Getting the job done: Barriers and enablers to municipal climate action in Greater Victoria

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Abstract

Climate action is high on the agenda for many local governments across Canada and yet greenhouse gas emissions do not decline. The literature on policy implementation points to the importance of the working level in understanding the scope for climate action and the types of barriers that professionals face in advancing climate goals. This study contributes to this literature by exploring the barriers and enablers to municipal climate action through focus groups with municipal staff members across Greater Victoria, British Columbia, in the key sectors of buildings and energy, transportation, and solid waste. Six categories of barriers and enablers are identified: funding, staffing, legislation/regulation, governance, information, and politics, with the first categories representing a form of government capacity. Given the overall lack of power in implementing economic and regulatory policies, municipal government officials emphasize the importance of collaboration, data communication, and political leadership in implementing climate action at the local level.

Keywords: local government, climate change, climate action, municipal government, British Columbia

Résumé

L'action climatique figure est importante pour administrations locales partout au Canada, et pourtant les émissions de gaz à effet de serre ne diminuent pas. La littérature sur la mise en œuvre des politiques souligne l'importance du niveau opérationnel pour comprendre la portée de l'action climatique et les types d'obstacles auxquels les professionnels sont confrontés pour faire avancer les objectifs climatiques. Cette étude contribue à cette littérature en explorant les obstacles et les catalyseurs de l'action municipale en faveur du climat par le biais de groupes de discussion réunissant des membres du personnel municipal du Grand Victoria, en Colombie-Britannique, dans les secteurs : des bâtiments et de l'énergie, des transports et des déchets solides. Six catégories d'obstacles et de catalyseurs sont identifiées : le financement, le personnel, la législation/réglementation, la gouvernance, l'information et la politique, les premières catégories représentant une forme de capacité gouvernementale. Compte tenu du manque général de pouvoir dans la mise en œuvre des politiques économiques et réglementaires, les responsables des gouvernements

municipaux soulignent l'importance de la collaboration, de la communication des données et du leadership politique dans la mise en œuvre de l'action climatique au niveau local.

Mots-clés : gouvernement local, changement climatique, action climatique, gouvernement municipal, Colombie-Britannique

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Introduction

Climate action is high on the agenda for many local governments across Canada and yet there are significant barriers to meeting climate goals, including a lack of financial resources, dedicated staff and out-of-date policies and regulations (Rhodes et al. 2021a; Dale et al. 2020a; Robinson and Gore 2005; Oulahen et al. 2018; McLean and Borén 2015). The literature on policy implementation points to the importance of the *working level* in understanding the scope for climate action and the types of barriers that professionals face in the conduct of their work (Leck and Roberts 2015; Salon, Murphy, and Sciara 2014; Lawrence et al. 2015a). These may include regulatory, structural and cultural/behavioural barriers, including professional/disciplinary silos (Burch 2010a; Dale et al. 2020b). This study contributes to this literature by exploring the barriers and enablers to local government climate policy implementation *at the working level* among Greater Victoria municipalities in British Columbia.

Buildings and energy, transportation, and waste—the focus on this research on municipal climate action—are the three highest sectoral contributors to GHG emissions in Greater Victoria, at 39.8%, 39.2%, and 4.0% respectively (Capital Regional District 2021). Both the Capital Regional District and the City of Victoria have set ambitious targets for greenhouse gas (GHG), but emission levels have not been significantly reduced (City of Victoria 2020; Capital Regional District 2017). This relative lack of success is common of local governments (Fuhr, Hickmann, and Kern 2018). Municipalities are on the front line of climate change mitigation efforts and yet, they are in many ways 'policy takers,' beholden to upper level governments for their regulatory powers and funding (Robinson and Gore 2005). They can also be 'policy makers,' adopting innovative and new approaches and demonstrating leadership in climate action (Touchant 2022; Lee and Koski 2012). Municipal government climate action takes place within a given structure of regulations and institutions unique to each municipality (Lawrence et al. 2015b). The thirteen municipalities of Greater Victoria share manty characteristics: geographic location, position within the British Columbian and Canadian context, and membership in the regional level of government. This metropolitan area faces climate change related threats from wildfire, droughts, ocean acidification, flooding and other climate chance impacts (Rhodes et al. 2021b).

This research has convened focus groups with local government public servants to understand the contexts in which they work to implement climate solutions. It identifies barriers and enablers to climate action at the working level across three thematic areas: buildings and energy, transportation, and waste. This article proceeds with a literature review discussing conceptual frameworks of barriers and enables in municipal climate policy-making. The next section outlines the background and characteristics of municipal climate action in British Columbia. The section on methods describes how primary data were collected and analysed via focus groups. It is followed by a section on the findings of this research. Discussion and conclusions end the article.

