Carbon management in New Zealand local government: co-benefits of action and organizational resolve in the absence of Government support

S. J. Birchall

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

Email: jeffbirchall@gmail.com

In an effort to promote public sector carbon management, in 2004, New Zealand's (NZ) Labour-led government funded local government membership in the Communities for Climate Protection - New Zealand (CCP-NZ) program, the NZ arm of ICLEI's Cities for Climate Protection campaign. In late 2008 the Government transitioned from a Labour-led to a National-led government, and this resulted in a shift to its climate change agenda, including the abandonment of the CCP-NZ program. This paper examines the experiences of managers from the councils involved in the CCP-NZ program to determine the co-benefits of participation in the initiative, and to assess whether councils will continue activities to mitigate their carbon footprint in the absence of Government support. The research approach consists of a series of semi-structured interviews with managers responsible for the delivery of the CCP-NZ program within member-councils, as well as program architects from Local Government New Zealand and ICLEI. Findings suggest that while the scheme delivered considerable co-benefits, including improved management awareness around organizational carbon management and broadened inter-council networking on carbon reduction related objectives, without Government support, overall, carbon management activities will only continue in a scaled-back manner.

Keywords: climate change mitigation, greenhouse gas emissions, public sector organizations, managers, Communities for Climate Protection

Introduction

The evidence for anthropogenic climate change is overwhelming (IPCC 2013; Hansen et al. 2012), and public acceptance of the need to take responsibility for climate change is growing (Jordan & Lorenzoni 2007). Correspondingly, national governments from around the world (e.g. UK, Germany) have developed long-term mitigation strategies to avert the effects of climate change (e.g. Bailey 2007; Boston 2008; Bebbington & Barter 2011). However, even when the notion of climate change and the need for an international response is accepted across national

political parties, a unified and coherent policy response may remain elusive (Birchall 2013a,b). In New Zealand (NZ), for example, where "government has made many statements that indicate a commitment to sustainability and sustainable development" (Buhrs 2008, p. 62), the creation of a national climate strategy is hampered by indecision and the desire to not get ahead of other countries (e.g. Chapman 2006; Birchall et al. 2012) that may have a greater mitigative impact.

Internationally, both domestically (e.g. Hwang 2010; Holmes 2010; Howarth & Foxall 2010) and transnationally (e.g. Patterberg & Stripple 2008), carbon, or emissions trading (ET), both via voluntary and regulated mechanisms, has become the preferred path to mitigate greenhouse gas (GHG) emissions, and a growing body of academic literature exploring carbon markets (e.g. Lovell & Liverman 2010) and ET (e.g. Lohmann & Sexton 2010) has emerged.

On a organizational level, as government policies and regulations begin to emerge, organizations are beginning to assess their risk and opportunities (e.g. Jones & Levy 2008; Engels 2009; Solomon et al. 2011; Bebbington & Barter 2011) in an increasingly carbon constrained economy. In addition, the literature suggests that as climate change becomes mainstream, stakeholder pressure may influence organization response (Sprengel & Busch 2010). Indeed, as Solomon et al. (2011) find, clients and investors are beginning to view climate change as a material risk, and as a result are requiring organizations to manage the risk accordingly.

In the end, given current uncertainty with regard to how government policy and the marketplace will react to climate change, organizations, like some governments, are hesitant to move too quickly (e.g. Pinkse & Kolk 2010) and lead by example (e.g. Jones & Levy 2008; Aragon-Correa & Rubio-Lopez 2007). The recent global financial crisis has further exacerbated uncertainty (e.g. Kolk & Pinkse 2009) and with organizations having less discretionary funding for environmental initiatives such as low-carbon equipment and carbon offsetting, this has resulted in a decline in participation in the voluntary carbon market (Hamilton et al. 2010). Nonetheless, keen organizations have begun to prepare for a carbon constrained world (e.g. Jeswani et al. 2007), and as Pinkse & Kolk (2010) note, this prompts organizations to further push their innovative capacity.

As an initial step, many organizations, from both the public and private sector, are quantifying their greenhouse gas (GHG) emissions, and as a result GHG inventory development and implementation are featuring in the academic literature (e.g. Pham et al. 2010; Kennedy et al. 2010; Smith & Heath 2010). Additionally, strategies for GHG emissions reductions, and for some, the ultimate goal of achieving carbon neutrality, are on the rise, as is the academic literature exploring these trends (e.g. Birchall et al. 2012; Ball et al. 2011; Gossling 2010).

