

Cross-Sector Partnerships as an Implementation Strategy in Achieving
Net-Zero Greenhouse Gas Emissions

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Following the emphasis on the need for cross-sector partnerships (CSPs) during the 2002 World Summit on Sustainable Development, CSP approaches have gained recognition internationally and have been integrated into development agendas such as the United Nations Sustainable Development Goals (SDGs). CSPs enable expertise mobilization, adoption of technology, and leveraging of funding to support the achievement of the SDGs. Local partners engaging in CSPs can make significant progress toward achieving their local sustainability goals while contributing to the global SDGs. In recent years, empirical studies have identified CSPs as a strategy for achieving deep decarbonization, including at the local level. Furthermore, existing literature highlights a positive correlation between partnership structural features and sustainability progress (i.e., plan outcomes), particularly regarding climate action. However, the potential relationship between the size and design of local CSPs working on achieving net-zero climate plans remains understudied. Additionally, the documentation of best practices of partnerships allows for replication within similar contexts. Thus, this research identifies the similarities and differences in the structural features of small and large CSPs that contribute to mitigating greenhouse gas (GHG) emissions. The research uses a qualitative cross-case comparison approach, involving two cases: one small CSP in the City of Markham (3 partners) and one large CSP in the City of Montreal (over 100 partners). The cases are focused on climate mitigation, involve the city, were in the implementation or completion phase, and were selected based on detailed selection criteria following recommendations from the Municipal Net-Zero Action-Research Partnership (NZAP). Data were collected from archival documents and interviews with partners and dedicated staff of the partnerships to get broader insights into the nuances of the partnerships. Analysis was done using a deductive analytical framework on partnership structures and outcomes, and an inductive analysis on partner and partnership's perspectives about the implications of their structure on outcomes. The results show that to achieve community-wide action, a large CSP is needed, but to achieve a focused project, a small CSP is ideal. The design of the partnership's decision-making, coordination, communication, multi-level integration, monitoring & reporting, financing, and partner engagement are all critical structural features to consider in ensuring the partnership can achieve its climate goals, regardless of size, but the size will influence the design. The findings of this research are significant for organizations focused on local climate mitigation, including private, public, and civil society organizations. The thesis contributes to future cities' research area by conducting an empirical investigation to advance the literature on the role of cross-sector partnerships in advancing the implementation of climate action plans in municipalities. The findings will also be useful to academic researchers focusing on net-zero climate action, climate change, sustainable economy, CSPs, and local climate action plans.

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1 Introduction

1.1 Background and Research Problem

The steady rise in greenhouse gas (GHG) emissions poses a significant threat to the global climate system, impacting ecosystems and human livelihood (IPCC, 2021). Current statistics indicate that anthropogenic activities have substantially impacted the climate and have caused approximately 1.2°C of global warming, which is expected to increase as emissions persist (IPCC, 2023; Lesch, 2023). It has been estimated that over 40% of the world's population lives in areas that are highly vulnerable to climate change (IPCC, 2023), highlighting the urgent need for both adaptation and mitigation strategies. Climate mitigation refers to deliberate efforts to reduce greenhouse gas (GHG) emissions and accelerate their removal from the atmosphere, such as through the creation of 'sinks.' These actions are aimed at slowing or halting the progression of long-term climate change (Burch et al., 2021; Noor, 2023). Climate adaptation refers to processes and behaviours that assist a system in absorbing changes that have already occurred or are anticipated in the future (IPCC, 2007; Noor, 2023). However, scientists have revealed that current mitigation efforts are insufficient to limit the warming to below 2 degrees Celsius (IPCC, 2023). Furthermore, average annual modelled mitigation investment requirements for 2020 to 2030 in scenarios that limit warming to 2°C or 1.5°C are three to six times greater than current levels, and total mitigation investments (public, private, domestic, and international) would need to increase across all sectors and regions (IPCC, 2023). Consequently, in 2018, the CDP (Carbon Disclosure Project) published that if drastic measures are not put in place, over 200 of the world's largest industries could lose over a trillion dollars due to climate change (CDP, 2018). Furthermore, in addition to negatively impacting the global economy, it will also pose serious threats to the ecosystem and means of livelihood, as it will also lead to hot extremes, high mortality rates, extinction of rare species and extreme depletion of natural resources (IPCC, 2023).

In a bid to salvage the situation, research has been conducted to identify the sources of GHG emissions (Linton et al., 2021). Empirical research has shown that the G7 nations comprising Canada, Italy, Japan, United Kingdom, Germany, France, and the United States are among the world's largest emitters of GHGs (G7 Countries Report, n.d.). The G7 nations refer to the seven countries with the most advanced economies and they, as a group, represent over 46% of the world's GDP (G7 Countries Report, n.d.; Government of Canada, 2022a). However, according to the World Resources Institute (2023), the world's top three emitters are China, the United States and India. They contribute more than 40% of global GHG emissions (Friedrich et al., 2023). Thus, to achieve a drastic reduction in global GHG emissions, these countries, including Canada, must take the lead in reducing their emissions.

According to statistics, urban areas have been identified to be the primary source of greenhouse gases, given that they produce over 70% of GHG emissions into the atmosphere (Churkina, 2016; IPCC, 2014). Currently, more than half of the world's population now lives in urban areas and there has been a projection of an increase in the human population in towns and cities to 60% by 2030 (UNFPA, n.d.). This makes it imperative to consider urban areas as a priority in the mitigation of greenhouse gases (Linton et al., 2021).

In response to the imminent danger, several countries, Canada inclusive, have pledged to reduce their carbon footprint (Government of Canada, 2019). Historically, Canada has faced challenges in meeting its GHG reduction targets, partly due to its significant fossil fuel industry and vast geographical size, which poses unique challenges for emissions reductions (CCA, 2019; Stephenson & Shaw, 2013). Despite these challenges, Canada has committed to reducing GHG emissions by 40-45% by 2030 and achieving net-zero carbon emissions by 2050 (Government of Canada, 2022a). To validate this commitment, Canada established the Canadian Net-Zero Emissions Accountability Act in 2021. This legislation highlights the government's recognition of the urgency of climate action and establishes legally binding targets (Government of Canada, 2022a). The Act includes provisions for setting regular emissions reduction goals, creating a transparent accountability framework, and engaging with Indigenous peoples, provinces, territories, experts, youth and the public to develop effective policies (Government of Canada, 2022a). To align with federal commitments and achieve the net-zero emissions target in 2050, many municipalities have drafted a local climate action plan (IPCC, 2021). For accountability purposes, some of these municipalities give an annual report of their progress to the Carbon Disclosure Project. The Carbon Disclosure Project also referred to as the CDP, is a non-profit organization that assigns ratings to municipalities and companies based on various factors (CDP, 2022). These include a public disclosure through CDP-ICLEI, a municipality-wide inventory of emissions, published climate action and climate adaptation plans, alongside a completed Climate Risk and Vulnerability Assessment (CRVA) (CDP, 2022).

Additionally, the Partners for Climate Protection (PCP) program was established in Canada by ICLEI – Local Governments for Sustainability (ICLEI) and the Federation of Canadian Municipalities (FCM & ICLEI, 2018). Partners for Climate Protection (PCP) is a program with over 500 municipalities as members (FCM & ICLEI, 2018). It provides its members with resources, information and effective strategies on how to tackle climate change and reduce GHG emissions in their respective municipalities (CDP, 2018; FCM & ICLEI, 2018). Another project co-led by FCM and ICLEI-Canada in collaboration with the University of Waterloo is the Municipal Net-Zero Action Research Partnership (N-ZAP) project (University of Waterloo, n.d.). Its main objective is to assist Canadian municipalities in

monitoring, measuring and achieving net-zero GHG emissions targets, ensuring emissions reduction projects, policies and programs are aligned with Canada's national reduction commitments (University of Waterloo, n.d.). In a bid to achieve its main objective, it has five working groups (University of Waterloo, n.d.).

Working Group 1 focuses on producing a database that determines the current state of GHG emission reduction targets, measurement, monitoring and planning in Canadian municipalities (NZAP, 2024). Working Group 2 aims to advance standardized measurement systems and tools (indicators) that can also be used to identify mitigation opportunities and further social equity (University of Waterloo, n.d.). Working Group 3 has the objective to improve municipal monitoring & disclosure, including carbon accounting, climate budgets, and TCFD, and integrate net-zero accounting and carbon budgets into municipal-level decision-making, enhancing transparency on action and gaps. This effort drives planning to address these gaps and ensures accountability (University of Waterloo, n.d.). Working Group 4 aims to enhance community-wide emissions measuring and monitoring (collaborative governance) and ensure equitable, diverse and inclusive engagement in climate action, measurement and monitoring (University of Waterloo, n.d.). Lastly, Working Group 5 focuses on mobilizing knowledge resources and tools to diverse audiences using accessible and inclusive formats (University of Waterloo, n.d.).

This thesis contributes to achieving the objective of Working Group 4. Community-wide emission monitoring and measurement systems are enhanced by conducting a survey to identify the current state of the measurement and monitoring and strategies that have proven beneficial. To achieve this, Working Group 1 (WG1) has conducted a survey which identifies one of the strategies as partnerships (University of Waterloo, n.d.). However, the relevance of partnerships in relation to climate performance remains understudied (Clarke et al., 2023; Wong et al., 2020; World Climate Research Program, 2019).

Additionally, Canada introduced the National Adaptation Strategy which emphasizes the importance of partnerships in addressing climate change and underscores the relevance of partnerships in tackling change (Government of Canada, 2022b). The term 'partnerships' used in this thesis refers to the voluntary or compulsory forms of alliances where organizations from public, private and/or civil society come together to address issues of mutual concern or gain mutual benefit (Clarke et al., 2023). Some possible reasons for which organizations go into partnerships could be to reduce the boundaries between organizations, to foster mutual interdependence of partners, for financial gains or profit, to share resources, and for competitive advantage among others (Hutchinson, 2020). "Cross-sector

partnership," as used in this thesis, refers to a type of partnership where organizations from different sectors—public, private, or civil society—voluntarily collaborate to address sustainability-related issues (Parmigiani & Rivera-Santos, 2011). This type of partnership takes two forms: small cross-sector social partnerships and large cross-sector partnerships, otherwise known as multi-stakeholder partnerships (Clarke & MacDonald, 2019; Ordonez Ponce, 2018).

Previous empirical research has explored deep decarbonization strategies in priority industries including transportation, buildings, electricity, and waste (Linton et al., 2021, 2022; Papadis & Tsatsaronis, 2020; Valencia et al., 2022; Wang et al., 2022), with cross-sector partnerships being one of the identified strategies. Recent studies reveal a significant increase in the number and intricacies of CSPs, which have demonstrated significant impacts and provided valuable insights for academic learning (Clarke & Crane, 2018; Wong et al., 2020). This growth has spurred an increase in the study of CSPs across various academic disciplines, highlighting the interdisciplinary nature of CSP research (Bryson et al., 2015; Clarke & Crane, 2018). A significant challenge in the field of CSPs is the considerable variation in their characteristics, including size, objective, duration, voluntary participation, and regional scope (Selsky & Parker, 2005; Wong et al., 2020). Despite the widespread recognition of CSPs as a strategy to address sustainability-related issues, their success is not guaranteed (Bryson et al., 2006; Wong et al., 2020), owing to poor design and insufficient data (Bryson et al., 2006). This highlights the critical need to examine the relationship between the size and design of CSPs in municipalities striving for net-zero climate targets, a topic that has been identified as a gap in the existing academic literature (Clarke et al., 2023; Clarke & MacDonald, 2019).

Furthermore, recent empirical studies emphasize the relevance of structural features in determining the success of CSPs, particularly in the context of the decarbonization of industries (Sun et al., 2020; Wong et al., 2020). However, these studies are limited by the restriction to participants who could provide information in English (Wong et al., 2020). Therefore, it becomes a gap in the literature, requiring a thorough examination of the effectiveness of both small and large CSPs in key decarbonization industries, including waste, transportation, electricity, and buildings, both in English and French-speaking municipalities. A deeper understanding of the impacts of these partnerships within these priority industries is essential for assessing their role in achieving net-zero climate goals (Clarke et al., 2023; Kuttan, 2023).

Thus, this research focuses on identifying the similarities and divergence in the structural features of small and large CSPs that have played a role in mitigating GHG emissions, thereby facilitating the achievement of net-zero greenhouse gases, particularly in Canadian municipalities

(FCM & ICLEI, 2018). This echoes the C40 report ‘Powering Climate Action’ which clearly stated that municipalities that engage in partnerships as part of their implementation strategy often make more significant progress than those that do not (C40, 2015).

This thesis aims to compare the partnership recommendations for achieving net-zero greenhouse gas emissions found in existing academic literature with those implemented by leading Canadian local governments. It will delve into the dynamics of CSPs to bridge the current knowledge gap and offer actionable insights for optimizing these collaborations to enhance climate action. This will help identify methods that can be improved upon and can be applied to other urban areas in Canada.

1.2 Statement of Purpose and Research Questions

This research aims to qualitatively explore, through case studies, partnerships with a community-wide focus in municipalities that are advancing in climate change mitigation and adaptation. It will also explore both small and large cross-sector partnerships that are being implemented by these Canadian cities. It seeks to discover the significance of partnerships in these municipalities and gather insights on partnerships that will be relevant to other municipalities that either do not have a climate action partnership or are making incremental changes towards the net-zero climate action plan.

To achieve the purpose of this research, the following questions have been developed. Addressing the questions will provide insights into the best practices concerning the structural features of partnerships in Canadian municipalities that are proactive in climate action (Clarke et al., 2023; Sun et al., 2020; Wong et al., 2020). Additionally, it will reveal the significance of these partnerships in helping them make transformational changes to counteract the carbon lock-in of buildings, electricity grids, transportation, and waste sectors as they aim toward their net-zero climate action plan.

- What similarities and differences exist in the structural features of small and large CSPs focused on mitigating greenhouse gas emissions?
- What is the role of partnership size and structure in influencing plan outcomes in small and large CSPs focused on achieving net-zero greenhouse gases?

1.3 Study Methods

The proposed research method is the case study approach. It will have two qualitative phases. The first phase, or document analysis, will rely on secondary sources of data (Creswell, 2018). The survey of Working Group 1 of the N-ZAP project will be used to identify municipalities that currently engage in partnerships as part of their climate mitigation strategies (University of Waterloo, n.d.). Afterwards, a

search will be conducted on the websites of these municipalities to identify municipalities with formal partnership and equity-embedded structures properly captured in their local climate action reports. An extensive literature review and conceptual framework will inform the development of the coding scheme for deductive coding of document analysis data (Creswell, 2018). This would be to capture themes and patterns previously identified in the literature review and conceptual framework (Creswell, 2018). Then, inductive coding will be used to enhance the conceptual framework (Creswell, 2018). This would be to identify themes that were previously not in the literature review and conceptual framework (Creswell, 2018).

The information received from the first phase will be used to inform the second qualitative phase, which will use semi-structured interviews with representatives of member organizations involved in the partnerships. Virtual interviews are proposed to reveal a broader perspective of partnerships as a strategy for achieving local climate action plans and to get further clarification on any part of the respective documents that were not clear.

1.4 Expected Contributions

The study aims to contribute to the future of cities research area by conducting an empirical investigation to advance the literature on the role of cross-sector partnerships and the achievement of net-zero GHG goals of municipalities. The findings from this research will be useful to academic researchers focusing on net-zero climate action, climate change, sustainable economy, cross-sector partnerships, and local climate action plans. The research also helps give insights to key decision-makers in municipalities, the private sector and civil society on partnership design and size that can facilitate the achievement of their net-zero emissions plan. The study will also advance empirical knowledge of Sustainable Development Goals 11 - sustainable cities and communities and 13- climate change (United Nations, 2023b).

1.5 Thesis Outline

This thesis is made up of six chapters – the introduction, the literature review, the methodology, the results, the discussion, and the conclusion. The introduction offers a synthesis of the research problem, the proposed research questions, the purpose statement, and the proposed study methods. The second chapter is the literature review that gives an overview of the current knowledge of climate mitigation, deep decarbonization and local climate action plans. Additionally, it underscores the importance of partnership in a sustainability context and highlights the significance of partnership as a strategy in local climate action plans. It identifies the gap in the literature that forms the basis of this research. The

third chapter is the methodology. It explains the research design, data collection, analysis, and interpretation. Additionally, it reveals the researchers' role, limitations, and strategies to ensure validity and reliability. The fourth chapter presents the empirical findings, while the fifth chapter discusses these findings in light of the literature review and conceptual framework, addressing the research questions. The final chapter provides a comprehensive overview of the thesis, highlighting its contributions, limitations, and suggestions for future research.

2 Literature Review

2.1 Introduction

This section begins with an overview of climate change, climate mitigation and deep decarbonization. Then, current knowledge on climate action planning and net-zero climate action plans is explored, which is followed by an extensive discussion of the existing literature on partnerships that relate to sustainability, the types of partnerships currently utilized in Canadian municipalities and their relevance to the net-zero climate action plan. Lastly, it gives a summary that identifies the gaps in the existing literature that show the need for a study on current partnership strategies employed by Canadian cities in facilitating their transformation as they make significant progress towards achieving the net-zero climate action plan.

2.2 Context

2.2.1 Climate Change

Climate change refers to the long-term variations in temperature and weather conditions that happen over an extended period (IPCC, 2014). This may be a natural change caused by the solar system or man-made activities (IPCC, 2022). Since the 1800s, humans have greatly damaged the earth's natural cycle (Bataille et al., 2020; Burch et al., 2021; Valencia et al., 2022). After World War II, mankind became heavily reliant on fossil fuels which have been attributed to be a leading cause of climate change (IPCC, 2023; Perera & Nadeau, 2022). Fossil fuels such as coal, oil and gas have become significant sources of energy and to date, account for 80% of global energy and about 66% of the world's electricity is generated by fossil fuels (United Nations, 2023a). Priority urban sectors known to be significant drivers of greenhouse gas emissions include buildings, waste, transportation and electricity (Linton et al., 2022; Papadis & Tsatsaronis, 2020; Valencia et al., 2022). Energy and transportation have been described as being responsible for the emission of billions of tons of carbon dioxide and over 100 million tons of methane into the atmosphere (Perera & Nadeau, 2022). Specifically, emissions of carbon dioxide from the combustion of fossil fuels have increased by over 600%, rising from 5 billion metric tons in 1950 to 35 billion metric tons in 2020 (Global Carbon Project, 2022). Other greenhouse gases include methane (CH₄), nitrous oxide (N₂O), ozone-depleting substances (ODSs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF₆) and perfluorocarbons (PFCs) (Montzka, 2011). The constant release of these gases into the atmosphere contributes significantly to global warming (IPCC, 2014; Li et al., 2022). The emissions from these sectors have caused over 1.2 degrees Celsius in global warming and have a trajectory to get to 2 degrees Celsius or worse by 2050, and by the end of the 21st century, there is a projected increase of more than 3-5 degrees Celsius, above pre-industrial levels (IPCC, 2022;

Li et al., 2022). A current report by IPCC (2023) reveals that stabilizing the climate requires drastic changes, and the window to prevent adverse temperature rise is rapidly closing. It was described as Code Red, which signifies imminent danger for mankind (IPCC, 2023). The current state of global warming has led to an increase in the intensity and frequency of catastrophes such as drastic changes in natural and modified forests resulting in forest fires (Kirilenko & Sedjo, 2007), food insecurity (Wheeler & von Braun, 2013), a rise in sea levels (Matsuoka et al., 2015), droughts (Mukherjee et al., 2018), heat waves (Marx et al., 2021), among others (IPCC, 2022). Thus, to avert the impending adverse effects of climate change, immediate preventive measures must be put in place and implemented (Whitmarsh et al., 2021). This necessitates climate mitigation strategies.

2.2.2 Climate Mitigation

Climate change has been an issue for centuries (United Nations, 1992). However, it became a global concern in the late 20th century, and the need to act became imminent (United Nations, 1992). One of the drivers of the recent efforts was the establishment of the Intergovernmental Panel on Climate Change in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) (Agrawala, 1998). Its objective is to assess climate impacts and provide recommendations for policymakers (Tozer, 2019). To date, IPCC prepares comprehensive assessment reports on “the state of scientific, technical and socioeconomic knowledge on climate change” thereby highlighting the severity of climate change (IPCC, 2022).

The early response to climate change in the 1990s led to the organization of several summits and international conventions (Naser & Pearce, 2022). One such summit was the Earth Summit held in Rio de Janeiro in 1992 (Breidenich et al., 1998; Kuyper et al., 2018). During the summit, an international treaty, known as the United Nations Framework Convention on Climate Change (UNFCCC) was adopted (Kuyper et al., 2018; Naser & Pearce, 2022). The UNFCCC is a framework convention that has ushered in an era of global environmental governance (Breidenich et al., 1998; Kuyper et al., 2018). It aims at providing support to countries around the globe that are addressing climate change (United Nations, 1992). After the UNFCCC began operations in 1994, the first Conference of the Parties (COP)—its authoritative body comprising all parties to the UNFCCC—had its first meeting in 1995 (Kuyper et al., 2018). During the initial decision-making process, known as the Berlin Mandate, parties to the COP agreed that developed nations, known as Annex I countries, should pioneer the adoption of climate mitigation strategies (Kuyper et al., 2018; Naser & Pearce, 2022). They were expected to provide periodic progress reports, owing to their significant contribution to the release of greenhouse gases in the atmosphere (Kammerer & Namhata, 2018; Kuyper et al., 2018; Naser & Pearce, 2022). Subsequently, developing nations, known as non-Annex I countries, were to

follow suit at a later phase (Kuyper et al., 2018; Naser & Pearce, 2022). This was the premise on which negotiations toward a new treaty were launched, resulting in the Kyoto Protocol in 1997 (Kuyper et al., 2018; Naser & Pearce, 2022). While the Kyoto Protocol succeeded in enhancing global market-based flexible mitigation strategies, including emissions trading and the clean development mechanism, among others, its limitation was its inability to achieve the overarching goal of reducing global greenhouse gas emissions (Naser & Pearce, 2022).

Consequently, another treaty known as the Paris Agreement was signed by 196 countries in December 2015 at the UN Climate Change Conference under the UNFCCC in Paris, France (Dimitrov, 2016; Naser & Pearce, 2022). Its primary objective has been to restrict global temperature rise to below 2 degrees Celsius above pre-industrial levels while pursuing efforts to reduce the temperature to 1.5 degrees Celsius. (Kuyper et al., 2018). Each participating country is required to outline its targets and strategies for mitigating greenhouse gas emissions (Dimitrov, 2016; Robiou du Pont et al., 2017). These commitments are determined by each country based on its unique national circumstances and capacities (Kuyper et al., 2018; Naser & Pearce, 2022).

These pledges are called Nationally Determined Contributions (NDCs); hence, they are not legally binding (Naser & Pearce, 2022). Unlike the Kyoto Protocol, which focuses on developed countries, developing countries are involved in the Paris Agreement (Bodansky, 2016). Additionally, the Paris Agreement has made it possible for different sectors to be actively involved in addressing climate change, such as the public, private, and civil society (Bodansky, 2016). Furthermore, negotiations have been ongoing at different levels to ensure progress in areas such as financial mechanisms, capacity building, and institution building which will ultimately lead to a reduction in greenhouse gases (Kuyper et al., 2018; Naser & Pearce, 2022). However, sustainability experts believe that the voluntary pledges of these representatives from different countries are insufficient given the current state of global warming (Kammerer & Namhata, 2018). Moreso, these scientists argue that even if countries fulfil their commitments, the possibility of stabilizing the temperature at 1.5 degrees Celsius is still far-fetched (Linton et al., 2022). To address the growing concern, deep decarbonization became a widely accepted response to climate change (Leibowicz et al., 2018).

2.2.3 Deep Decarbonization, Net-Zero and Carbon Neutrality

Deep decarbonization is described as the complete transformation of municipal systems and technology to net-zero GHG emissions while capturing social and political dynamics to facilitate the implementation of a climate action plan (Tozer, 2019). It involves “disrupting the interdependent, overarching, and reinforcing dynamics that lead to the continuing use of the carbon-emitting process

across scales” (Bernstein & Hoffmann, 2018, p. 250). The essence of deep decarbonization is minimizing the consumption of unproductive energy, transitioning to renewable sources of energy, and capturing and offsetting greenhouse gases in the atmosphere (Linton et al., 2021).

Achieving deep decarbonization involves more than just technological shifts through low-carbon innovation (Markard et al., 2012; Wesseling et al., 2017), it requires a comprehensive sociotechnical transition, which entails changes in user behaviour, cultural norms, policies, industry strategies, infrastructure, and scientific approaches (Grin et al., 2010; Markard et al., 2012; Wesseling et al., 2017). Hence, in addressing climate change, countries are not expected to focus solely on deep decarbonization, rather, deep decarbonization strategies must be aligned with the development priorities of each nation (Bataille et al., 2016, 2020). In accordance with the Paris Agreement, pathways to carbon neutrality must align with a nation's sustainable development goals (Bataille et al., 2016). For example, in Sub-Saharan Africa, South Asia, and Southeast Asia, climate mitigation measures must be carefully designed to avoid hindering efforts to reduce poverty, end hunger, and improve well-being (United Nations, 2021). Without supportive policies, these measures could increase food and energy prices, adversely impacting the livelihood of the poor (United Nations, 2021). In contrast, in the Middle East and North Africa, transitioning to carbon neutrality could diversify oil-dependent economies and support inclusive growth (United Nations, 2021). However, a decline in oil demand could slow economic reforms, potentially contributing to inequality (United Nations, 2021). Therefore, climate policies must consider economic factors and be designed to synergize with other objectives, such as energy security, sustainable economic growth, employment, poverty alleviation, access to clean energy, improvements in local air and water quality, and other relevant goals (Bataille et al., 2020; Kong et al., 2023; Waisman et al., 2019). Consequently, achieving deep decarbonization can be reached only through country-specific strategies taking into account each country's unique opportunities and challenges (Bataille et al., 2020; Waisman et al., 2019).

Developed nations have set the pace in adopting the net-zero climate action plan. Empirical research has shown that the G7 nations comprising Canada, Italy, Japan, the United Kingdom, Germany, France, and the United States are among the world's largest emitters of GHGs (G7 Countries Report, n.d.). The G7 nations refer to the seven countries with the most advanced economies and they, as a group, represent over 46% of the world's GDP (G7 Countries Report, n.d.; Government of Canada, 2022a). According to the World Resources Institute (2023), the world's top three emitters are China, the United States and India. They contribute more than 40% of global greenhouse gas emissions (Friedrich et al., 2023). As of September 2022, about 140 countries worldwide had committed to or were considering a net-zero target, covering about 70% of global carbon dioxide emissions (CAT,

2022). These countries have committed to the 80 by 50 plan, which means they have ambitious targets of reducing emissions by 80% by 2050, while some aim to achieve net zero by the same year (Jiang, 2022).

