Structural Challenges that Contributed to the Decline of the Communities for Climate Protection Programme

S. J. Birchall, PhD

Department of Accounting and Information Systems, University of Canterbury, Christchurch, New Zealand

Department of Accounting and Information Systems, University of Canterbury Private Bag 4800, Christchurch 8140, New Zealand, jeffbirchall@gmail.com

In 2004 New Zealand's (NZ) Labour-led government launched the Communities for Climate Protection - NZ (CCP-NZ) programme. Following a shift in Government leadership in 2008, from Clark's Labour-led to Key's National-led government, the CCP-NZ programme was discontinued. Through the narratives of managers charged with the implementation and delivery of the CCP-NZ programme, this paper explores the structural challenges that contributed to the initiative's decline in NZ local government. This research contributes to the academic literature by shedding light on the outworking of a local government carbon management strategy. Additionally, this study provides policy makers and managers seeking to embark on organizational carbon mitigation the opportunity to glean insight from the experience of public sector managers responsible for the CCP-NZ programme.

Keywords: New Zealand, local government, managers, carbon management

Introduction

Historically local government has not featured prominently in discussions on international policy, with regard to climate change, energy or otherwise. This trend began to change in the 1990s, however, following a summit (in New York, 25-26 January 1993) that brought together North American and European cities to develop a framework for action on greenhouse gas (GHG) reductions and energy management (ICLEI, 1993a).ⁱ Local government's contribution in this area grew further when the Organization for Economic Cooperation and Development (OECD) published the results of its review of urban energy management (see OECD, 1995). Recognizing the important role of local

energy management, as it was clear cities were large sources of energy related GHG emissions (e.g. Romero-Lankao, 2007), the European Union developed a funding stream for local government that helped make possible the creation of energy management programmes within Europe (Allman et al., 2004). This facilitated the emergence of local authority networks interested in sharing best practices in energy management and climate change mitigation (e.g. Allman et al., 2004; Lee, 2013), both within Europe (i.e. the Climate Alliance and Energy Cities) and internationally (i.e. Cities for Climate Protection).

Local authorities can "play an important role in realizing national climate policy targets" (Kok et al., 2002, p. 46). With urban areas responsible for almost 70% of anthropogenic carbon emissions (Lee, 2013), climate change is featuring more prominently on local government agendas (e.g. Lindseth, 2004; Birchall, 2014a; Bulkeley & Betsill, 2013). As a result, research into local governance of climate change has grown significantly over the last decade (Bulkeley, 2010), with studies ranging from exploring the process of climate change mitigation strategy development (e.g. Luque et al., 2013) to understanding the effectiveness of mitigation strategies in general (e.g. Bulkeley & Betsill, 2013; Yalcin & Lefevre, 2012; Argyriou et al., 2012; Jones, 2013). Yet, while local government are critical players in climate change mitigation (e.g. Lee, 2013; Castan-Broto & Bulkeley, 2013), the literature suggests that local efforts to manage GHG emissions are fragmented, with a propensity towards rhetoric, instead of integrated and effective actions (Romero-Lankao, 2012). Additionally, while local government participation in climate change mitigation networks has increased globally (Betsill & Bulkeley, 2007; Bulkeley & Castan-

Broto, 2013), the literature indicates that the value of these networks has been challenged (e.g. Krause, 2012).

Further, the literature suggests that political as well as administrative structures, or lack there of, tend to hamper the incorporation of climate mitigation activities (e.g. Holgate, 2007; Kithiia & Dowling, 2010; Jones, 2013).ⁱⁱ Likewise, in the absence of supportive policy at the national level, it is difficult for local governments to make significant contributions to climate change mitigation (e.g. Betsill, 2001; Gore, 2010; Birchall, 2014a).ⁱⁱⁱ In addition, while public sector decision-makers are in fact beginning to engage the climate change discourse (e.g. Bartlett & Dibben, 2010), and though local governments are beginning to appreciate the business case for GHG emission mitigation (e.g. Kousky & Schneider, 2003; Greenaway & Carswell, 2009; Lee, 2013), priority for action remains low (Brody et al., 2010).

In 2004 New Zealand's (NZ) Labour-led government launched the Communities for Climate Protection - NZ (CCP-NZ) programme. As the NZ arm of ICLEI's Cities for Climate Protection (CCP) campaign, the purpose of the CCP-NZ programme was to facilitate local government carbon management, and thus contribute to Labour's ambition of a sustainable public service (e.g. Birchall, 2014b). Following a shift in Government leadership in 2008, from Clark's Labour-led (more liberal) to Key's National-led (more conservative) government, the CCP-NZ programme was discontinued. While the literature suggests that the programme was terminated for reasons of political ideology (Birchall, 2014d), it is also evident that the initiative was suffering from a number of structural, or methodological and practical challenges.

This empirical study is part of a larger research programme that seeks to uncover public servant experiences with climate change mitigation and carbon management in NZ agencies. Through the narratives of managers charged with the delivery of the CCP-NZ programme, this paper explores the structural challenges that contributed to the initiative's decline in NZ local government.^{iv}. This study, therefore, provides policy makers and managers seeking to embark on organizational carbon mitigation the opportunity to glean insight from the experience of public sector managers responsible for the CCP-NZ programme. More practically, findings from this study may serve an instructional function; demonstration of lessons learned from the CCP-NZ programme experience may assuage local government buy-in and thus facilitate programme uptake elsewhere. Additionally, this research contributes to the academic literature by shedding light on the outworking of a local government carbon management strategy.

Programme overview

The CCP-NZ programme began in 2004, with funding from the Ministry for the Environment,^v support from the Energy Efficiency and Conservation Authority and Local Government New Zealand, and operational guidance from ICLEI, through its Oceania Secretariat.^{vi} During its operation, the CCP-NZ programme included 34 councils (regional, district and city), representing approximately 83% of NZ's population (CCP-NZ, 2009).

As a voluntary scheme, local government participation in the initiative was not mandated by Government.

Building on ICLEI's success with the Cities for Climate Protection (CCP) campaign in Australia,^{vii} the goal of the CCP-NZ programme was to help local government councils achieve quantifiable GHG emission reductions, both from within councils' own operations (corporate) and from within its wider community.^{viii}

As identified by many local governments and echoed by ICLEI's mantra, because of their proximity to the population, councils play a unique and pivotal role in demonstrating leadership on climate change mitigation (e.g. CCP-NZ, 2009). Likewise, local government is ideally situated to ease the implementation of government policy on climate change.

ICLEI and the CCP campaign represent a network of international governments keen on environmental improvement, and specifically climate change abatement. Association with ICLEI's network allowed participant councils in the CCP-NZ programme to benefit from sharing of best practices in GHG emission mitigation and the use of tried and tested methodologies. And more directly, programme participants benefited from workshops on capacity building for staff and management and technics for working with elected officials.

The scheme centred around its strategic framework, a "five-step standardised and internationally recognised process for measuring, reporting and monitoring GHG emission

reductions" (Birchall, 2014a). After councils committed to becoming a CCP-NZ

programme participant, they began the five steps, or milestones (CCP-NZ, 2009):

<u>Milestone 1</u> Conduct a GHG emissions inventory, analysis, and forecast (under a business as usual scenario) for corporate and community emissions.