Yet much of the scholarly work that has attempted to understand the actual dynamics and outworking of organisational (public and private sector) carbon emissions reduction programs, and the key motives that drive or inhibit action, is largely limited to inferring these relationships from analyses of websites, reports, or survey questionnaires (e.g. Kolk & Pinkse 2004; Hoffman 2006; Okereke 2007; Bulkeley & Castan-Broto 2013), rather than addressing the issues through in-depth field studies that require comprehensive datasets.

This empirical paper therefore, through in-depth field studies, goes beyond existing academic research and explores the narratives of managers in NZ public organizations that were seeking to manage and reduce their carbon emissions.. More specifically, this paper presents the realised co-benefits[i] of NZ local government council participation in the, now dismantled, Communities for Climate Protection - NZ (CCP-NZ) program and considers organizational resolve for carbon management in the absence of Government financial support.

Overview of the CCP-NZ program

In an effort to promote public sector carbon management, in 2004, Clark's Labour-led government funded local government membership in the CCP-NZ program, the NZ arm of ICLEI's Cities for Climate Protection (CCP) campaign[ii]. While the direct aim of the CCP-NZ program was to help local government councils achieve quantifiable GHG emission reductions, Government also sought to elevate NZ's profile (domestically and internationally) as a leader on sustainability in general and climate change and carbon mitigation in particular. As a voluntary initiative, local government participation in the program was not mandated by Government.

However, during its operation, the CCP-NZ program grew to include 34 councils (regional, district and city), representing in the order of 83% of NZ's population (CCP-NZ 2009).

The initiative operated within the guidelines provided by the International Local Government GHG Emissions Analysis Protocol – New Zealand Supplement, which "seeks to follow certain principles, drawn from the WRI/ WBCSD GHG Protocol, to ensure accurate accounting and reporting" (ICLEI 2008a). The CCP-NZ program centred around its strategic framework, a five-step standardised and internationally recognised process for measuring, reporting and monitoring GHG emission reductions[iii]. At the core of the framework was the international CCP Greenhouse Gas Application (GGA) Software, which assisted councils develop emission inventories, analyse data, and ultimately benchmark progress against other participant councils (CCP-NZ 2009).

In late 2008 the NZ government shifted from a Labour-led to a National-led (traditionally more conservative) government, and this resulted in a change to its carbon agenda, including the abandonment of the CCP-NZ program.

Method

Given the study's emphasis on uncovering employee interpretations, a flexible qualitative approach which aims to be investigative and probing, was adopted. The study includes one case study which focused on member councils of the CCP-NZ program. Of the 34 councils that were involved in the initiative, 16 are explored in this study[iv]. 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 program, the council's population and location (i.e. north v. south island). Ultimately, the councils selected for this research represent a good multi-level cross section of NZ councils.

The study involved semi-structured interviews with managers responsible for delivery of the CCP-NZ program in their organization, and semi-structured interviews with two of the scheme's key program architects (Table 1)[v]. Program architects differ from managers in that the program architects were responsible for the macro-level aspects of program creation and operation.

Interviews took place throughout NZ, with all save one occurring between January and February 2010[vi]. Interview duration ranged from 44 minutes to 1 hour 21 minutes.

<INSERT TABLE 1 HERE>

Transcripts resulting from the semi-structured interviews were transcribed verbatim. The unsanitised transcripts were returned to the interviewees for their approval. Following approval, transcripts were manually coded and studied to discover emerging themes. Because of the open-ended nature of semi-structured interviews, in some instances the themes do not reflect the experiences of all 16 councils explored in this research. This is expressed in the figures as DND, did not discuss.

Since the interviews occurred over an extended period of time, initial analysis of the interview transcripts began immediately following interviewee approval. To ensure continuity with the transcript data this analysis also included review of interview and field notes. While the purpose of this assessment was purely exploratory, and prelude to more in-depth attention once all the interviews were complete, it nonetheless provided initial insight for theme development.

Because interviews occurred over an extended period of time, with the last interview taking place over three years after the CCP-NZ program ended, it is important to note that the narratives within the transcript were treated as the interviewees' retrospective interpretation or sense making - it was critical to remain aware of the interviewees context relative to their narrative. The inclusion of multiple interviewees and extensive background reading about the organizations help to mitigate the risks associated with recall, and thus improve the credibility of the study in general.