Before the emergence of recent climate action targets, countries have worked independently to achieve their set goals which yielded little or no positive change (Carbon Neutral Cities Alliance, 2015; Sachs et al., 2014). However, since the adoption of climate action targets, some alliances have been formed such as the Deep Decarbonization Pathways Project (DDPP) at the country level and the Carbon Neutral Cities Alliance (CNCA) for cities (Carbon Neutral Cities Alliance, 2015; Sachs et al., 2014). These alliances help facilitate the sharing of resources and the dissemination of information on key strategies and technical pathways that nations and cities can adopt as they transition to carbon neutrality (O'Brien, 2018). However, these current strategies and pathways do not seem sufficient to achieve carbon neutrality by 2050, considering that the window to attain carbon neutrality by 2050 is rapidly closing (IPCC, 2023).

2.3 Climate Action Planning

Climate action planning involves setting goals and developing strategies to mitigate the impacts of climate change or adapt to changes that are considered to be inevitable which could be at the local, national, or international levels (Bassett & Shandas, 2010; Baynham & Stevens, 2014). Climate action plans are usually characterized by 'mitigation' strategies and sometimes also, 'adaptation' strategies (Baynham & Stevens, 2014). Both categories of strategies are essential and complementary components of climate change planning for local jurisdictions (Baynham & Stevens, 2014; Burch et al., 2021). The former focuses on preventing the extent or scale of severe impacts by reducing the sources of greenhouse gas emissions or enhancing carbon sinks (Burch et al., 2021). Meanwhile, the latter addresses those impacts that are unavoidable, thereby limiting vulnerability and increasing the capacity to cope with the actual or anticipated climate and its effects (Aboagye & Sharifi, 2024; Baynham & Stevens, 2014; Burch et al., 2021). These plans are voluntary and not legally binding (Stone et al., 2012).

Although mitigation and adaptation are integral facets of climate action, they exhibit relative benefits and limitations which make them differ, with significant implications for planning (Baynham & Stevens, 2014). First and foremost, mitigation is considered more crucial because reducing GHG has the potential to minimize impacts across all climate-affected systems, unlike adaptation, which is often restricted, especially in the case of ecosystems, which generally necessitates a tailored approach for specific impacts (Baynham & Stevens, 2014). Additionally, since mitigation addresses the underlying

cause of climate change, that is GHGs, the outcomes are more reliable compared to adaptation, which depends on regional impact data and projections (Baynham & Stevens, 2014). Furthermore, mitigation favours the equitable polluter-pays principle; developed countries have been the highest emitters of GHGs, both in the past and present, whereas the need for adaptation is most keenly felt by developing nations considered to be low emitters of emissions (Baynham & Stevens, 2014). Finally, assessing the effectiveness of adaptation, or the avoidance of future impacts is considerably more challenging than quantitatively measuring GHG emissions (Baynham & Stevens, 2014).

Climate action plans usually contain the following key elements: a greenhouse gas emissions inventory that identifies sources of the emissions and quantifies the amount, forecast and reduction targets, mitigation and adaptation policy and strategies, an implementation guide, and a framework for monitoring and evaluation (Bassett & Shandas, 2010; Baynham & Stevens, 2014; Boswell et al., 2012). While some action plans are visionary, establishing a broad framework for future policy development and coordination, others are focused on implementation with detailed policy and program information (Boswell et al., 2012). Additionally, these plans foster collaboration with relevant stakeholders to achieve the overarching goal (FCM & ICLEI, 2018). It has a multi-dimensional approach that encompasses the political, environmental, and economic aspects of climate mitigation (Linton et al., 2022). Climate action planning is crucial to achieving carbon neutrality by 2050 (Linton et al., 2022).

Climate action plans differ from other traditional types of plans in several key aspects. Firstly, they address greenhouse gas emissions reduction, a global issue of high technical complexity that demands specialized training and a deep understanding of climate risks (Bassett & Shandas, 2010; Boswell et al., 2012), encompassing physical and transition risks. Physical risks refer to event-driven hazards from extreme weather events like hurricanes, heatwaves, and floods, as well as long-term shifts in climate patterns, including steady increases in average temperatures and sea level rise (Marx et al., 2021; Mukherjee et al., 2018). These changes often damage physical assets, degrade the environment, and affect resource availability (Barbier & Hochard, 2018; Gao et al., 2023). On the other hand, transition risks stem from policies and regulations that limit or price GHG emissions; climate-related damages; and liability risks associated with the legal responsibility for the impacts of climate change (Gambhir et al., 2022; Setzer & Vanhala, 2019). In essence, they are influenced by technological, policy and socio-economic factors (Gambhir et al., 2022).

Furthermore, the perception of climate change by members of a society is highly subjective (Bassett & Shandas, 2010; Baynham & Stevens, 2014; Millard-Ball, 2013). While some citizens view the issue as a pressing need, others have no experience with climate change and do not associate extreme weather events such as drought with climate change (Bassett & Shandas, 2010; Millard-Ball, 2013).

This is significantly different from traditional planning scenarios like land use or transportation planning which tackle visible issues like land use (Bassett & Shandas, 2010; Baynham & Stevens, 2014). Lastly, the politicization of the issue involves conservative think tanks and climate activists who sometimes disagree with the predictions of mainstream climate scientists on issues concerning climate change (Bassett & Shandas, 2010; McCright & Dunlap, 2011).

2.3.1 Local Climate Action Planning

Cities have been recognized for their fundamental role in the production of greenhouse gases, accounting for 71-76% of global greenhouse gas emissions (Bassett & Shandas, 2010; IPCC, 2014), with local governments exercising control or influence over approximately 50% of these emissions (FCM & ICLEI, 2018). This makes it imperative for local governments to have plans to address climate change (Tozer, 2013). In response, some local governments have agreed to reduce greenhouse gas emissions to net-zero by the year 2050 (Linton et al., 2022). In a bid to achieve this target, many municipalities have a climate action plan which is referred to as a local climate action plan (Bassett & Shandas, 2010).

Several factors influence the adoption of local climate action plans, including their viability, the availability of resources and the local government's perception of the issue (Bassett & Shandas, 2010). These plans typically focus on key industries like land use, transportation, energy, waste and buildings (Boswell et al., 2012; Linton et al., 2022). These action plans may either be stand-alone documents or integrated into other frameworks such as land-use plans, sustainability plans, green plans or other community-level planning documents (Boswell et al., 2012).

The functions of local climate action plans encompass establishing accountability (Boswell et al., 2012), fostering partnership among stakeholders in the municipality (Baynham & Stevens, 2014; Boswell et al., 2012), responding to the unique needs of the community, implementing measures to reduce greenhouse gas emissions and achieve desired targets (Bassett & Shandas, 2010; Peker & Ataöv, 2021), setting climate adaptation measures-induced impacts and hazards (Boswell et al., 2012), and integrating actions from various community plans (Bassett & Shandas, 2010; Boswell et al., 2012). Although these plans operate at local levels, the cumulative impact of the implementation has far-reaching effects on a global level (Carbon Neutral Cities Alliance, 2015). Notably, these are often characterized by political continuity, engagement of political stakeholders, the establishment of measurement systems, operational budgets, partnerships, and policies among others (Carbon Neutral Cities Alliance, 2015).

These local climate action plans are usually voluntary and not legally binding (Bassett & Shandas, 2010). Consequently, there is no mandated format or guide that every municipality must adopt (Boswell et al., 2012). Nevertheless, ICLEI has introduced the ICLEI Cities for Climate Protection Milestone Guide, which has emerged as a widely acknowledged framework for the preparation of climate action plans and is currently recognized as the commonly used guide (Boswell et al., 2012). In Canada, local climate action planning includes identifying technical pathways and strategies that the local governments will use to decarbonize all sectors within its geographical boundary (Linton et al., 2021). Based on a study conducted in Canada by Guyadeen et al. (2019), it was observed that municipal plans in Canada often include goals, policies, governance structures, organization, and partnerships as part of their strategies. While many cities incorporate partnerships as part of their climate strategies, the study lacks detailed information on the specific types of partnerships involved and their level of relevance in achieving transformative outcomes (Guyadeen et al., 2019). This gap highlights the need for further research, which is the focus of this study. The research aims to identify CSPs within Canadian municipalities that concentrate on climate mitigation. It will examine the interconnectedness between the size and structure of these partnerships and analyze how these factors influence the success of plans, particularly concerning achieving net-zero emissions. The study seeks to fill this critical gap in the understanding of the role and effectiveness of partnerships in municipal climate strategies.

In determining the relevance of local climate action plans, empirical research was carried out on fifty cities in the US revealing that only twelve had climate action plans and these plans are governed by state-level plans which encompass strategies to improve the energy efficiency of buildings, decarbonize transportation system, and power generation systems (Stone et al., 2012). The research revealed that cities pursuing emissions-reduction strategies carry the unintended benefit of managing local-scale drivers of warming as well (Stone et al., 2012). It further acknowledged the benefits associated with tree planting and reflective roofing for cooling buildings, thereby lowering energy consumption for air conditioning and associated greenhouse gas emissions, three out of five cities surveyed have included provisions in climate action plans for these strategies (Stone et al., 2012). These approaches contribute to temperature reduction, as well as constitute at least the beginnings of a more locally adaptive approach to climate change management (Stone et al., 2012).

2.3.2 Net-Zero Local Climate Action Plan

The net-zero climate action plan can be described as the world's current response to the greatest issue of the 21st century- climate change (IPCC, 2022). While some mitigation efforts focus on incremental change, net-zero climate action focuses on the complete and rapid transformation of technologies, infrastructure, and organizations to offset carbon lock-in (Linton et al., 2022). It also develops policies

and regulations that will help sustain the plan and implementation (Geels et al., 2017). A net-zero climate action plan implies an average of zero GHG emissions into the atmosphere which means that all sectors of the economy either emit zero greenhouse gas or offset their emissions using natural methods such as tree planting or the use of technology for carbon capturing and storage (Government of Canada, 2022a). Furthermore, these plans focus on the transformative approach, and it involves multiple dimensions of change – social, political, ecological and economic (Linton et al., 2022).

The ambitious global net-zero carbon emissions target does not mandate individual countries to achieve carbon neutrality by 2050 (Linton et al., 2022), rather it necessitates that municipalities implement local climate action plans and strategies aligned with achieving this goal (Linton et al., 2021). To make up for the disparities in emissions reduction, some regions will have to go net-negative to compensate for others that are unable to meet the target (Bataille et al., 2020). Moreso, net-zero deep decarbonization is not only focused on achieving carbon neutrality within a short time frame, but it also considers the sustainability of these reductions across priority sectors such as transportation, building, waste and electricity (Bataille et al., 2016). This entails considering path dependencies, inertia, the lock-in risks associated with the duration required to adjust to renewable energy sources, retrofitting old buildings, constructing new ones, changing land-use patterns, and adopting new infrastructures for transportation (Bataille et al., 2020; Jiang, 2022). To successfully navigate these transformations, strategic thinking is essential. It ensures a focus on long-term goals to guide short-term decisions which align with the Paris Agreement (Bataille et al., 2020; Jiang, 2022). In addition, for any local climate plan to be successful, it must consider the main sectors that emit greenhouse gases (Tozer, 2013). Considering that the local government does not directly control all the emissions within its geographical boundary, it is imperative to also have collaborative plans that cover emissions within and outside its jurisdiction (Tozer, 2013). These plans are referred to as corporate and community plans.

2.3.3 Corporate And Community Plans

The corporate climate action plan takes into consideration all emissions from sectors under the direct control of the local government (Tozer, 2013). Generally, local governments control decisions that are related to land use, transportation planning, waste management, and greening of public infrastructure (Clarke & Ordonez-Ponce, 2017; Linton et al., 2022). To reduce emissions from these sectors, local governments employ corporate climate action plans, where the local government is the corporation, and the corporate plan specifically addresses actions within its direct control and influence (Clarke & Ordonez-Ponce, 2017).

On the other hand, the community-wide climate action plan targets all emissions within the defined geographical boundary of a local government (Clarke & Ordonez-Ponce, 2017). These include but are not limited to emissions from private residential homes, commercial buildings, private vehicles and companies (Linton et al., 2021, 2022). In essence, corporate plans are developed and implemented solely by the local government, while community plans are developed and executed by the local government in collaboration with other sectors such as the private sector and civil society (Zhou et al., 2022). The limited control of the local government over the emissions from certain sectors within its geographic boundary makes partnerships an absolute necessity (Clarke & Crane, 2018; Clarke & Ordonez-Ponce, 2017; Seitanidi & Crane, 2014).

2.3.4 Climate Plan Implementation and Evaluation

Recent research highlights the possibility of limiting global temperature to 1.8 degrees Celsius by 2050 (IEA, 2021). However, the implementation and evaluation of local climate action plans are pivotal to achieving this feat (Aboagye & Sharifi, 2024; Bataille et al., 2020; Kong et al., 2023). The implementation phase is often characterized by monitoring or tracking processes which have been highlighted as important by researchers and policymakers (Hale et al., 2021). At the national and international levels, there are annual publications such as the UNEP Emissions Gap Report, IEA World Energy Outlook, and Climate Action Tracker. These publications focus on evaluating the potential impacts of national climate policies on future emissions (Hale et al., 2021). Additionally, countries disclose their historical and current emission levels through internal processes and within the framework of the United Nations Framework Convention on Climate Change (Hale et al., 2021).

Precisely, measuring progress, executing plans and assessing impacts can provide substantial benefits for various stakeholders in the climate action landscape (Aboagye & Sharifi, 2024; Hale et al., 2021). Firstly, for the municipalities, privately owned corporations and other organizations, evaluation of progress toward their own targets enables them to identify effective practices and uncover those that are not yielding desired results (Hale et al., 2021; Waisman et al., 2019). This information helps these entities in determining the adequacy of their efforts in reaching their desired targets (Hale et al., 2021). Moreover, gaining insights into the targets, activities, and accomplishments of individual actors can generate 'learning effects' and 'demonstration effects' for other municipalities with similar goals or targets (Hale et al., 2021). Grasping what proves effective and what doesn't in a certain municipality provides actionable knowledge that other municipalities can leverage to enhance or refine their strategies (Hale et al., 2021; Waisman et al., 2019).

Additionally, it can serve as a basis for acknowledging their efforts, potentially opening up opportunities to secure more funding or additional support (Hale et al., 2021). Various channels for sharing tracking and evaluation endeavours, such as exchanging best practices through online platforms or conferences, and utilizing qualitative case studies, can significantly facilitate peer-to-peer learning (Hale et al., 2021).

Furthermore, tracking progress and impact is essential for establishing the credibility of climate action and providing accountability (Hale et al., 2021). National and international policymakers need to understand the advancements made by state and non-state actors to accurately assess the overall progress on climate change at both national and global levels (Hale et al., 2021). Finally, evaluating climate action progress gives researchers a more granular understanding of progress toward the goals of the Paris Agreement than is available from national inventories (Hale et al., 2021).

In evaluating climate action plans, Hale et al. (2021) provides a framework that highlights the importance of having a baseline that indicates the current level of emissions and resilience and a benchmark, which refers to the climate action target. In the context of climate mitigation action, key benchmarks would include alignment with the goals of the Paris Agreement, the SDGs, or achieving 'net-zero' emissions (Hale et al., 2021). Regular evaluation of the progress in the implementation of local climate action plans is crucial to understanding the barriers affecting the implementation and identifying opportunities for improvement (Seneviratne et al., 2021).

Baynham (2014) conducted research wherein he assessed the community climate plans of municipalities in British Columbia. Based on his findings, he discovered that all the communities had policies addressing transportation, land use, and energy reduction, and the majority of them also included plans for waste reduction. Despite the overall quality of the plans, some failed to account for implementation considerations. Baynham (2014) study emphasized the critical need for establishing a comprehensive framework for implementation. The implementation aspect of the community plans revealed significant weaknesses, with an average score of 34% across plans. Most of the plans lacked timelines and actions for comprehensive monitoring, with fewer than half including these essential components. In many cases, monitoring efforts were focused on a few specific actions rather than adopting a comprehensive framework to evaluate the entirety of the plan. His study underscored the importance of establishing a framework for implementation. A good framework should include actions, priorities, timelines and responsible agency for each policy (Baynham & Stevens, 2014).

2.3.5 Barriers To Implementation Strategy

The implementation phase of the local climate action plan is often met with significant challenges that hinder the progress of municipalities toward achieving net-zero emissions (Peker & Ataöv, 2021). Insufficient funding has been identified as one of the major barriers (Salon et al., 2014; Schuch, 2023). Some municipalities may not have the resources needed to fulfill their climate-related obligations, owing to competing priorities and financial constraints (Salon et al., 2014; Schuch, 2023). Other challenges include legislative limitations, lack of actionable knowledge, staff-related and institutional hardship, limited capacity, lack of expertise, insufficient funding and behaviour change, among others (Bataille et al., 2016; Peker & Ataöv, 2021). Cities may also struggle with identifying and implementing suitable renewable energy sources owing to a lack of professional and technical skills in this regard (Salon et al., 2014). Some municipalities make significant changes in addressing corporate emissions but struggle to reduce community-wide emissions, owing to limited control (Tozer, 2013).

Furthermore, the size of the municipality often determines the level of control the government has over emissions (Linton et al., 2022). Larger municipalities often have more control over major sources of emissions, making it easier to address both corporate and community-wide emissions, while smaller municipalities often have lesser control over community-wide emissions (Linton et al., 2022). Smaller cities tend to engage in cross-sector partnerships to compensate for the limited control. Other identified barriers include a lack of community engagement, external factors such as natural disasters, and political crises, amongst others (Baker et al., 2012; Bataille et al., 2016). Nevertheless, several best practices have been unveiled in recent years to improve the implementation phase (Linton et al., 2021). These include enhancing stakeholder engagement, improving oversight and reporting mechanisms, use of financial tools, amongst others (Linton et al., 2021). Engaging in cross-sector partnerships has also been identified as a key strategy in mitigating or overcoming these challenges affecting the implementation of local climate action plans (Bäckstrand, 2006; Ordonez-Ponce & Clarke, 2020; van Tulder et al., 2016). Acknowledging the importance of partnerships, the C40 report “Powering Climate Action” stated that municipalities who engage in partnerships as part of their strategies to implement the climate action plan often make more significant progress than those who do not (C40, 2015). However, limited literature exists on the relevance of cross-sector partnerships in addressing climate change and improving climate action plans. The next four sections provide a thorough analysis of partnerships and their relevance in implementing local climate action plans.

2.4 Partnerships

The emphasis on partnerships at the 2002 World Summit on Sustainable Development (WSSD) has led to their widespread recognition and integration into international development agendas (Forsyth, 2010; Gannon et al., 2021). It has been considered a useful strategy in fulfilling the Paris Agreement and carrying out the United Nations Sustainable Development Goals (Beisheim & Simon, 2016; Gannon et al., 2021). In September 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development (Beisheim & Simon, 2016; Elalfy et al., 2020). While governments were charged with the implementation of these agendas, partnerships were seen as key in the implementation phase (Beisheim & Simon, 2016). According to the summary, they were responsible for knowledge and expertise mobilization, adoption of technology, and generation of funding to support the achievement of the SDGs in all countries, especially in developing countries (United Nations, 2015).

Over the years, partnerships have been called different names such as strategic alliances, partnerships, coalitions, joint ventures, and joint franchises, amongst others (Rao et al., 2005). Researchers have attributed several meanings to partnerships, which vary depending on the context in which it is applied (Casey, 2008). Boddy et al. (2000, p. 1004) defined partnership “as a situation in which there is an attempt to build close, long-term links between organizations...that remain distinct, but which choose to work closely together”. Another researcher has defined partnerships as collaborations, voluntary or mandatory, where organizations from different sectors: public, private and civil society make collaborative efforts to tackle a mutual issue or to achieve mutual benefits (Clarke et al., 2023). Additionally, it has been described as a formal entity that allows for collaboration among partner organizations with the sole aim of tackling a specific issue (Banerjee et al., 2020; Samuel & Clarke, 2022). Some possible reasons for which organizations go into partnerships could be to reduce the boundaries between organizations, to foster mutual interdependence of partners, for financial gains or profit, to share resources, and for competitive advantage among others (Hutchinson, 2020). Partnerships are actualized through a collaboration of diverse organizations and are characterized by a common goal or objective, mutual respect among partner organizations, willingness to negotiate and cooperate, information and resources sharing and shared decision-making (Casey, 2008). Kernaghan (1993) gives five types of partnerships based on power allocation: they include collaborative, operational, contributory, consultative and phoney.

In a 'collaborative partnership,' there is an equal distribution of power among partner organizations, with each partner having the right to contribute to the decision-making process (Kamiya, 2011; Kernaghan, 1993). All partners share resources and information, facilitating interdependence among them, which is often a feature associated with partnerships having less than ten partners, also

known as small cross-sector partnerships (Laird et al., 2024; Suhendra et al., 2023). On the other hand, an 'operational partnership' involves work sharing without decision-making authority. Here, one partner retains power while other partners are actively involved in operations, leading to a more efficient and responsive organization (Kernaghan, 1993; Worthington et al., 2003). A 'contributory partnership' emphasizes the contribution of partners rather than their involvement in daily operations (Kernaghan, 1993); for example, a partner organization might provide funding with minimal operational involvement. Meanwhile, a 'consultative partnership' often takes the form of advisory committees or councils that provide advice on specific policy issues (Kernaghan, 1993). Lastly, 'phony partnerships' are typically established by a public sector organization to co-opt various stakeholders without genuinely sharing power or decision-making (Kernaghan, 1993).

However, these forms of partnerships are not mutually exclusive. Some larger partnerships have organizations that perform more than one of these functions, which suggests a limitation in the application of the types of partnerships. However, this thesis only focuses on collaborative and operational partnerships. Gaster and Deakin (1999) also classified partnerships based on important roles that are being carried out. These include information exchange, action planning, coordination and collaboration or full partnership (Gaster et al., 1999).

2.4.1 Partnerships And Sustainable Development

Sustainable development, according to the Brundtland Report, also known as our common future, is the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 43). In the sustainability context, partnerships make it possible for a government to address sustainability issues outside their control but within the local government area, for private enterprises to fulfill their corporate social responsibility, boost the reputation of the organization and reduce their carbon footprint and for the civil society such as the non-profit organizations to show more accountability, efficiency and also have access to better funding to achieve their goals (MacDonald et al., 2018; Selsky & Parker, 2010; Stites & Gray, 2013). The UN Sustainable Development Goal #17 recognizes the importance of partnerships in achieving sustainable development goals (MacDonald et al., 2018; Selsky & Parker, 2010; Stites & Gray, 2013). These types of partnerships are non-hierarchical and voluntary (Ordonez Ponce, 2018). For partnerships to succeed, the reason for the partnership must be of mutual benefit to both partners which facilitates mutual interdependence of the partners (Glasbergen et al., 2007). Also, there has to be a defined relationship among the partner organizations (Glasbergen et al., 2007). This thesis focuses on cross-sector partnerships.

2.4.2 Cross-Sector Partnerships

Cross-sector partnerships (CSP) are a type of partnership where organizations from different sectors (public, private or civil society), voluntarily collaborate to address sustainability-related issues (Parmigiani & Rivera-Santos, 2011). It has also been defined as a collaborative effort among various sectors – public, private, and civil society—where all partners commit to working together towards a shared sustainability goal (Banerjee et al., 2020; Samuel & Clarke, 2022). Partnership networks have been branded as a new form of global governance with the potential to bridge multilateral norms and local action by bringing together key actors in different sectors: civil society, government and business (Bäckstrand, 2006).

Given that sustainability issues are too complex to be handled by one organization, it is imperative to have partnerships for them to be resolved (Gray & Purdy, 2018; Susha et al., 2023). Some of these issues include a poor education system, poverty eradication, climate change, safety and security (Banerjee et al., 2020; Clarke & Fuller, 2010). Cross-sector partnerships are crucial in achieving broad sustainability goals (Babiak & Thibault, 2008; Seitanidi & Crane, 2014).

This type of partnership takes two forms based on the number of partnering organizations: small cross-sector social (Clarke & MacDonald, 2019), partnerships and large cross-sector partnerships, otherwise known as multi-stakeholder partnerships (Ordonez Ponce, 2018; Samuel & Clarke, 2022). Small cross-sector partnerships involve a few partner organizations from different sectors – private, public, and civil society (Clarke & MacDonald, 2019). These partnerships are commonly categorized into four types: private sector-civil society partnerships, public-civil society (Gray & Purdy, 2018; Susha et al., 2023), public-private sector partnerships, and tri-sector partnerships that engage all three sectors (Hutchinson, 2020; Ordonez Ponce, 2018). Large cross-sector partnerships also known as multi-stakeholder partnerships, and multi-stakeholder partnerships refer to the cooperation of various organizations from different sectors to achieve a sustainability-related goal (Clarke & Crane, 2018; Samuel & Clarke, 2022; Seitanidi & Crane, 2014).

In addressing sustainability issues, a novel type of CSP is data-sharing partnerships, which brings together actors from different sectors for the purpose of accessing data to tackle societal needs (Susha & Gil-Garcia, 2019; Wang, 2018). The varying priorities of public, private, and non-profit sector organizations are becoming progressively crucial (Susha et al., 2023). The public sector emphasizes transparency and openness, viewing data as a public good and should be made accessible and used for the benefit of all (Susha et al., 2023; Wang, 2018). Conversely, the private sector, such as tech companies, steer towards data monetization, whereby data is perceived as a strategic asset and a source

of new business models (Parvinen et al., 2020). Therefore, this creates a need for collaboration among the different sectors, utilizing the power of data for the public good (Susha et al., 2023; Susha & Gil-Garcia, 2019). However, data-sharing partnerships are often faced with challenges such as ensuring proper use, mitigating data risks, and adherence to data protection legislation (Sayogo & Pardo, 2013; Schmit et al., 2019).

The ‘public sector’ refers to all organizations under the direct control of the government - federal, provincial and municipal (Hutchinson, 2020). It is often characterized by hierarchical structures, formal rules and regulations (Lakin, 2010). Some fundamental reasons for engaging in partnerships could be a lack of expertise, inadequate funding and resources, or lack of technical know-how needed to resolve social and sustainability issues within their geographical boundary but out of their direct control (Linton et al., 2021; Samuel & Clarke, 2022). Given that over 70% of greenhouse gases are from municipalities but only about 50 % of these emissions are within the jurisdiction of the local government, the local government partners with organizations from other sectors to achieve the net-zero climate action plan (C40, 2015).