Literature review: Barriers and enablers to climate action

The conceptual framework of barriers and enablers is well-established in the literature. Barriers hinder effective action, while enablers help it along. Robinson and Gore (2005) conducted the first analysis of barriers and enablers to municipal climate action in Canada, suggesting that information and capacity were the most significant barriers, alongside denial. Subsequent literature has added to this list. Funding appears as a concern for most municipalities alongside staffing capacity/human resource constraints (Robinson and Gore 2005; Oulahen et al. 2018; Dale et al. 2020a).

Questions of governance and regulation arise frequently in the literature on both multilevel governance and barriers and enablers. Asymmetry between responsibilities transferred to municipalities and their ability to pay for them is a barrier for urban climate action in British Columbia (Burch 2010a). Municipalities are reliant on legislation and funding decisions by senior levels of government that may not align with their climate goals (Birchall, MacDonald, and Baran 2022; Dale et al. 2018). Municipal powers in Canada are particularly constrained by the mismatch between the impacts of climate change and the power to mitigate them at the local level (Robinson and Gore 2005). Where government capacity, meaning the combination of adequate funding and jurisdiction (defined by Ryan as legal competence, human and technical resources, funding), is lacking, governments are unable to implement effective climate policy (Ryan 2015, 519–20). Ryan (2015) posits that government capacity is a necessary but not sufficient condition for climate action. Capacity cannot in itself guarantee successful climate policy; other factors, such as information management and political leadership, can either support or block climate action. The concept of capacity is closely aligned to the regulatory and institutional framework faced by a municipality (Pasquini, Cowling, and Ziervogel 2013). Rules can be enabling in that they provide a given structure, but the content of the rules can provide a significant barrier to climate action. The literature on political leadership variously stresses the importance of external influence and pressure in shaping/driving climate policy responses at the local level (Lindvall 2023) alongside peer networks, including those connected to global climate agendas (Acuto 2013; Carmin, Dodman, and Chu 2013).

Another theme that arises in the literature is the flow of information both within municipalities, and between municipalities and higher levels of government (Birchall et al. 2022). Quality of information is key; earlier studies found that staff were unconvinced that climate action was needed (Pasquini et al. 2013; Reisinger et al. 2011; Robinson and Gore 2005) or were ill-informed (Porter et al. 2015). Robinson and Gore (2005) identified both public lack of knowledge and a lack of technical understanding among municipal staff as barriers in their seminal study on Canadian municipal response to climate change. Lawrence et al. (2015) report that climate expertise was lacking among local government professionals in New Zealand, and that stakeholders in local communities expressed skepticism about the scale of the threat of climate change. A longitudinal study on barriers and enablers in British local government showed marked improvement in the knowledge and expertise of local government officials from 2003 to 2013, showing that the situation is not static (Porter et al. 2015). Oulahen et al. (2018) identify lack of public awareness and denial as barriers to action in British Columbia.

The literature on barriers and enablers to municipal climate action has been characterised by Ryan (2015) as susceptible to the 'everything matters' trap in which the desire for detail overwhelms the ability to assess which barriers and enablers prevent or encourage successful policy implementation. In recognition of this, the focus groups have been analysed to bundle key themes and reflect on the elements where municipalities have more or less agency over climate actions.

Background: Local government climate action in British Columbia

Greater Victoria exists on the traditional territories of the Lekwungen peoples and on the land of three First Nations: Songhees, Esquimalt and WSÁNEĆ. Greater Victoria has a population of around 400,000 spanning 13 municipalities, three electoral areas, and the Capital Regional District (CRD) (see Table 1). Greater Victoria is coterminous with the area of the CRD.

Saanich and Victoria are the largest municipalities, with populations of 117,735 and 91,867, respectively (Statistics Canada 2022). Greater Victoria is served by the Capital Regional District—a regional service provider to its member municipalities with responsibility for: regional parks, waste management, regional water supply, wastewater treatment, solid waste, recreation facilities and 911 call answer. The CRD is governed by a board comprised of 24 members drawn from the municipal councils of the thirteen member municipalities and three electoral districts it serves. It acts as the local government for these electoral districts, making it simultaneously a local level of government and a regional service provider. BC Transit is the regional transportation provider for Greater Victoria. Metropolitan governance in Greater Victoria is fragmented and spans multiple municipalities, a provincial transit provider and a service district. Integrated transportation and land use planning are lacking in Greater Victoria.