<u>Milestone 2</u> Set emissions reduction goals relative to base-year; Targets should include policy set by national government.

<u>Milestone 3</u> Develop a local action plan to achieve sustainable reductions in emissions, demonstrate council's path to emission reductions; The action place should include existing measures that have been in place since the base-year.

<u>Milestone 4</u> Implement the climate action plan and quantify the benefits of policies and actions.

<u>Milestone 5</u> Monitor progress towards the reduction goal, and start the process for re-inventory and review of the plan.

A critical component of the framework was ICLEI's international CCP Greenhouse Gas Application (GGA) Software.^{ix} The central purpose of the software was to facilitate council emissions inventory development, assist with data analysis, and ultimately benchmark progress against other participant councils (CCP-NZ, 2009).

Along with the GGA software, the programme also employed the New Zealand Supplement to the International Local Government GHG Emissions Analysis Protocol (ICLEI, 2008), which was written specifically to address the unique needs of local government, and "seeks to follow certain principles,^x drawn from the WRI/ WBCSD GHG Protocol, to ensure accurate accounting and reporting" (ICLEI, 2008b, p. 4). The supplement provided councils with guidance on to how to quantify emissions from their own operations and from the communities within their boundaries.^{xi}

In addition to allowing councils to gauge the effectiveness of their emission reduction efforts, the five-step framework provided councils with the opportunity to highlight achievements and gain buy-in for future work. Moreover, by working through the milestones, councils "gain[ed] an understanding of how local authority decisions can be used to reduce [GHG] emissions while improving quality of life in the local community" (CCP-NZ, 2009, p. 44).

While carbon neutrality was not the focus of the CCP-NZ programme, councils' interested in pursuing this effort were provided with appropriate resources. Also, in consultation with NZ councils, ICLEI developed the Carbon Neutrality Framework for Local Government - New Zealand Version (See ICLEI, 2008a). This framework, in the absence of a global standard for carbon neutrality, assisted in the establishment of "an independent standard to define the concept and support a claim of carbon neutrality" (CCP-NZ, 2009, p. 4).

In terms of membership, the programme began with 12 councils: two regional councils, six district councils, and four city councils. In 2008 the programme's membership grew to include 34 councils: six regional, 16 district, and 12 city councils. By the time it ended in 2009, the programme's 34 council membership was dominated by district councils, which represented 47% of total membership. This was followed by city, then

regional councils which represented 35% and 18% of total membership, respectively (Figure 1). The programme experienced two waves of relatively high enrolment: 2004 and 2007 representing 35% and 29% of total programme membership, respectively. At 9%, 2008 was the year with lowest overall enrolment.

Figure 1: Programme participation as a proportion of council type and by date joined <INSERT HERE Figure 1 >

While the aim was to complete the programme's five milestones, because the programme finished prematurely, this was not possible for all councils. By the time the programme ended in 2009, only 6% of participant councils had completed the final milestone (Figure 2). Of the three levels of local government involved in the programme, only two city councils reached the final milestone.

Figure 2: Programme participation as a proportion of milestone (M) completion (by 2009) <INSERT HERE Figure 2 >

In the end, total reported and quantifiable GHG emission reductions from council activities, from base year (30 June 2004) to 30 June 2009, is conservatively calculated to be more than 400,000 t-CO2e (relative to generation of over 22,000,000 t-CO2e/year) (CCP-NZ, 2009).

Method

The research seeks to uncover public servant experiences with the implementation and delivery of the CCP-NZ programme in NZ local government. As a result, a qualitative approach was adopted. The study includes one longitudinal case study which focuses on member councils of the CCP-NZ programme. Of the 34 councils that were involved in the CCP-NZ programme, 16 councils are explored in the first phase of this study (Table 1), with a subset of 7 councils included in the second phase, which took place following one years time (Table 2).^{xii} The purpose of the second phase of interviews was two-fold: first to explore the managers' experience in more depth; and second, to triangulate the data from phase one. Council selection was based on a range of factors, including the type of council (regional, district or city), year of initial membership, the milestone achieved while participating in the programme, the council's population and location (i.e. north or south island). Ultimately, the councils selected for this research represent a good multi-level cross section of CCP-NZ programme participant councils.^{xiii}

The study involved semi-structured interviews with managers responsible for the implementation and delivery of the CCP-NZ programme in their organization, and semistructured interviews with three of the scheme's key programme architects (Table 3).^{xiv} Programme architects differ from managers in that the programme architects were responsible for the macro-level aspects of programme creation and operation, while managers dealt with the more practical (hands-on) aspects of the programme's day-to-day application. In addition, all interviewees were full time employees (not elected officials) of their respective organization.^{xv} Transcripts resulting from the semi-structured interviews were transcribed verbatim. The unsanitised transcripts were returned to the interviewees for their approval. Following approval, the transcripts were manually coded and studied to discover emerging themes. This is presented in the Results section as *In the beginning*; *Support*; and, *Approach*. Though sub-themes are included, because of the open-ended nature of semi-structured interviews, in some instances the sub-themes are not represented by all the councils explored in this research. Findings resulting from interviews with the programme architects are incorporated in the Discussion section, which discusses further the themes presented in the Results section.

In addition to the semi-structured interviews with the managers and programme architects, this study was also informed by publicly available information relating to the CCP-NZ programme (i.e. information disclosed on ICLEI and government websites and media releases). For a more detailed account of the study's method, see Birchall (2014c).

 Table 1: Phase 1 interviewees (January 2010 - June 2010)

<INSERT HERE Table 1 >

Table 2: Phase 2 interviewees (February 2011)

<INSERT HERE Table 2 >

 Table 3: Programme architects (February 2010 - July 2011)

<INSERT HERE Table 3>

Results

The data resulting from the interviews with managers from organizations participating in the CCP-NZ programme suggested a similar experience between local government councils. Further analysis was organized around three primary themes:

- In the beginning, which explores the early stages of programme development and participant recruitment;
- **Support**, which explores leadership within the councils and engagement with programme partners;
- Approach, which explores programme delivery and methodology

In the beginning

In terms of timing, in other words, council's rationale for joining when it did, climate change was featuring more prominently on the global agenda, and therefore councils were becoming keen to act. For two of the seven phase two councils, joining the programme was considered the right thing to do (Appendix, Table 5), as explained by Southland District Council (Table 2):

It was just something that we should be doing and the world was becoming more aware about climate change. This kind of stuff made sense in terms of protecting the environment and being more efficient - even cost savings.

And for Wellington City Council, just as they were becoming keen to act on climate change, ICLEI was in the process of gathering support and meeting with prospective members: "So it was an issue that the council was considering and it was kind of timely that ICLEI was also going around talking to councils about their programme" (Table 2, Wellington City Council).

As for why councils did not join the CCP-NZ programme sooner, while Wellington City Council (Table 2) offered that "[climate change] definitely wasn't a priority for the council until it joined the CCP-NZ programme," according to Nelson City Council (Table 2), council did not join the programme earlier because it was concerned about the hidden costs it would incur:

The reasons for not joining [the programme] earlier were mainly related to concerns of the amount of staff time it would take and some councillors' fears about you know, you get some support like the intern, but what hidden cost would evolve.