The ‘private sector’ encompasses all enterprises that are characterized by the presence of a board of directors, chief executive officers, entrepreneurs or shareholders who have the sole aim of maximizing profits (Boyne, 2002). These private organizations could be small or medium-sized enterprises or multinationals (Ordonez Ponce, 2018). Private organizations join partnerships to improve their financial prowess. However, they can also join cross-sector social partnerships to fulfill the organization’s corporate social responsibility (Samuel & Clarke, 2022). According to Weimer and Vining (2011), a private-public partnership usually involves private enterprise financing or taking charge of a government’s project with the expectation of receiving payments either from the government or indirectly from the end users which is within a given period.

‘Civil society’ refers to all non-profit-driven organizations set up by individuals to pursue a common interest. A common example of a civil society organization is a non-governmental organization (Banerjee et al., 2020; Siegel, 2017). Three main characteristics of civil society are: that it is voluntary-driven, non-governmental and not-for-profit (Canada, 2017). These non-governmental organizations focus on addressing social issues such as poverty alleviation, sustainability-related issues, and healthcare among others (Hall & O’Dwyer, 2017).

2.4.2.1 Small Cross-Sector Partnerships

These are partnerships that involve the participation of either two partners (referred to as a dyad), as shown in Figure 1 or three partners (known as a triad) from any combination of the three sectors: public,

private, or civil society (Rühli et al., 2017). Research conducted in Indonesia revealed that small CSP projects were more prevalent than large CSP initiatives (Suhendra et al., 2023). Prior to initiating a small-sector partnership, research underscores the importance of conducting a comprehensive study to identify legal, technical, economic, and environmental risks associated with the project (Suhendra et al., 2023).

Public-Private Partnerships (PPPs) are the most common type of CSPs and have been extensively explored in empirical and grey literature (Benítez-Ávila et al., 2018; Yukhymenko et al., 2022). However, small CSPs typically involve collaboration between the public sector and a few private organizations and or civil society (Laird et al., 2024; Suhendra et al., 2023).

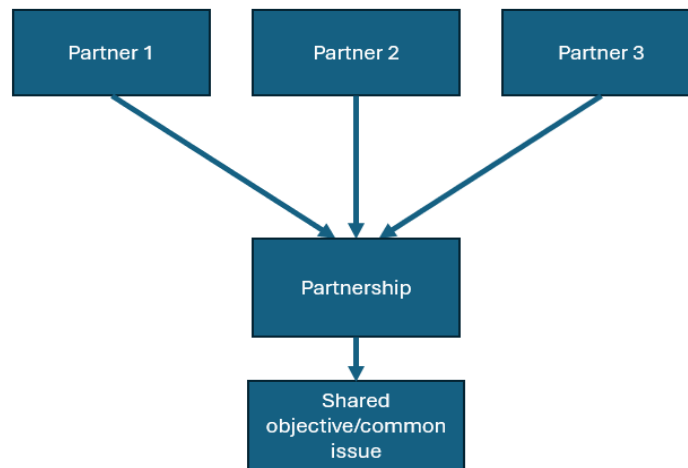


Figure 2.1: Small CSP (triad collaboration)

(Adapted from Macdonald et al. (2019))

Small CSPs offer advantages such as designing solutions to meet the needs of end users in local communities (Ahmad & Shukla, 2014; Suhendra et al., 2023). In developed nations, the need for small-scale CSP models and structures is gaining momentum (Yukhymenko et al., 2022). Yet, there exists a gap in the documentation of best practices to facilitate replication within similar contexts. This documentation can significantly contribute to the long-term growth of small CSPs (Ahmad & Shukla, 2014; Suhendra et al., 2023).

Owing to the absence of detailed best practices, the process of reinventing the wheel for each new small-scale project undertaken by a small CSP initiative requires more time, funding, and effort (Ahmad & Shukla, 2014). Furthermore, in certain situations, sector-specific strategies are either absent, as observed in small-scale municipal projects related to solid waste, or are merely adapted from larger projects, such as in the case of small road and bridge projects, which may not necessarily be ideal owing to the disparity in the scope of the projects (Ahmad & Shukla, 2014).

Another noteworthy challenge encountered by small CSPs is funding constraints. Financing for small CSPs can be obtained from sources such as the government, partner donations, equity investments from investors, or loans (Suhendra et al., 2023). While some efforts have been made to enable credit enhancement of small CSPs projects through guarantees and other mechanisms, these initiatives are often not adequately developed, limited in availability, or not easily accessible by certain sectors, particularly pertaining to smaller projects, given that the associated rules and guidelines were tailored to suit larger projects (Ahmad & Shukla, 2014; Suhendra et al., 2023). Additionally, financial institutions, such as banks often impose stringent requirements, such as outrageous collateral demands, inhibiting the development of project finance for small-scale CSP projects in developing countries (Ahmad & Shukla, 2014).

Laird, Quick and Shaver (2024) mentioned strategies that can help small cross-sector social partnerships. It involves having a minimum viable benefit process (Laird et al., 2024). This involves identifying who the potential partners and their role in the partnership, and what each of them has to offer; understanding the rationale for collaboration; identifying the issue they are passionate about tackling (Laird et al., 2024). Regarding the location, it involves indicating whether the issue would be addressed within a community or region. Lastly, it includes identifying the specific problem that needs to be addressed.

Identifying the partners (Who): This involves identifying the partners and what resources they bring to the partnership, as well as their capacity (Moore, 2015). It involves understanding the diverse backgrounds of the partners involved in the partnership, these involve the professional, cultural, geographical and sectoral frameworks, as well as the work values, strengths and weaknesses of potential partners (Austin & Seitanidi, 2012; Berger et al., 2004; Laird et al., 2024). This helps in building trust and enhancing relational ties among the prospective partners (Benítez-Ávila et al., 2018; Hamann et al., 2011). It helps to uncover potential resources that were not initially obvious that they can benefit from one another and know what duties to assign the partners (Berger et al., 2004). Most importantly, it helps to avoid setting an overly ambitious target as the strengths and limitations of partners have been revealed before setting of targets (Laird et al., 2024).

The rationale for the partnership (Why): This involves having the partners identify the issue that they are passionate about addressing (Laird et al., 2024). This helps to reinforce their motivation to engage in and invest in the partnership, as well as define the boundaries of the shared motivation (Escher & Brzustewicz, 2020; Laird et al., 2024).

Identifying the location (Where): This involves identifying the exact location where the issue will be addressed. It is important to note that the area must be a place that the partner organizations are knowledgeable about (Laird et al., 2024). The knowledge could stem from the lived experiences of some partners or an experience that stems from work or professional training (Laird et al., 2024). In this case, the partners are in a better position to understand the problem and design an actionable solution.

Defining the specific issue (What): In this step, partners are expected to streamline their focus, it involves identifying the specific projects that are relevant to the chosen location and the impact they hope to achieve (Laird et al., 2024). Furthermore, it requires assessing the feasibility of achieving the goals, taking into consideration the availability of resources and training that can contribute to achieving the goal (Berger et al., 2004; Laird et al., 2024).

Factual foundations: This involves identifying the people or group affected by the issue to be resolved, the severity of the issue, known facts about the causes and current or past efforts to address the issue in the target location (Laird et al., 2024). It also involves examining successful strategies adopted in other locations to tackle similar issues and assessing their applicability in the target location (Laird et al., 2024). Having this detailed background information would be crucial to the success of the partnership and should be done before the launch of the project. Furthermore, it helps to prevent redundant efforts (Laird et al., 2024).

Scale, Pivot or Stop: In this case, it involves assessing the partnership after a given duration to decide whether adjustments, scaling up the project, or termination of the project are warranted. However, if the partners decide to end the project, it would be helpful to document the process (Suhendra et al., 2023). The documentation can serve as a guide for future projects, enabling others to gain insights from both successes and mistakes, facilitating essential improvements (Laird et al., 2024; Thierie & De Moor, 2017).

Some examples of small projects embarked upon by small cross-sector partnerships in Kenya are detailed below:

Table 2.1: Small Projects Undertaken by Small Cross-Sector Partnerships in Kenya

Project	Sector	PPP Type	Value	User Charges/ Government Support	Financing	Local/ Foreign Investor	Distinct Approval Process
Kenyatta University Students Hostel	Accommodation	DBFOT	Estimated at \$50 million	User charges, 80% occupancy guarantee by authority	Debt and equity	Local	No
Palestine Solid Waste Project	Solid Waste Management	Operation and maintenance contract	-	Local body payment supported by GPOBA	Debt and equity	Foreign	No
PURA	Rural Integrated Infrastructure	BOT/ BOO combination based on activity	\$25 million	User charges on certain services, government subsidy of up to 30%	Debt and equity	Local	Yes
Gandhinagar Rooftop Solar	Non-conventional Energy	BOO	\$9 million	Private Distribution The company buys entire power; government provides part of rooftop space	Debt and equity	Local	No
Street Lighting Bhubaneswar	Urban Amenities	Performance-based O&M contract	\$4.8 million	Local body pays fee from energy savings	Equity	Local	No
Punjab Grain Silo	Agricultural Storage	BOO	\$7 million	Fixed charges paid on guaranteed storage	Debt and equity	Local	No

(Table copied from Ahmad and Shukla (2014, p. 10)).

2.4.2.2 Large Cross-Sector Partnerships

Large cross-sector partnerships, also known as multi-stakeholder partnerships, are collaborative efforts involving multiple state and non-state actors aimed at tackling mutually beneficial public good challenges, as shown in Figure 2 (Banerjee et al., 2020; Samuel & Clarke, 2022). These partnerships enable what is termed as 'hyper collective action,' which is instrumental in addressing 'wicked

problems’, otherwise known as complex sustainability-related challenges and interconnected issues such as the Sustainable Development Goals (Rühli et al., 2017; Samuel & Clarke, 2022).

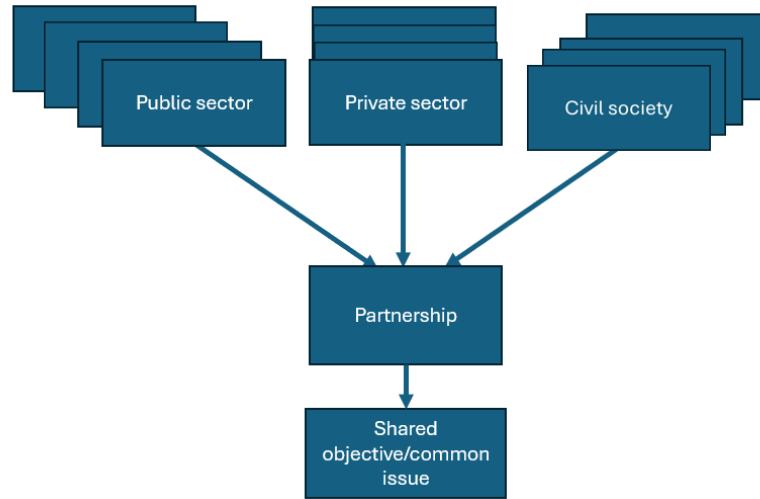


Figure 2.2: Multi-Stakeholder Partnerships or Large CSPs

(Adapted from Clarke & Macdonald (2019))

In 2015, the United Nations adopted 17 Sustainable Development Goals, with the 17th SDG focusing on the significance of partnerships in addressing complex societal challenges ranging from the upward surge in population density to rising inequality and poverty (United Nations, 2015). Multilateral institutions increasingly consider partnerships as pivotal to achieving these goals given their limited capacity (Banerjee et al., 2020). The United Nations recognizes the role of key social actors such as private organizations, the public sector and civil society in attaining sustainable development (Bäckstrand, 2006; Pattberg & Widerberg, 2016). By bringing together diverse stakeholders from various sectors, these partnerships facilitate knowledge sharing, enhance efficiency, foster innovation, and cultivate stronger inter-organizational relationships (Beisheim, 2012; Bode et al., 2019).

Some identified success factors for effective multistakeholder partnerships include ensuring the right mix of partners, which implies those with the capacity and willingness to actively engage in the partnership (Beisheim, 2012; Berger et al., 2004). Leadership structures are also essential, necessitating the presence of entrepreneurs or brokers (Glasbergen, 2010), conveners, and orchestrators (Pattberg & Widerberg, 2016) primarily to unite partners, formulate and oversee planning, establish

dispute-solving mechanisms, as well as facilitate the challenging startup process (Austin & Seitanidi, 2012; Dietrich et al., 2010; MacDonald et al., 2019; Sun et al., 2020). According to Dewulf and Elbers (2018), as cross-sector partnerships involve the integration of several organizations across different fields, they incorporate various values, languages, and work practices. Consequently, as the scope of organizations involved expands, some partners tend to prioritize their individual organizational interests over the partnership, thereby making cooperation within the CSP becomes increasingly complex (Babiak & Thibault, 2008; Benítez-Ávila et al., 2018; Dewulf & Elbers, 2018). This complexity can lead to friction, as multiple belief systems and standards may conflict, which could be a notable cause of conflict, hence, emphasizing the need for conflict-resolving mechanisms and a leadership structure in multi-stakeholder partnerships (Dewulf & Elbers, 2018; Yaziji, 2009).

Adequate funding is another essential aspect, with possible sources, such as membership fees, voluntary donations from partner organizations, government grants, and reinvestment of funds generated through partnership activities (Cairns & Harris, 2011; Pattberg & Widerberg, 2016; Reinicke & Deng, 2000). However, caution must be exercised regarding reliance on unstable funding sources, such as voluntary contributions from private funders (Pattberg & Widerberg, 2016).

For multistakeholder partnerships, a high level of institutionalization with formal organization and bureaucracy is recommended, as a strong corporate identity appears to be correlated with partnership effectiveness (Pattberg & Widerberg, 2016; Szulecki et al., 2011). According to Pattberg and Widerberg (2016), a good management structure includes having a dedicated team focused solely on partnership tasks, recruiting staff with managerial expertise to occupy key positions, as well as ensuring effective communication between the process managers and key partnership members, as well as among the partner organizations.

Nevertheless, multi-stakeholder partnerships are faced with numerous challenges, including the management of day-to-day operations, which can pose difficulties in monitoring and potentially hinder the achievement of significant outcomes over time (Banerjee et al., 2020). Owing to the diversity of partners involved, establishing a clear structure is crucial to effectively manage daily operations and mitigate conflicts (Banerjee et al., 2020; MacDonald et al., 2019). Another critical consideration is the spatial scale, which could be local, regional, or national, pertaining to both participation and implementation focus, which can significantly impact the outcomes of multistakeholder partnerships (Banerjee et al., 2020). Local-level actors may find it increasingly challenging to engage with their counterparts at the same level (Banerjee et al., 2020; Castillo-Villar, 2020). Smaller organizations at the grassroots level or representing minority interest groups may lack the necessary resources to participate effectively in multisectoral partnerships (Worley & Mirvis, 2013). If not properly addressed,

there is the possibility of having large power asymmetries. Certain influential organizations may possess the capacity to influence the operations of multistakeholder partnerships, thereby restricting the extent of participation and opportunities for smaller-scale organizations, particularly those operating at the grassroots level (Banerjee et al., 2020; Benítez-Ávila et al., 2018). Additionally, non-state actors may harbour concerns about power dynamics within multistakeholder partnerships, particularly when engaging with private sectors, leading to trust deficits (Banerjee et al., 2020). For some partner organizations, organizational legitimacy may outweigh partnership goals, posing challenges in achieving a balance (Huxham & Vangen, 2004).

Consequently, multistakeholder partnerships may not inherently promote inclusivity, as certain partners may exert more influence than others (Banerjee et al., 2020; Dewulf & Elbers, 2018). Furthermore, participation in partnerships may require individual actors to adjust their operational strategies to align their organizational objectives with the overarching partnership goals (MacDonald et al., 2019). Research underscores that the success of multistakeholder partnerships is contingent upon the inclusion and active participation of the partners involved (Eweje et al., 2020; Koschmann et al., 2012).

Multi-stakeholder partnerships have proven useful in addressing sustainability issues. However, it is essential to evaluate the actual effectiveness of partnerships rather than merely adhering to a normative understanding of the concept (Banerjee et al., 2020; Briggs, 2003). While previous research highlighted the relevance of partnerships in climate action, understanding the similarities and differences in the partnership structures of small and large cross-sector partnership structures in relation to achieving climate goals remains understudied (Clarke et al., 2023; Clarke & Ordonez-Ponce, 2017; Gambhir et al., 2022). The table below provides a summary of the comparison between small and large CSPs. Table 2.2, presented below, provides a summary of the comparison between small and large CSPs.

Table 2.2: Comparison between Small and Large CSPs

Features	Small Cross-sector Partnerships	Multi-stakeholder Partnerships
Number of partners	Involves fewer partners, often less than ten (Clarke & MacDonald, 2019; Rühli et al., 2017)	Involves multiple partners across different sectors, often above ten (Gray & Purdy, 2018; Pattberg & Widerberg, 2016)
Focus	Addresses a specific, well defined and narrow issue (Laird et al., 2024)	Addresses complex or ‘wicked’ societal challenges (Banerjee et al., 2020; Rühli et al., 2017)

Barriers	Limited resources, limited scope of project (Ahmad & Shukla, 2014; Laird et al., 2024)	Bureaucratic hurdles, power asymmetry which may hinder inclusivity (Banerjee et al., 2020; Dewulf & Elbers, 2018)
Impact/Reach	Usually focuses on a specific issue within a specific community (Suhendra et al., 2023)	Might have the potential for systemic change and influence the introduction of new policies (Clarke & Crane, 2018)
Coordination	Low level of institutionalization (Kamiya, 2011)	Medium to high level of institutionalization (Kamiya, 2011)
Funding	Limited funding opportunities and high interest rates on loans. Funding sources include equity, government funding (Ahmad & Shukla, 2014; Suhendra et al., 2023)	More funding opportunities such as government grants, voluntary contributions from partner organizations, and membership fees, among others (Pattberg & Widerberg, 2016; Reinicke & Deng, 2000)
Decision-making	Involves nearly all or all the partners (Kamiya, 2011)	Typically, this task is carried out by a designated committee or delegated body involved in the partnership (Kamiya, 2011)

2.4.3 Cross-Sector Partnerships and Local Sustainable Development

The United Nations Sustainable Development Goals have garnered the attention of experts, researchers, and world leaders (Dempsey, 2011). Thus, a lot of effort is being put into achieving these goals on a global scale (Dempsey, 2011; MacDonald et al., 2019). However, to attain these goals, there has to be a focus on cities (Bassett & Shandas, 2010).

To further prove their commitment to addressing sustainability issues, more than 178 local governments adopted Agenda 21 at the United Nations Conference on Environment and Development that took place in Brazil, in 1992 (Dempsey, 2011). The Local Agenda 21 (LA 21) was embedded in the Agenda 21 (Lafferty & Eckerberg, 2013; MacDonald et al., 2019). It is a framework designed to guide local sustainability efforts (Lafferty & Eckerberg, 2013; MacDonald et al., 2019). It highlights strategies for public engagement and implementation processes for achieving sustainable development at local levels (MacDonald et al., 2019).

The primary objective of an LA21 is to encourage the pursuit of sustainability initiatives at local levels while addressing environmental, social and economic issues (MacDonald et al., 2019). Some key elements of LA21 include community involvement which involves engaging members of the community such as residents and businesses in developing plans that would drive the community toward achieving sustainability (ICLEI, 2002). Another key component of an LA21 is the emphasis on

the formation of partnerships. It encourages the formation of partnerships at the local level to effectively address complex sustainability issues that cannot be addressed by one organization (Ordonez-Ponce & Clarke, 2020). These partnerships will oversee the development of sustainability plans and monitor and report the progress of the implementation of policies and initiatives that align with the principles of the Local Agenda 21.

Research has shown that adopting the LA21 has been a useful strategy for achieving sustainability at the local level (Clarke & Fuller, 2010). Local governments have been actively engaging in partnerships as a means to achieve their local sustainable goals. More than 10,000 partnerships exist globally that are focused on addressing local sustainability issues (Ordonez-Ponce & Clarke, 2020). Some of the issues being addressed include unemployment, poverty alleviation, climate change, safety and security, environment (Clarke & Fuller, 2010).

2.4.4 Collaborative Strategic Management

According to Clarke and Fuller (2010, p. 3), collaborative strategy can be defined as “the joint determination of the vision and long-term collaborative goals for addressing a given social problem”. This encompasses the work done individually by partner organizations and the collaborative effort of the group in addressing a social problem (Clarke & Fuller, 2010). Collaborative strategic management involves forming partnerships among different organizations to attain a set goal (Clarke & Fuller, 2010). To achieve this, a collaborative strategic plan is developed to guide the implementation process (Clarke & Fuller, 2010). Finally, implementation strategies are employed at both the organizational and collaborative levels to ensure the successful implementation of the collaborative strategic plan (Clarke & Fuller, 2010). There are five stages involved in the process of collaborative strategic management in addressing sustainable goals within communities (Banerjee et al., 2020; Clarke & Fuller, 2010). The first stage involves understanding the relationship between addressing the goal and the need for the partnership (Clarke & Fuller, 2010). It also involves identifying potential partners and then forming a partnership (Clarke & MacDonald, 2019). The partnership structure is not rigid, as partners may be added or removed at any stage (Clarke & Fuller, 2010; Clarke & MacDonald, 2019). However, there is a lead convener or organization that supervises the process (Clarke & Fuller, 2010; Clarke & MacDonald, 2019). The second stage involves developing a collaborative strategic plan, a mission and a vision that aligns with the objectives of the partnership (Clarke & Fuller, 2010). Implementation of the collaborative strategic plan makes up the third and fourth stages (Clarke & Fuller, 2010). This could be done independently, that is within the different organizations with a focus on the company’s sustainable goals or collectively as a group focusing on the community’s sustainability plans (MacDonald et al., 2019).

Understanding potential risks and identifying strategies to mitigate or overcome them in this stage becomes crucial (Austin & Seitanidi, 2012; Brinkerhoff, 2011). This considers internal and external factors that could negatively impact the achievement of the company's goals, such as financial limitations, policies, and changes in stakeholder engagement (Brinkerhoff, 2011). Risk assessment can either be formal or informal (Austin & Seitanidi, 2012). The formal internal risk assessment involves the collection of interaction intelligence from potential partner organizations such as internal process and output reports, and external evaluation of prior joint projects (Austin & Seitanidi, 2012). The formal external risk assessment seeks to develop knowledge of any formal incidents that occurred or substantial grievances that previous partner organizations may have expressed (Austin & Seitanidi, 2012). In contrast, informal internal risk assessment relies on open communication with stakeholders within each partner organization and informal meetings between partnership teams and potential partners (Austin & Seitanidi, 2012). On the other hand, informal external risk assessment involves each partner engaging in open dialogue with peer organizations within and outside their sector to gather intelligence, such as anecdotal evidence, that reveals accountable decision-making systems (Seitanidi & Crane, 2014).

Risk mitigation involves developing strategies to reduce the possibility and consequences of negative occurrences (Selsky & Parker, 2005). It involves proactively planning for possible setbacks, developing contingency measures, and establishing alternative courses of action (Selsky & Parker, 2005). Communication also plays a vital role in this regard (Selsky & Parker, 2005). It ensures that all partners are aware of the potential risks and the strategies to address them. Effective risk management improves the resilience of the partnership, protects collaborative efforts, and increases the possibility of achieving the goal or objective of the partners (Austin & Seitanidi, 2012; Babiak & Wolfe, 2009).

The last stage of collaborative strategic management is characterized by the fulfilment of the objectives of the partnership either by individual partners or collectively as a group (Clarke & Fuller, 2010). These outcomes could be either plan-centric, process-centric, partner-centric, environmental-centric, outside stakeholder-centric or person-centric (Wong et al., 2020). This process is flexible and can be influenced by internal and external factors (Clarke & Fuller, 2010; MacDonald et al., 2019).

2.5 Cross-Sector Partnership Structures and Outcomes

The success of every partnership lies in its structure and implementation process (Clarke, 2011). In recent years, more research has been done to identify partnership structures and their relevance to outcomes (Wong et al., 2020). Engaging in partnership with relevant stakeholders is not an automatic key to success (Koschmann et al., 2012). For a partnership to be successful, several key factors must

be considered, including the type of organizations involved, whether the partnership is formal or informal, the decision-making process, communication mechanisms, and monitoring and evaluation (Albers, 2010; Casey, 2008; Huxham, 1993; van Tulder et al., 2016).

Concerning cross-sector partnerships, partnership structures can be defined as a significant criterion in determining the shape and implementation of agendas (Huxham, 1993). One key element of the partnership structure is that it influences the actions of the partner organizations. According to Clarke (2011), partnership outcome is only made possible through partnership structures. There are five possible outcomes, they include plan-centric, process-centric, partner-centric, outside-stakeholder-centric, person-centric, and environment-centric (Clarke, 2011; Wong et al., 2020). Partnership structures comprise partner organizations, forms and processes (Clarke & Fuller, 2010; Huxham, 1993). Assessing the effectiveness of the partnership for achieving the expected outcomes includes the level of engagement of the key partners, the strength of the evaluation and monitoring processes, strategic review and regular re-evaluation of ineffective plans, number of partners, forms of partnerships and the decision-making process (Wong et al., 2020).

2.5.1 Decision-making Process

The decision-making process refers to the stages involved in making decisions, assigning, prioritizing tasks and taking actions that align with the partnership's goals and objectives (Clarke, 2011; Clarke et al., 2023). Effective decision-making is crucial to the smooth running of the partnership till it accomplishes the purpose for which it was established (Bryson et al., 2006). Although cross-sector partnerships are sometimes portrayed as pragmatic arrangements focused on problem-solving characterized by an absence of politics and power, it is worth noting that they are inherently affected by power dynamics (Benítez-Ávila et al., 2018). This is owing to the disparity in the level of control over resources among actors involved in the partnership, diverse interests, and high stakes, among others (Benítez-Ávila et al., 2018). Even when there are clear interdependencies between the actors, conflict is bound to arise, hence, making it crucial to address power asymmetries (Dewulf & Elbers, 2018; Pattberg & Widerberg, 2016; Purdy, 2012). In describing power relations in cross-sector partnerships, there are two main categories 'episodic power' and 'systemic power' (Dewulf & Elbers, 2018; Gray & Purdy, 2018). Episodic power refers to the power exerted in specific events or interactions and can be further divided into three types. The first, direct power, refers to the influence one actor has on another actor to undertake an action that does not align with their interest. The second, indirect power, pertains to the ability of an actor to influence the decision-making process by marginalizing or disregarding the issues and suggestions presented by another actor. The third, ideological power, involves the manipulation of another actor's perception of their own interests, subtly

shaping their decisions and actions (Dewulf & Elbers, 2018; Gray & Purdy, 2018). Systemic power, on the other hand, is embedded in the structure (Conway, 2020). A further analysis of power dynamics in cross-sector partnerships reveals that there are two main ways power can be exercised in relation to CSPs: power in CSPs and power over CSPs (Benítez-Ávila et al., 2018). Power in CSPs takes into consideration direct power strategies (Benítez-Ávila et al., 2018). Partners who excel in persuasion and have greater communicative legitimacy may have a higher advantage in the strategic framing of partnership objectives and other decisions made within the partnerships (Benítez-Ávila et al., 2018). While power over CSPs focuses on the ability to influence behaviour for a long time (Benítez-Ávila et al., 2018).