A feature of Canadian federalism is its ability to accommodate distinct regional approaches and cultures – in this regard, British Columbia is a climate leader as the first jurisdiction in North America to establish a carbon tax. The British Columbia Ministry of Environment and Climate Change Strategy leads work on climate preparedness,

Table 1
Local government population and governance in Greater Victoria

Name	Type of Government	Leader	Number of councillors	Representation on CRD	Population
Central Saanich	district	mayor	6	1 or more directors	17,385
Colwood	city	mayor	6	1 or more directors	18,961
Esquimalt	township	mayor	6	1 or more directors	17,533
Highlands	district	mayor	6	1 or more directors	2,482
Langford	city	mayor	6	1 or more directors	45,584
Metchosin	district	mayor	4	1 or more directors	5,067
North Saanich	district	mayor	6	1 or more directors	12,235
Oak Bay	District	mayor	6	1 or more directors	17,990
Saanich	District	mayor	8	1 or more directors	117,735
Sidney	Town	mayor	6	1 or more directors	12,318
Sooke	district	mayor	6	1 or more directors	15,086
Victoria	City	mayor	8	1 or more directors	91,867
View Royal	Town	mayor	4	1 or more directors	11,575
Capital Regional District	Regional District	Chair and Vice-chair	24 Directors		409,085
Juan de Fuca	Electoral Area	CRD	none	1 director	5,531
Saltspring Island	Electoral Area	CRD	none	1 director	11,635
Southern Gulf Islands	Electoral Area	CRD	none	1director	6,101

Source: Population figures from Table 98-10-0002-01: Canada, provinces and territories, and census subdivisions (municipalities), Statistics Canada, 2022).

adaptation and greenhouse gas reduction targets. In 2021, the Ministry published the CleanBC Roadmap to 2030 which outlines the key sectoral actions that need to be taken to decarbonise the economy. It allocated $76 million from BC's Local Government Climate Action Program for three years to local governments and Modern Treaty Nations (Government of British Columbia 2022). In February 2023, the Government of BC announced an additional $1 billion in grants to BC's local governments under a Growing Community Fund (Government of British Columbia 2024c).

Municipalities in BC govern under powers granted them by the province in legislation such as *Community Charter* and the *Local Government Act*. Under this legislation municipalities possess corporate, regulatory and taxation powers. The Community Charter (passed in May 2003) grants regulatory authority to the municipality over municipal services, public places, the protection of persons or property, and buildings and other structures (Community Charter [RSBC 2003]). The province and the municipality have concurrent authority in four areas: public health, protection of the natural environment, wildlife, and prohibitions concerning soil removal and deposit. Municipal bylaws in these areas must be approved by a provincial minister (Ministry of Municipal Affairs 2022).

Under Division 4 of the Local Government Act, municipalities may implement an Official Community Plan, a "statement of objectives and policies to guide decisions on planning and land use management, within the area covered by the plan, respecting the purposes of local government" (Local Government Act [RSBC 2015]). Developing an Official Community Plan is not compulsory. However, if one has been developed, "all bylaws enacted or works undertaken must be consistent with the plan. The official community plan does not commit the local government to proceed with any works or projects that are mentioned in the plan" (Government of British Columbia 2024d). It may contain policies on protecting the natural environment but again these are not compulsory. Official Com-

munity Plans can contain measures to promote sustainability, defined as a balance of "economic, social, cultural and environmental interests in order to meet the needs of the present generation without compromising the ability of future generations to meet their needs" (Government of British Columbia 2024d). Guidance documents such as the BC Climate Action Toolkit (Government of British Columbia 2024a) and Guide to Green Choices (Ministry of Municipal Affairs 2021) provide advice, but not regulation. Similar arrangements are available at the regional level as well. Regional districts in BC can develop a regional growth strategy (RGS), in collaboration with member municipalities and provincial agencies.

Municipalities in British Columbia have not undergone the types of municipal mergers (amalgamations) experienced in other parts of Canada. Instead, municipal culture has been described as one of 'gentle imposition' in which the province is generally respectful of municipal autonomy. The Community Charter is seen as an example of this cordial relationship as it gives municipalities the scope to enact policies suited to the local population and circumstances, and to be more active members in multi-level governance (Sancton, Young, and Institute of Public Administration of Canada 2009). This autonomy has however not been accompanied by greater financial resources, thus creating a potential mismatch between jurisdiction and capacity (Curry 2018).