Prior policy emerged as another sub-them in the research. While two councils indicated that sustainability policy did pre-exist council's membership in the programme, four of the seven phase two councils revealed that climate change thinking was not part of council policy before joining the CCP-NZ programme (Appendix, Table 5). And for Nelson City Council, climate change thinking was only present in so far as it related to adaptation: "Yes, in terms of you know how high a bridge should be, so that adaptation aspect" (Table 2, Nelson City Council).

Support

With regard to leadership and buy-in, of the 16 councils interviewed in phase one, only five councils mentioned senior management leadership (Appendix, Table 4). While four councils indicated that strong leadership did exist, one council suggested that leadership was in fact lacking: "There was not a lot of support in-house – trying to sell the idea to council was not easy" (Table 1, Environment Canterbury Regional Council).

One year later, five of the seven councils interviewed for phase two of the research indicated that buy-in for participation in the programme within senior management and council in general, was inconsistent (Appendix, Table 5). For Nelson City Council, while political interest was split 50/50, the Chief Executive did not accept carbon management as core business:

Some councillors keen - executive quite wary and some councillors quite wary, so 50/50. Well, actually our chief executive at the time. His view was that [CCP-NZ] wasn't core council business (Table 2, Nelson City Council).

According to Wellington City Council (Table 2), however, though "there were definitely people who didn't think climate change was an issue and didn't believe in the science in climate change," the programme did ultimately gain traction:

So I mean it definitely wasn't like, 'anti the programme', but there wasn't like an enthusiastic ground swell of positive energy. But I mean there was definitely support and that's why we participated (Table 2, Wellington City Council).

In a similar vein, for Rotorua District Council, while council did not necessarily buy-into the CCP-NZ programme, council believed that its membership was the right thing to do:

No [buy-in], not at that time. I don't think there was ever a view at that point anyway to

really take it by the throat and to you know really buy into it - I think it was just playing with it... I think at the time that this was being promoted because of the minimal cost and just being seen to be doing the right thing (Table 2, Rotorua District Council).

In terms of community buy-in, while Greater Wellington Regional Council (Table 2) indicated that support for council acting on climate change was dependent on the individual community, Wellington City Council (Table 2) suggested that community interest was quite pervasive: "Overwhelming support for acting on climate change."

In terms of engagement with ICLEI, in phase one, the majority of councils that discussed programme support indicated that ICLEI was strong when it came to supporting member councils (Appendix, Table 4). According to two councils, the programme was particularly effective at information sharing and providing technical assistance, as confirmed by Rotorua District Council (Table 1):

The material was there. If we wanted the assistance, the advice, the direction, the facilitation or putting in touch with other people - guidelines; all of that was there whenever we wanted it.

As per two other councils, however, "[ICLEI] didn't really provide that overall sort of guidance and encouragement" (Table 1, Hawkes Bay Regional Council). As the data suggested, this became increasingly the case towards the end of the programme:

In the end [CCP] wasn't giving the local government the support and information it really needed. There wasn't a lot of interaction between local government and the CCP down in Wellington in the end. It kind of fell by the wayside and so the councils were sort of left on their own to carry on (Table 1, Waitakere City Council).

Two of the seven phase two councils noted that the ICLEI presence in NZ was not engaged

with their council (Appendix, Table 5), as indicated by the following:

Oh, I don't think [ICLEI] were engaged at all. Well, to be honest ICLEI was a bit of a joke anyway.... and you know the support that they gave was minimum and random and not very professional at times. I mean I think ICLEI in Australia was doing a wonderful job, but we really weren't getting any useful information out of ICLEI New Zealand. They were under-resourced, understaffed and they weren't adding a lot of value (Table 2, Auckland Regional Council).

That said, five of the seven councils indicated ICLEI was indeed engaged with their council. In the case of Wellington City Council, however, it was confessed that this may

have been the result of location, given that ICLEI's NZ office was located in Wellington (Table 2, Wellington City Council).

But, while engagement did exit, Wellington City Council (Table 2) expressed that the engagement was not effective due to personality conflicts. This was reiterated by Greater Wellington Regional Council (Table 2): "People didn't find [the contact] easy to work with and so they tended to kind of keep [them] at arms length."

In terms of partner engagement, all seven phase two interviewees indicated that the Ministry for the Environment and Local Government New Zealand were not engaged with councils (Appendix, Table 5):

No, [the Ministry for the Environment and Local Government New Zealand] had no role at all; they were just not involved. Neither of them was involved really; I didn't see them as being active partners (Table 2, Auckland Regional Council).

Moreover, Dunedin City Council added that there was a lack of coordination between the programme funder (the Ministry for the Environment) and the programme provider (ICLEI):

So I don't think ICLEI got involved with [the Ministry for the Environment] to say, 'Right, here's an ICLEI MFE programme,' so they didn't integrate very well like that (Table 2, Dunedin City Council).

Approach

Of the 16 councils interviewed in phase one of the research, only one council suggested that the programme was well delivered, while five councils explicitly advocated that the programme lacked the appropriate focus (Appendix, Table 4). This was manifested

in two key areas: First, as Nelson City Council (Table 1) indicated, ICLEI encouraged artificially high emission reduction targets, which "set [council] up to fail."

And, second, as Auckland Regional Council B (Table 1) explained, the programme was more interested in increasing membership than addressing the appropriateness of the programme itself. This was particularly an issue for regional councils, as expressed by Hawkes Bay Regional Council (Table 1): while ICLEI was promoting the value of the programme, "I didn't really find that CCP recognised the role of the regional council."

A third, albeit less discussed area concerning programme focus relates to the community component of the programme. In this respect, while Dunedin City Council (Table 1) believed that in fact the programme had a stronger community focus, Hamilton City Council (Table 1) suggested otherwise, and noted that the community component of the programme was failing, particularly towards the end of the programme:

Where ICLEI stalled was around the community stuff. If they had more engagement either through local authorities or through other mechanisms with communities it would be a different story... the community wasn't able to get engaged too well, so the value has always been questioned, particularly recently.

Methodology also presented as an issue of concern. When discussing the methodology ICLEI used for the CCP-NZ programme, the majority (10 of 16) of phase one councils indicated that the methodology was inefficient (Appendix, Table 4). More specifically, Dunedin City Council (Table 1) explained that the programme was not sufficiently robust for council purposes, that "the actual software and methodology [ICLEI] used was quite light... [the programme] wasn't technically driven, the inventory was a bit

simplistic." Wellington City Council (Table 1) agreed, noting that the functionality of the software was inflexible: "you weren't able to put our own specific circumstances into ICLEI's inventory tool. It needs to be much more tailored to the council." Waitakere City Council (Table 1) reiterated these conclusions, and highlighted that if progress is measured by emissions reductions, than "the [methodology] needs to be a bit more rigorous."

Councils were also frustrated by the programme's inability to remain current, particularly with regard to global standards, as suggested by Auckland Regional Council B (Table 1): "I don't think CCP maintained or kept up with the maturity that grew within the sector. Some of the opportunities around benchmarking were not there. It's not ISO compliant."

Moreover, in terms of measurability, boundary scope was not well defined: "Goal posts must have shifted about three times" (Table 1, Greater Wellington Regional Council). For some councils this was further exacerbated by limited access to data, as explained by Dunedin City Council (Table 1): "Initially the organizational thing is difficult because all our energy accounts were paper based, stored after three months off site. So there was hardly any history available locally." Ultimately, concern surrounded the data itself. Three of the 16 councils interviewed indicated that they questioned the quality and/ or the usefulness of the data.