Data interpretation began with a preliminary reading of the transcripts, which provided a sense of tone and context, and insight for theme development. Following, transcripts were reread with more attention in order to appreciate the narrative within each transcript. At this stage standout quotations were highlighted using different colour markers to represent themes. Next, themes within each transcript were rendered (cutting, pasting and gathering highlighted quotations onto

a separate page(s), organised by colour-code) and refined to primary and sub-themes. Each theme was then assigned to a colour-coded page(s), and quotations from each organization that reflect a given theme were gathered onto the corresponding colour-coded page(s). Lastly, the case study was summarised.

Results

The findings suggested a similar experience between local government councils. Further analysis was organized around four primary themes:

- In the beginning, which explores councils' goal in joining the program
- Outcome, which explores the realized benefits of the program
- In general, which explores councils' overall impression of the program
- Next steps, which explores councils' plans moving forward

Lastly, the views of two of the initiative's principal program architects are presented.

In the beginning

Rationale for joining

Councils joined the CCP-NZ program for a number of reasons. Of the 16 councils interviewed for the purpose of this research, eight (50%) suggested the desire to show leadership as their rationale for joining the CCP-NZ program (Figure 1).

Councils indicated a variety of reasons for wanting to show leadership, including the need to lead the community by example, as expressed by Environment Canterbury Regional Council (Table 1):

> [Council] should be leading by example, there was a growing awareness of needing to do something. So I think you know if we are leading by example, then that is something that the public will pick up on.

Wellington City Council (Table 1) reiterated this sentiment and added the importance of facilitating community action:

[Council] wanted to show the community that we were taking the issue seriously and we wanted to help the community with programs that also facilitated them to take action whether its residents or businesses.

Councils also sought to be a part of a recognised program, to show their forward thinking on climate change: 'To be part of that group that is seen as 'go ahead' in this area' (Table 1, Nelson City Council).

For two councils, the desire to join the CCP-NZ program was driven by the Mayor, be it to address climate change directly, as indicated by Kapiti Coast District Council (Table 1), or as Hamilton City Council (Table 1) suggested, to improve the bottom-line: 'we had a very active mayor at the time and it was a very topical subject, but the focus was always on money, making things cost effective.' Further, as Auckland Regional Council (Table 1)explained, the initiative facilitated political commitment, and offered a consistent and transparent approach to climate mitigation:

> The reason why our council did become a member of CCP, it was to get clear political commitment and a mandate for officers to actually drive and get more momentum behind the work – we wanted to work with a national consistent framework that was comparable, consistent and transparent.

Two other councils, the Kaikoura District Council and the Waitakere City Council, joined because the scheme aligned with their respective council's strategic direction. Similarly the Dunedin City Council and the Auckland City Council joined the program because their councils appreciated the need to reduce their carbon footprint. Less ambitiously, the Greater Wellington Regional Council joined the CCP-NZ program because council was looking for the low-hanging fruit, easy actions:

> [Council was] looking for basically something that wasn't going to involve too much effort, but would allow them to do something real about you know a contribution to climate change response. (Table 1, Greater Wellington Regional Council)

<INSERT FIGURE 1 HERE>

Aim

Eight of the 16 (50%) councils interviewed discussed their council's goal for climate change mitigation (carbon management or carbon neutral) (Figure 2); five of the eight councils expressed a desire to achieve carbon neutrality. Far North District Council (Table 1), for example, suggested that their council's ambition for carbon neutrality was a result of the community's expectation that council should lead in this area:

> Our community expect council to be a leader in relation to climate change and so carbon neutrality is something that we should be seeking to pursue and to demonstrate to our community, to overall enhance our environmental performance.

For the Greater Wellington Regional Council , while council acknowledged that carbon neutrality is a difficult target to achieve, indicated that it is nonetheless 'good to have it as an aspirational goal" (Table 1, Greater Wellington Regional Council). While Auckland Regional Council B (Table 1) echoed this sentiment, they emphasised that council's primary goal was 'carbon reductions and maximising co-benefits.'

Three councils admitted that carbon neutrality was not a driver for their council, as confirmed by Hawkes Bay Regional Council (Table 1): 'No real driver at this stage to encourage [council] to promote ourselves as being carbon neutral.'