Methods

Primary data for this study was collected from focus groups of municipal officials from the Capital Regional District (CRD) and the thirteen municipalities of Greater Victoria, working in climate change mitigation, policy, planning and engineering. Participants were recruited using contact information available on local government websites and by snowballing (asking invitees to pass on the invitation to those who were deemed to be valuable or interested participants). 27 invitations were issued, and a total of 19 officials agreed to participate, giving a response rate of 70.4 per cent. Three officials participated in more than one focus group, but none participated in all groups. A participant number (P) was assigned to each participant. The focus groups were conducted in virtual online meetings in October and November of 2022, shortly after local government elections. Video and audio of the groups was recorded and transcribed. The focus groups provided a vivid picture of the thoughts of municipal officials at a particular moment in time.

Recruiting participants in the energy and buildings group (n=11, from the CRD and 6 municipalities) and the transportation group (n=9, from the CRD and 7 municipalities) was straightforward. Officials working in climate action relating to waste were much more difficult to recruit, with only one participant from the City of Victoria and one from the CRD being able to participate (n=2). This speaks to the relative maturity of each file; work on transportation and buildings has been going on for longer and has been a higher priority for staff and councils. All research participants were experts and professionals who work for municipal governments or other governmental institutions. Because of the nature of focus groups, we were not able to guarantee anonymity during data collection; however, the anonymity of responses was ensured. Interviewees were not identified, and municipal names were stripped from the identifying data.

Transcriptions from the focus group were coded using NVivo software. Coding identified themes and issues as they arose, rather than applying the conceptual framework immediately to the material. Coding was iterative , using the "Diving In Toolkit" (Maietta et al. 2021) . This approach draws quotations from the discussion, groups them together in diagrams, and composes memos about why these quotations are particularly compelling. Themes were identified using the same words chosen by the participants to describe their experience; remarks on funding, for example, were categorized as "funding." Similarly, only actors and instruments referred to by name in the focus groups formed part of the analysis to keep the focus on the working level. Select quotations from the focus groups have been included in this paper, referenced with the corresponding participant coding number (P1, P2, etc.).

A recognised limitation of recruiting by invitation is that the discussion only involved those municipalities with an interest in and capacity for climate action. One invitation was refused on the basis that the municipality had nothing significant to add to existing provincial climate policy. Officials with two of the smallest municipalities refused the invitation to participate because capacity was so stretched that they had no time left to discuss their work. More information on this phenomenon could have contributed to our knowledge of barriers and enablers.

Findings

This study reveals that municipal official across the three sectors responsible for the highest percentage of GHG emissions in Greater Victoria face similar barriers and enablers in their work. Table 2 lists the principal themes discussed in the focus groups, categorising them as barriers, enablers, or both. It classifies them according to Vedung's (1998) typology as economic, regulation and information instruments (see Table 2). This classification is offered as an overall guide; the differences across the three thematic areas are explored in greater detail in this section.

Funding

Funding levels attracted varying levels of concern across the three thematic areas, with smaller municipalities noting less administrative capacity to apply for grant applications. Officials working in sustainable transportation expressed the highest level of frustration about funding, viewing its lack as a barrier. They noted that the shortfall was considerable, with one official stating that it is:

> billions of dollars that are required to get the sort of network that they can really get those mode shifts that we're looking at…It's a money issue, but that's sort of seven-figure, eight-figure, nine-figure money issue rather than a sort of small triple A [All Ages and Abilities] bike lane type. (P17)

They pointed out that active transportation was now "mainstream transportation" and needed to be funded accordingly, as the scale of expenditure on road construction for motorized vehicles is orders of magnitude larger than that spent on active transportation projects. Participants stressed the need for significant investment in public transit throughout Greater Victoria to provide more frequent and reliable services that could replace car travel. Officials contrasted the ambitious targets of higher levels of government for mode shift and GHG emissions reduction with the current levels of funding to support projects that would shift mode choice and reduce emissions. One official from a larger municipality remarked that the provincial government had, in its own document on reducing GHG emissions, CleanBC, specified a much higher funding level for sustainable transportation than currently exists: "It's kind of ironic the CleanBC plan talks about that they should fund between $38 and $44 per capita for active transportation, and they fund less than a dollar at the moment" (P18). Since the focus groups were held, the Province has announced an additional $100 million for active transportation over three years, in addition to $24 million from the BC Active Transportation Infrastructure Grants Program (British Columbia Ministry of Finance 2023).

Table 2
Barriers and enablers to climate action in Greater Victoria

Funding	Enabler	Barrier	Enabler	Economic
Staffing: resources	Barrier and enabler	Barrier	Enabler	Economic
Staffing: interactions	Enabler	Enabler	Enabler	Information
Legislation/regulation	Barrier and enabler	Barrier	Enabler	Regulation
Governance	Barrier and enabler	Barrier and enabler	Enabler	Regulation
Information and data management	Enabler (horizontal) Barrier (vertical)	Enabler (horizontal) Barrier (vertical)	Enabler	Information
Politics: public opinion and political leadership	Enabler	Enabler	Enabler	Information

Note: This table is based on the focus group discussions, and identifies whether categories were viewed predominantly, not exclusively, as barriers or enablers.