In spite of these criticisms (and in contradiction to the observations noted above), however, two councils did find that the programme had an effective methodology: "CCP could be tailor-made to any community" (Table 1, Kaikoura district council B). And for Southland District Council (Table 1), the strength of the programme was in the framework: "Follow these steps and it will guide you through it... it was quite valuable in that way." Yet later, during phase two, Southland District Council (Table 2) conceded that the data quality was poor.

In terms of community data, as indicated by two councils, the lack of quality and consistent data hindered the effectiveness of the community component of the programme as well; for Greater Wellington Regional Council (Table 2), the community inventory just wasn't sufficiently rigorous: "we just didn't think it was robust enough to stand up to the kind of scrutiny we thought we might be subjected to."

As for benchmarking, consistently, councils that discussed this component (both domestic and/ or international), confessed that it was not part of their GHG emission mitigation strategy (Appendix, Table 4). As explained by Wellington City Council (Table 1), "it became clear pretty quickly through the initial analysis of the CCP programme that every council is different. And so I found it quite difficult to benchmark." In spite of the unique nature and circumstance of each council, Auckland Regional Council A (Table 1) indicated that their council did in fact compare progress to that of other councils.

Another common sub-theme in the research was barriers to achieving the next milestone. The CCP-NZ programme ended prematurely, for some councils' this was the sole barrier to achieving the next milestone (Appendix, Table 4). For other councils, progress was hindered by resource constraints. For three councils, this was the result of a change in council or a shift in strategic priority, as indicated by Hawkes Bay Regional Council (Table 1): "So we haven't put a huge amount of priority on it." And for three other councils, echoing an earlier observation, access to quality data blocked the next milestone. It should be noted that while some councils indicated that access to quality data blocked their progression to the next milestone, the CCP-NZ programme framework does not require participants to progress linearly through the 5 milestones.

For Wellington City Council specifically, the barrier to achieving the next milestone was the uncertainty surrounding the value the programme offered to council:

Well, I guess the barriers were just wondering how much value it was going to add to us. Following this process is not going to give us that much - it's not actually going to deliver that much more other than a PR exercise (Table 1, Wellington City Council).

Transferability, although less discussed in the research, as only four of the seven councils interviewed in phase two mentioned this aspect of the initiative, did emerge as a sub-theme. In terms of how well the CCP-NZ programme transferred to New Zealand from its parent programme in Australia (CCP), two councils indicated that the programme transferred well to NZ (Appendix, Table 5), with Greater Wellington Regional Council (Table 2) suggesting that "an inventory's an inventory… Its kind of neutral across borders in a way." Notwithstanding their belief that the programme did transfer well to NZ, the council conceded that the programme lacked an adaptation component.

Two councils concluded that in fact the programme did not transfer well to NZ, with Auckland Regional Council (Table 2) suggesting that the programme did not address

the community side well enough. For Dunedin City Council, because ICLEI failed to provide adequate resources for the NZ arm of the initiative, the CCP-NZ programme did not translate as well as it otherwise could have:

There was a lot more support in some other areas for that programme and [Australia] was throwing money at it and that wasn't going to happen here. I think that [CCP (Australia)] probably had more staff over there, more support. We had one little group in Wellington with five people or four people that were running this programme in New Zealand (Table 2, Dunedin City Council).

Discussion

In 2004 when the CCP-NZ programme began, it was envisioned by the Labour-led government as a means to demonstrate sustainability within the public sector. And while programme members did indeed experience a number of significant benefits, including learning around climate change issues, improved network circles and inter-council collaboration on GHG emissions management related objectives (e.g. Birchall, 2014a), the initiative nonetheless suffered from a plethora of challenges that contributed its decline in NZ local government.

In the beginning

Councils were in the process of exploring climate change mitigation at about the same time that ICLEI was gathering support and meeting with prospective programme members:

[Climate change] definitely wasn't a priority for the council until it joined the CCP Programme. So it was an issue that the council was considering and it was kind of timely that ICLEI was also going around talking to councils about their programme (Table 2, Wellington City Council).

According to ICLEI B (Table 3), councils were quite keen to join the programme:

So when I went over to New Zealand and talked about what we were setting up here in Australia, New Zealanders [were] very interested ... We then started recruiting councils and we recruited them very quickly and to MFE that was seen as the market speaking. So the fast recruitment and we pushed it really hard was kind of proof that the market was saying, yes, we want CCP.

And as ICLEI B (Table 3) indicated, "[the programme] very quickly got momentum."^{xvi} The first year of the programme saw the greatest uptake in membership, with 35% of councils joining in 2004 (Figure 1). Interestingly, and perhaps linked to Labour's launch of the Carbon Neutral Public Service programme (though this was never mentioned in the interviews),^{xvii} 2007 saw the next largest wave of membership, with 29% of total membership.

Also of note, the bulk of councils that joined in 2004 (and in 2007) were District Councils. Had time (and access to key personnel) permitted, it would have been interesting to explore deeper into ICLEI's recruitment strategy, particularly given that, as Local Government New Zealand (Table 3) indicated, "[the recruitment strategy] was very weighted towards those authorities with larger populations." This would imply that city councils were the primary target, and begs the question, of those councils approached by ICLEI, how many ultimately joined the CCP-NZ programme.

Perhaps not surprisingly, the findings suggested that ICLEI sought to sign-up as many councils as possible.^{xviii} What's interesting about ICLEI's strategy, however, is that performance objectives were centred around the number of councils participating in the

programme as opposed to their progression through the five-milestone framework (Table 3, ICLEI A). Incidentally, only 6% of participant councils completed the final milestone by the time the programme ended in 2009 (Figure 2). While this suggests that ICLEI's ambition was public relations related (quantity over quality), which in fact was the belief held by Local Government New Zealand (Table 3), it is supported by the data which demonstrates that 45% of participant councils did not move beyond the first milestone (Figure 2).^{xix}

With that said, the lack of progression beyond the first milestone may be less about ICLEI's short-sighted performance objectives and more about councils' laggardness. After all, Government funded the interns whose sole task was to develop the inventory necessary to achieve M1. As such, and notwithstanding continued funding for programme membership, once funding for the day-to-day operations was gone, councils may have lost the drive to continue at their own expense, given the abundance of pressing priorities (e.g. Brody et al, 2010). Alternatively, the lack of forward movement may have been the result of the programme simply ending prematurely, as is suggested by the fact that 38% of councils joined the programme between 2007 and 2008 - it would take at least one year to achieve M1 after all.

Ultimately, the CCP-NZ programme, as indicated by Local Government New Zealand (Table 3), "would have been something that was driven from outside of New Zealand," implying that perhaps climate change thinking was not high on NZ councils' agenda. Yet of the 11 councils interviewed as part of phase one of this research, that

discussed whether climate change thinking was part of council policy prior to joining the CCP-NZ programme, all indicated that indeed it was (Appendix, Table 5).