<INSERT FIGURE 2 HERE>

Outcome

Networking

According to the research, networking and collaboration was consistently ranked by participant councils as a co-benefit of membership in the CCP-NZ program (Figure 3).

10 of the 16 (63%) councils interviewed indicated that they collaborated with other program member councils. As Hamilton City Council (Table 1) explained, collaboration effectively fostered new learning:

> Pulled people together who are usually individuals working on their own or in a very small team… you actually get to talk and find out what other people are doing and how they're doing it.

On the other end of the spectrum, four councils indicated that they did not network or collaborate with either ICLEI or the other CCP-NZ program member councils. For the larger councils, it was thought that domestic collaboration was not appropriate for their needs, as explained by Auckland City Council (Table 1):

> The network component was useful yes. But, to be honest, the politicians here – being the biggest council you know, I really don't feel that we're that influenced by the other councils round New Zealand. Really where we are positioning ourselves against is your Sydney's, your Brisbane's, your Melbourne's. So [collaboration] didn't really seem to grab too much traction with our politicians.

Awareness

Seven of the 16 (44%) councils interviewed discussed awareness; all seven councils indicated that council awareness with regard to climate change and carbon management increased as a result of participation in the CCP-NZ program (Figure 3). Dunedin City Council (Table 1) explained that in the absence of the program, council would not have had the same level of understanding: 'You would never see it if you weren't in the program – you would not have a clue.' Far North District Council (Table 1) echoed this belief, suggesting that the '[program] created knowledge about opportunities that are there. It galvanised council's actions in relation to the mitigation options.'

Importantly, Wellington City Council (Table 1) admitted that the program, through its challenges, demonstrated the critical importance of data quality, and its affect on management practices:

> I don't know that councils generally are very careful about the rigor in their data or how they use it or how it changes management practices and I think that the CCP Program has made people a bit more aware of the importance of the rigour of your data and how you use it and I think that that message has come through quite a bit really.

Hawkes Bay Regional Council (Table 1), however, conceded that the program only increased councils' climate change and carbon management awareness in a narrow sense, with the program serving as a 'tool that would assist with awareness rather than a driver of awareness.'

Values

Another outcome of the CCP-NZ program was the embeddedness of the initiative's values in council management. 11 of the 16 (63%) councils interviewed agreed that the values of the program are now embedded in council management (Figure 3). As indicated by Christchurch City Council (Table 1) for example: 'When council is developing new projects it takes account of the effects of climate change. It has adopted a precautionary approach to future works and planning.'

This approach has been mirrored in energy management practices as well; according to Auckland Regional Council A (Table 1), the CCP-NZ program made council energy management practices more current: 'So I think it's sort of brought us into the 21st century and quite rapidly.' Additionally, as suggested by Kapiti Coast District Council (Table 1), council is now in a position 'where it is on the cusp of having energy management considered a normal way of doing business... and that's quite a step forward' council admits.

Wellington City Council (Table 1) demonstrated similar enthusiasm, indicating that the dismantling of the program really did not impact their council because the initiative's values had already gained traction. Likewise for the Far North District Council : 'So there is still ongoing buy-in to the actions that have been identified through the previous CCP-NZ work, so it's generated some momentum' (Table 1, Far North District Council). In addition, three councils indicated they have actually stepped-up their activity, increasing the momentum built by the CCP-NZ program. For some councils, however, as expressed by Hawkes Bay Regional Council (Table 1), though values are taking root, green thinking within council could go further yet.

Other councils admitted that since the program was dismantled, internal interest had decreased, and as a result momentum has waned. In the Hamilton City Council for instance, while some core councillors are still on side, 'they are in the minority… this council is very conscious of

what's going on with central government' (Table 1, Hamilton City Council) For two councils, program values have failed to become part of council policy entirely. According to Environment Canterbury Regional Council (Table 1), this is a result of councils' lack of commitment with regard to climate change in general:

> I think because really it comes back to council and their lack of commitment or lack of desire to do anything on climate change specifically… so that is probably largely why it didn't gain a lot of traction.

Additionally, in spite of the fact that the program participant councils have the technical ability to report carbon emissions, since carbon emissions reporting is not a mandated requirement, and given as Auckland City Council (Table 1) indicated, 'there is not a strong political rule around climate change,' councils have been lax to embed program values into policy.