Building and energy officials remarked on the plentiful funding available for home energy retrofits and for renewing municipal assets, and regarded it as an enabler. Reducing energy use in buildings has been stressed by the governments of Canada and BC and expenditure is correspondingly high. Home energy retrofits are funded through federal, provincial and some municipal rebates and when the focus groups were held were dependent on the homeowner getting a home energy evaluation through Natural Resources Canada both before and after renovations (Natural Resources Canada 2021). The $24 million BetterHomesBC and BetterBuildingsBC were co-funded with the federal government under the Low Carbon Economy Leadership Fund (Government of British Columbia 2024b). According to the focus groups these rebates had a drawback: they were only available to homeowners, with no requirement for landlords to perform retrofits. The adoption of heat pumps in British Columbia remains relatively low and adoption for retrofit may require adding regulation to the current policy mix (Pardy, Rhodes, and Jaccard 2022).

Funding was not seen as a barrier by the waste management group. In the city of Victoria and some other municipalities waste management is treated as a utility, with individual property owners charged by the municipality. Langford and Colwood do not provide municipal collection, requiring property owners to sign up for service with a private company. Both municipal and private haulers pay fees to dump waste at the Hartland Landfill. Fees charged by the landfill fund the CRD's waste management operations and policy. With this user pay model, municipalities are not dependent on funding decisions from higher levels of government. This provides them with reliable funding and freedom from the necessity to lobby for increased monies or to apply for grants.

Staffing: Resources and interaction

Staffing resources were viewed as both barrier and enabler by the buildings and energy and transportation group. Larger municipalities, like Saanich and Victoria, have in-house teams to manage assets and to engage in building infrastructure for active transportation, with more resources to put into policy. Smaller municipalities have little to no policy capacity and most operations and maintenance work is contracted out. The lack of policy capacity hampers the ability of smaller municipalities to argue the case for actions to reduce GHG emissions, particularly while developing their Official Community Plans.

All focus groups differentiated between staff directly employed by the municipality, contractors to the municipality, and private sector actors. While the larger municipalities enjoy higher staffing levels, officials from Victoria and Saanich expressed concern about the size of the task before them. The ability of contractors to attract employees in the current labour and housing market in BC was raised in all three groups and was seen as a barrier. Officials from the buildings and energy and waste groups saw an unwillingness to innovate and to be flexible within the private sector as a barrier. Examples were haulage and HVAC installation companies.

Interaction between staff, within and across municipalities, is highly developed and collaborative. In all groups it was seen as an enabler and crucial in overcoming the barriers caused by lack of capacity and expertise. One official spoke about borrowing a spreadsheet from another municipality for a grant application, while another talked about trying to tie in with neighbouring municipalities on policy. A participant spoke particularly of the value of attending meetings of specialists as a generalist: "we don't actually have a transportation person…and coming here [to meetings] sometimes just lets us take two steps forward when sometimes we'd be just crawling. So I show up to these things, just to see if I can just steal some of the knowledge" (P13). The smaller municipalities perceive lack of staff expertise and available staff hours as significant barriers. Informal assistance from colleagues in other municipalities, as well as formal assistance from the CRD, helps break these barriers down. The focus groups indicated a culture of collaboration amongst municipal officials working on similar portfolios, and larger municipalities with greater capacity providing support and guidance to smaller ones.

Legislation and regulation

The legislative and regulatory framework governing each area occupied the attention of all three focus groups. The most vociferous commentary came from the sustainable transportation group, which saw provincial legislation and standards as a barrier. One official said vehemently that:

> The Motor Vehicle Act in BC is atrocious when it comes to sustainable transportation. It severely needs to be completely overhauled and updated to reflect improving sustainable transportation -- for safe

passing laws, no right turns on red, all the things to do with electric mobility like mobility scooters and electric bikes -- all of those things are currently not addressed in the Act and they need to be. (P18)

While many pieces of legislation were discussed during the focus groups, none came under more criticism than the Motor Vehicle Act.