The distribution of power in the decision-making process varies depending on the nature and size of the partnership (Kamiya, 2011). For small cross-sector partnerships, almost all partners are involved in the decision-making process (Kamiya, 2011). However, for multi-stakeholder partnerships, owing to the large number of partner organizations involved, the partners to be involved in the decision-making process have to be identified (Kamiya, 2011). It is important to decide who makes the decisions and the steps to be followed when decisions are to be made (Kamiya, 2011).

In terms of power allocation, the decision-making process can either be centralized or decentralized (Mintzberg, 1989). When the responsibility to make decisions lies in the power of one organization, the decision-making structure is centralized (Albers, 2010). It can either be vertically centralized or decentralized (Albers, 2010). If the decision-making power is concentrated in the higher hierarchical levels, then, it is vertically centralized, but if the major decisions are delegated to lower hierarchical levels such as lower managers, then, it is vertically decentralized (Albers, 2010). On the other hand, when the decision-making is done by several organizations, then, it can be said to be decentralized (Mintzberg, 1989). Decentralization is ideal for multi-stakeholder partnerships (MacDonald et al., 2019).

Another governance structure is specialization (Albers, 2010). Specialization involves having dedicated positions and units for partnership-related tasks, which are separate from the individual partner organizations (Albers, 2010). For instance, the presence of a partnership manager and other partnership-specific positions indicates a high level of specialization while the absence of these positions would mean that oversight would be carried out by the senior management of the partner organizations (Albers, 2010).

The formality of the decision-making process depends on the governing structure (Bryson et al., 2006). It could be self-governing, in this case, decisions are made through regular meetings of

members or informal interactions (Bryson et al., 2006). It could also be an organization that takes the lead in coordinating activities and making decisions (Bryson et al., 2006). Lastly, a separate entity could be set up to take charge of making decisions (Bryson et al., 2006). Some determining factors in this regard include the network size and the level of trust among partner organizations (Kamiya, 2011).

2.5.1.1 Configuration Models

The configuration model in cross-sector partnerships examines how different sectors—public, private, and civil society—collaborate to achieve shared goals, particularly in addressing complex societal issues like sustainability and climate change (Albers, 2010; Collaborate CIC, & Dartington Service Lab Design, 2019). The configuration model adopted by a CSP provides the framework that facilitates strategic alignment among partners, leveraging their distinct resources, capabilities, and expertise to create synergistic outcomes (Collaborate CIC, & Dartington Service Lab Design, 2019; MacDonald et al., 2019). Given that CSPs are not a one-size-fits-all solution due to their complex and interconnected relationships, changes along the process can cause unexpected effects within the system (Bryson et al., 2006; Wong et al., 2020). The success or failure of a partnership depends on the types of partners and their relationships, the phases in the partnering process, the structural features of the partnership, and the respective environment (Glasbergen et al., 2007; Wong et al., 2020). Therefore, effective CSPs are characterized by clear governance structures, mutual trust, and shared accountability, which are crucial for navigating the diverse interests and objectives of each sector (Albers, 2010; Bauer et al., 2023).

Furthermore, the nature and complexity of the issue to be addressed often play a key role in determining the configuration model to be adopted, highlighting the importance of adaptive management practices that enable partnerships to respond to evolving challenges and new opportunities (Bryson et al., 2006). Research has shown that CSPs with well-defined roles and responsibilities, as well as mechanisms for continuous learning and feedback, tend to be more resilient and impactful (Crosby & Bryson, 2005). Moreover, the integration of stakeholder engagement processes defined by the configuration model ensures that the partnership's activities are inclusive and responsive to the needs of the communities they serve (Austin & Seitanidi, 2012). These configuration models include decentralization, mission-oriented, constellation, networked collaboration, catalyst collaboration, and coalition, among others.

2.5.1.1.1 Constellation Model

The "constellation model" of CSPs is designed to facilitate collaboration across multiple sectors to achieve joint outcomes through a decentralized approach (Chaplyn et al., 2020; Surman & Surman,

2008). It often involves ‘constellations’ or small, self-organizing teams that contribute to the implementation of the action plans (Surman & Surman, 2008). These self-organizing teams thread into an overall partnership, which is held together with a framework that shares leadership between the partners (Mowla, 2019; Surman & Surman, 2008). It is often very flexible; a new cluster or “constellation” can be formed when a group of partners decides to work on a particular issue, which makes it adaptive (Das, 2015; Mowla, 2019). However, when a constellation underperforms or is affected by low engagement from partner organizations, it can become inactive or disappear altogether without negatively impacting the overall partnership (Das, 2015; Surman & Surman, 2008). Constellations flow from opportunism, not from a rigid strategic plan. This makes it possible to balance the interests and needs of each group within the broader goal of highly productive collaboration (Surman & Surman, 2008). As constellation-based partnerships exist only through lightweight agreements between members and are not legally incorporated entities (Surman & Surman, 2008). As a result, fiscal and legal responsibility moves around depending on the lead partner of a particular constellation (Surman & Surman, 2008).

Ideally, constellations are administratively attached to an intermediary organization with experience in guiding the planning process, facilitating meetings, supporting new constellations, fundraising for joint projects, mediating conflict, helping information to flow and building the overall capacity of the group to work towards its desired outcome (Surman & Surman, 2008). While serious effort still goes into core partnership governance and management, decision-making authority and resources are concentrated in the constellations which drive and define the partnership (Surman & Surman, 2008). Summarizing key features of this model, Surman and Surman (2008) mention the following:

- **Action-Focused Constellations:** The model organizes partners into small, self-organizing teams or 'constellations' that focus on specific actions (Mowla, 2019; Surman & Surman, 2008). These teams operate independently but contribute to a larger partnership framework that shares leadership among partners.
- **Lightweight Governance:** It is often characterized by a stewardship group comprising representatives from partner organizations, which helps guide the partnership’s vision and support constellations (Surman & Surman, 2008). This group ensures that the constellations’ framework aligns with the partnership’s overarching goal and manages practical matters like budget allocation and adherence (Surman & Surman, 2008).

The figure below shows a summary of the constellation model.

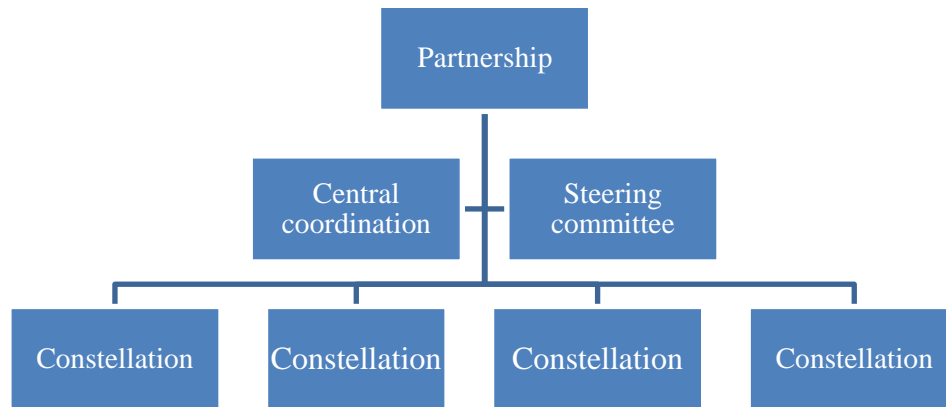


Figure 2.3: Constellation model

(Adapted from (Surman & Surman, 2008))

2.5.1.1.2 Networked Collaboration Model

The networked collaboration model represents a flexible and adaptive approach to partnership among diverse organizations across sectors (Collaborate CIC, & Dartington Service Lab Design, 2019; Scheinert et al., 2017). Unlike more formal, structured collaborations, this model thrives on the diversity of its participating partner organizations, which may differ significantly in structure, focus, and working culture (Collaborate CIC, & Dartington Service Lab Design, 2019). Membership in these networks is usually open and evolves over time, allowing easy entry of new partner organizations (Collaborate CIC, & Dartington Service Lab Design, 2019; Mačiulienė & Skaržauskienė, 2016). The primary unifying factor in these networks is a common interest or objective, which serves as the basis for the partnership (Mačiulienė & Skaržauskienė, 2016). Networked collaborations can either be “homophily” or “heterophily” (Scheinert et al., 2017). Homophily refers to the collaboration of distinct organizations that share similar goals, values or resources, while heterophily refers to the collaboration of organizations that have diverse or different goals, resources (Scheinert et al., 2017).

One of the advantages of networked collaborations is their ability to connect the partners involved to an extensive pool of resources and information (Collaborate CIC, & Dartington Service Lab Design, 2019; Mačiulienė & Skaržauskienė, 2016). This connection facilitates the sharing of ideas and fosters a shared commitment to specific activities or outcomes. Organizations often view this approach as beneficial for aligning with others in pursuit of their objectives, providing a platform for collective

advocacy and extensive influence (Collaborate CIC, & Dartington Service Lab Design, 2019). The purpose within these networks is usually articulated through shared principles for action rather than defined, measurable goals (Collaborate CIC, & Dartington Service Lab Design, 2019). This allows for a broad alignment of efforts while accommodating the diverse priorities and approaches of the members.

Furthermore, the model is characterized by a horizontal, non-hierarchical structure. Decision-making processes can be slow, as they require input from most or all partner organizations (Collaborate CIC, & Dartington Service Lab Design, 2019). A notable downside of the model is the complicated evaluation process owing to shifts in contributions and responsibilities of the partners, often as a result of the diversity of the membership and the varying degrees of involvement (Collaborate CIC, & Dartington Service Lab Design, 2019).

2.5.1.1.3 Decentralized Collaboration

A decentralized collaboration model is characterized by the participation of organizations across different sectors in decision-making processes (MacDonald et al., 2019), with the absence of hierarchies, and the presence of flat structures, fostering transparency and equal participation among all members (Collaborate CIC, & Dartington Service Lab Design, 2019; Kamiya, 2011). Such partnerships are particularly effective in multi-stakeholder partnerships mobilizing grassroots activities toward a shared agenda, often challenging traditional power structures, addressing complex societal issues and building partnership capacity in complex environments (Huby et al., 2018; MacDonald et al., 2019). The non-hierarchical nature of decentralized collaboration enables diverse actors to work together, regardless of their institutional affiliations, promoting equity, inclusivity and diversity in problem-solving (Collaborate CIC, & Dartington Service Lab Design, 2019).

One of the core advantages of decentralized collaboration lies in its bottom-up approach, which prioritizes mobilizing organizations throughout the system, encourages communication and facilitates active engagement of the partners (Chen, 2019; Hubby et al., 2018). According to Hubby et al (2018), the effectiveness of CSPs adopting this model usually relies predominantly on those at the ground level who manage its day-to-day activities. This approach contrasts with traditional top-down models, as it allows for a more organic and democratic process of change (Chen, 2019). This flexibility enables the CSP to adapt to new challenges and opportunities, ensuring that the partnership remains relevant and responsive to the needs of its members and the broader community (Collaborate CIC, & Dartington Service Lab Design, 2019).

The mechanics of decentralized collaboration involve several key elements, including governance, communication, evaluation, and resource management (Collaborate CIC, & Dartington Service Lab Design, 2019; MacDonald et al., 2019). Decentralized collaborations may sometimes have self-organizing teams. In this case, decision-making is distributed among the teams rather than concentrated in a central management hierarchy (MacDonald et al., 2019). This distribution of power promotes transparent decision-making and encourages multiple voices to contribute, using informal and immediate communication channels (Chen, 2019; Collaborate CIC, & Dartington Service Lab Design, 2019). It promotes learning, fostering continuous improvement and innovation.

Evaluating the impact of decentralized collaborations can be challenging due to the absence of traditional hierarchical structures and clear attribution between activities and outcomes. However, qualitative assessments such as the level of disruption achieved or the awareness generated among the wider public, can be used to assess progress (Collaborate CIC, & Dartington Service Lab Design, 2019).

In conclusion, a decentralized collaboration model offers a framework for addressing societal challenges through a participatory and inclusive approach (Collaborate CIC, & Dartington Service Lab Design, 2019; Mačiulienė & Skaržauskienė, 2016). It prioritizes the bottom-up approach, which empowers organizations to effect change, promote transparency, and challenge traditional power structures (Chen, 2019; Huby et al., 2018). The success of such partnerships hinges on the active participation and commitment of all members, as well as the ability to adapt and evolve in response to new circumstances (Kamiya, 2011; MacDonald et al., 2019).

2.5.1.1.4 Hub And Spoke Model

The hub-and-spoke model refers to a model with a central organizing body known as the “hub” charged with decision-making power comprising one or many organizations and the “spokes” comprised of partner organizations involved in the partnership. It is a model that is prevalent in the healthcare, supply chain and aviation industries (Alderighi et al., 2007; Lin et al., 2021; Marcovitz et al., 2022). In the healthcare sector, it involves a central facility, or “hub,” providing the most advanced medical services, while smaller satellite facilities, or “spokes,” offer essential healthcare services locally (Elrod & Fortenberry, 2017). Patients requiring more intensive care are referred from spokes to the hub. This model centralizes specialized resources and expertise at the hub, reducing costs and increasing efficiency while ensuring consistent quality across the network (Elrod & Fortenberry, 2017). It is highly scalable, allowing for the addition of new spokes as needed.

In the context of the Willis-Knighton Health System, the hub-and-spoke model has been used to support rural hospitals in northwest Louisiana (Elrod & Fortenberry, 2017). The system's main campus is the hub, while rural hospitals like DeSoto Regional Health System function as spokes. This arrangement allows rural populations to access basic services within the community and more complex care at the central hub. The model has proven successful in maintaining healthcare access in underserved areas and has facilitated the integration and management of partnerships with rural hospitals, ensuring their sustainability and contributing to plan outcomes, specifically enhancing healthcare outcomes for the community.

2.5.2 Co-ordination

Coordination in a cross-sector partnership entails harmonizing and synergizing the efforts and activities of partner organizations to achieve a common goal or objective, thereby preventing redundancy and conflicts (Austin & Seitanidi, 2012; Schwenk, 1990; Wang et al., 2022). Codesigning mechanisms are essential to add value to the partnership (Austin & Seitanidi, 2012). Dietrich (2010, p. 63) defines coordination as 'shared mutual understanding on goals, necessary activities, and contributions needed to be performed by collaborating actors'. Coordination is also a continuous process through which feedback loops enable the correction of inefficiencies or issues (Bauer et al., 2023; Clarke & Fuller, 2010). The organization charged with coordination manages uncertainties and works with partner organizations to ensure that uncertainties do not affect the ongoing work (Bauer et al., 2023). It is considered one of the five key elements through which the quality of a partnership is monitored: communication, coordination, mutual support, aligned efforts, and cohesion (Dietrich et al., 2010). Highlighting the importance of coordination, Reich and Benbasat (2000) mention that it is a knowledge-integration process that promotes a mutual understanding of project objectives and identifies strategies needed to attain those objectives. Any partner organization charged with coordination ensures the management of uncertainties and works with partner organizations to ensure that uncertainties do not affect the ongoing work (Bauer et al., 2023). Cross-sector partnerships that involve staff members who primarily act as coordinators are more likely to produce predefined outcomes (Bauer et al., 2023).

There are different levels of institutionalization in coordination which depend on the presence or absence of a secretariat (Kamiya, 2011). When there are different secretariats with different offices for staff of partner organizations, this is considered a high level of institutionalization (Kamiya, 2011). However, when there is only one secretariat with one organization charged with oversight, this is considered a medium level of institutionalization (Kamiya, 2011). Lastly, when the partnership is characterized by an absence of a secretariat, it is considered a low level of institutionalization (Kamiya,

2011). In this case, one of the partners acts as the co-ordinator when the need arises (Kamiya, 2011). This type is common among small cross-sector partnerships (Kamiya, 2011).

2.5.3 Communication

Communication is the process involved in sharing information among partner organizations involved in a cross-sector partnership (Koschmann et al., 2012). It includes verbal and nonverbal exchange, identifying the frequency and channels of communication to facilitate networking, configuration and achievement of the set goals and objectives (Dietrich et al., 2010). The quality of communication in the partnership is reflected through the frequency and willingness of collaborative actors to openly share ideas to keep every partner informed of ongoing changes (Dietrich et al., 2010). Additionally, high-quality communication also considers the effectiveness and expense of communication (Daft & Lengel, 1986). The cost of communication is correlated with both the frequency and the communication channels utilized (Daft & Lengel, 1986). Based on the findings of their research, Anderson et al. (2006 p.144) advised that “project managers should devote increasing energies into rich communication both within the project and towards the project environment. This implies a stronger stakeholder orientation as a means for ensuring project success whether the stakeholder is internal or external to the organization”.

Koschmann et al. (2012) highlighted communication practices that increase cross-sector partnership potential and assess cross-sector partnership value. To increase cross-sector partnership potential, a key consideration is increasing meaningful participation (Koschmann et al., 2012; Rein & Stott, 2009). Having the right partners will not automatically yield results if communication is lacking (Koschmann et al., 2012). Hence, achieving desired outcomes requires communication practices that manage the diversity of participants and encourage participation (Babiak & Thibault, 2008; Koschmann et al., 2012). Thus, emphasizing the degree of participation of partner members and the inclusion of the diverse interests of these partner members in the decision-making process (Koschmann et al., 2012).

Another key consideration is managing centripetal and centrifugal forces. “Centripetal forces draw people together toward a group identity and a resulting monologue, whereas centrifugal forces separate and divide people but are necessary for dialogue” (Koschmann et al., 2012, p. 341). Therefore, this aspect focuses on managing conflicts that may arise during deliberations. This entails resisting premature closure in conversation, where closure refers to an abrupt end of deliberation, an elimination of conflict, or the deliberate refusal to acknowledge alternatives (Koschmann et al., 2012; Thackaberry, 2004). This does not suggest endless conversations but a ‘mindfulness about how openness or closure in conversation helps manage competing tension’ (Koschmann et al., 2012, p. 341). Consequently, it

helps to prevent the marginalization of certain actors within the partnership (Rein & Stott, 2009), as well as maintain and build trust (Hamann et al., 2011).

Furthermore, communication practices that assess cross-sector partnership value include external intertextual influence and account of capital transformation (Koschmann et al., 2012). An indicator of external intertextual influence involves considering how the cross-sector partnership authoritative text such as reports shapes the public perception of an issue (Koschmann et al., 2012). For instance, it could influence the introduction of a regulation to address the issue (Koschmann et al., 2012). Another indicator is examining how the authoritative text influences the authoritative text of the member organizations within the partnership and how it influences external constituents, that is, organizations that are not members of the partnership (Koschmann et al., 2012).

In describing the process of open communication climate, there are two main categories: external communication and internal communication (Rein & Stott, 2009). Internal communication involves interactions that take place between and within partner organizations (Rein & Stott, 2009). Kolk et al. (2010) mention three possibilities: trickle-up, trickle round and trickle-down. Trickle-up communication involves discussion of organizational members with superiors, such as individuals involved in the administration. Trickle-round communication refers to interaction with peers or within or between partnering organizations. Lastly, trickle-down communication involves interaction with subordinates.

Some recognized channels of communication include periodic meetings (Schmid & Almog-Bar, 2020), taskforce meetings (Wong et al., 2020), monthly breakfast meetings (Wong et al., 2020)

, email correspondence (Schmid & Almog-Bar, 2020), and newsletters (Clarke et al., 2023). External communication involves interaction with external constituents and some identified channels include reports, media coverage, award events and links with international and external organizations (Clarke et al., 2023; Rein & Stott, 2009).

2.5.4 Stakeholder or Partners' Engagement

This refers to the level of commitment or involvement of partner organizations and the frequency of participation in the partnership (Hall & O'Dwyer, 2017). Every partnership must have a framework that establishes the role of partners, and the stages involved in recruiting new partners (Austin & Seitanidi, 2012). This ensures the continuity of the partnership and the achievement of the partnership goal (Kamiya, 2011). According to Gray (1985), the involvement of key partners increases the possibility of achieving the partnership's objective. Some considerations for the recruitment of new

partners include mission fit, resource fit, evaluation fit, cycle fit, management fit, workforce fit, cause fit, and cultural fit (Berger et al., 2004). In considering mission fit as a recruitment strategy, the partnership considers the relevance of the intending organization in relation to the partnership objective (Austin & Seitanidi, 2012; Berger et al., 2004). It is not enough to have partners, but the partners must be considered relevant in the attainment of the intended outcomes (Koschmann et al., 2012). The engagement of partner organization in a partnership tends to be higher when the partnership objectives align with the organization's mission and vision (Berger et al., 2004; Iteke et al., 2020). Another key consideration is resource fit, this takes into account the resources the organization contributes to the partnership, this could be in terms of knowledge, funds or other forms of resources (Berger et al., 2004; Hardy et al., 2003). It enables the achievement of the partnership goals and ensures continuity (Clarke et al., 2023; Peng, 2011). Work force fit examines if there is a relationship between the organization's workforce and the partnership cause such that the participating employees involved in the partnership can develop an affinity for the cause and get actively involved in the partnership (Berger et al., 2004; Escher & Brzustewicz, 2020). Cycle fit considers the schedule of intending partner organizations, if it would permit collaboration on key tasks (Berger et al., 2004). Cultural fit considers the extent to which the values and organizational norms of prospective partner organizations align with the existing values of the partnership and the partner organizations already involved in the partnership (Berger et al., 2004). Stakeholder engagement also varies based on the type of partner organization. Moore (2015) identifies three types of value capital contributed by partners involved in a collaboration. These include intellectual capital, reputational capital and economic capital. Intellectual capital is domain-specific expertise or knowledge that is typically disseminated in restricted environments like universities and research agencies (Moore, 2015; Peng, 2011). Given that a university has a cognitive mission, which involves generating and disseminating knowledge, the contribution of a university in a partnership would be more of the intellectual capital (Moore, 2015; Peng, 2011). Reputational capital provides a certain status and is often the contribution of the public sector (Moore, 2015). The state's mission is a regulative one, which implies that it establishes order in a social and economic environment (Moore, 2015). Lastly, economic value refers to substantive capital or actual revenue contributed to fund the projects initiated by the partnership (Austin & Seitanidi, 2012; Moore, 2015). This is often the contribution of the private sector (Austin & Seitanidi, 2012).

2.5.5 Measuring, Monitoring and Reporting Systems

Measurement or evaluation can be applied to the 'outputs' which refer to the immediate effects of the partnership on the partner organizations; 'outcomes' which relate to the intermediate effects on the society that is the focus of the partnership and 'outcomes' which encompass the long-term effects and

net-effects of the partnership on the issue to be addressed, usually the main objective of the partnership (van Tulder et al., 2016).

There are two perspectives when it comes to measuring the impact of partnerships. There are evaluators measuring impact and impact evaluators (van Tulder et al., 2016; White, 2009). The first perspective starts by examining the partnership itself and defines impact as the final effects in a causal chain (Austin & Seitanidi, 2012; van Tulder et al., 2016). Evaluators measuring impact considers various effects during partnership implementation, including positive and negative, direct and indirect, short-term and long-term, intended and unintended effects that lead to outcomes (van Tulder et al., 2016). It focuses on learning, helping managers and stakeholders to have deeper insights about their interventions and on understanding the reasons behind outcomes and impacts (Stites & Gray, 2013; van Tulder et al., 2016). This approach views partnerships as instrumental, often linked to Corporate Social Responsibility (CSR) implementation, prioritizing direct benefits for organizational actors. However, it considers only outputs and not the outcomes (van Tulder et al., 2016).

In contrast, the second perspective of impact evaluators takes the (social) issue as the main consideration (van Tulder et al., 2016). This approach focuses on providing evidence that partnerships actually address the social issue (van Tulder et al., 2016). Furthermore, it involves strong methodological rigour and can be associated with experimental and quasi-experimental methods and employing randomized control groups (Stites & Gray, 2013; van Tulder et al., 2016), while considering the crowding-out effect to non-involved stakeholders (van Tulder et al., 2016). A downside to this approach is that it is exceptionally challenging to apply it to cross-sector partnerships that address complex issues (van Tulder et al., 2016). However, it can be used to provide evidence of the positive impact of partnership in addressing complex problems (van Tulder et al., 2016).

Measurement of the impacts of cross-sector partnerships has proven difficult in partnerships owing to the lack of baseline metrics that can be used for the assessment and a reluctance among participating managers to reveal the effects of these partnerships on their respective organizations (van Tulder et al., 2016). Other challenges associated with impact assessment include multi causality of partnerships, non-quantifiable value of partnerships and the temporal dimension (van Tulder et al., 2016). Partners place more emphasis on kickstarting the partnership and are less concerned about measuring the starting point of each partner organization (van Tulder et al., 2016). Inability to measure the partnership's initial position influences both its dynamics and the partners' ability to monitor progress, thereby complicating the task of convincingly and consistently assessing the impact of the partnership (van Tulder et al., 2016).

An additional challenge associated with measurement is the inability to determine the long-term impact of partnership concerning broader societal goals, such as the sustainable development goals, due to insufficient data (van Tulder et al., 2016). While a partnership may effectively address the issues for which it was established, the unavailability of data to measure the long-term impacts make it increasingly difficult to ascertain its significance in addressing the overarching issue (Suhendra et al., 2023).

Effective monitoring and reporting systems are essential for the success of partnerships (van Tulder et al., 2016). Research has demonstrated that without such systems, it becomes exceedingly difficult to evaluate partnership effectiveness (van Tulder et al., 2016). Monitoring and reporting mechanisms allow for the assessment of partner contributions and fulfillment of responsibilities (Albers, 2010). It involves establishing performance indicators, a cooperative scorecard, and a partnership accounting system (Albers, 2010). A monitoring mechanism with defined standards (indicators and measures) of goal attainment of partnerships is key to achieving transparency (Bäckstrand, 2006). Furthermore, it is crucial to promote and reinforce the legitimacy and credibility of partnerships as a viable and efficient approach to tackling complex social and environmental concerns, while also discerning their necessary limits (van Tulder et al., 2016).