Granted, for some councils, climate change mitigation was not necessarily the primary goal of their policies. Instead, as indicated by Environment Canterbury Regional Council (Table 1): "I think we don't really talk about it directly in terms of carbon, but certainly talk about it in terms of savings." And ICLEI must have been aware of this disposition, given that as Local Government New Zealand (Table 3) indicated, "[the programme] was promoted as a cost saving sort of thing" as opposed to strictly GHG emissions mitigation. While local governments are beginning to appreciate the business case for carbon management (Kousky & Schneider, 2003; Greenaway & Carswell, 2009), actions must compete with other responsibilities shunted from the national government:

Councils have had decades of increasing responsibilities to take up without funding to follow, so they themselves have found it extremely difficult to undertake new programmes that aren't legislatively – that aren't required (Table 3, ICLEI A).

What's more, four of the same councils that were interviewed as part of phase two, one year later, indicated that council policy did not include climate change thinking prior to joining the programme (Appendix, Table 5). And of those that indicated that climate change thinking was present before they joined the programme, all suggested that it was in the form of either sustainability or energy management and adaptation. This suggests that councils' interpretation of climate change policy varies across local government and is thus highly subjective.

Support

As for management leadership, though it does not appear to have been a problem (Table 4), the programme did lack a clear champion. As the literature suggests, the lack of a clear leader can hinder the actualization of a climate control agenda (e.g. Bartlett & Dibben, 2010). This was reiterated by Local Government New Zealand (Table 3): "There are very few local authorities who have a nominated climate change policy person." Moreover, notwithstanding funding to support an intern and pay programme membership fees, Government support for the initiative was also lacking:

And we know on climate change activities they're not supported in New Zealand to the same extent that they are in Australia – I know that. I mean in terms of what's happening in local authorities there's just nothing – we just get this huge vacuum of support (Table 3, Local Government New Zealand).

This is further substantiated by the interview findings, which indicated that 100% (7 of 7) of phase two organizations believed that the Ministry for the Environment was not engaged when it came to council involvement with the CCP-NZ programme (Table 5).

Communication between Local Government New Zealand and the Ministry for the Environment was also unproductive, particularly with regard to climate initiatives such as the CCP-NZ programme:

What we tried to do at the time was initiate a conversation with [the Ministry for the Environment] about setting up a... brokerage for a lot of information and ideas and best practice and stuff like that... you know we may as well just gone away and buried ourselves somewhere. We just can't get central government to engage (Table 1, Local Government New Zealand).

This was likewise the case between Government and ICLEI: "So I don't think ICLEI got involved with [the Ministry for the Environment] to say, 'Right, here's an ICLEI/ MFE programme,' so they didn't integrate very well like that" (Table 2, Dunedin City Council).

Unlike their experience with the Ministry for the Environment, the majority of councils did enjoy engagement with ICLEI (Table 5). With that said, however, ICLEI's administrative arm in NZ quickly deteriorated soon after the programme began, leaving councils without support and decreasing the value of their membership:^{xx}

Oh, I don't think [ICLEI] were engaged at all. And you know the support that they gave was minimum and random and not very professional at times. I mean I think ICLEI in Australia was doing a wonderful job, but we really weren't getting any useful information out of ICLEI New Zealand. They were under-resourced, understaffed and they weren't adding a lot of value (Table 2, Auckland Regional Council).

Specifically, the problem surrounded the National Programme Manager (ICLEI A). The National Programme Manager, while politically adept, lacked the resolve and leadership necessary to lead the programme: "Well, it's a leadership problem and even that's a little bit you know, it's really a single person... and I think that [ICLEI B] knew that there were issues as well" (Table 1, Local Government New Zealand). This claim is supported by the interview findings as well, where it is noted that "people didn't find [the contact] easy to work with" (Table 2, Greater Wellington Regional Council)... "there were definitely some personality conflicts" (Table 2, Wellington City Council). In fact ICLEI B was quite aware of the problem, as conceded later in our discussion: "I guess [the National Programme Manager] wasn't technically strong."

What is also telling is that while Local Government New Zealand (Table 3) revealed that when it came to discussions with the National Programme Manager "there was a distinct unwillingness to listen," it was ICLEI B's failure to communicate with the consultant charged with selecting the National Programme Manager that led to ICLEI A being hired in the first place; the consultant was prepared to advise against ICLEI A, believing that they were unsuitable for the position. But ICLEI B had already offered ICLEI A the post. This is further evidence of an endemic breakdown in the CCP-NZ programme's administrative architecture.

Approach

Though ICLEI B (Table 3) conceded that the National Programme Manager was largely responsible for the programme's decline in NZ, the programme's inventory tool was considered "quite light" (Table 1, Dunedin City Council) and moreover failed to remain current: "the tool that we used was becoming obsolete. It wasn't refined enough and in actual fact, it had reached the end of its life" (Table 3, ICLEI A). Recognising the deficiencies of the programme, ICLEI developed a protocol document that was intended to address NZ councils' unique needs and improve the functionality of the inventory tool (the CCP GGA Software). Unfortunately, as ICLEI A (Table 3) explained, the protocol was inconsistent with the original tool's methodology. While it remains unclear why the inconsistency was not addressed prior to the protocol's delivery, ICLEI was in the process of correcting the problems when the programme was cancelled: "with the CCP programme being pulled that stopped too" (Table 3, ICLEI A).

Another failure of the programme was the lack of formal benchmarking (Table 4). While the GGA software was intended to facilitate comparison and benchmarking within the CCP-NZ programme and between the larger pool of CCP participants (e.g. CCP-NZ, 2009), the majority of councils indicated that benchmarking was not practical, so they simply did not include it in their GHG emissions mitigation effort. This is likely a failing of the councils as opposed to the programme itself however, given that the software at the heart of the programme did indeed allow for comparison. With that said, though the programme endeavoured to follow "certain principles" (ICLEI, 2008b) from the WRI/WBCSD GHG Protocol, councils indicated that they had difficulty gathering consistent data (garbage in garbage out), thus rendering cross-council comparison difficult.

Yet the purpose of the CCP-NZ programme was not simply quantifiable GHG emission reductions, but rather to set long term policy related to climate change mitigation. In this capacity, as demonstrated here and echoed in Birchall (2014a), the CCP-NZ programme was indeed the impetus for local government action on climate change and moving forward, "because of their participation in the CCP-NZ programme, programme values became embedded in organizational management" (Birchall, 2013, p. 12).