In addition, Ministry of Transportation and Infrastructure (MOTI) construction regulations were criticized as inflexible and outdated. While most of the roadways in Greater Victoria are under municipal control, some are subject to MOTI regulation. Roads in the Electoral Areas, for whom the CRD acts as the municipal government, fall under MOTI control. Officials pointed to a lack of flexibility in interpreting design guidelines resulting in vehicle-centric infrastructure that endangers those using active transportation for a generation or more. Participants remarked that the BC Transit Act and lack of a unified transportation policy takes public transit decisions largely out of the hands of municipal officials, who spoke of the need for more frequent service throughout Greater Victoria. Municipal bylaws allow municipalities to set parking regulations and minimums for new construction, thus enabling them to place less of an emphasis on motor vehicle parking. This was regarded by some municipal officials as politically risky for councils, but Saanich and Victoria were noted to be getting over that barrier.

Legislation and regulation were seen as both barrier and enabler by the buildings and energy group. The BC Energy Step Code and Zero Carbon Step Code were mainly viewed as enablers. Through them, municipalities can accelerate their adoption of higher efficiency in building standards by enacting their own bylaws to reflect higher steps. One official remarked approvingly:

How the Step Code was rolled out …is really helpful or easy for smaller communities to action because now we have these pathways: you can choose to go faster but the set of requirements is clear. It's in the bylaw. You don't necessarily need your local expertise because there's other ways to make sure for the building permit review that it's signed off. (P4)

Another was more critical, stating that the higher steps should be mandatory and not up to individual municipalities. Most agreed that the ability to regulate the energy efficiency of existing buildings, and not just new builds, was missing from the provincial regulations. Frustration was evident:

If we could just regulate emissions from existing buildings that would help a lot. With a year's work and not a small amount of effort, we are now able to regulate emissions from new buildings, but we can't touch existing ones and we're just going to be trying to come up with creative tools for the rest of our lives until we can just regulate how much they can emit. (P4)

While officials welcomed the changes to provincial codes requiring more stringent standards, they also regarded their lack of ability to apply those codes to existing buildings as a barrier.

Changes to provincial legislation and guidance in recent years have transformed how waste is managed in Greater Victoria…The waste sector is highly regulated, with municipal officials feeling enabled by regulations to reduce landfill waste emissions and plastic waste. The province is so active in these areas that one invitee refused to participate, saying inaccurately that the Province was in sole charge. The Environmental Management Act provides four areas of concurrent jurisdiction, one of which is protection of the natural environment. Victoria and other municipalities wishing to ban plastic grocery bags stepped into this concurrent jurisdiction, with the Minister of the Environment eventually approving such a ban for all municipalities in the province. The federal role in plastics regulation, such as the introduction of regulations banning certain single-use plastics (*Single-Use Plastics Prohibition Regulations*) (Government of Canada 2022) was welcomed as another enabler, leaving the City of Victoria free to develop other regulations. The City of Victoria has used this space to introduce a construction waste bylaw to compel the diversion of wood from demolition into secondary reuse markets.

Governance
Governance was perceived as both a barrier and an enabler by all groups. Greater Victoria's numerous municipalities, governed separately, could form a barrier to consistent and efficient climate policy. One official noted that having a more united front would be useful when dealing with the province. The regional growth strategy reflects this disunity

and was described as "having no teeth." This fragmentation means that coherent regional transit planning does not occur. Waste policy was also seen to vary widely across the municipalities, with disparate goals all reached in different ways. One official suggested amalgamation of municipalities as a solution but this view was by no means universal.

Other officials were more positive about the governance structure, seeing it either as neutral or an enabler. Those seeing it as neutral noted that all models have drawbacks: "when you talk to Vancouver or Kelowna or places like that, they have their own challenges as well, with the setups that they have." (P18) One official praised:-

> the sheer amount of collaboration that goes on in the region… the degree that we work together to try and align takes a lot of the burden off which is very helpful and the high degree of collaboration as well also allows us to kind of divide and conquer a little bit, to pilot programs in one municipality as and then potentially adopt it afterwards. (P7)

The focus group on waste referred to the spread of the plastic checkout bag ban throughout the region as an example of an informal pilot project, with Victoria leading and other municipalities following suit. Innovation also spreads because the public notices infrastructure or programs developed by other municipalities and requests them in their home municipality. The CRD is seen to have a positive coordinating role in the current governance structure, particularly in running the Climate Action Intermunicipal Working Group and developing the Home Navigator Program for energy retrofits.

Shared authority over protection of the natural environment by both municipalities and the Province was seen as an enabler particularly by the waste group. The ambiguity of this shared authority can embolden a municipality, like Victoria, to push on further regulation. There is space to act but municipalities need to act boldly to occupy that space.