Monitoring, Evaluation and Reporting is dependent on the structure of the cross-sector partnership. These are sometimes done through public disclosure of annual reports, third party evaluations, meeting documents, capital transformation, among others (Koschmann et al., 2012; Pattberg et al., 2012). There are two ways to assess the value production of cross-sector partnerships on the basis of account of capital transformation (Koschmann et al., 2012). The first involves assessing the content or form of accounts given when an actor or actors represent(s) the partnership to deliver a written or oral presentation about the partnership (Koschmann et al., 2012). The aim is to discover patterns across accounts provided by the different actors either of the same sectors or different sectors. Another assessment strategy of value production involves examining partners' accounts over time for evidence of how people account for higher-order effects (Koschmann et al., 2012). The analysis might include understanding how and whether accounts given influence subsequent deliberations, how they shape development and how they influence conversational partners (Koschmann et al., 2012).

Monitoring systems usually have timelines that determine the frequency of the monitoring and reporting process, which could be determined by the goals, or the projects carried out (Clarke et al., 2023). Recent empirical research carried out by Clarke et al. (2023) on Gwangju Council for Sustainable Development (GCSD) reveals that the partnership evaluates its goal every five years, while it provides reports on its projects on an annual basis.

The size of the partnership determines the size of the monitoring and reporting system (Albers, 2010). Usually, the more partner organizations involved, the more elaborate the monitoring and reporting system (Albers, 2010). The Creating Shared Value (CSV) model of Porter and Kramer proposes different stages of monitoring to ensure the success of partnerships (Kolk et al., 2010). They include the micro level (impacts on individual recipients), meso (impact on other organizations) and macro (systemic impact) (Kolk et al., 2010). Monitoring of implementation plans makes it possible to make adjustments in a timely manner (MacDonald et al., 2019).

For partnerships set up to address climate change, monitoring differs for corporate-level governance and community-wide governance (Zhou et al., 2022). To monitor corporate-level governance, a formal internal reporting framework should be established to regularly evaluate progress across various municipal departments and the feedback from relevant stakeholders should be used to enhance decision-making processes (Zhou et al., 2022). Monitoring corporate-wide emissions involves adopting a standardized evaluation framework with indicators to track progress in emissions reduction within a given timeframe, while community-wide actions and outcomes should be evaluated in relation to partner commitments (Zhou et al., 2022).

2.5.6 Multi-Level Integration

Multi-level integration involves the effective coordination and collaboration of various organizational and systemic levels that characterize the cross-sector partnership (Austin & Seitanidi, 2012; Pache et al., 2022). Multi-level integration is essential for the success of cross-sector partnerships, as it facilitates the creation of a shared vision, promotes the alignment of the strategies toward the achievement of the overarching goal or objective and promotes cooperation through the creation of a common culture (Austin & Seitanidi, 2012; Pache et al., 2022). Austin and Seitanidi (2012) provide a framework that governs multi-level integration. The framework comprises -the value creation spectrum, identifying the stages of the collaboration, which indicates how value creation varies across different types of collaborative relationships; the nature of value creation processes in partnership and the resultant internal and external benefits costs, and partnership outcomes at the micro, meso, and macro levels.

Given that cross-sector partnerships span across industries from different sectors, these partnerships are influenced by the regulatory environment in which they are formed (Austin & Seitanidi, 2012; Babiak & Wolfe, 2009). The process of multi-level integration involves identifying relevant stakeholders and their roles, the establishment of communication strategies, which involves the channels, frequency and the strategies for resolving conflicts, establishing effective leadership, the

development of shared goals and objectives, and the implementation of effective monitoring and evaluation mechanisms (Kolk et al., 2010; Rein & Stott, 2009; Selsky & Parker, 2005). Multi-level integration also considers funding mechanisms, which describes the funding arrangement, cost-sharing protocols, and strategies to mitigate risks associated with funding.

Furthermore, an assessment framework is established to assess progress and outcomes (Huxham, 1993; van Tulder et al., 2016), which ensures that the partnerships resonate with the overarching policy objectives and address the challenges that formed the basis of its establishment. However, a significant challenge affecting multi-level integration is bureaucratic barriers which stem from inefficient administrative processes (Babiak & Thibault, 2009). When the regulations are rigid, it restrains the partnership from making changes to adapt to situations which may undermine the effectiveness of the partnership (Babiak & Thibault, 2009). On the other hand, a flexible regulatory policy allows for adjustments when the occasion arises (Huxham, 1993). Harmonizing regulatory frameworks across sectors and jurisdictions reduces the possibility of tension and conflicts and promotes efficient partnership implementation (Babiak & Thibault, 2009). Achieving this often involves involving representatives from the different sectors to participate in the formulation and revision of the policies, this ensures inclusivity and allows for a balanced perspective (MacDonald et al., 2018).

2.6 Climate Action Partnership Levels

The urgency in the need to tackle climate change has propelled several organizations across different sectors to engage in a partnership to address climate change (Wong et al., 2020). This has provided the basis for significant progress in transitioning towards a net-zero climate action plan. Electricity, buildings, waste, and transportation have been identified as the priority industries in the local reduction of greenhouse gases (Linton et al., 2022). Hence, cross-sector partnerships focusing on climate mitigation aim to reduce greenhouse gas emissions in one or more of these significant industries.

Existing literature reveals three focus areas of cross-sector social partnerships aiming at mitigating climate change. These include project, industry (sector) and community-wide climate action.

2.6.1 Projects

Projects focused on climate mitigation can either be a small-scale project or a large-scale project. Small scale projects are usually undertaken by small CSPs (Suhendra et al., 2023). They address a specific or narrow issue and have a limited scope (Laird et al., 2024; Suhendra et al., 2023). On the other hand, large-scale projects are undertaken by large CSPs, usually characterized by the broad scope of the issue they aim to address (Bäckstrand, 2006; Gray & Purdy, 2018).

Given the complexity of achieving net-zero GHG goals, local governments often partner with specialized private corporations (Suhendra et al., 2023; Urrutia-Azcona et al., 2020). These partnerships leverage the expertise of these organizations to realize specific projects within their respective fields, ensuring effective execution and progress toward carbon neutrality (Urrutia-Azcona et al., 2020).

An example of a large-scale project is the Close the Glass Loop Initiative by the European Union (Close the Glass Loop, 2023). This initiative creates awareness and encourages recycling, which promotes sustainable waste disposal and management (Dimitrov, 2016; Massoud & El-Fadel, 2002). Another project in Canada is the Green Maritime Shipping Initiative. It brings together the Port Authorities of Montréal, Trois-Rivières and Quebec City for a research project led by the Université de Montréal as part of the PLAINE – Réseau Québec Maritime – RQM. It aims to mitigate the impacts of commercial shipping and port activities on the environment and natural and human ecosystems. This initiative is particularly in line with the collaborative partnership announced in 2022 between the ports of Montréal, Quebec City and Trois-Rivières, aimed in particular at greening their facilities, operations and supply chains, with the ultimate aim of achieving carbon neutrality.

2.6.2 Industry (Pathway)

The ‘pathway’ used in this context refers to industries contributing to greenhouse gas emissions. The identified priority industries are waste, electricity, buildings and transportation. Decarbonizing a sector implies making efforts to achieve net-zero GHG emissions by 2050 (Linton et al., 2022).

2.6.2.1 Electricity

Electricity contributes over 25% of total greenhouse gas emissions (IEA, 2021), and is crucial to decarbonizing other sectors such as buildings, transport and industries (Browning et al., 2023; Kong et al., 2023). Realizing the net-zero target by 2050 demands a rapid acceleration in the innovation of carbon-free energy technology and major changes in regulations and policies, governments have taken steps to address climate change by pledging to achieve net-zero emissions by 2050 (Government of Canada, 2022a). Recent research has shown that more investments are directed toward carbon-free energy systems and are significantly outpacing investments in energy systems dependent on fossil fuels (Browning et al., 2023). Despite these significant changes made in the electricity sector, there is a global concern about not being able to achieve net-zero in the energy sector by 2050 (IEA, 2021).

International Energy Agency (2015) suggested cross-sector partnerships as a means of decarbonizing the electricity grids and building capacity so that climate change policies of businesses can align with industry best practices. Cross-sector partnerships facilitate the use of renewable energy sources such as

solar and hydropower generation (Jiang, 2022). Cross-sector partnerships involving governments, private businesses, public institutions, and civil society organizations play a pivotal role in facilitating knowledge and resource sharing, thereby accelerating the adoption of sustainable energy technologies in municipalities and organizations (Jiang, 2022). This accounts for the transformative progress made in decarbonizing electricity grids (Jiang, 2022). One such partnership is the ‘Powering Past Coal Alliance’ (PPCA, 2021). It aims to phase out dependence on fossil fuels and promote the adoption of clean energy (PPCA, 2021). However, some challenges still persist such as grid integration, energy supply security and inconsistencies in policies (Papadis & Tsatsaronis, 2020).

Another partnership is the 24/7 Clean Energy Compact (IEA, 2021). This partnership cuts across different industries. It involves the government of Iceland, energy buyers and suppliers, and organizations like Google, Sustainable Energy for All, and the UN-Energy. Its primary objective is to advance procurement practices, accelerate the adoption of clean innovation in the electricity sector, and the transition to carbon-free energy systems (IEA, 2021).

The International Renewable Energy Agency has several partnership initiatives focused on renewable sources of energy such as the Global Offshore Wind Alliance (GOWA), the Global Geothermal Alliance (GGA), and SIDS Lighthouse Initiative (GOWA, 2022). These partnerships bring together governments, businesses and non-profit organizations to promote the use of clean energy sources (GOWA, 2022).

2.6.2.2 Buildings

Recent research conducted by the United Nations reveals that buildings accounted for 36% of global energy consumption and 37% of energy-related greenhouse gas emissions in 2020 (IEA, 2021). This includes energy consumption from residential, commercial, industrial, and others (Carbon Neutral Cities Alliance, 2015). To achieve net-zero GHG emissions in the building sector, the focus has to be on existing and old buildings (Linton et al., 2022). For existing buildings, retrofits are an integral part of decarbonization (Chen et al., 2023; Valencia et al., 2022). The heating and cooling systems constitute a major source of greenhouse gas emissions. This makes it essential that the systems transition from dependency on fossil fuels to clean energy sources (Chen et al., 2023). New buildings have to be designed according to net-zero codes and standards (Linton et al., 2022; Xiang et al., 2023). Zero-emissions buildings require that all new buildings are designed in a way that energy sources for powering the buildings are highly efficient and are solely renewable energy sources (Browning et al., 2023). Two key mechanisms for decarbonizing buildings are electrification and efficiency (Browning et al., 2023). Cross-sector partnerships play a crucial role in expediting the decarbonization of the

building sector by facilitating partnerships among key industry players such as construction, energy and technology (Leibowicz et al., 2018). These partnerships focus on collaboration to enhance innovation, resources and knowledge sharing and enhance sustainability in the building sector. A typical example is the World Green Building Council's Advancing Net-Zero initiative (WGBC, 2022). It comprises organizations from the private and public sectors, as well as civil society (WGBC, 2022). It aims at promoting the urgency and achievability of net-zero carbon buildings and enhancing industry capacity to achieve the goal. One of its projects is the Net-Zero Carbon Building Commitment initiative (WGBC, 2022). This project focuses on having less than 40% carbon emissions from renovated infrastructure and net-zero emissions for all new buildings (WGBC, 2022). These partnerships facilitate the utilization of renewable energy sources for buildings and energy-efficient building systems, which promote sustainability and, ultimately, aim towards net-zero carbon emissions (WGBC, 2022).

2.6.2.3 Waste

Waste is considered a priority sector in the emission of greenhouse gases (Zhao et al., 2022). This is because most waste is non-recyclable and is the cause of landfills (Zhao et al., 2022). Landfills are known to be a major cause of methane (Scharff et al., 2023). Research has been done on ways to decarbonize the waste sector (Zhao et al., 2022). One possible pathway is exploring the waste-to-energy system (Kalair et al., 2021; Moustakas et al., 2023). This involves the conversion of waste to renewable energy (Forsyth, 2005). Another suggestion is the production of renewable energy through waste incineration (Nyitrai et al., 2023). Nyitrai et al. (2023) highlight the possibility of using landfill gas capture and deployment. This will deplete the methane caused by landfills and contribute to the production of renewable energy (Nyitrai et al., 2023). Regulations and policy frameworks have played a key role in contributing to achieving net-zero greenhouse gas emissions in the waste sector (Zhao et al., 2022). Policies on carbon emissions, recycling and waste disposal have contributed to reducing waste and greenhouse gas emissions. It promotes strategies to achieve zero waste, recycling and composting (Nyitrai et al., 2023; Zhao et al., 2022). One such partnership is the Ellen MacArthur Foundation's New Plastics Initiative (Ellen MacArthur Foundation, n.d.). It aims to reduce the use of plastics, improve the recycling system, as well as develop alternatives for plastics use and redesign products (Panagopoulos, 2020).

2.6.2.4 Transportation

Transportation contributes about 25% of GHG emissions, and it relies mostly on fossil fuels (Zhao et al., 2022). The emissions keep rising owing to an increase in economic activities, especially, relating to the delivery of goods (Arora et al., 2021). The sector has been the hardest to decarbonize (Zhao et

al., 2022). Decarbonizing the transportation sector entails addressing emissions from all modes of passenger mobility and freight transport, including those from goods delivery, land travel, and air travel (Arora et al., 2021; He et al., 2013; Pan et al., 2018). To reduce these emissions, policies have been introduced by the government such as the zero-emissions mandate, and tighter emission standards and grants have been provided to subsidize the cost of electric vehicles (Arora et al., 2021; Pan et al., 2018). Infrastructures such as charging systems are built to encourage the use of these electric vehicles (Pan et al., 2018).

In the transportation industry, cross-sector partnerships contribute to the promotion of sustainable mobility options (Kuttan, 2023). Partnerships such as EV100 have facilitated the adoption of electric vehicles by industries and have recorded significant progress (EV100, 2023). EV100 is an international initiative that unites companies dedicated to transitioning their owned and contracted vehicle fleets up to 3.5 tonnes, as well as 50% of their fleet between 3.5 and 7 tonnes, to electric vehicles. However, challenges still exist as regards infrastructure gaps, such as the lack of charging systems in some countries and accessibility of sustainable means of transportation by all in the society, irrespective of one's financial status (Farhadi & Moghaddas Tafreshi, 2022; Mastoi et al., 2022). This highlights the need for more partnerships to emerge to provide equitable access to sustainable means of transportation.

2.6.2.5 Nature-Based Solutions

According to the International Union for Conservation of Nature, nature-based solutions can be defined as the actions taken to conserve, manage and restore natural or altered ecosystems that address environmental issues while ensuring the promotion of healthy living and biodiversity benefits (Government of Canada, 2015). In addition to developing clean or renewable energy technology, nature-based solutions have emerged as a solution to transformational change towards achieving carbon neutrality (Anderson & Gough, 2021; Ptichnikov & Shvarts, 2023). These nature-based solutions like green infrastructure, provide a multi-functional strategy to build climate resilience, improve ecological connectivity, and promote and support sustainable and healthier cities (Anderson & Gough, 2021). It is a complex form of adaptation that minimizes the consequences of climate change on human health while reducing greenhouse gas emissions and providing carbon sequestration capacity (Anderson & Gough, 2021). Green infrastructure encompasses green roof systems, green walls, urban agricultural systems, tree-based intercropping systems, urban vegetation and forestry systems (Anderson & Gough, 2021). It involves the use of natural carbon sinks such as forests, plants and wetlands (Panagopoulos, 2020). These offset carbon in the atmosphere by absorbing it through photosynthesis. Carbon sequestration is also done through afforestation (Panagopoulos, 2020). Regions that are vulnerable to

extreme weather events such as storms and flooding can be protected by coastal ecosystems such as seagrass beds and mangroves (Eweje et al., 2020; MacDonald et al., 2019). Furthermore, planting trees in urban areas helps to regulate temperature and improve biodiversity. However, monitoring processes have to be set up to avoid natural disasters like wildfires.

Cross-sector partnerships play a vital role in the implementation of nature-based initiatives. Collaborative efforts from the government, indigenous communities, research institutes, civil society, and private and public sectors will enhance the adoption of these initiatives.

2.6.3 Community-Wide Action

Community-wide climate action level refers to a partnership focus that involves multiple projects that address community-wide emissions (Wong et al., 2020). Generally, these initiatives are usually undertaken by multi-stakeholder partnerships or large cross-sector partnerships. Research has shown that the CSPs created for community-wide climate action are recent developments (Wong et al., 2020). Initially, communities aimed for targets of 5% reduction by 2012 compared to 1990 levels followed by 15–20% reductions by 2020 (Sun et al., 2020). At the time, small CSPs involving the local government, local utilities, and a few relevant partners were adequate (Sun et al., 2020; Wong et al., 2020). Notably, addressing corporate emissions within the local government jurisdiction was enough to achieve the stipulated 5% reduction in community-wide GHG emissions (Sun et al., 2020).

However, the current trajectory has shifted significantly, with communities now committing to a 45% reduction of GHG emissions by 2030 and carbon neutrality by 2050 (Sun et al., 2020). Achieving such ambitious targets requires significant partner engagement, requiring a broader spectrum of organizations to participate (Sun et al., 2020). Substantiating the claim, recent research examining 350 cities globally revealed that only 48% responded to a comprehensive survey on climate action, with a majority of respondents from the United States (Aylett, 2014). 55% of the respondents indicated that they have been actively engaging in shaping local government climate policies. In stark contrast, private organizations lag significantly behind, with only 26% of cities acknowledging the active participation of privately owned organizations in local climate change planning (Aylett, 2014).

This disparity underscores the importance of engaging organizations across all sectors, especially key actors who are major emitters of greenhouse gases, in collaborative efforts (Sun et al., 2020; Wong et al., 2020). Nevertheless, the success of such partnerships is contingent on active participation and engagement from these key actors, facilitating progress and enhancing public involvement and cooperation (Clarke et al., 2023; Koschmann et al., 2012; Sun et al., 2020).

Lastly, an effective monitoring and reporting system must be set up to ensure the success of the partnership (Albers, 2010; Bäckstrand, 2006; van Tulder et al., 2016). One of its functions will be to identify and replace strategies that are not effective, as well as engage new partners. Research has shown that there are two levels of implementation of climate action plans in cross-sector partnerships (MacDonald et al., 2019): the partner and partnership levels (Brinkerhoff, 1999; Huxham, 1993). At the partners' level, partners make efforts to promote sustainability initiatives such as reducing greenhouse gases within their individual organizations. This might require including strategies to mitigate climate change in the organization's daily operations (Clarke, 2011). While at the partnership level, the partners contribute to achieving the goal of the partnership, which is usually outside the jurisdiction of individual partners (Hardy et al., 2003; Samuel & Clarke, 2022)

Across all levels mentioned above, CSPs have driven community engagement, promoted the adoption of clean energy sources, enhanced clean technological innovation, and contributed significantly to sustainable development (Clarke et al., 2023; Kuttan, 2023). However, some indicators help to determine the progress of a community in connection with achieving the net-zero carbon emissions target (Jacob et al., 2010; Kenney et al., 2020; Robert et al., 2005). These indicators will be considered in the next section.

2.7 Evaluation Framework and Indicators for Community-Wide Climate Progress

An evaluation framework for community-wide progress in climate mitigation is crucial to assessing the effectiveness of strategies employed in carbon reduction and adaptation measures in municipalities (Kenney et al., 2020). The framework encompasses several indicators that provide a comprehensive picture of the community's progress towards carbon neutrality and would be used in determining areas and opportunities for improvement (Kenney et al., 2020). The indicator network is thus based primarily on the need to establish consistent baselines that serve as benchmarks for assessing change and variability (Kenney et al., 2020). Kenney et al. (2020) provided six criteria that should serve as the basis for the indicator design. The first is the involvement of relevant stakeholders in the decision-making. The second criterion for selecting indicators involves the requirement that these indicators must be supported by a transparent model that explains the structure and functioning of each system (McCarthy et al., 2012). As a third criterion, there must be a documented association between the indicators and climate change and variability (Kenney et al., 2020). Another criterion is that the indicators must correspond to phenomena that are of national importance such as climate change (Kenney et al., 2020). A fourth criterion is that the indicators ought to be used. Providing indicators with readily available metadata, including data, methodologies, and justifications, allows end-users to tailor indicators for their unique and decision-specific needs (Kenney et al., 2020). Simultaneously, this approach ensures

that the system is designed to have broad utility in evaluating changes in nationally significant indicators. McCarthy et al. (2012) provide further details on the evaluation of indicators, it was mentioned that the indicators must be SMART, an acronym for Specific, Measurable, Achievable, Relevant and Timely. Indicators should not be vague; rather, they should state how they can be operationalized in a given context (Kenney et al., 2020; McCarthy et al., 2012). Measurable indicators have a well-thought-out strategy for identifying a baseline or methodologies for measurement (Jacob et al., 2010; McCarthy et al., 2012). To be considered relevant, indicators must reflect the output, outcome or impact that is being addressed (McCarthy et al., 2012). Lastly, indicators ought to be "timely" in the sense that the information is collected at moments that precisely capture what the indicator attempts to reflect.

The climate mitigation strategy often has three aspects to consider in evaluating climate progress. These include the output, the outcome and the indicators (Sun et al., 2020). For instance, an aspect of the climate action plan may focus on information dissemination. To evaluate the information dissemination, Kenney et al. (2020) provides an evaluation framework that considers the output, indicators, outcome and success indicators.

While the list above is not exhaustive, it provides key areas or indicators that communities can use to gauge their progress in addressing climate change. Using these indicators will help identify areas for improvement as they work towards achieving carbon neutrality (Kenney et al., 2020; McCright & Dunlap, 2011). However, achieving these goals is dependent on the strength of the partnership. The next section discusses the evaluation framework for partnership effectiveness.

2.7.1 Evaluation Framework for Partnership Effectiveness

An effective framework for partnership is essential in analyzing the impact, structure, outputs, outcome, and success of the partnership in relation to the overarching goal or objective (Babiak, 2009; Bauer et al., 2023). The most critical element in partnership decisions is the evaluation of the efficiency and effectiveness of the partnerships in accomplishing the set-out goal or objective (Gannon et al., 2021; van Tulder et al., 2016). Research carried out on 348 partnerships found in the Commission on Sustainable Development database revealed that 37% of the existing partnerships had no output in terms of the criteria applied (Pattberg et al., 2012). In addition, 43% had no structure in place to achieve their goals. Hence, the quality of the partnerships matters, ensuring that the structure can produce the desired outcome (Pattberg et al., 2012). This framework includes key indicators that determine the effectiveness of the partnership and highlights best practices based on existing literature. Some indicators include stakeholder engagement, achievement of short-term goals, the effectiveness of

communication channels, governance structures such as decision-making process, flexibility and ability to adapt to changing circumstances (Beisheim & Simon, 2016; van Tulder et al., 2016).

Highlighting the importance of flexibility and engagement, Beisheim et al. (2016) mentioned that partnerships should have all relevant partners on board. Other indicators include the leadership structure, the strength and frequency of communication, the decision-making process, the monitoring and reporting structure and the flexibility of the partnership to adjust to changing circumstances (Bauer et al., 2023; Beisheim & Simon, 2016).

Good evaluation practice suggests that, ideally, evaluation considers all key factors that may influence outcomes in order to meet collective needs and achieve collective goals successfully (Bauer et al., 2023; Brinkerhoff, 2002). This includes the institutions and incentives governing the execution of policies and programs, including informal and formal rules, regulations, structures and organizational framework (Brinkerhoff, 2002).

Effectiveness is also evident when partnerships contribute value through the creation of social capital, collaborative actions and learning, adaptive practices, synergistic outcomes, and improved problem-solving capacity (Bauer et al., 2023). Table 2.3 below provides some metrics for tracking progress in cross-sector partnerships that have been identified in existing literature.

Table 2.3: Sustainability Initiatives and Indicators Identified in Literature for Tracking Progress in CSPs

Sustainability Initiatives	Indicators
Reduction in greenhouse gas emissions	<ul style="list-style-type: none"> • Percentage decrease in community-wide GHG emissions across all sectors compared to a baseline year (Sun et al., 2020).
Adoption of sustainable mobility options	<ul style="list-style-type: none"> • Percentage increase in the use of sustainable means of transportation such as walking and cycling (Ogryzek et al., 2020). • Percentage increase in the use of public transportation compared to a baseline year (Ercan et al., 2016). • Percentage increase in the sale and use of electric vehicles compared to a baseline year (Woody et al., 2023).

Climate education and awareness	<ul style="list-style-type: none"> • Number of training, workshops, and public sensitization programs on climate mitigation (Kenney et al., 2020). • Number of early warning and health hazards dissemination outlets, by type of outlet such as radio, newspaper, and website (Kenney et al., 2020). • Number of languages used in dissemination materials of total number of languages spoken in the community; the number of extension materials containing climate change-relevant materials (Kenney et al., 2020). • Percentage change in government budget allocations towards climate change information dissemination (Kenney et al., 2020).
Adoption of renewable energy sources	<ul style="list-style-type: none"> • Percentage increase in the use of renewable energy sources such as solar, wind and hydropower to meet energy demand (Kellett, 2007).
Presence of green infrastructure	<ul style="list-style-type: none"> • Number of green infrastructures such as green roofs, and green buildings that are climate resilient (Bassett & Shandas, 2010; Valencia et al., 2022).
Waste reduction and recycling	<ul style="list-style-type: none"> • Percentage decrease in non-recyclable waste (Zhao et al., 2022). • Percentage increase in recyclable waste (Zhao et al., 2022). • Presence of waste to energy systems
Community Engagement	<ul style="list-style-type: none"> • Participation of indigenous people in climate-related activities and events (Nyong et al., 2007).
Preservation of ecosystems	<ul style="list-style-type: none"> • Number of greenspaces available in municipalities (Campagnaro et al., 2019).