<INSERT FIGURE 3 HERE>

In general

Success

In terms of whether or not the CCP-NZ program was a success, 13 of the 16 (81%) councils interviewed concluded that the initiative was a success.

Christchurch City Council (Table 1), for example, indicating that the program was a success in that it facilitated a better understanding of climate change and carbon management issues in general:

> I think it was a success in terms of getting the people to understand the basic principles of responding to climate change in mitigation terms anyway and equipping them to do so and actually sharing information (Table 1, Christchurch City Council).

For two other councils, however, the program was not a convincing success, as suggested by Environment Canterbury Regional Council (Table 1): 'Overall, no, not as successful as it could have been.' Similarly, Hawkes Bay Regional Council (Table 1) acknowledged that benefits

stemming from participation in the program were not huge, and thus concluded that the program was unsuccessful.

Impetus for action

Ultimately, the overall consensus, as evident from 11 of the 16 councils interviewed, was that the program did serve as the impetus for council action on climate change and carbon management (Figure 4). As Kapiti Coast District Council (Table 1) indicated, this was particularly the case 'in terms of getting climate change issues on the agenda of councils.'

Rotorua District Council (Table 1) agree, indicating that the CCP-NZ program was the catalyst that pushed their council to better understand its carbon footprint:

> I think CCP got [council] focussed to start with and it got us thinking about it; it got us measuring data; it got us understanding what we're doing and where the energy is used, where the emissions are and has given us some base statistics and some base philosophy. I think that has been helpful to take us forward.

Likewise, as expressed by Auckland Regional Council B (Table 1), participation in the program 'started council on the journey; it played its part and we've grown as a result of it.'

And, as Wellington City Council (Table 1) conceded, 'I think without it, [council] would have struggled to put a lot more resources into developing something and probably not as good as what they were able to provide us.'

<INSERT FIGURE 4 HERE>

Next steps

Wether it is developing a carbon management plan or implementing an energy audit, 15 of the 16 (94%) councils interviewed suggested that they are moving forward, to some degree, with actions begun while participating in the CCP-NZ program; 12 of the 15 councils are seeking to manage their carbon footprint.

In terms of goals, 11 of the 16 councils interviewed discussed reduction targets. While eight councils indicated that they have emissions targets, be it to stabilise or reduce, three councils suggested that they do not have targets for future emissions reductions (Figure 5).

Christchurch City Council (Table 1) qualified their council's goal by suggesting that targets are effective for driving policy, but tend not to ensure action:

> 50 percent by 2050 in terms of reductions. But in my mind I don't think targets are a very good – it's aspirational; they set a direction which is fine, but they don't set actions. Putting in a target makes you feel better, but it doesn't actually do anything.

Two of the eight councils with emissions reduction targets remain committed to carbon neutrality, as indicated, albeit aspirationally, by Kaikoura district council A (Table 1):

> [Council] said that we were going to be zero carbon by 2015. And the realisation was that although we may never make zero carbon that it is something that we should be striving for.

Hamilton City Council (Table 1), on the other hand, indicated that because GHG emissions are not a mandated measure under the Local Government Act, their council has completely pulled back the efforts to manage carbon emissions.

<INSERT FIGURE 5 HERE>

Program architects' views

The CCP-NZ program was an initiative 'driven from outside of New Zealand' (Table 1, Local Government New Zealand). In an effort to get NZ councils onboard, ICLEI promoted the program's business case, as expressed by ICLEI (Table 1):

> So it was very much a business case that was put to them. This was also very well thought out; how it actually produced an integrated systematic approach, which gave the means for measurement of progress, monitoring of progress. How that gave a path to energy efficiencies that would save ratepayers money.

Following the shift in Government, from Clark's Labour-led to Key's National-led government, the Ministry for the Environment experienced a change in management, and as a result, according to ICLEI (Table 1):

> Anything that was to do with sustainability – that word – anything that had the word 'sustainability' attached to it seemed to rouse the ire of some politicians… There was political ideology, which was about rejection of programs of the past Government.

Local Government New Zealand (Table 1) reiterated this sentiment, adding that 'climate change activities [are] not supported in New Zealand to the same extent that they are in Australia' where the program began. Moreover, Local Government New Zealand (Table 1) emphasised that in terms of local authority support around climate change, there is a 'huge vacuum of support.'