Ultimately, the NZ extension of the programme was intended as a replica of the Australian parent programme. However, while ICLEI B (Table 3), asserts that the Australian programme was of high standard, implementation in NZ was weak: "So CCP-NZ being designed by us had the same approach technically. I don't think the implementation was anywhere near as strong as here [(Australia)]" (Table 3, ICLEI B). Yet

programme membership as a percentage of the total number of local government councils within each country was quite similar: 41% (233 of 565) in Australia (DIRD, 2013) and 43% (34 of 78) in NZ (DIA, 2011). This in spite of the fact that the CCP campaign ran seven years longer than the CCP-NZ programme. Further, in both countries programme membership represented a similar percentage of the population: 84% in Australia (CCP-Australia, 2008) and 83% in NZ (CCP-NZ, 2009). This would suggest that programme traction within NZ, despite structural challenges, was similar to Australia. Nevertheless, during the course of programme membership councils in Australia reduced GHG emissions by 18 million t-CO2e (CCP-Australia, 2008), while in NZ only 400,000 t-CO2e were reduced (CCP-NZ, 2009)., Given that the Australian programme included more councils than the NZ programme, and occurred over a greater period of time, this may not be a surprise.^{xxi}

Conclusion

Local governments can play an important role in climate change mitigation. However, ineffective political and administrative support structures (e.g. Jones, 2013; Birchall, 2014a) leave local efforts to manage GHG emissions fragmented (e.g. Romero-Lankao, 2012). The experience of councils involved in the CCP-NZ programme provides policy makers and managers seeking to embark on organizational GHG emissions mitigation (either voluntarily, or as a result of a national mandate) the opportunity to glean insight from their experience (lessons learned), which may assuage local government buyin, and facilitate the uptake of CCP-like initiatives elsewhere. The CCP-NZ programme experienced a number of structural challenges that contributed to its decline in NZ local government. Chief among the programme's barriers was a lack of effective partner support. This was further exacerbated by a breakdown in ICLEI's local administrative structure; as the CEO of ICLEI noted, the initiative's National Programme Manager, located in Wellington, was not effective in their role. These hurdles, directly or indirectly, ultimately contributed to the application problems councils were experiencing with programme delivery and methodology. As for the former, the data suggests that the CCP-NZ programme was geared towards quantity of membership, rather than a focus on a quality experience for those involved in the programme. In terms of the initiative's methodology, the majority of councils concluded that it was inefficient and that the software at the heart of the programme was insufficiently robust for the needs of the participants.^{xxii}

If another iteration of the CCP-NZ programme were introduced, in addition to focusing on carbon management rather than carbon neutrality, the initiative would have to be bipartisan in order to survive subsequent political shifts. Moreover, in order to achieve universal support the programme must demonstrate that energy and financial savings will be achieved, as well as reductions in GHG emissions.

To improve the efficiency and effectiveness of programme delivery and application, the scheme would have to enjoy partner support and engagement within the prescribed agencies. This can be achieved by including partners in the scoping and execution phases of programme development. In order to maintain engagement, while it may not be realistic to expect organizations to create a specific management position for climate change or sustainability, management should nominate a representative, a champion (perhaps under an energy manager), who will work closely with partner agencies. This will improve administrative continuity and promote internal capacity-building around climate change in general.

In terms of application, and in order to facilitate the incorporation of quality data, it is critical the programme include current management software that is appropriate for the intended user. Quality data will support domestic as well as international benchmarking. Along this line, if progression through the programme includes a milestone framework, managers must determine whether it is applicable in different countries, or even within the same country but in different regions. While the CCP-NZ programme did not require participants to progress through the milestones in a linear fashion, if the framework is too malleable, it may lose functional, quantitative and comparative value. Likewise, the next iteration of the programme may gain credibility if it were compliant to an international standard.

Acknowledgments

I am grateful to the Royal Society of New Zealand's Marsden Fund Grant # 08-UOC-025, which funded this research programme.

Notes

iii This is also manifested in a lack of capacity to execute a coordinated strategy for climate change mitigation (e.g. Corfee-Morlot et al., 2011).

¹ This article focuses on the experience of public sector managers within the NZ local government. Birchall et al. (2013) and Birchall (2014b) consider the experience of public sector managers within NZ ministries and departments. For an analysis that includes the application of political theory (termination theory), please see Birchall (2014d).

The Ministry for the Environment provided councils with a one-off payment of NZ\$4000 to employ an intern to assist with the completion of Milestone 1. This sum is noted in each councils' Milestone 1 report, see for example, Environment Canterbury Regional Council (2005).

^{vi} The International Council for Local Environmental Initiatives, today known as ICLEI - Local Governments for Sustainability (ICLEI), was founded in 1990. ICLEI is an international, not-for-profit association of local governments and local government organizations, with 1105 members in 66 countries (CCP-NZ, 2009).

vii The CCP campaign began in Australia in 1997 and ended in 2009; during that time (1998/99 – 2007/08) councils reported GHG emission reductions of 18 million t-CO2e (CCP-Australia, 2008).

^{viii} In terms of the CCP-NZ programme, "community" refers to emissions associated with the residential, commercial, and industrial sectors within council's land boundary. In instances were data allows, 'community' also includes the transportation and waste sector as well. Corporate emissions were broken down into five main sectors: buildings, vehicle fleet, employee commute, water/ sewage, and waste. As council is part of the community, corporate emissions are considered a "subset of the council's community emissions" (CCP-NZ, 2009, p. 7).

* The GGA software was modified for use in New Zealand in 2004 (CCP-NZ, 2009).

* The principles for achieving accurate accounting and reporting under the WRI/ WBCSD GHG Protocol include: relevance, completeness, consistency, transparency, accuracy, and conservativeness.

^{xi} ICLEI supplied councils with community inventory data, sourced from the Ministry for Economic Development, Energy Efficiency and Conservation Authority, and Ministry of Transport (CCP-NZ, 2009).

** Many managers responsible for the delivery of the CCP-NZ programme were disestablished following programme termination, access for interviews was therefore limited, and became increasingly more limited as time passed.

^{xiii} Given that it was not feasible to include all CCP-NZ programme participants in this research, reasonable effort was made to ensure that the study selection did indeed represent the CCP-NZ programme membership. For example, programme participation by council type: Total membership:18% regional, 47% district, 35% city; study selection: 25% regional, 31% district, 44% city. Programme membership as a proportion of year joined: Total membership: 35% in 2004, 15% in 2005, 12% in 2006, 29% in 2007, 9% in 2008; study selection: 44% in 2004, 19% in 2005, 13% in 2006, 25% in 2007. Programme participation as a proportion of milestone (M) achievement: Total membership: M1 44%, M2 9%, M3 29%, M4 9%, M5 6%, Political Declaration 3%; study selection: M1 31%, M2 6%, M3 31%, M4 19%, M5 13%. Data representing the total programme membership was extrapolated from *Communities for Climate Protection – New Zealand Action Profile 2009*.

^{xiv} The University of Canterbury Human Ethics Committee approved this research. Before each interview occurred, interviewees were required to sign a consent form, acknowledging that their participation was voluntary and that they could withdraw from the study at any time without disadvantage. Interviewees were also provided with a signed (by the researcher) security and confidentiality form, indicating that their personal information would be kept confidential.

^w It should be noted that efforts to meet with Nick Smith, Minister for the Environment and Climate Change Issues, and members of his staff, were unsuccessful.

xii ICLEI B (Table 3) notes that the larger councils in particular were very keen to act on climate mitigation, they were just unsure what to do – CCP-NZ provided the framework for action.

^{xvii} The Carbon Neutral Public Service programme was a Government initiative to move the core public service towards carbon neutrality (e.g. Birchall et al., 2013; Birchall, 2014b); the programme was abandoned in 2009.

x^{wiii} ICLEI B conceded that the programme was not likely to grow any further, given the percentage of NZ's population (83%) already represented by programme member councils: "you know with that percentage of population and that number of councils you're not going to get many more" (ICLEI B, Table 3).

^{xix} While the programme's goal was to help local government councils quantify their GHG emissions (M1), it was also to build off M1 and achieve quantifiable GHG emission reductions.