Clarke & Fuller (2010) provide six possible outcomes of any partnership: partner-centric, process-centric, outside stakeholder-centric, environmental-centric and person-centric. Plan-centric outcomes focus on actualizing the partnership objectives (Creswell, 2018). In this case, the partnership is evaluated based on its ability to accomplish the goal that was the reason for its creation (Clarke & Fuller, 2010; Wong et al., 2020). Process-centric are outcomes that result in modifications, and alterations to the partnership formation, design and implementation process, including actions within the implementation process (Clarke & Fuller, 2010). Partner-centric focuses on outcomes associated with learning and organizational shifts in the behaviour of individual partners, both past and present (Clarke & Fuller, 2010; Wong et al., 2020). Outside stakeholder-centric outcomes involve changes in the relationship among partner organizations and other stakeholders not involved in the partnership (Clarke & Fuller, 2010). Environmental-centric outcomes focus on unexpected outcomes that are related to ecological, environmental, regulatory, social and/or technological environments, which

extend beyond the partnership objectives or goals (Clarke & Fuller, 2010). Lastly, person-centric focuses on outcomes limited to an individual's scope (Clarke & Fuller, 2010). These outcomes are specifically tailored to the needs and goals of individuals, as opposed to broader organizational or societal impacts, emphasizing personal development aspects, such as acquiring new skills, enhancing individual capacities, and accumulating knowledge. The table below summarizes key findings in the literature.

Table 2.4: Summary of Key Findings and Variables in the Literature

Structural Features	Categories	Sub-categories
Oversight and decision-making	Mode of governance	<ul style="list-style-type: none"> • Enabling • Provisioning • Authority • Self-regulation/self-governing (Linton et al., 2021)
	Formality of partnership	<ul style="list-style-type: none"> • Level of formality (formal agreement, committee, taskforce) • Plans of partnership • Document to guide partnership activities
	Partner involvement in decision-making	<ul style="list-style-type: none"> • Degree of involvement • Frequency of involvement (Clarke et al., 2023)
Measuring, monitoring and reporting in CSPs	System/process for monitoring and lead organization	<ul style="list-style-type: none"> • Progress • Impacts • Outcomes • Inclusion of community (Albers, 2010; Kolk et al., 2010)
	Format and frequency for measuring and monitoring Structure/Process for reporting and lead organization	<ul style="list-style-type: none"> • Partner goals • Partnership goals • Inclusion of community (Clarke et al., 2023) • Progress • Impact • Outcomes • Accomplishment (Clarke et al., 2023)
	Format and frequency of reporting	<ul style="list-style-type: none"> • Partner goals • Partnership goals (Banerjee et al., 2020; Clarke et al., 2023; Peng, 2011)
	Accountability mechanisms	<ul style="list-style-type: none"> • Identification of account-giving actor and account holding forum • Communication and information sharing • Performance assessment

	<p>Extent to which collaborators share information frequently and inclusively among collaborators and with the public</p> <p>Extent to which collaboration has the capacity to use and implement rewards or sanctions based on collaborative decisions</p>	<ul style="list-style-type: none"> • Feedback systems • Accountability relationship (Koschmann et al., 2012; van Tulder et al., 2016) • Relationship attributes • Inclusion of community <p>(Bäckstrand, 2006; Beisheim & Simon, 2016; Clarke et al., 2023; Lee & Ospina, 2022; van Tulder et al., 2016)</p>
Coordination	Type of coordination	<ul style="list-style-type: none"> • Hosted secretariat • Separate secretariat • Without secretariat (Kamiya, 2011)
	Organization responsible for the secretariat/coordination	<ul style="list-style-type: none"> • Name and type of organization (Bauer et al., 2023; Kamiya, 2011)
Communication	System/process for communication	<ul style="list-style-type: none"> • Communication framework • Frequency of communication • Costs of communication • Openness and accessibility (Clarke et al., 2023; Dietrich et al., 2010)
	Channels/format for communication	<ul style="list-style-type: none"> • Newsletter • Website • Meetings • Workshops • Emails • Social events • Annual assembly/gala <p>(Clarke et al., 2023; Sun et al., 2020; Wong et al., 2020)</p>
	Conflict resolution mechanisms	<ul style="list-style-type: none"> • Managerial intervention, internal communication (Kolk et al., 2010) <p>Control approach, collaboration approach (Pfisterer et al., 2020)</p>
	Channels for recognition	<ul style="list-style-type: none"> • Awards • Media coverage • Events • Newsletter • Website • Meetings • Emails • Events • Annual assembly/gala <p>(Clarke et al., 2023; Sun et al., 2020)</p>

	Forms of communication: Internal and external	<p>Internal</p> <ul style="list-style-type: none"> • Trickle-up (partnership-related discussions with superiors) • Trickle round (partnership-related conversation with peers) • Trickle-down (partnership-related conversation with subordinates) <p>External (with external stakeholders including community members) (Kolk et al., 2010)</p>
Partner engagement	Size of partnership	<ul style="list-style-type: none"> • Small CSP (Laird et al., 2024; Suhendra et al., 2023) • Large CSP (Banerjee et al., 2020; Samuel & Clarke, 2022)
	Diversity of partners	<ul style="list-style-type: none"> • Sectoral diversity • Pathway diversity • Structural diversity <p>(Clarke & MacDonald, 2019)</p>
	Level of partner engagement	<ul style="list-style-type: none"> • Low • High <p>(Austin & Seitanidi, 2012)</p>
	Types of partner engagement	<ul style="list-style-type: none"> • Capacity building (skills-training, communication technologies, knowledge enhancement programmes) • Relationship-based (Indigenous partners) (Austin & Seitanidi, 2012; Moore, 2015; Peng, 2011)
	Role of partners (as related to engagement)	<ul style="list-style-type: none"> • Regulator • Coordinator • Facilitator/broker • Funder • Convener • Program deliverer/service provider • Educator/capacity builder, • Strategic partner with other levels of government • Consultant • Initiator <p>(Becqué et al., 2019; Salon et al., 2014)</p>
	Recruitment strategy	<ul style="list-style-type: none"> • Details about strategy • Considerations for new partners (e.g. mission fit, resource fit, management fit, workforce fit, product/cause fit, cultural fit, cycle fit, evaluation fit). <p>(Berger et al., 2004)</p>
Resources, budgeting and financing	Sources of funding	<ul style="list-style-type: none"> • Federal • Provincial • Private sector

		(Ahmad & Shukla, 2014; Pattberg & Widerberg, 2016; Suhendra et al., 2023)
	Processes for resourcing, budgeting and financing and lead organization	<ul style="list-style-type: none"> • Process for allocating funding • Partner engagement in decision-making • Steps for determining needs and resources (Clarke et al., 2023)
	Level of funding	<ul style="list-style-type: none"> • Corporate contribution (funds, gifts, services) • Unquantifiable contribution (legitimacy, ethical values etc) (Austin & Seitanidi, 2012; Moore, 2015; Peng, 2011)
	Dedicated staff	<ul style="list-style-type: none"> • Number of dedicated staff (Pattberg & Widerberg, 2016)
Effectiveness of partnership	Evaluation and performance metrics used	<ul style="list-style-type: none"> • Framework/approach/method to evaluation • Criteria and source of data • Engagement of stakeholders • Inclusiveness • Access to evaluation and evaluation use • Other (scalability and replicability; resilience and environment) • (Banerjee et al., 2020; Laird et al., 2024; Ordóñez Ponce, 2018; van Tulder et al., 2016)
	Outcomes and types	<ul style="list-style-type: none"> • Plan-centric • Process-centric • Partner-centric • Person-centric • Outside stakeholder-centric • Environmental-centric • Success • Capacity building • Learning, knowledge exchange and innovation • Commitment to future collaborations • Evidence of scaling • Spinoff initiatives (Suhendra et al., 2023; Wong et al., 2020)
	Outputs	<ul style="list-style-type: none"> • Tools • Resources • Infrastructure developed (Clarke & Fuller, 2010; Dietrich et al., 2010; van Tulder et al., 2016)
	Inputs	<ul style="list-style-type: none"> • Money • Staff and resources • Time • Capital assets • Commitment (Moore, 2015; Peng, 2011)

	Impacts	<ul style="list-style-type: none"> • Effects on society • Intended/direct effects • Unintended/indirect effects • Negative effects • Positive effects • Long-term effects • Short-term effects • Consideration of impact on issues interacting with climate change (Cl Clarke et al., 2023; van Tulder et al., 2016; Wong et al., 2020)
	Activities	<ul style="list-style-type: none"> • Number and nature of participants • Roles adopted by participants • Arrangement and degree of internal dependencies (Cl Clarke & MacDonald, 2019; Kamiya, 2011; Moore, 2015)
	Effectiveness of the partnership itself and the effectiveness for achieving impacts for both climate and equity goals	<ul style="list-style-type: none"> • Progress towards climate goals • Outcomes realized • Impact achieved for partnership and for society (Cl Clarke et al., 2023; Clarke & MacDonald, 2019)
Reflections/ Learning	Relationship between structure and outcome	<ul style="list-style-type: none"> • Important considerations for achieving outcomes (Cl Clarke & MacDonald, 2019; Huxham, 1993; Sun et al., 2020)
(Adapted from Working Group 4 Analytical Framework (University of Waterloo, n.d.).)		

2.7.2 Relationship Between Size, Design and Plan Outcomes

Previous sections have provided detailed information on the relevance of CSPs in creating public value and fostering positive social change, surpassing what individual partner organizations can achieve independently (Bryson et al., 2006; Samuel & Clarke, 2022; Stites & Gray, 2013). A CSP is described as successful when it achieves the intended objective, for which it was formed (Bauer et al., 2023; van Tulder et al., 2016). Current literature indicates that the size of a partnership significantly influences its structural features, which are critical during plan implementation for achieving desired outcomes, such as reductions in greenhouse gas (GHG) emissions and energy use (Kamiya, 2011; Suhendra et al., 2023; Wong et al., 2020). Successful implementation and achievement of plan goals, such as GHG and energy use reductions, can also yield a broad range of community benefits.

A study by Wong (2020) involving four case studies of CSPs found in small and mid-sized communities identified key structural features that play a crucial role in the implementation phase of partnership objectives. These features include partners' engagement, decision-making and oversight, communication, and monitoring. For instance, cities like North Vancouver and Saanich experienced uncertain GHG and energy outcomes due to delays in monitoring and reporting. In contrast, Guelph and London in Ontario observed reductions in GHG levels following the adoption of their plans. This comparison demonstrates that the absence of certain structural features, such as effective monitoring and measurement, can lead to uncertain plan outcomes (Wong et al., 2020). Conversely, the presence of these features, as seen in London and Guelph, is associated with positive progress towards achieving plan goals (Glasbergen et al., 2007; Sun et al., 2020). Further research indicates that small CSPs are more likely to achieve their objectives when decision-making is collaborative, promoting inclusive engagement and participation from most or all partners (Kamiya, 2011; Laird et al., 2024). Large CSPs, on the other hand, benefit from a decentralized decision-making process or a delegated team responsible for making decisions, which facilitates a faster and more efficient process, thereby accelerating the achievement of plan objectives (MacDonald et al., 2019). Additionally, involving key players rather than all partners in large CSPs can be more effective, as not all partners need to be involved in every decision-making aspect (Alfantoukh et al., 2018; Dowling et al., 2016)

Other critical structural features, such as communication, monitoring, proper resourcing, budgeting, and financing, are also essential for achieving plan outcomes. This thesis seeks to explore the specific nuances between small and large CSPs and the unique structural features that contribute to achieving plan outcomes, particularly in the context of climate mitigation. This focus allows for a deeper understanding of how different CSP structures can be optimized to achieve climate mitigation goals.

2.8 Summary

Empirical and grey literature have extensively discussed cross-sector partnerships and their relevance in addressing 'wicked' societal issues, often referred to as 'complex' or 'interconnected' problems (Bode et al., 2019; Rühli et al., 2017; Samuel & Clarke, 2022). In recent decades, climate change has emerged as the most pressing 'wicked' problem, prompting extensive academic research into strategies for addressing it and meeting the ambitious target of limiting global warming to 1.5 degrees Celsius, as recommended by the Intergovernmental Panel on Climate Change (IPCC, 2023; Sun et al., 2020; Wong et al., 2020).

Research on partnerships has uncovered a positive correlation between certain structural features and outcomes, including plan outcomes which refers to the initial goals of the partnership; and partner outcomes—the benefits derived by individual partner organizations (Clarke & Fuller, 2010; Sun et al., 2020). Specifically, concerning plan outcomes, partnership structures have been found to play a significant role in contributing to climate mitigation efforts (Sun et al., 2020; Wong et al., 2020).

However, there are differences in the focus levels of different cross-sector partnerships pursuing climate mitigation efforts (Clarke et al., 2023). These can be categorized into project-based, industry-focused, and community-wide partnerships. While small CSPs tend to target specific issues, which directly or indirectly reduce greenhouse gases, larger CSPs address emissions on an industry or community-wide scale (Clarke et al., 2023; Suhendra et al., 2023; Sun et al., 2020). CSPs with community-wide focus are relatively recent developments, partly due to the increased emphasis on achieving net-zero emissions, which became prominent in the 21st century (Aylett, 2014; Sun et al., 2020).

There is a significant gap in knowledge regarding the similarities and differences in the structural features of small and large CSPs and their impact on climate mitigation goals (Clarke et al., 2023; Sun et al., 2020). The lack of documented projects undertaken by small CSPs has made it challenging for organizations to initiate these partnerships, highlighting the need for research to elucidate the intricacies of small CSPs addressing climate change and to explore their distinctions from larger counterparts (Laird et al., 2024; Suhendra et al., 2023). This research aims to address the gaps in the literature by conducting a comparative analysis of two case studies—one representing a small CSP and the other a large CSP, both in the implementation phase of their climate action plans. By examining partnership reports, and websites, and conducting interviews, this study will extract data relevant to key findings, and uncover best practices adopted by small and large CSPs, currently addressing climate change. The insights gained from this research can provide valuable guidance that can serve as a roadmap for other partners with similar objectives.

3 Methodology

3.1 Introduction

This chapter provides the methods adopted for the study. The research was conducted using a qualitative design and approach and used case studies to provide detailed information about partnerships focused on climate mitigation in Canadian municipalities. The following sections elaborate on the research design and approach, case study selection criteria, data collection procedure and methods employed for the analysis. Furthermore, the limitations of the research, the steps taken to ensure reliability and validity, as well as the researcher's reflexivity are discussed extensively.

3.2 Research Design and Approach

This study qualitatively explored the importance of partnerships in achieving a net-zero climate action plan for a Canadian municipality. Qualitative research method allows for a nuanced understanding of the phenomenon by using multiple sources of data such as documents, interviews and observations (Creswell, 2018). Another key feature of the qualitative research is that it focuses on collecting data in the natural setting of the participants which is usually a face-to-face interaction where physical or virtual interviews are conducted using open-ended questions (Creswell, 2018). This enables the participants to express an in-depth understanding of the phenomenon under study (Creswell, 2018; Priya, 2021). In this case, the researcher is a principal actor, given that the researcher is the one who collects the data and interprets it. In addition, the researcher has to include how their personal background, experiences or culture might influence the interpretation (Creswell, 2018). This is known as the researcher's role or reflexivity of the researcher (Creswell, 2018).

The research study used case studies for an in-depth exploration of cross-sector partnerships that focus on climate action plans (Yin, 2015). Although case studies can be used in qualitative, quantitative or mixed-methods research (Campbell et al., 2020), this study is neither a quantitative nor mixed methods research. This is because it neither focuses on numerical data nor requires a hypothesis or statistical analysis of data (Campbell et al., 2020; Creswell, 2018). Rather, qualitative case study methodology is used to explore the importance of partnerships as an approach to achieving a net-zero climate action plan (Campbell et al., 2020; Priya, 2021). The multi-case study design is used in the research given that it allows for the analysis of multiple cases and cross-case comparison which reveals trends, patterns and differences that can be replicable within a similar context (Hunziker & Blankenagel, 2021). Focusing on two cases allowed for in-depth synthesis of partnership reports and substantiating of information through multiple interviews per case. This resulted in a detailed

description of the phenomenon under study, as well as providing a comprehensive understanding of the diverse perspectives of participants involved in the partnership.

3.3 Sampling Strategy

The study focused on existing cross-sector social partnerships in Canadian cities, aiming towards net-zero climate action goals. Particularly, these cities are advancing climate mitigation efforts by strategically leveraging partnerships in implementing their local climate action plans. These are cities that have acknowledged partnerships as part of their strategies in the implementation of their local climate action plans and have included information about the partnership on their websites. Thus, the research focused on these cities to provide relevant and detailed insight into the partnership structures that characterize small and large cross-sector social partnerships focused on achieving the net-zero climate action plan.

Given that the research focuses on Canadian municipalities integrating partnerships into their implementation strategies, the first step was to determine the case selection criteria. The selection of cases followed a given set of operational characteristics (Priya, 2021; Yin, 2015). Since the multiple case study design was adopted for the research, it was imperative that the pattern and characteristics remained consistent across all cases (Linton et al., 2022).

The selection criteria used for this study are as follows:

1. The partnership should have both climate mitigation and equity as explicit elements or goals.
2. The focus or scope should be either sector, project or community wide.
3. The partnership should be in the implementation or completion stage.
4. Formality of the partnership, not just a collaboration.
5. Presence of an accountability mechanism
6. It should have a framework that allows for replication and transferability within a similar context.
7. Diverse configurations (one large CSP, one small CSP, French, types of partners, level of engagement, type of collaboration, structural features)

The selection criteria specified that there should be publicly available information for a case to be considered. Following the selection criteria, the first stage was to use the reports from working group one of the N-ZAP project to identify Canadian municipalities that are in the implementation phase of their local climate action plans and have cross-sector partnerships included in the implementation. N-ZAP project is a partnership that was set up to support Canadian municipalities in monitoring,

measuring and achieving net-zero climate action targets (University of Waterloo, n.d.). The first working group focused on carrying out a survey to identify municipalities that have their local climate action plan and were progressing towards achieving the net-zero carbon emissions target (University of Waterloo, n.d.). Thus, the starting point was the survey responses of the Working Group 1 project. Out of over 50 French cities that had responded to the questionnaire, only 10 cities acknowledged partnerships as part of their implementation strategy in achieving net-zero greenhouse gases. Table 3.1 provides a list of formal partnerships aimed at mitigating climate change found in the municipalities based on publicly accessible documents and the municipalities' website. The names of the municipalities are anonymous due to confidentiality requirements. The details are provided below:

Table 3.1: List of Municipalities that Included Partnership as a Climate Mitigation Strategy in the Survey Responses

Municipalities	Partnerships	Level	Size of Partnership/ Number of partners	Formality	Source
Ville 1	Cle verte: Community-wide (Single issue - Transportation)	Project	Multi- stakeholder partnership	Yes	Website
Ville 2	None identified	---	---	---	Website
Ville 3	None identified	---	---	---	Website
Ville 4	One identified	Sector (Waste)	Small CSP (two partners)	Unknown	Newspaper Report
Ville 5	None identified	---	---	---	Website
Ville 6	None identified	---	---	---	Website
Ville 7	None identified	---	---	---	Website and Report
Ville 8	None identified	---	---	---	---
Ville 9		Project (Carbon parks, carbon sequestration)	---	Unknown	Website
Ville 10	None identified	---	---	---	Website

Following the findings, the researcher then conducted internet searches of the identified cities on the shortlist. However, it was observed that not all the cities had details of the partnerships on their websites and met the case study selection criteria. To make up for the lapses, Quest, one of the partners involved in the NZAP project, recommended some cities, which are detailed in Table 3.2. This is owing to the presence of partnerships in the cities that are focused on net-zero climate action.

Table 3.2: List of Potential Case Studies Provided by Quest

Name of municipality	Partnerships	Level	Size of Partnership/ Number of partners	Formality
Village de Cap-Pele	IFE Canada	Industry	Large Cross-Sector Partnership	YES
Village de Nigadoo	IFE Canada	Industry	Large Cross-Sector Partnership	YES
Village de Saint-Isidore	IFE Canada	Industry	Large Cross-Sector Partnership	YES
Village de Saint Marie- Saint Raphael	IFE Canada	Industry	Large Cross-Sector Partnership	YES
Montréal	Partnership Climate Montréal	Community-wide	Large Cross-sector Partnership	YES
Trois-Rivières	Green Maritime Shipping Corridor	Project	Small Cross-sector Partnership	YES

Following the recommendation provided, an internet search was further conducted on the potential cases to determine partnerships that focused on climate mitigation targets, were in the implementation phase, and had equity goals and a formal structure.

Based on the gap identified in the literature, the researcher decided to focus on small cross-sector partnerships and large cross-sector partnerships. Several studies have focused on multi-stakeholder partnerships, however, the relationship between partnership size, design and effectiveness in achieving net-zero climate action targets remains understudied (Clarke et al., 2023; Clarke & MacDonald, 2019). Hence, two cases were chosen, one case being a small cross-sector partnership and the other, being a large cross-sector partnership.

Small cross-sector partnerships involve no more than ten partners and focus on a specific issue within a given restricted location (MacDonald et al., 2019; Suhendra et al., 2023). In the context of achieving net-zero climate action targets, these are partnerships that have one focus or project within the community which contributes to the reduction of greenhouse gases (Suhendra et al., 2023; Wong et al., 2020). On the other hand, large cross-sector social partnerships involve multiple partners across different sectors (Samuel & Clarke, 2022; Sun et al., 2020; Wong et al., 2020). In accordance with the set criteria and recommendations provided, the Green Maritime Shipping Corridor in Trois Rivieres and Partenariat Climat Montréal were selected. However, owing to the researcher’s inability to get a response from any of the partners involved in the Trois-Rivieres partnership, other cases were explored using the sample cases recommended by members of NZAP Working Group 4. Table 3.3 below shows a breakdown of Working Group 4 selected cases using pre-determined selection criteria.

Table 3.3: Sample Cases of CSPs Focused on Climate Mitigation

Community-wide	Industry/sector	Project
Partenariat Climat Montreal, Quebec	City of St. John’s, Newfoundland and Labrador (Buildings - energy efficiency)	City of Kamloops Climate Connection Trails project, British Columbia (Public education)
Halifax Regional Municipality (HaliFACT)	Town of Canmore, Alberta (Energy generation)	City of Markham SNAP neighbourhood project, Ontario (Building project)
ClimateActionWR, Region of Waterloo	City of Vancouver (Nature-based solutions)	Port Trois-Rivieres, Quebec (Port corridor)
Georgian Bay Biosphere Reserve (ICECAP)- Includes many First Nations and towns, Ontario	City of Saskatoon, Saskatchewan (Waste)	City of Brandon CCC, Manitoba (Business education)
	Three Energy (Energy generation)	

(Adapted from Working Group 4 Selected Cases (University of Waterloo, n.d.)).

In order to identify a second case to be used as the small CSP, the researcher had some units of comparison:

1. It should involve the municipality in the implementation phase
2. The partnership should either be in the implementation phase or should have achieved its objectives
3. The partnership should operate in an urban municipality.
4. The small CSP should not have more than ten partners, while the large CSP should not have more than 100 partners.

The Bayview Glen SNAP project and Partenariat Climat Montréal were selected based on the above-mentioned criteria.

Table 3.4: Comparison of the Partenariat Climat Montréal and the Bayview Glen SNAP Project

Category	Montréal Climate Partnership	SNAP Neighbourhood Project
Type of municipality	Urban	Urban
Size	Large cross-sector partnership (100+ partners)	Small cross-sector partnership (3+)
Involvement of the municipality	Involves the city of Montréal	Involves the city of Markham
Involvement of the private sector	Involves several SMEs and large enterprises	Involves businesses as service providers in the municipality
Stage of the partnership	Intermediate	Completed since 2016
Projects	Multiple projects including addressing emissions from transportation, buildings, energy and waste.	Multiple projects including enhancing water efficiency, ecosystem integrity, energy and climate, access and mobility

The Partenariat Climat Montréal has community-wide climate mitigation targets, encompassing several projects focused on climate mitigation goals. It was launched by philanthropic organizations including the Fondation du Grand Montréal and the Fondation Familiale Trottier. The partnership is a

pioneering endeavour that unites over a hundred economic, community, institutional, and philanthropic organizations. Its mission is to mobilize key stakeholders within the Montréal community to contribute to its goal of curbing greenhouse gas emissions by 55% by 2030 and steer the city toward net-zero GHG emissions by 2050. The partnership also produced a guide that serves as a framework for establishing partnerships focused on municipal climate action. However, it stated that one of its limitations is the lack of generalizability of the framework given that it was tailored according to the Quebecois context. Therefore, the guide may not be fit for application in other jurisdictions outside Quebec.

3.3 Data Collection and Recording Procedure

Data collection in a qualitative research study requires defining the scope of the research and establishing a procedure for systematic documentation of information. Case study research requires collecting information from multiple sources, such as qualitative documents. These may be publicly available documents, including newspapers, minutes of meetings, and official reports; private documents, such as personal journals; and qualitative audiovisual and digital materials, including social media materials. This data may include photographs, art objects, videotapes, website main pages, e-mails, text messages, social media text

Virtual interviews were conducted with different partners, including secretariat-lead partners, members of dedicated staff involved in the partnerships, members of executive and steering committees, and working group leads involved in the partnership, as well as with members of the coordination team to get the partnership context. Ichha Kohli, a student researcher involved in N-ZAP Working Group 4 assisted with the data collection for the Bayview Glen SNAP project while I collected data for Partenariat Climat Montreal. This strategy for recruitment is based on the recommendations given by Creswell (2018) and previous research done by Linton (2021) and Akomolafe (2024). Indeed, Linton (2021) and Akomolafe (2024) research involved getting information from documents and conducting interviews with project managers of local climate action plans. Owing to the similarity of the research methods, following their strategy of recruitment and inquiry was most appropriate.

The key actors, such as the partner organizations, were identified through the website search and document analysis. Prior to commencing the interview process, ethics training was completed, and an ethics clearance was obtained to ensure strict adherence to ethical standards in qualitative research methods. Following the ethics approval (Appendix A), the representatives of the partner organizations were sent recruitment letters (Appendix B) in French and English. Once availability and willingness to participate in the research study were confirmed, the participants were sent an interview guide and a

research information letter in French or English, determined by the preferred language of the participant (Appendix C and D) prior to the interview. During the interview, verbal consent is obtained from the participants, indicating their interest in participating in the research. The Acuity software was used to schedule a meeting time and date with the partner. The interview was conducted either in French or English using open-ended questions that allowed for a nuanced understanding of the phenomenon under study. Upon completion of the interview, an appreciation email is sent to the participants (Appendix E). After conducting the interviews, transcription was done immediately before the analysis.