According to ICLEI (Table 1), the message from Government was that it is 'time for local government to take responsibility for [the CCP-NZ program] - in other words to pay for it.' As ICLEI (Table 1) explains, however:

> 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 programs that aren't legislatively – that aren't required.

Ultimately, as Local Government New Zealand (Table 1) indicated, from a governance perspective, the program has not made much headway, and 'in the absence of Government actually being involved, it is just too hard' for local governments to maintain the momentum built during the program's operation.

Discussion

The CCP-NZ program grew out of the Labour-led government's desire to make 'sustainability central to New Zealand's unique national identity' (Clark 2006). While NZ's contribution to global GHG emissions is low (0.2%) (Ministry for the Environment 2009b), NZ is among the developed nations with the greatest net emissions increase (23%) since 1990 (Ministry for the

Environment 2009a). Government thus sought to elevate NZ's profile as a leader on sustainability in general and climate change and carbon mitigation in particular.

At the local level, the Local Government Act 2002 mandates local authorities to operate in an environmentally sustainable manner. While the Act does not require local authorities to measure, manage or reduce the environmental effects of their activities (Office of the Auditor-General 2011), it does 'promote the social, economic, environmental and cultural well being of communities in the present and for the future' (Local Government New Zealand 2011; see also Wilson & Salter 2003). With the passing of the Energy and Climate Change Amendment to NZ's Resource Management Act 1991, in 2004, greater responsibility for action on climate change was shifted to local authorities (Greenaway & Carswell 2009). In an effort to promote climate change mitigation, and to facilitate local government organizational awareness with regard to their carbon footprint, in 2004 the Labour-led government funded local authority membership in the CCP-NZ program. As identified by many councils 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).

Building on ICLEI's success with the CCP campaign, the goal of the CCP-NZ program was to help local government councils achieve quantifiable GHG emission reductions and demonstrate leadership to the community. By the time the program ended, total quantifiable GHG emission reductions, stemming from activities from the 34 councils' base-year through to June 30, 2009, were in excess of 400,000 t-CO2e, or about 133,300 t-CO2e/y (CCP-NZ 2009).

Beyond quantifiable GHG emission reductions, co-benefits of participation in the CCP-NZ program were significant. Key co-benefits include, for example, effective inter-council collaboration which promoted new learning and sharing of best practices, and increased council awareness around climate change and carbon management. Moreover, the majority of councils concluded that because of their participation in the CCP-NZ program, program values became embedded in organizational management.

Yet despite 81% of councils believing that the initiative was a success, local government resolve for carbon management has waned. While the majority of councils indicated that they will move

forward with efforts to manage their carbon footprint, plans are largely non-target orientated. Additionally, councils that are endeavouring to achieve carbon neutrality have recast their goal as aspirational.

To this point, councils are operating within a diminished budget and increasing responsibility. Perhaps then, as Local Government New Zealand (Table 1) indicated, it is too difficult for local governments to maintain the momentum around climate change and carbon mitigation. This is reflected in the literature as well, which suggests that without supportive policy at the national level, priority for climate change action within local government remains low (e.g. Betsill 2001; Brody et al 2010).

This empirical field study goes beyond the existing literature and demonstrates that while a strong case can be made for reducing organizational GHG emissions, and despite experienced co-benefits of participation in the CCP-NZ program, NZ local government councils do indeed require Government support in order to pursue such actions. Moreover, as the data show, given that the CCP-NZ program was the impetus for council action on climate change, Government support is needed at the very least to cultivate interest in such initiatives.

Conclusion

In joining the CCP-NZ program, and in line with the Labour-led government's desire to be at the forefront of the global effort on climate change mitigation, NZ local government councils sought to achieve quantifiable GHG emission reductions and demonstrate leadership to the community on climate change mitigation (CCP-NZ 2009).

Council participation in the CCP-NZ program resulted in considerable co-benefits, including an increase in management awareness around organizational carbon management and broadened inter-council networking and collaboration on GHG emission reduction related objectives. While many councils will continue with efforts begun during their participation in the CCP-NZ program, without Government support, carbon management activities will only persist in a scaled-back manner, with a minority of councils ceasing efforts entirely.

Notes

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[i] For the purposes of this study, co-benefits refer to the non-direct financial and emission reduction related benefits of participation in the CCP-NZ program.

[ii] The International Council for Local Environmental Initiatives, today known as ICLEI - Local Governments for Sustainability (ICLEI), is an international not-for-profit association of local governments and local government organizations, with members in 84 countries: http://www.iclei.org/index.php?id=about.