^{xx} Perhaps another angle of inquiry could explore the spatial dimension to ICLEI NZ's level of engagement. The findings suggested that perhaps ICLEI's point person based in Wellington was in more frequent contact with councils that were near to Wellington, i.e. Rotorua District Council, Nelson City Council, Greater Wellington Regional Council and Wellington City Council for example (Appendix, Table 5).

^{xxi} While the dynamics of the Australian CCP campaign's membership (and the associated GHG emission reductions) are beyond the scope of this paper, they are nevertheless an interesting area for future research.

x^{xii} While this study has identified weaknesses in the NZ arm of ICLEI's CCP initiative, were these weaknesses endemic to NZ or are they present within the CCP campaign in general? Further analysis of the CCP campaign's design and methodology could be instructional and shed light on the potential drawbacks of the programme and its ability to disseminate beyond Australia.

¹ The Cities for Climate Protection Campaign (CCPC), the parent program of the Communities for Climate Protection – New Zealand program, which is the focus on this paper and will be discussed later, emerged from the summit as tool to mobilize local government action on climate change mitigation. At its core, CCPC has four goals: (1) strengthen local commitment to reduce urban GHG emissions; (2) disseminate planning and management tools to assist in the development of cost effective emissions reduction policies; (3) research and develop of best practices; (4) enhance local government's role in/ with national and international policy creation (ICLEI, 1993b).

^a As Ball et al. (2009, p. 579) explain: "the literature underlines the role of local government agencies in particular as having responsibilities and decision-making powers in traffic, public transport, economic development, housing, and urban land-use planning which have led to a degree of political support for climate change policies, but with authorities lacking central government political and financial support, as well as, in many cases, competence to act."

Appendix Table 4: Phase one interview results <INSERT HERE Table 2>

Table 5: Phase two interview results <INSERT HERE Table 3 >

References

- Allman, L., Fleming, P., and Wallace, A., 2004. The progress of English and Welsh local authorities in addressing climate change. *Local Environment*, 9(3), 271-283.
- Argyriou, I., Fleming, P., and Wright, A., 2012. Local climate policy: Lessons from a case study of transfer of expertise between UK local authorities. *Sustainable Cities and Society*, 5, 87-95.
- Ball, A., Mason, I. Grubnic, S., and Hughes, P., 2009b. The carbon neutral public sector: early developments and an urgent agenda for research. *Public Management Review*, 11(5), 575-600.
- Bartlett, D., and Dibben, P., 2010. Public sector innovation and entrepreneurship: case studies from local government. *Local Government Studies, 28*(4), 107-121.
- Betsill, M., 2001. Mitigating climate change in US cities: Opportunities and obstacles. *Local Environment, 6*(4), 393-406.
- Betsill, M., and Bulkeley, H., 2007. Looking back and thinking ahead: A decade of cities and climate change research. *Local Environment*, *12*(5), 447-456.
- Birchall, S. J., 2014a. Carbon management in New Zealand local government: co-benefits of action and organizational resolve in the absence of Government support.
 Australasian Journal of Environmental Management,
 DOI:10.1080/14486563.2013.878258.

- Birchall, S. J., 2014b. New Zealand's abandonment of the Carbon Neutral Public Service programme: The National-led government's path forward on climate change mitigation. *Climate Policy*, DOI:10.1080/14693062.2014.877224.
- Birchall, S. J., 2014c. Qualitative inquiry as a method to extract personal narratives:Approach to research into organizational climate change mitigation. *The Qualitative Report*. In press.
- Birchall, S. J., 2014d. Termination theory and national climate change mitigation programs: The case of New Zealand. *Review of Policy Research*, *31*(1), 38-59.
- Birchall, S. J., Ball, A., Mason, I., and Milne, M., 2013. Managing carbon in times of political change: The rise and fall of the New Zealand Carbon Neutral Public Service programme. *Australasian Journal of Environmental Management*, 20(1), 63-78.
- Brody, S., Grover, H., Lindquist, E., and Vedlitz, A., 2010. Examining climate change mitigation and adaptation behaviours among public sector organizations in the USA. *Local Environment*, 15(6), 591-603.
- Bulkeley, H., 2010. Cities and the Governing of Climate Change. Annual Review of Environment and Resources, 35, 229-253.
- Bulkeley, H., and Betsill, M., 2013. Revisiting the urban politics of climate change, *Environmental Politics*, 22(1), 136-154.
- Bulkeley, H. and Castan-Broto, V., 2013. Government by experiment? *Global cities and the governing of climate change, 38*(3), 361-375.

- Castan-Broto, V. and Bulkeley, H., 2013. A survey of urban climate change experiments in 100 cities. *Global Environmental Change*, 23, 92-102.
- CCP-Australia, 2008. Cities for Climate Protection Australia: Local Government Action on Climate Change - Measures Evaluation Report 2008. ICLEI – Local Governments for Sustainability and the Australian Department of the Environment, Water, Heritage and the Arts. Melbourne, Australia.
- CCP-NZ, 2009. Communities for Climate Protection New Zealand Actions Profile 2009. ICLEI – Local Governments for Sustainability and the New Zealand Ministry for the Environment. Wellington, New Zealand.
- Corfee-Morlot J, Cochran I, Hallegate S and Teasdale P. J., 2011. Multilevel risk governance and urban adaptation policy. *Climatic Change*, *104*, 169–197.
- DIA, 2011. *About local government* [online]. Department of Internal Affairs, New Zealand. Available from: http://www.localcouncils.govt.nz/lgip.nsf/wpgurl/About-Local-Government-Index [Accessed 25 March 2014].
- DIRD, 2013. Local government [online]. Department of Infrastructure and Regional Development, Australia. Available from: <u>http://www.regional.gov.au/local/index.aspx</u> [Accessed 25 March 2014].

- Environment Canterbury Regional Council, 2005. Greenhouse Gas Emissions Analysis and Forecast Milestone One Report Communities for Climate Protection - New Zealand Programme. Environment Canterbury. Christchurch, New Zealand.
- Gore, C. D., 2010. The limits and opportunities of networks: Municipalities and Canadian climate change policy. *Review of Policy Research*, *27*(1), 27-46.
- Greenaway, A., and Carswell, F., 2009. Climate change policy and practice in regional New Zealand: how are actors negotiating science and policy? *New Zealand Geographer*, 65, 107-117.
- Hoff, J., 2010. Local climate protection programmes in Australia and New Zealand:Results, dilemmas and relevance for future actions. A CIDEA Project Report no. 1.Institut for Satskundskab.
- Holgate, C., 2007. Factors and actors in climate change mitigation: A tale of two South African cities. *Local Environment*, *12*(5), 471-484.
- ICLEI, 2008a. Carbon neutrality framework for local government. ICLEI Local Governments for Sustainability. Melbourne, Australia.
- ICLEI, 2008b. New Zealand supplement to the international local government GHG emissions analysis protocol. ICLEI – Local Governments for Sustainability. Melbourne, Australia.