Following the protocol of Yin (2015), we ensured safe data data-keeping by saving the information derived from reports and documents in multiple secure folders. The recording was saved to the University of Waterloo cloud storage to ensure the secure storage and preservation of interview recordings. Subsequently, a transcription company was utilized to convert the audio recordings into text formats; the researcher also ensured the accuracy of the transcripts. A case study database was created after collecting the findings from different sources (Yin, 2015). It contained the found documents, the transcription of the interviews and additional documents received during the interviews. The case study database enabled easy access to all the information needed (Yin, 2015). Moreso, duplicates of the folder were made and saved on Dropbox for N-ZAP to prevent loss or damage of information.

3.4 Researcher's Reflexivity

One of the key features of qualitative research is to identify how one's background or professional experience may potentially affect the research. This is known as the researcher's reflexivity (Creswell, 2018).

I am an African and a new immigrant in Canada, who moved to Canada to begin my master's research program. I understand that there are differences in culture and lifestyle, and these aspects may shape my data collection procedure. However, to prevent this from happening, I followed the data collection procedure set out by Working Group 4 of the N-ZAP project.

Furthermore, considering that I am bilingual, I know that I might have been biased in the interview with French speakers compared to English speakers. Thus, to prevent this from negatively impacting the research, I had the same set of questions available in English and French and a set duration for the interviews. I took up an internship with the Mitacs Accelerate Program where I learnt more about the local climate action plans in Montréal and partners involved in the Partenariat Climat Montréal. During the internship and the course of the research, I continued to self-evaluate, check my role as the researcher and write extensively on my role as the researcher in the final report. Also, given

that I have volunteered with a non-governmental organization- Jeunes Volontaires pour l'Environnement. I might have had the tendency to focus on only the contribution of civil society in helping municipalities achieve climate mitigation. However, having identified these potential biases, I did not allow sentiments from the volunteer experience to affect my research. I sent out recruitment emails to all identified potential organizations across different sectors.

On the other hand, given that I understand both English and French, this made it possible for me to conduct interviews in both languages. Additionally, I took notes about my personal experiences during the interviews. These included the reactions of the participants, new knowledge gained or observations about the interviews. These memos were useful in the analysis of the data. However, I intend to limit the discussion about these experiences so that it does not override the methods section of the study (Creswell, 2018).

3.5 Data Analysis

The conceptual framework and literature review were developed before the data analysis stage. These were essential in guiding the analysis of the findings (Creswell, 2018). The first step was to read the documents to get a comprehensive understanding of the plans and other documented content. This was followed by sorting all the information received. The research questions and conceptual framework were used to develop a coding scheme with Working Group 4 of the N-ZAP project. (Creswell, 2018). The first stage was deductive coding. The deductive coding was based on the understanding of the role of partnerships, and it involved identifying structural features and outcomes in partnerships that were obtained from the literature review and the analytical framework developed by NZAP Working Group 4. Qualitative sentences from the documents and transcripts were read and coded according to the analytical framework. Then, the inductive approach was used to capture emerging themes not included in the conceptual framework to ensure a broad understanding of the partnerships.

The enhanced conceptual framework was used to inform the interviews in the second phase of the study. The interview questions were used to get a comprehensive understanding of what was written in the reports and a more nuanced perspective on the role of partnerships (Creswell, 2018). The researcher participated in some of the audio file transcriptions using transcription software and proofread to guarantee accuracy. Transcribers were recruited to give transcripts of the audio files (Creswell, 2018). Lastly, the similarities and differences between the findings from the documents and interviews were identified, and a cross-case comparison was conducted to reveal the differences.

3.6 Reliability and Validity

Qualitative validity involves checking for the accuracy of the findings. There are three major types of validity: internal, external, and construct (Creswell, 2018). In this research, internal validity will be ensured by triangulating data sources. This involves collecting data from multiple sources such as documents from working group one survey content, partnership documents, community climate plan and virtual interviews. Additionally, the researcher's bias was clearly stated, and a detailed description was used to convey the findings (Creswell, 2018). To ensure external validity, other N-ZAP researchers replicated the research design used for the case studies, it contained definitions of the scope and boundary to verify that generalizations are reasonable. To ensure construct validity, an extensive literature review was conducted (Creswell, 2018). For reliability of the findings, a detailed description of the entire research was given (Creswell, 2018). These include the data collection process, research tools and interview questions. I proofread transcriptions to avoid obvious mistakes. Also, my supervisor and a PhD candidate assisted in cross-checking for codes to ensure that there was no discrepancy in the meaning or definition of these codes (Gibbs, 2007).

3.7 Interpretation

This case study design provided a rich description of the findings from the research, relating it to existing or past literature (Creswell, 2018). The study included an analysis of patterns and themes identified throughout the research. It also offered insights into the partnerships undertaken by the selected Canadian municipalities. Additionally, it acknowledged any limitations of the study and proposed potential areas for future research.

3.7.1 Limitations

This research has certain limitations related to the sample, the research design and the approach. One of the limitations is the subjectivity of coding. As the researcher, I might have focused on expected codes, and this may have impacted the analysis (Creswell, 2018). However, to prevent this from happening, my academic supervisor assisted with auditing my codes and a PhD researcher read the case write-ups. This ensured that other codes were considered such as the surprising codes and unusual codes (Creswell, 2018). Additionally, limiting the research to partnerships existing in two Canadian municipalities may have somewhat limited the findings' generalizability, given that some cities in other provinces might have been engaging in partnerships that have positively influenced their local climate action plan. However, having only two case studies, a partnership focused on a community-wide climate action plan and another project-based one allowed for an in-depth exploration of successful

strategies utilized by these partnerships and helped provide insights that will be useful to other cities striving to meet their climate mitigation targets.

4 Results

4.1 Introduction

This chapter presents the empirical findings derived from websites, documents, and interviews of partners from two partnerships: one large CSP and one small CSP, each used as a case study. The subsequent subsections commence with an overview of the municipality, followed by the background and structural features of the CSPs, focused on achieving net-zero climate goals. The results are summarized in tables to convey detailed information concisely. The final section offers a cross-case analysis, comparing the findings from the two types of CSPs.

4.2 The SNAP Project: City of Markham

Markham is an urban city in the York Region of Ontario.¹ It has a population of 338,503 residents, according to the 2021 census.² The City of Markham is considered a lower-tier municipality in the York region.³

The City of Markham, Ontario, Canada, is governed by a municipal council.⁴ This council is responsible for making decisions about municipal services and ensuring the proper utilization of tax revenue.⁵ The council comprises the mayor, four regional councillors and eight councillors, representing eight wards.⁶ The community elects the mayor and four representatives of the council to represent the city at the regional level.⁷ The municipality's voters elect the members of the council.⁸

Some of the departments in the City of Markham include: 'Asset Management' - this department develops and implements corporate asset management strategic plans; 'Building Standards'-this department enhances the quality of community life with particular emphasis on environmental, health, accessibility, and life safety issues related to building construction; 'By-Law Enforcement'- Markham By-law Enforcement Officers provide proactive enforcement services for all the City's regulatory and by-laws; among others.⁹

¹ <https://www12.statcan.gc.ca/census-recensement/2021>

² <https://www12.statcan.gc.ca/census-recensement/2021>

³ [Regional Services | York Region](#)

⁴ [About Municipal Government \(markham.ca\)](#)

⁵ [About Municipal Government \(markham.ca\)](#)

⁶ [About Municipal Government \(markham.ca\)](#)

⁷ [About Municipal Government \(markham.ca\)](#)

⁸ [About Municipal Government \(markham.ca\)](#)

⁹ <https://www.markham.ca/wps/portal/home/about/city-hall/departments/departments>

4.2.1 Background of the Partnership

In 2012, the Toronto Region Conservation Authority (TRCA) approached the City of Markham to launch the Sustainable Neighbourhood Retrofit Action Plan (SNAP) in collaboration with other partners.¹⁰ This initiative was primarily led by TRCA in partnership with the City of Markham (following direction from Markham City Council) and York Region. It focused on the Bayview Glen neighbourhood located in the community of Thornhill in the City of Markham and the Don River Watershed.¹¹ This neighbourhood, with a population of over 2,400 residents¹², is characterized by its ancient buildings and large homes built in the 1960s, which required several retrofits, including upgrades to sewer mains and pipelines due to significant infill development.¹³

The Bayview Glen SNAP project was a pilot program initiated in the City of Markham in response to recurring flooding within the Dawn watershed area, which affected residential property owners and the community.¹⁴ Residents had experienced frequent basement flooding, exacerbated by increasingly severe rainstorms. This project was a proactive measure of tackling climate change impacts and finding sustainable solutions for the community.¹⁵

TRCA saw this as an opportunity to mitigate flooding while enhancing the local ecosystem. Community engagement was central to the project, with consultations held at local events and schools serving as community hubs.¹⁶ Feedback from these events shaped the retrofit of Glen Crest Park, where stormwater pipes were upgraded, and new amenities were added.¹⁷

The park was renovated with a new, safety-approved playground and a pathway to promote active transportation and accessibility, ensuring that all community members, including those with mobility issues, could navigate the area.¹⁸ A rain garden was also installed to manage stormwater and support local wildlife, including pollinator gardens to benefit monarch butterflies and bees.¹⁹

¹⁰ Interview with a sustainability officer

¹¹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.2

¹² [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

¹³ Interview with a sustainability officer

¹⁴ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.3

¹⁵ Interview with a sustainability officer

¹⁶ Interview with a sustainability officer

¹⁷ Interview with a sustainability officer

¹⁸ Interview with a sustainability officer

¹⁹ Interview with a partner

The Bayview Glen SNAP project in the City of Markham was launched in 2012 and concluded in 2018, following the successful update of Glen Crest Park, which formed the basis of the partnership.²⁰ Glen Crest Park was always intended to be the focus of the project's efforts, emphasizing both construction and community feedback.²¹ However, a secondary aspect of community engagement was introduced by contacting residential property owners to explore the possibility of energy retrofits.²² During this period, experience with energy retrofits was limited.²³ Consequently, this initiative enabled the partners to evaluate the community's openness to such improvements.²⁴ By distributing mailers and engaging in consultations with residents, the partners assessed their receptiveness to enhancing their homes beyond aesthetic upgrades, such as granite countertops or extensive infill development.²⁵

Energy efficiency became a significant focus because the buildings in the community were notably larger than average, with over 90% being single-family detached homes exceeding 3,000 square feet.²⁶ The homes consumed more energy compared to other neighbourhoods in Markham, making it a priority to educate the community on energy conservation, even though it was not the project's main focus.²⁷

In Bayview Glen, the SNAP project aligned its objectives with Markham's green print sustainability plan, the 'Green print', the West Thornhill Stormwater Remediation Class Environmental Assessment (EA) Study, TRCA's Don River Watershed Plan, York Region's Inflow & Infiltration Reduction and Long-Term Water Conservation Strategies and Enbridge and Powerstream's conservation objectives which involved consultations with residents and stakeholders.²⁸ It is built on five core values: water efficiency, ecosystem integrity, energy and climate, access and mobility, and identity and culture.²⁹ Additionally, the Bayview Glen plan offered a timely opportunity to address retrofit objectives, thereby advancing the implementation of the Don Watershed Regeneration Plan, contributing to Greenprint Energy and Climate priorities through the reduction of carbon emissions and other greenhouse gases, addressing the long-term sustainability of drinking water through freshwater

²⁰ [Projects: Glencrest Park Renewal - Toronto and Region Conservation Authority \(TRCA\)](#)

²¹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.3

²² Interview with a sustainability officer

²³ Interview with a sustainability officer

²⁴ Interview with a sustainability officer

²⁵ Interview with a sustainability officer

²⁶ Interview with a sustainability officer

²⁷ Interview with a sustainability officer

²⁸ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.3

²⁹ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

conservation, reinvigorate parks and parkettes and increase urban forestry and biodiversity, and generate financial savings and benefits through energy conservation.³⁰

This holistic approach made it clear to property owners and other community members that sustainability is a priority for both Markham and the partners.³¹ It demonstrated the commitment not only to creating a more sustainable park but also to promoting a more sustainable lifestyle for the residents.³²

Table 4.1: Background of the Partnership

	Category	Sub-Category	Consolidated information
Background	Municipality	Province/Territory	York Region, Ontario ³³
		Urban/Rural	Urban ³⁴
		Size of population	338,503 ³⁵
		Multi-level governance structure	Lower-tier municipality ³⁶
		Most common spoken language	Chinese and English (2016) ³⁷
	Partnership	Name of partnership	Bayview Glen Sustainable Neighbourhood Retrofit Project (SNAP) ³⁸
		Timeframe	2012-2018 ³⁹
		Stage of partnership	Complete ⁴⁰
	Climate plan	Type of plan	Markham's Green Print Sustainability Plan ⁴¹

³⁰ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.3

³¹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.3

³² [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

³³ <https://www12.statcan.gc.ca/census-recensement/2021>

³⁴ <https://www12.statcan.gc.ca/census-recensement/2021>

³⁵ <https://www12.statcan.gc.ca/census-recensement/2021>

³⁶ <https://www12.statcan.gc.ca/census-recensement/2021>

³⁷ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

³⁸ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

³⁹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

⁴⁰ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

⁴¹ Markham's green print sustainability plan

		Tied to the partnership in what way	The SNAP project's objectives align with Markham's Green Print Sustainability Plan ⁴²
	Type of the partnership	Size of the partnership	Small CSP. Partners: TRCA, City of Markham, York Region
	Motivation to form the partnership	Integrative	The partnership was formed based on the needs of members of the community.

4.2.2 Structure of the Partnership

This section focuses on the structural features of the partnership, which is the framework designed to leverage the strengths and resources of diverse stakeholders, including the public sector, private sector, civil society, community groups and Indigenous peoples. Partnerships focused on climate change operate through collaborative networks that enable shared decision-making, resource allocation, and collective action toward achieving net-zero climate action goals. The organizational structure often includes decision-making and oversight, communication, partner engagement, coordination, multi-level integration, resourcing, budgeting and financing, and measuring monitoring and reporting.

4.2.2.1 Oversight and Decision-making

The partnership uses the constellation model. It developed different working groups that played a key role in driving community sustainability initiatives. In the constellation model, multiple stakeholders collaborate within semi-autonomous working groups, each focusing on specific aspects of a shared goal (Surman & Surman, 2008). Markham's approach of forming task forces and ensuring the involvement of diverse groups of the community diversity aligns with this model by enabling various segments of the community to contribute their expertise and perspectives.

Another evident model is the catalyst collaboration model, the partners prioritized learning from community members to inform their innovation and approach to addressing the sustainability-related issues. Furthermore, it promoted equity by considering the vulnerable population, including

⁴² Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

those with mobility issues and incorporated these learnings in the action undertaken, as mentioned by an interviewee

‘The project involved collaboration with various departments, including active transportation, asset management, corporate communications..., and urban design planning, to identify and address any missing elements in the project.’⁴³

The decision-making process uses a collaborative approach that involved all the partners. According to one of the interviewees,

*“The approach was decidedly more collaborative, involving key players in a single room to discuss and align on mandatory requirements, desirable features, and budget constraints”.*⁴⁴

This process was particularly valuable, especially when unexpected issues arose during construction. Transparent communication fostered trust among all parties. Even when certain enhancements exceeded the budget, their importance to the neighbourhood was recognized, leading to successful efforts to secure additional funds, including external funding. These collaborative discussions not only enabled the inclusion of additional amenities but also facilitated the sharing of lessons learned, emphasizing the importance of ongoing collaboration. This approach has led to increased cooperation with other departments and external partners, ensuring open communication lines and a strong focus on sustainability in future projects⁴⁵

The modes of governance employed are enabling and provisioning. Governance by enabling is evidenced by the involvement of the residents in the community and local businesses in the partnership.⁴⁶ The York Region, TRCA, and Markham were the lead partners, while the Bayview Glen Residents Association, Bayview Glen Public School (and its parent council), and homeowners and businesses, were also key participants.⁴⁷ For instance, the design of Glencrest Park was developed in consultation with residents through two public meetings, a resident survey, and input from two community fairs at Bayview Glen Public School where numerous neighbours discussed the designs with the project management team and provided useful feedback.⁴⁸

On the other hand, governance by provisioning is shown through the tangible actions taken to enhance community infrastructure and engagement. The park renewal project, initiated in October

⁴³ Interview with a sustainability officer

⁴⁴ Interview with a sustainability officer

⁴⁵ Interview with a sustainability officer

⁴⁶ [Projects: Engagement Strategy - Toronto and Region Conservation Authority \(TRCA\)](#)

⁴⁷ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

⁴⁸ [Projects: Glencrest Park Renewal - Toronto and Region Conservation Authority \(TRCA\)](#)

2016, involved over 100 community members planting 500 native trees and shrubs, showcasing the direct provision of resources and opportunities for residents to participate in environmental stewardship.⁴⁹ Additionally, the educational component at the event, where residents learned about environmental improvements for their homes, further illustrates governance by provisioning.⁵⁰ The official opening on May 26, 2018, served as a platform for the neighbourhood to explore the new park amenities and understand the park's critical roles in stormwater management and ecosystem health, highlighting the provision of knowledge and infrastructure to support sustainable community development.⁵¹

Table 4.2: Oversight and Decision-Making Process

Category	Sub-category	Consolidated information
Configuration	Constellation model	Decentralized Structure: The partnership has committees, working groups involving service providers. These groups work semi-independently but are coordinated by the Sustainability Office. ⁵²
	Catalyst collaboration model	Collaborative effort aimed at initiating and accelerating change in the community. The project focused on improving accessibility by retrofitting roads and adding bike lanes, addressing specific needs through the combined efforts of various departments and external partners. ⁵³
	Decision-making process	Involves the three partners, with regular consultations with community members ⁵⁴
Modes of governance	Enabling	Involvement of the community, including Bayview Glen Residents Association, Bayview Glen Public School (and its parent council), as well as homeowners and businesses ⁵⁵

⁴⁹ [Projects: Glencrest Park Renewal - Toronto and Region Conservation Authority \(TRCA\)](#)

⁵⁰ Interview with a sustainability officer

⁵¹ [Projects: Glencrest Park Renewal - Toronto and Region Conservation Authority \(TRCA\)](#)

⁵² Interview with a sustainability officer

⁵³ Interview with a sustainability officer

⁵⁴ Interview with a sustainability officer

⁵⁵ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

	Provisioning	Tangible actions taken to enhance community infrastructure and engagement, including the implementation of the park renewal project, organizing information sessions, and involving the community members in the planting of trees and shrubs. ⁵⁶
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4.2.2.2 Partner Engagement

4.2.2.2.1 Level Of Engagement

The Bayview Glen SNAP project is characterized by high levels of participation from both partners and the community. This comprehensive approach ensured that all stakeholders, including community members who would be impacted by the project, were actively involved in the strategic framing of the project's plan. According to one of the partners,

*"I know for sure we had a number of; we call them co-planning workshops where we bring together technical staff with the community. And it was; each one of those workshops – it was before COVID, so everything was in-person, it was full days, full-day workshops where we had a lot of social innovation activities to help people think outside, both to help the technical staff and the community think outside the box, and then develop solutions together... And then we had a lot of real engagement."*⁵⁷,

"...SNAP is led by TRCA, but the responsibility for implementation is shared with all the members".⁵⁸

4.2.2.2.2 Role of Partners

The roles of the partners in this project were diverse, encompassing consulting, funding, convening, coordinating, and service provision. The TRCA was involved in convening, service provision. As noted by an interviewee

"... I believe TRCA did reach out to the City of Markham to see if there was a program SNAP... So, we were just, I think we were the fifth one that they initiated, and the first one in Markham, ... And so, the TRCA held an EV festival, if you will, a few times just to cater to the interests of the community."

⁵⁶ <https://trca.ca/conservation/sustainable-neighbourhoods/snap-neighbourhood-projects/bayview-glen-snap/projects-glencrest-park/>

⁵⁷ Interview with a partner

⁵⁸ Interview with a partner

And provide more information on what they wanted to hear. They also did bike days where it was family-friendly.”⁵⁹

The City of Markham had a representative who was actively involved in the partnership, describing the person’s contribution in coordination and planning, a partner mentioned

“We planned everything very closely with her.... But it was – yes, we’re very close with the City of Markham.”⁶⁰

Highlighting the role of the partners in consultation and service delivery, another interviewee mentioned

“Additionally, for the home retrofit program, SNAP got involved with several businesses and NGOs, including (name concealed) for swimming pool solutions, rain barrel deliveries, and possibly a tree organization, ...alongside the Region of York's various divisions, which collectively oversee project management.”⁶¹

4.2.2.2.3 Recruitment Strategy

The two major recruitment strategies are mission fit and resource fit. Other considerations include reputational capital and economic capital. According to one interviewee, municipalities were mandated to hire TRCA to manage their, to develop the watershed plans, and to also regulate floodplains. Therefore, the SNAP Program was a program that was through a service level agreement that they decided basically to hire TRCA to deliver the service.”⁶²

4.2.2.2.4 Frequency of Engagement

The partners acknowledged regular meetings and check-ins. According to one of the interviewees, “And I think having those check-ins with internal and external partners, really helped us to ask those tough questions.”⁶³ Furthermore, there were times when meetings were held weekly.”⁶⁴

4.2.2.2.5 Partner Commitment

While the lead partners, such as the TRCA and Markham, were actively involved throughout the entire project, from the launch to the execution of the SNAP initiative, other partners were engaged primarily

⁵⁹ Interview with a sustainability officer

⁶⁰ Interview with a partner

⁶¹ Interview with a partner

⁶² Interview with a partner

⁶³ Interview with a sustainability officer

⁶⁴ Interview with a partner

as service providers, focusing on specific tasks assigned to them.⁶⁵ These service providers contributed their expertise and resources to fulfill particular roles within the project, ensuring the successful implementation of various components without getting involved in the broader strategic or ongoing management aspects.⁶⁶

Table 4.3: Summary of Partner Engagement

Category	Sub-category	Consolidated information
	Diversity of partners	Public sector -Markham and York region ⁶⁷ Civil society- TRCA ⁶⁸ Private sector- Businesses ⁶⁹
	Role of partners	Consultants (Businesses), ⁷⁰ Service providers (TRCA, Businesses and Markham), ⁷¹ Funding (Markham), ⁷² Convening (TRCA), ⁷³ Recruiting (Markham) ⁷⁴
	Recruitment strategy	Resource fit, mission fit ⁷⁵
	Frequency of engagement	Regular (weekly, at times) ⁷⁶
	Level of engagement	High ⁷⁷
	Partner Commitment	Varies Lead partners (throughout the project) Service providers (limited to tasks assigned) ⁷⁸

4.2.2.3 Coordination

TRCA and the City of Markham were involved in coordination. The City of Markham had a representative who acted as a coordinator and was actively involved in the project's operations. This coordinator participated in meetings held at least weekly, and sometimes multiple times a week, closely

⁶⁵ Interview with a partner

⁶⁶ Interview with a partner

⁶⁷ [Sustainable Neighbourhood Retrofit Action Plan \(markham.ca\)](http://www.markham.ca/SustainableNeighbourhoodRetrofitActionPlan)

⁶⁸ [Sustainable Neighbourhood Retrofit Action Plan \(markham.ca\)](http://www.markham.ca/SustainableNeighbourhoodRetrofitActionPlan)

⁶⁹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.3

⁷⁰ Interview with a partner

⁷¹ Interview with a partner

⁷² Interview with a partner

⁷³ Interview with a sustainability officer

⁷⁴ Interview with a partner

⁷⁵ Interview with a partner

⁷⁶ Interview with a partner

⁷⁷ Interview with a partner

⁷⁸ Interview with a sustainability officer

collaborating with the team to ensure smooth progress. The person also reported to her superior who also worked for the City of Markham. This involvement is underscored by an interviewee's statement

“We had one person, which she's now the manager of sustainability, but at the time she was a coordinator. And she did everything. It was as if we were the same team. It seemed like we were colleagues more than – we did everything together We planned everything very closely with her. And then she reported to But it was – yes, we're very close with the City of Markham.”⁷⁹

To ensure progress on tasks and continuation of the projects and avoid duplication of efforts, the City of Markham prepared schedules for workers, as outlined in this statement *“But working with scheduling, schedules, we're making sure that everyone got their part in, and being able to kind of overlap but also not get in the way, was really key.”⁸⁰*

4.2.2.4 Communication

4.2.2.4.1 System/Process for Communication

The City of Markham and the TRCA employed a system of communication characterized by openness and accessibility to ensure continuous engagement and communication with partners and community members throughout the development and implementation of the project. Before initiating communication with community members, they conducted a comprehensive demographic analysis. This analysis included factors such as languages spoken, income levels, and countries of origin, which informed strategies for effectively engaging and involving the community in the project.