[iii] Milestone 1, conduct a greenhouse gas emissions inventory, perform an analysis and forecast for corporate and community emissions; Milestone 2, set emissions reduction goals relative to base-year; Milestone 3, develop a local action plan to achieve sustainable reductions in emissions; Milestone 4, implement local action plan and quantify the benefits of policies and actions; and Milestone 5, Monitor progress towards reductions goals (CCP-NZ 2009).

[iv] Because many managers responsible for the delivery of the CCP-NZ program were disestablished following program termination, access for interviews was limited, and became increasingly more limited as time passed.

[v] 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.

[vi] Because of a series of devastating earthquakes that crippled Christchurch, it was not possible to arrange an interview with the Local Government New Zealand representative until July 2011. As the purpose of this interview was to glean insight into macro-level aspects of the CCP-NZ program, the delay does not directly affect the findings vis-a-vis co-benefits and organizational resolve for carbon mitigation.

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TABLES AND FIGUERS

Table 1.   CCP-NZ program interviewees (January - February 2010; July 2011)

Organization	Interviewee(s)
Regional Council	
Auckland	a. Project Leader, Sustainability b. Senior Policy Analyst, Corporate Sustainability Manager
Environment Canterbury	Energy Policy Analyst
Greater Wellington	Regional Climate Response Coordinator
Hawke's Bay	Group Manager Assets Management
District Council	
Far North	Senior Planner
Kaikoura	a. District Planner b. District Planner
Kapiti Coast	Senior Advisor, Climate Change and Energy
Rotorua	Business Manager
Southland	Assistant Corporate Planner
City Council	
Auckland	Senior Sustainability Policy Analyst
Christchurch	Principal Advisor, Sustainability
Dunedin	Energy Manager
Hamilton	Energy Manager
Nelson	Senior Policy Planner
Waitakere	Energy Manager
Wellington	Senior Advisor
Programme Architects	
Local Government New Zealand	Senior Policy Analyst
ICLEI	CCP-NZ National Programme Manager

Figure 1. Councils' rationale for joining the CCP-NZ program

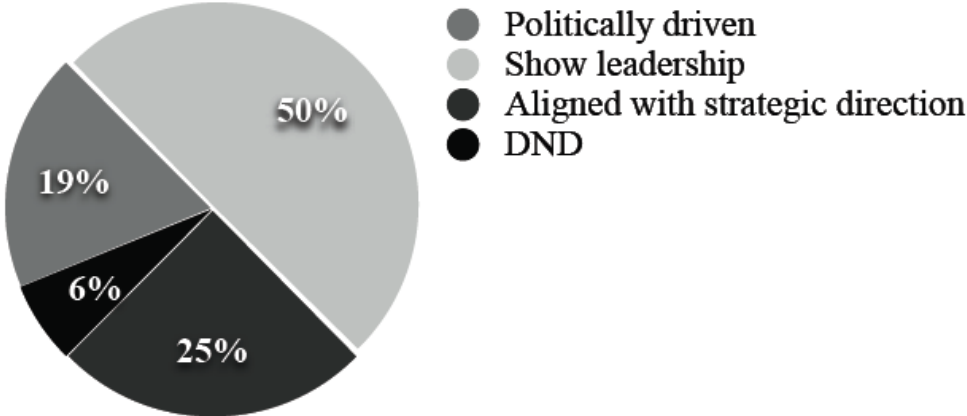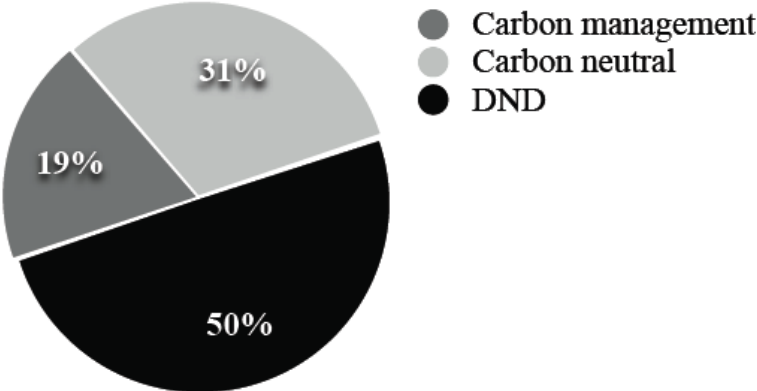Figure 2. Councils' aim with regard to climate change mitigation