Information and data management

Information and data management was viewed as both a barrier and enabler for climate action. Inconsistent and unclear modelling requirements when reporting emissions data and applying for grants is a barrier for local governments in their vertical relationship with both federal and provincial governments. Small municipalities do not have the capacity to engage in such detailed data analysis. Municipalities overcome this barrier by sharing information and modelling approaches between each other and appealing to the CRD for assistance. Horizontal information sharing thus becomes an enabler of climate action. Data on the mode shift that occurred after protected bike infrastructure was built enabled construction of further infrastructure.

Lack of detailed knowledge about climate action among the public was raised as a barrier. One official remarked that levels of climate awareness among the general public were insufficient, although demand for climate action was seen as high by all groups. Unlike in studies from earlier years (Porter, Demeritt, and Dessai 2015; Robinson and Gore 2005), no one saw inadequate climate awareness or education among staff as a barrier. One official noted that their work was supported by "community values and political will, social license… that's what our Council is elected on, those promises of sustainability and real action… that translates on a staff level." (P19) Commitment by politicians to climate leadership was important, with the election of councils that ran on climate action platforms seen as a signal of support for robust policy.

Data management was considered to be a barrier when officials were preparing grant applications, as the information demanded was unknown or difficult to access. Officials cited inadequate access to data for modelling purposes, and indeed to appropriate modelling approaches. This was a particular barrier for smaller municipalities with little capacity for policy analysis. Officials pointed to the overabundance of information as an administrative barrier to homeowners applying for home energy retrofit rebates, with one official wishing that:

> people could just pick up a phone and then there was a fully funded service that would just say, 'OK, we're going to do the full insulation, windows, air sealing and electrification of your space and water heating package for you.' … and it just has to be really easy, like one phone call and that's all that homeowner has to do. (P3)

Home energy rebates were universally criticized for lack of ease of use.

Information sharing is linked closely to the governance question; collaboration and learning from each other's projects enables municipalities to transcend some of the difficulties caused by so many municipalities in a relatively small area. Multiple examples of information flow and collaboration between officials were raised. The most formal were the CRD Climate Action Working Group, with regular meetings for climate officials, and the CRD Home Navigator Program, developed by member municipalities together to address the administrative burden facing residents in home energy rebates. Officials make an effort to attend meetings where they will encounter their opposite numbers, and applaud advances made by other municipalities in active transportation funding, for example. Those working for smaller municipalities get in touch with each other for advice on information submission. The waste group described highly informative meetings with officials from the US and Vancouver while developing Victoria's construction waste bylaw. Information passes freely and generally with goodwill through all types of contact.

Public opinion and political leadership

Public opinion was seen as both a barrier and enabler. Officials discussed the difference between perceived and actual opposition to policies, noting that opposition was expressed loudly, while those in favour did not usually provide feedback. Victoria's experience with opposition to the AAA bike network came up repeatedly, and one official stated:

> So while we heard there's been a very vocal group that's not supportive of bike lanes, I'm not sure that that there's actually a substantive majority that are against the work that's been done…politically actually we may perceive barriers, but they may not actually be there. (P17)

Several officials pointed to the recent elections in which climate-friendly councils had been voted in as a counterpoint to this loud opposition. Concern was expressed about the negative political consequences of restricting parking; one official noted that these concerns were not stopping Saanich and Victoria from taking action. Active transportation was noted as a more contentious file than both buildings and energy and waste policy.

Officials from all groups remarked that they took their cues from elected politicians and that leadership from councils was an enabler. Council directs officials to develop plans and cost out budgets on priority areas, which include active transportation and waste strategies. Caution on the part of councils could act as a barrier, with some officials worried that their councils were not implementing an accelerated schedule for the Step Code. It is unknown whether municipalities that did not send officials to participate in the focus groups experience a lack of political leadership.

Discussion and conclusions

Previous literature has demonstrated that local governments in British Columbia find themselves with the responsibility for taking climate action without the corresponding financial resources (Curry 2018). Officials in Greater Victoria lack legal competence, or jurisdiction, particularly in transportation; the provincial government pulls most of the regulatory levers. When officials in the Lower Mainland were asked how barriers of legal competence for municipalities could be overcome, they suggested a number of solutions that remain outside local jurisdiction to this day. Still lacking in Greater Victoria is "regional planning [that] should match density with transportation needs, rather than piecemeal local planning" (Burch 2010c, 293). In contrast, municipal officials dealing with buildings and energy are able to rely on the higher building standards introduced by the Province since 2010. This finding is consistent with the work of Jaccard et al. (2009) on Vancouver; lack of jurisdiction means a corresponding lack of access to instruments to support ambitious climate action. Municipalities can have success in entering the space occupied by concurrent jurisdiction over the protection of the environment, as Victoria and other municipalities have done in their single-use plastic policies. Here again municipalities must rely to some extent on policy congruence with the Province. For the most part, capacity is not a barrier only when the Province does not stand in the way.