- ICLEI, 1993a. Municipal leader's declaration on climate change and the urban environment. United Nations Headquarters, New York, 25-26 January 1993.International Council for Local Environmental Initiatives.
- ICLEI, 1993b. Cities for Climate Protection: An international campaign to reduce urban emissions of greenhouse gases. Written by Jeb Brugmann, Secretary General of
 ICLEI and Phillip Jessup, Director for the Urban CO2 Reduction Project, 15 February
 1993 (Toronto). International Council for Local Environmental Initiatives
- Jones, S., 2013. Climate change policies of city governments in federal systems: An analysis of Vancouver, Melbourne and New York City. *Regional Studies*, 47(6), 974-992.
- Kithiia, J., and Dowling, R., 2010. An integrated city-level planning process to address the impacts of climate change in Kenya: The case of Mombasa. *Cities*, *27*(6), 466-475.
- Kok, M., Vermeulen, W., Faaij, A. and de Jager, D., 2002. *Global warming and social innovation: The challenge of a climate-neutral society*. London, UK: Earthscan
- Kousky, C., and Schneider, S. H., 2003. Global climate policy: will cities lead the way? *Climate Policy*, *3*(4), 359-372.
- Krause, R. M., 2012. An assessment of the impact that participation in local climate networks has on cities' implementation of climate, energy, and transportation policies. *Review of Policy Research*, 29(5), 585-604.

- Lee. T., 2013. Global Cities and Transnational Climate Change Networks. *Global Environmental Politics*, *13*(1),108-128.
- Lindseth, G., 2004. The cities for climate protection campaign (CCPC) and the framing of local climate policy. Local Government, *9*(4), 325-336.
- Luque, A., Edwards G. A. S., and Lalande, C., 2013. The local governance of climate change: New tools to respond to old limitations in Esmeraldas, Ecuador. *Local Environment*, 18(6), 738-751.
- OECD, 1995. Urban Energy Management: Good local practice. Organization for Economic Cooperation and Development. Paris, France.
- Romero-Lankao, P., 2012. Governing carbon and climate in the cities: An overview of policy and planning challenges and options. *European Planning Studies, 20*(1), 7-26.
- Romero-Lankao, P., 2007. How do local governments in Mexico City manage global warming? *Local Environment*, *12*(5), 519-535.
- Yalcin, M., and Lefevre, B., 2012. Local climate action plans in France: Emergence, limitations and conditions for success. *Environmental Policy and Governance*, 22, 104-115.

Figures and Tables

Figure 1: Programme participation as a proportion of council type and by date joined



Data is derived from CCP-NZ (2009)

Figure 2: Programme participation as a proportion of milestone (M) completion (by 2009)



Data is derived from CCP-NZ (2009)

Council	Interviewee(s)	Location	Date	Duration	
Regional					
Auckland	(A) Project Leader,Sustainability(B) Senior Policy Analyst,Corporate SustainabilityManager	Auckland, NZ	23-Feb-10	1hr 5 min	
Environment Canterbury	Energy Policy Analyst	Christchurch, NZ	11-Jan-10	44 min	
Greater Wellington	Regional Climate Response Coordinator	Wellington, NZ	8-Feb-10	1hr 21 min	
Hawke's Bay	Group Manager Assets Management	Napier, NZ	15-Feb-10	55 min	
District					
Far North	Senior Planner	Kerikeri, NZ	26-Feb-10	32 min	
Kaikoura	(A) District Planner(B) District Planner	Kaikoura, NZ	3-Feb-10	52 min	
Kapiti Coast	Senior Advisor, Climate Change and Energy	Paraparaumu, NZ	11-Feb-10	56 min	
Rotorua	Business Manager	Rotorua, NZ	16-Feb-10	1hr 5 min	
Southland	Assistant Corporate Planner	Invercargill, NZ	25-Jan-10	47 min	
City					
Auckland	Senior Sustainability Policy Analyst	Auckland, NZ	23-Feb-10	55 min	
Christchurch	Principal Advisor, Sustainability	Christchurch, NZ	22-Jun-10	1h 20 min	
Dunedin	Energy Manager	Dunedin, NZ	27-Jan-10	1h 14 min	
Hamilton	Energy Manager	Hamilton, NZ	18-Feb-10	1h 4 min	
Nelson	Senior Policy Planner	Nelson, NZ	5-Feb-10	53 min	
Waitakere	Energy Manager	Henderson, NZ	24-Feb-10	45 min	
Wellington	Senior Advisor	Wellington, NZ	11-Feb-10	54 min	

Table 1: Phase 1 interviewees (January 2010 - June 2010)

Council	Interviewee(s)	Location	Date	Duration
Regional				
Auckland	Senior Policy Analyst, Corporate Sustainability Manager	Auckland, NZ	28-Feb-11	56 min
Greater Wellington	Regional Climate Response Coordinator	Wellington, NZ	22-Feb-11	57 min
District				
Rotorua Southland	Business Manager Assistant Corporate Planner	Rotorua, NZ Invercargill, NZ	24-Feb-11 9-Feb-11	54 min 43 min
City				
Dunedin Nelson	Energy Manager Senior Policy Planner	Dunedin, NZ Nelson, NZ	8-Feb-11 15-Feb-11	57 min 1hr 6 min
Wellington	Senior Advisor	Wellington, NZ	17-Feb-11	56 min

Table 2: Phase 2 interviewees (February 2011)

Table 3: Programme architects (February 2010 - July 2011)

Programme architects	Interviewee(s)	Location	Date	Duration
Local Government New Zealand	Senior Policy Analyst	Wellington, NZ	22-Jul-11	56 min
ICLEI	(A) CCP-NZ National Programme Manager	Wellington, NZ	12-Feb-10	54 min
	(B) CEO ICLEI, Director ICLEI Oceania	Melbourne, AUS	56-Jul-10	1h 27 min

Sub-themes	Regional Council			District Council				City Council								
	Auckland	Environment Canterbury	Greater Wellington	Hawke's Bay	Far North	Kaikoura	Kapiti Coast	Rotorua	Southland	Auckland	Christchurch	Dunedin	Hamilton	Nelson	Waitakere	Wellington
Support																
Senior Management Leadershin		Not a lot						Yes				Yes		Yes	Yes	
Engagement with ICLEI			Yes	No		Yes		Yes			Yes				Not in the end	
Approach																
Programme Delivery (was it effective?)	No	No	No	No					Yes			No	No		No	
Programme Methodology (robust enough?)	No		No	No		Yes			Yes	No	No	No	No	No	No	No
Formal Benchmarking	Yes					No	No		No		No				No	No
Barrier to Achieving next Milestone	Programme ended	Time and resource constraints	Resource constraints	Low priority		Action Plan focus changed			Programme ended	Change in council; quality of data	All milestones complete	•		Community data	Access to data	Uncertain of value

Table 4: Phase one interview results

Data is derived from semi-structured interviews with managers from respective council.

Sub-themes	Regional	Council	District	Council	City Council		
	Auckland	Greater Wellington	Rotorua	Southland	Dunedin	Nelson	Wellington
In the beginning							
Timing	New	Keen to do	Right	Right		Fears	Increased
(Rationale for joining when it did)	political buy-in	something	thing to do	thing to do		of hidden costs gone	priority for action
Prior Policy	Yes	Yes	No	No	No	Yes	No
Support							
Engagement with ICLEI	No	Yes	Yes	Yes	No	Yes	Yes
Engagement with Partners	No	No	No	No	No	No	No
Approach							
Programme Methodology (Robust enough?)	No	No	Yes	Yes	No		No
Transferability (Transfer well from CCP-Australia?)	No	Yes	Yes		No		

Table 5: Phase two interview results

Data is derived from semi-structured interviews with managers from respective council.