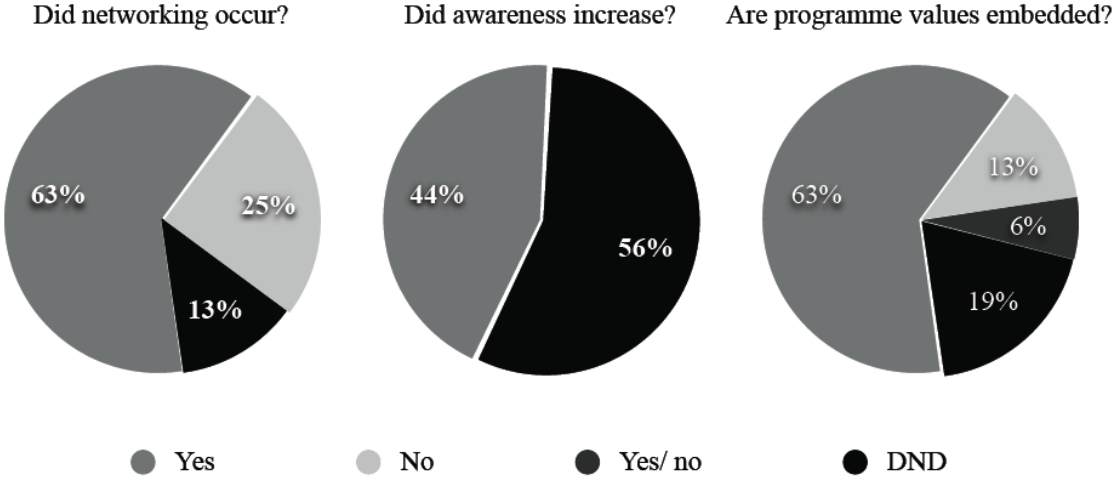Figure 3. Outcome of councils' participation in the CCP-NZ program

Did networking occur?   Did awareness increase?   Are programme values embedded?

63%   25%   13%

44%   56%

63%   13%   6%   19%

● Yes   ● No   ● Yes/ no   ● DND

Figure 4. Councils' general thoughts on the CCP-NZ program

A success?

Impetus for action?

81%   6%

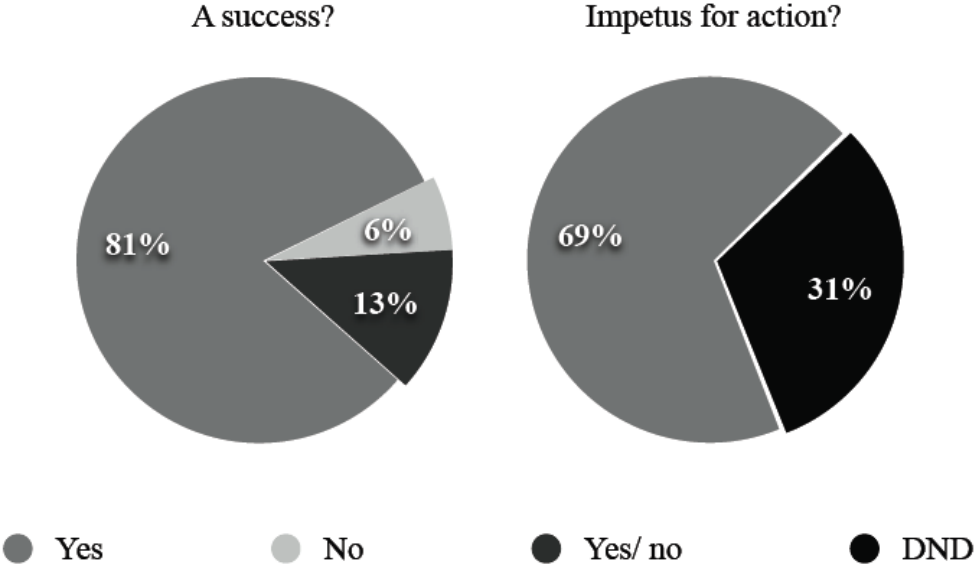13%

69%   31%

Yes   No   Yes/ no   DND

Figure 5.   Does council have a reduction target moving forward?