Two enablers can enhance capacity but are unable to mitigate it lack. These are local framing (information and facilitation), as discussed above, and political leadership. Political leadership appears frequently as an enabler in the literature (Burch 2010a; Oseland 2019; Pasquini, Cowling, and Ziervogel 2013; Porter, Demeritt, and Dessai 2015), with Pasquini et al. noting the importance of a public willing to support climate leadership. Dale et al. (2020b) stress that climate leadership at multiple levels is a significant enabler in climate action in British Columbia. While earlier studies on municipal climate action revealed that lack of knowledge and buy-in among both staff and politicians

was a barrier to action, this study shows that most officials find their colleagues well-informed and committed. Information sharing and the flow of data communication appeared as barriers in studies of other municipalities, with some studies finding that a siloed approach hampered climate action (Birchall et al. 2022; Oseland 2019). As noted by Burch (Burch 2010a), officials in the Lower Mainland suggested that staff in policy and operations needed more information and greater buy-in.

This study finds that barriers and enablers to climate action in Greater Victoria as described by municipal officials fall into six categories: funding, staffing, legislation/regulation, governance, information and data management and politics. The first four categories are forms of government capacity. When municipal governments have sufficient access to funding for projects and staffing, funding can be an enabler. Insufficient access to legislative capacity means that funding is released to municipalities according to provincial decisions. When municipal and provincial policy align, for example in improving energy efficiency and buildings, regulation is less of a barrier and funding is available. When municipal ambitions are greater than those allowed for in provincial policy, as is the case with active transportation, funding for staff and projects is inadequate and legislation is considered to be misaligned with the needs of active transportation users. Waste officials have autonomy over their own funding by means of charging user fees, and financial capacity is thus not a barrier.

Analysis of the types of instruments used in climate action in Greater Victoria revealed that upper levels of government had control over those most associated with power: regulation and economic measures. Informational measures not associated with regulation or funding were viewed as less effective; guidance from CleanBC asking municipalities to increase mode share to 30% by 2030 was derided at the time of the focus groups because it did not come with sufficient funding to support implementation. Municipalities and the CRD use numerous informational instruments, such as the Intermunicipal Climate Action Working Group and the Home Energy Navigator Program, as well as more informal interpersonal communication. These instruments make information into an enabler at the municipal and regional levels.

When the policy goals of municipal governments align with effective regulation and adequate funding provided by senior governments, fewer barriers exist for municipal officials, as can be seen in the remarks of the buildings and energy, and waste, focus groups.   Lack of policy alignment with senior levels of government conversely comprises a significant barrier for municipalities, as is evident from the experiences of municipal officials in transportation. Dale et al. remark that climate action "will not be effective without policy coherence (within governments) and policy congruence (between government levels); as our evidence shows in BC, there is often a dampening down effect by one or two of the higher levels"(Dale et al. 2020a, 877) . Municipal officials in Greater Victoria would share this view.

The findings of this study are consistent with many features of the literature on barriers and enablers to municipal climate action. Questions of government capacity, defined by Ryan as "legal competence, human and technical resources, funding," arise frequently (Ryan 2015, 519–20), who) posits that government capacity is a necessary but not sufficient condition for municipal climate action. Capacity cannot in itself guarantee successful climate policy; other factors, such as information management and political leadership, can either support or block climate action. Burch et al. (2010a) explicitly reject explanations of climate inaction based on lack of capacity, remarking that overcoming this barrier is "less a matter of more capacity (such as municipalities requiring additional funding from the provincial government— although this would certainly be welcomed) than facilitating the effective use of existing resources" (296). This facilitation involves information sharing and political leadership which can help to mitigate lack of capacity or further enable successful action.

Information sharing and collaboration was manifested in informal conversations and a willingness to learn from the experience of other municipalities. It is formalized by the role of the CRD as a climate broker of sorts, collating and disseminating information and providing fora for detailed interaction. The CRD is engaging in the facilitation that Burch (2010a) deemed so essential in her study on three municipalities in the Lower Mainland of BC, operating under the same regional district framework in force in Victoria, BC. While regional districts were originally constituted to coordinate utilities and services, they have taken on a coordinating role for issues of regional concern, like climate change (Burch 2010a). Communication and collaboration are however unable to compensate for barriers of government capacity. While they have prima facie similar goals, upper governments have not aligned their regulations nor their funding decisions with the needs of municipalities, as this study has shown. The municipalities rely on information, collaboration and the facilitation of the CRD to operate in a landscape where the instruments of power are primarily wielded by upper layers of government.

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