (where applicable), zoning, building codes, and environment.
16. This argument needs to be qualified, given that I was not able to secure an interview with a representative from the Transportation Bureau before the end of my field work.

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