Periodic meetings were organized at accessible locations, such as local schools, to facilitate participation from residents in the community. These meetings provided a platform for transparent dialogue and ensured that residents could easily contribute to and stay informed about the project's progress. It printed publications in the languages spoken by the residents in the community and had a native of the community interact with community members to facilitate communication. As stated by an interviewee

“...we have our marketing and public engagement efforts in SNAP are very customized to each neighbourhood. So, we do a lot of, first desktop analysis of the demographics, ... It's very well – it's very customized. I'm pretty sure in Thornhill, we had materials in different languages. We had..., a

⁷⁹ Interview with a partner

⁸⁰ Interview with a sustainability officer

program assistant that had a connection with those cultures so that it was – that advised us, and was also part of the phase in the engagement.”⁸¹

4.2.2.4.2 Channels/Format for Communication

The project used various internal communication channels, including workshops, meetings, and emails. Workshops were discussion forums for collaborative problem-solving and brainstorming, fostering a hands-on approach to project design.⁸² Regular meetings provided structured opportunities for partners and technical staff to discuss progress, address issues, and align on strategies.⁸³

The channels include the website, presentations, newsletters, and in-person meetings for external communication. Specifically, according to the Toronto Region Conservation Authority, the participation channels include a homeowner survey (conducted in February-May 2014 and mailed to 715 households in the neighbourhood), interviews (March 2014), municipal staff and agency sessions (three meetings in the Spring of 2014 with the City of Markham, TRCA and York Region staff), fun fairs (June 2014 and June 2015), community meetings and focus group.⁸⁴

4.2.2.4.3 Conflict Resolution Mechanism

The conflict resolution mechanism within the SNAP project relied on transparency, trust, experience of the TRCA with other SNAP projects, and proactive communication. The partners openly communicated about the risks associated with trying new approaches allowing all partners and other stakeholders to understand the uncertainties involved.⁸⁵ Trust in the leadership and established partnerships, particularly the TRCA's successful track record. Leveraging the TRCA's previous successes and educating staff and stakeholders about past project successes helped build confidence and align expectations, fostering a shared sense of purpose.⁸⁶ Emphasizing the importance of leadership in sustainability further unified the team, focusing their efforts on achieving innovative and sustainable outcomes. This is well detailed in the response of one of the interviewees

“Yes, I think transparency. I mean, there are always risks with trying new things. I've said this before. There are always risks with trying new things. And I think there was a lot just trusting in that factor, but also trusting in the partnerships that we had. So, TRCA having done this before, and all the

⁸¹ Interview with a partner

⁸² Interview with a partner

⁸³ Interview with a partner

⁸⁴ [Projects: Engagement Strategy - Toronto and Region Conservation Authority \(TRCA\)](#)

⁸⁵ Interview with a sustainability officer

⁸⁶ Interview with a sustainability officer

SNAP's have some sort of innovation to it. But being the fifth one with them, trying to figure out what the innovation of this is behind ours really helped to have examples to back it. And being able to educate our other staff on that too, and to show that this isn't shooting in the dark, and we're going to figure out what happens, no, there was examples of success. And we wanted to be part of that success, and that storyline.”⁸⁷

Table 4.4: Communication Process in the Bayview Glen SNAP Project

Category	Sub-category	Consolidated information
Communication	System/Process of communication	Conducting demographic analysis before engaging the community ⁸⁸ Printing publications in the languages spoken by community members. ⁸⁹ Organizing meetings in open and accessible places such as schools ⁹⁰
	Channels for recognition	Media coverage, website ⁹¹ ; The SNAP project received an award National Award of Excellence for New Directions from the Canadian Society of Landscape Architects ⁹² .
	Channels/format for communication	Internal: Emails, workshops, meetings ⁹³ External: homeowner survey, key informant interviews, municipal staff and agency sessions, two fun fairs, community meetings and focus group ⁹⁴

⁸⁷ Interview with a sustainability officer

⁸⁸ Interview with a partner

⁸⁹ Interview with a partner

⁹⁰ Interview with a partner

⁹¹ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

⁹² [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

⁹³ Interview with a sustainability officer

⁹⁴ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

4.2.2.5 Resourcing, Budgeting and Financing

4.2.2.5.1 Sources of Funding

The project received funding from the private sector, the public sector, and not-for-profit organizations. For the private sector, the Glencrest Park renewal project received a \$60,000 grant from the RBC Blue Water Project.⁹⁵ The project also received federal, municipal and TRCA funding.⁹⁶ Other organizations under the City of Markham also contributed to funding the project. One of the partners stated

“And it was very interesting because all the different divisions of the City contributed, which was, it’s very unique. There were other funders that I can’t remember, but a lot of different groups, and private and public sector contributed.”⁹⁷

Additionally, during the implementation stage, external organizations also got involved in the funding, owing to the significant progress that was made at the time. An interviewee mentioned

“And I think a lot of our external partners, sorry, external funding partners, I think FCM was a major one. They really saw that we were doing something new, doing something that will actually increase sustainability within our community, and saw the value in it essentially. And award us with the funding..”⁹⁸

4.2.2.5.2 Processes for Resourcing, Budgeting and Financing

The resourcing, financing, and budgeting processes for this initiative involved a combination of multiple funding streams, both external and internal. External funding was a significant component, with key partners like the Federation of Canadian Municipalities (FCM) providing support due to the project's innovative nature and potential for sustainability impact. Internally, the city of Markham reallocated funds from various sources, including surplus funds from pipeline construction, to enhance the project's sustainability features. This reallocation required approval from senior staff and the City Council, who recognized the project's value and the benefits it would bring to the community. The process also involved thorough review and positive feedback from stakeholders, ensuring that the initiative aligned with broader municipal goals and improved services for the community. Despite the

⁹⁵ [Projects: Glencrest Park Renewal - Toronto and Region Conservation Authority \(TRCA\)](#)

⁹⁶ Interview with a sustainability officer

⁹⁷ Interview with a partner

⁹⁸ Interview with a sustainability officer

challenges of exploring new areas, all involved parties ultimately acknowledged and supported the successful navigation of these processes.⁹⁹

Furthermore, discussion forums were organized to bring together partners and stakeholders to collaboratively prioritize needs, optimize budgets, and explore additional funding opportunities. These forums facilitated open dialogue, enabling participants to align their goals, share resources, and develop innovative solutions for securing necessary financial support. As noted by a sustainability officer

“Definitely more collaborative, we brought in the players that we needed to into one room and hashed out what everyone wanted, and what was mandatory, what was nice to have, and what worked within the budgets, for example. And when something was over budget, we wanted to put it in any way because it enhanced the neighbourhood.”¹⁰⁰

Table 4.5: Resourcing, Budgeting and Financing

Category	Sub-category	Consolidated information
Resourcing, Budgeting and Financing	Sources of funding	<ul style="list-style-type: none"> • Private sector -RBC Blue Water Project¹⁰¹ • Public sector- Federal, City of Markham¹⁰² • Civil society-FCM, TRCA¹⁰³
	Process for resourcing, budgeting and financing	<ul style="list-style-type: none"> • Allocation of funds: City of Markham¹⁰⁴ • Budgeting and prioritization of project needs: discussion forums¹⁰⁵ • Application for external funding: partners¹⁰⁶

⁹⁹ Interview with a sustainability officer

¹⁰⁰ Interview with a sustainability officer

¹⁰¹ [Projects: Glencrest Park Renewal - Toronto and Region Conservation Authority \(TRCA\)](#)

¹⁰² Interview with a sustainability officer

¹⁰³ Interview with a sustainability officer

¹⁰⁴ Interview with a sustainability officer

¹⁰⁵ Interview with a sustainability officer

¹⁰⁶ Interview with a sustainability officer

4.2.2.6 Measuring, Monitoring and Reporting

There were no baseline metrics for GHG emissions reduction in the Bayview Glen SNAP project. Nonetheless, the partnership incorporated qualitative assessments, feedback mechanisms, and process indicators to track the progress of the project’s plan.

Table 4.6: Measuring, Monitoring and Reporting

Category	Sub-category	Qualitative assessments	Process indicators
Projects	Bayview Glen Park Revitalization	<ul style="list-style-type: none"> Identified the need to enhance safe pedestrian connections from the surrounding area to the park.¹⁰⁷ Recreational amenities in the park need upgrades or repairs.¹⁰⁸ Improvements needed to address wet, muddy areas caused by poor drainage.¹⁰⁹ The reduced tree canopy requires restoration to improve landscape quality and drainage.¹¹⁰ 	<ul style="list-style-type: none"> New playground and safety surface in a new location Naturalized plantings – rain gardens, bioretention cells and detention swales¹¹¹ Shade structure/solar array¹¹² Solar lighting for proposed trails¹¹³ Stone entry sign wall¹¹⁴ Paved pedestrian walkways and entry courts¹¹⁵ Permeable unit paving layby and entry court¹¹⁶ Enhancements to existing softball field¹¹⁷ Bike racks and benches¹¹⁸
	Streetscape and circulation	<ul style="list-style-type: none"> Lack of sidewalks¹¹⁹ 	<ul style="list-style-type: none"> Increased number of connected sidewalks

¹⁰⁷ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹⁰⁸ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹⁰⁹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹⁰ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹¹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹² Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹³ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹⁴ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹⁵ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹⁶ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹⁷ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹⁸ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.10

¹¹⁹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

		<ul style="list-style-type: none"> • Lack of trails¹²⁰ • Lack of bike paths¹²¹ • Lack of connectivity in the system of sidewalks throughout the neighbourhood¹²² • Limited walkability due to disconnected sidewalks¹²³ • No designated bicycle routes within the neighborhood¹²⁴ 	<p>throughout the neighborhood.¹²⁵</p> <ul style="list-style-type: none"> • Enhanced walkability due to improved sidewalk network.¹²⁶ • Introduction and establishment of designated bicycle routes within the neighborhood.¹²⁷ • Development of trails and bike paths to encourage active transportation.¹²⁸ • Positive feedback from residents regarding the new sidewalks, trails, and bike paths.¹²⁹ • Increased usage of sidewalks, trails, and bike paths by residents.¹³⁰ • Improved pedestrian safety with the addition of sidewalks and bike paths.¹³¹ • Enhanced safe pedestrian connections to parks and other community areas.¹³² • Reduction in wet, muddy areas due to improved drainage
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¹²⁰ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²¹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²² Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²³ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²⁴ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²⁵ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²⁶ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²⁷ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²⁸ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹²⁹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹³⁰ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹³¹ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹³² Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

			and restored tree canopy. ¹³³
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Furthermore, the SNAP project incorporated multiple avenues for obtaining feedback throughout its development and implementation phases. These channels included digital platforms, such as a feedback icon on the project website¹³⁴, and in-person meetings designed to engage community members. According to one interviewee,

“... to provide an opportunity to educate our residents about the water, why we’re here, to hear their other concerns, not just about flooding, but if we’re going through a park, in which case we were, to help retrofit the pipes, how can we build a better park for you? What does that look like? And so, we did go to a few community events in the area, including the school. We found out that the school was a really great meeting hub and community hub for even parents that don’t have kids that went to that school.”¹³⁵

4.2.2.6.1 Reporting

The partners reported their progress through several channels such as presentations that were held at community centers and school. According to one of the partners,

“We had presentations, I think at the community center.”¹³⁶

Lastly, the partners also developed a summary of the action plan, detailing the baseline metrics, intended outcomes, and alignment with sustainability goals.¹³⁷

4.2.2.7 Multi-Level Integration

The vertical dimension of multi-level integration is evident in the Bay View Glen SNAP project, which refers to the collaboration between a higher level of government and a lower level to address community needs, including climate mitigation strategies. The project partners included the York Region and the City of Markham.

¹³³ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.14

¹³⁴ [Projects: Engagement Strategy - Toronto and Region Conservation Authority \(TRCA\)](#)

¹³⁵ Interview with a partner

¹³⁶ Interview with a partner

¹³⁷ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

The York region played a key role in the selection of the Bayview Glen neighbourhood for the SNAP project, due to planned flood remediation and control work in 2015. This decision was influenced by the area being the focus of the West Thornhill Flood Control Implementation Alternative Refinement Study and York Region's Inflow and Infiltration Reduction Strategy. The City of Markham was actively involved in the recruitment of service providers, engaging stakeholders, including community members, as well as contributing to the design and implementation of the SNAP project.

4.2.3 Plan Outcomes

The partnership achieved its primary goal of retrofitting the park and was honoured with the National Award of Excellence for New Directions by the Canadian Society of Landscape Architects.¹³⁸ According to one interviewee,

"The main benefits were focused on the community, ensuring they saw added value in their park. If I were to visit now, I'm certain I'd see many more families using the park compared to before the retrofit when it was quite quiet."¹³⁹

Additionally, the partnership successfully provided energy efficiency training to residents. Concerning the energy retrofits, an interviewee stated, "We're still compiling reports and monitoring the outcomes. An update or full report is expected later this year."¹⁴⁰

4.3 Montréal Climate Partnership: The City of Montréal

Montréal is an urban city in Quebec with a population of 1,762,949 inhabitants.¹⁴¹ The most spoken language is French.¹⁴² Montréal has a two-tier government system composed of the Ville de Montréal and its 19 boroughs.¹⁴³ The city council is Montréal's primary decision-making body.¹⁴⁴ It adopts municipal budgets, by-laws, motions, programs, subsidies and governmental agreements.¹⁴⁵ The city council is made up of 65 elected officials: the mayor of the city, who is also the mayor of Ville-Marie, the city council chair, who is also a city councillor, 18 borough mayors and 45 other city councillors.¹⁴⁶ The mayor of Montréal is a member of the Executive Committee, agglomeration council, Ville-Marie

¹³⁸ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

¹³⁹ Interview with a partner

¹⁴⁰ Interview with a partner

¹⁴¹ [Profile table, Census Profile, 2021 Census of Population - Montréal, Ville \(V\) \[Census subdivision\], Quebec \(statcan.gc.ca\)](#)

¹⁴² [Profile table, Census Profile, 2021 Census of Population - Montréal, Ville \(V\) \[Census subdivision\], Quebec \(statcan.gc.ca\)](#)

¹⁴³ [Elected officials | Ville de Montréal \(Montréal.ca\)](#)

¹⁴⁴ [City council | Ville de Montréal \(Montréal.ca\)](#)

¹⁴⁵ [City council | Ville de Montréal \(Montréal.ca\)](#)

¹⁴⁶ [City council | Ville de Montréal \(Montréal.ca\)](#)

borough council, city council, and city hall team and is the Chair of the ‘Communauté Métropolitaine de Montréal (CMM)’.¹⁴⁷

The Executive Committee is a decision-making body composed of municipal elected officials, including the mayor, a chair and two vice chairs.¹⁴⁸ The committee orients the city’s operational decisions to serve the interests of the population.¹⁴⁹ In addition to awarding contracts and granting financial aid, the Executive Committee prepares the budget, which is submitted to the city and agglomeration councils for adoption.¹⁵⁰

The agglomeration council adopts by-laws and authorizes expenditures on shared services across the island of Montréal, including social housing, emergency services and public transit.¹⁵¹ The agglomeration council is composed of the mayor of Montréal, 15 city councillors and the mayors of the 14 reconstituted cities on the island of Montréal.¹⁵²

The city hall team, led by Mayor Valérie Plante, consists of elected officials who advise her. The team makes decisions and takes actions to serve Montréalers' best interests, ensuring Montréal remains attuned to contemporary issues.¹⁵³ Additionally, it reviews major projects in Montréal and oversees their progress.¹⁵⁴

4.3.1 Background of The Partnership

The Partenariat Climat Montréal is an independent initiative that brings together over a hundred economic, community, institutional and philanthropic organizations.¹⁵⁵ Its mission is to mobilize key stakeholders in the Montréal community to achieve a 55% reduction in GHG emissions by 2030 and achieve carbon neutrality by 2050.¹⁵⁶

The “Montréal Climate Plan” formed the basis of the Partenariat Climat Montreal; the partnership aims to unite organizations that can drive change towards achieving the objectives included in the plan.¹⁵⁷ Through extensive consultations, an agreement was reached within a consultative committee, emphasizing the crucial need to mobilize organizations from civil society to support and

¹⁴⁷ [Valérie Plante | Ville de Montréal \(Montréal.ca\)](#)

¹⁴⁸ [Executive Committee | Ville de Montréal \(Montréal.ca\)](#)

¹⁴⁹ [Executive Committee | Ville de Montréal \(Montréal.ca\)](#)

¹⁵⁰ [Executive Committee | Ville de Montréal \(Montréal.ca\)](#)

¹⁵¹ [Agglomeration council | Ville de Montréal \(Montréal.ca\)](#)

¹⁵² [Agglomeration council | Ville de Montréal \(Montréal.ca\)](#)

¹⁵³ [City Hall team | Ville de Montréal \(Montréal.ca\)](#)

¹⁵⁴ [City Hall team | Ville de Montréal \(Montréal.ca\)](#)

¹⁵⁵ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](#)

¹⁵⁶ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](#)

¹⁵⁷ Interview with a member of the partnership secretariat

contribute to implementing the city's climate initiatives.¹⁵⁸ Collaboration across different sectors was deemed essential since the city bears limited direct responsibility for greenhouse gas emissions.¹⁵⁹ This collaborative approach was catalyzed by the Foundation of Greater Montréal and the Trottier Foundation, which highlights their key role in the formation of Partenariat Climat Montréal.¹⁶⁰

Partenariat Climat Montréal builds on the successful partnership established in 2018-2019 between the public sector, a group of philanthropic foundations, including the City of Montréal, and the C40 Cities organization for developing Montréal's Climate Plan.¹⁶¹ It draws inspiration from the best practices of international collaboration models focused on mobilization, including the Green Ribbon Commission in Boston and the London Business Climate Leaders.¹⁶² Partenariat Climat Montréal positions Montréal among the world's leading metropolises in the C40 network, highlighting the ecological transition as a pillar of the city's prosperity and appeal.

The initiative is funded by the Fondation du Grand Montréal, the Fondation Familiale Trottier, the McConnell Foundation, and the City of Montréal.¹⁶³ It was first announced in December 2020 at the City of Montréal's launch of the 2020-2030 Climate Plan, and the partnership commenced operations in January 2021.¹⁶⁴

Table 4.7: Background of the Partnership

	Category	Sub-Category	Consolidated information
	Municipality	Province/Territory	Quebec ¹⁶⁵
		Urban/Rural	Urban ¹⁶⁶
		Size of population	1,762,949 ¹⁶⁷
		Multi-level governance structure	Two-tier government system ¹⁶⁸

¹⁵⁸ Interview with a member of the partnership secretariat

¹⁵⁹ Interview with a member of the Executive Committee

¹⁶⁰ Interview with a member of the partnership secretariat

¹⁶¹ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](https://www.climatmonreal.com)

¹⁶² [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](https://www.climatmonreal.com)

¹⁶³ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](https://www.climatmonreal.com)

¹⁶⁴ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](https://www.climatmonreal.com)

¹⁶⁵ [Profile table, Census Profile, 2021 Census of Population - Montréal, Ville \(V\) \[Census subdivision\], Quebec \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/92-627-x/2021001/article/00001-eng.htm)

¹⁶⁶ [Profile table, Census Profile, 2021 Census of Population - Montréal, Ville \(V\) \[Census subdivision\], Quebec \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/92-627-x/2021001/article/00001-eng.htm)

¹⁶⁷ [Profile table, Census Profile, 2021 Census of Population - Montréal, Ville \(V\) \[Census subdivision\], Quebec \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/92-627-x/2021001/article/00001-eng.htm)

¹⁶⁸ [Profile table, Census Profile, 2021 Census of Population - Montréal, Ville \(V\) \[Census subdivision\], Quebec \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/92-627-x/2021001/article/00001-eng.htm)

Background		Most spoken language	French ¹⁶⁹
	Partnership	Name of partnership	Partenariat Climat Montréal ¹⁷⁰
		Timeframe	2021-ongoing ¹⁷¹
		Stage of partnership	Intermediate ¹⁷²
	Climate plan	Type of plan	The Ville de Montréal climate plan
		Tied to the partnership in what way	Partenariat Climat Montréal's objectives align with the Ville de climate plan ¹⁷³
	Type of the partnership	Size of the partnership	Large cross-sector partnerships: over 100 partner organizations ¹⁷⁴
	Motivation to form the partnership	Integrative	The partnership was formed based on the need to mobilize key players to achieve Montréal's climate goals ¹⁷⁵

4.3.2 Structure of the Partnership

4.3.2.1 Oversight and Decision-making

The partnership adopts the constellation configuration model. It has a relatively flexible structure and is not legally incorporated.¹⁷⁶ It is characterized by its decentralized yet interconnected structure. At its core, Partenariat Climat Montréal is guided by a Steering Committee comprising members who act as consultants and pioneer climate action initiatives.¹⁷⁷ The Executive Committee works closely with the Steering Committee. The committee is tasked with shaping Partenariat Climat Montréal's strategic direction and ensuring coherence across its activities. This committee leverages insights from the diversity of the Steering Committee members to set priorities effectively.¹⁷⁸ An internal team of six

¹⁶⁹ [Profile table, Census Profile, 2021 Census of Population - Montréal, Ville \(V\) \[Census subdivision\], Quebec \(statcan.gc.ca\)](#)

¹⁷⁰ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](#)

¹⁷¹ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](#)

¹⁷² [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](#)

¹⁷³ Interview with a partner

¹⁷⁴ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](#)

¹⁷⁵ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](#)

¹⁷⁶ Interview with a member of the partnership secretariat

¹⁷⁷ Interview with a member of the partnership secretariat

¹⁷⁸ Interview with a partner

staff members supports these committees and oversees day-to-day operations under the administrative umbrella of the Foundation of Greater Montréal.¹⁷⁹ Partenariat Climat Montréal further extends its reach through several distinct action groups focusing on critical areas such as buildings, mobility, businesses, adaptation, citizen projects, and finance.¹⁸⁰ They operate semi-autonomously, handling specific tasks or functions while adhering to the strategic direction set by the Executive Committee and members of the dedicated staff.

The ‘decision-making process’ is done in stages. The first is the development of strategies, usually done by the staff in charge of operations. Afterwards, these strategies are discussed with the executive team. If further refinements or actions are required, meetings are held with other members or partners, to clarify the decision and decide how to operationalize it. The partners involved in the decision-making process are those who specialize in the field or domain that is the subject of discussion. For major decisions, strategic consultations are made with the steering committee.¹⁸¹ The partners don't necessarily have decision-making power, but they are consulted to guide decision-making and direction, and that, can vary depending on the project.¹⁸² After consultations are made, the staff members in charge of operations and the Executive Committee make the decisions.¹⁸³ According to one of the interviewees,

“the internal team that makes the... in any case, that draws up these strategies and therefore the decisions to be taken on these activities, that submits them, so to speak, or discusses them with the Executive Committee. ...so, it's the Executive Committee that kind of approves these kinds of decisions or thinks about them with the in-house team, ...the steering committee is more of a strategic consultation on our major decisions. But, ultimately, it's still us, the team, and then the Executive Committee who make the decisions.”¹⁸⁴

Within the different action groups, consensual decision-making is prioritized and relies on collaborative input from all members. For preparing documents or working group reports, a draft document, such as a brief, is initially prepared and circulated among members for feedback. Each partner involved in the action group provides comments, which the lead partner then reviews and integrates, balancing differing opinions to arrive at a final version. The lead organization plays a key

¹⁷⁹ Interview with a member of the partnership secretariat

¹⁸⁰ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](http://climatMontréal.com)

¹⁸¹ Interview with a partner

¹⁸² Interview with a member of the partnership secretariat

¹⁸³ Interview with a member of the Executive Committee

¹⁸⁴ Interview with a member of the partnership secretariat

role in mediating between different viewpoints and finalizing the document. This method fosters inclusivity, creating avenues for all partners in the action group to contribute to the final outcome.”¹⁸⁵

The mode of governance is enabling and provisioning. “Governance by enabling” is shown through several key practices articulated by interviewees involved in the Partenariat Climat Montréal in Montréal. The partnership emphasizes dialogue and consultation with local stakeholders and sectors, ensuring responsiveness to community needs and sectoral perspectives. Furthermore, the integration of social equity considerations, including the involvement of vulnerable populations, and youth, as well as learning from the wisdom of members of First Nations, underscores a commitment to inclusive governance by amplifying marginalized voices and integrating their perspectives into refinements of partnership’s strategies to achieve its objective.¹⁸⁶ These efforts collectively reflect a governance approach that facilitates collaboration, inclusivity, and shared responsibility in advancing climate action goals in Montréal. According to one of the interviewees,

“So, we don't feel ourselves to be experts on every subject, but we do have bodies for consultation or points of support in the community that enable us to create a dialogue between the city and these players. On the one hand, this ensures that the city is as responsive as possible to the community, to the needs of sector players, and so on.”¹⁸⁷;

“We're going to need help, from the Montréal community, because the city isn't capable of meeting the reduction targets on its own. It controls 2% of the territory's emissions. ...we're going to go and see the big employers, we're going to go and see the experts in the field, the institutions, the universities.”¹⁸⁸

Governance by provisioning is shown through the provision of recommendations and resources to partners and external stakeholders to guide their operations as they make progress toward carbon neutrality. As noted by an interviewee,

“We aim to make the resources produced by the (name concealed) widely accessible to municipalities, real estate managers, citizens, and a broad spectrum of partners, including businesses and small enterprises across society. This dissemination goal extends not only to the Ville de Montréal but also to various stakeholders. The Montréal partnership plays a key role in promoting

¹⁸⁵ Interview with a partner

¹⁸⁶ Interview with a member of the Executive Committee

¹⁸⁷ Interview with a member of the partnership secretariat

¹⁸⁸ Interview with a member of the Executive Committee

the visibility and utilization of these resources and tools. It also offers an avenue for us to contribute our expertise to the partnership's efforts.”¹⁸⁹

Table 4.8: Oversight and Decision-Making

Category	Sub-category	Consolidated information
Configuration	Constellation model	Presence of a steering committee, Executive Committee, members of dedicated staff who work at the secretariat and six action groups who work toward achieving a reduction of 55% in greenhouse gas emissions by 2030 and carbon neutrality by 2050 ¹⁹⁰
	Decision-making process	The executive committee makes decisions, the steering committee informs decision-making, and internal staff support the decision-making process ¹⁹¹
Modes of governance	Enabling	Involvement of the community, including the youth, the Indigenous people, and the marginalized voices to know how to better address their needs and learn from them ¹⁹²
	Provisioning	Provision of recommendations and resources to guide partners as they make progress towards carbon neutrality.

4.3.2.2 Partner Engagement

4.3.2.2.1 Level of Engagement

Depending on their role, partners within the Partenariat Climat Montréal demonstrate varying levels of engagement, ranging from high participation to no engagement. Partners demonstrating high participation actively engage in the development and refinement of Partenariat Climat Montréal's initiatives and decision-making processes, particularly those in the Executive Committee or leaders of working groups.¹⁹³ One such example is a founding member of the partnership who is actively involved

¹⁸⁹ Interview with a partner

¹⁹⁰ <https://climatMontréal.com/en/>

¹⁹¹ Interview with a member of the Executive Committee

¹⁹² Interview with a member of the Executive Committee

¹⁹³ Interview with a partner

in the partnership and exhibits a high level of engagement. The partner holds positions on both the Steering Committee and the Executive Committee and is actively involved in staff training and capacity building, assisting with decision-making processes, and advocating for and approving budgets. Further emphasizing their involvement, the partner stated

*“I do a lot of coaching for the Climate Partnership employees to help them become more efficient in what they do, and I have more experience than I do teaching, I take a lot of mentoring time, I do a lot of mentoring with the Montréal Climate Partnership team.”*¹⁹⁴

Partners exhibiting a medium level of engagement participate in the Partenariat Climat Montréal activities without holding leadership positions or making decisions. These partners typically attend meetings and events such as the Climate Summit, engage in discussions during meetings and workshops, provide comments on briefs and make suggestions when appropriate. One partner from the public sector exemplifies this level of engagement, stating,

*“The organization primarily interacts with the partnership as a member rather than a governing body. The organization attends meetings and events when requested and provides input during discussions with the team. However, it does not play a significant role in governance, directing the partnership, or organizing other members.”*¹⁹⁵

Partners with low engagement primarily implement the recommendations the Partenariat Climat Montréal provides but do not actively participate in its development or decision-making. Their involvement is limited to adopting the partnership's suggestions.¹⁹⁶

The lowest level of engagement is observed in partners who do not participate in the partnership's activities. Their only involvement is having their organization's name listed on the Partenariat Climat Montréal website. One partner from the not-for-profit sector describes the Partenariat Climat Montréal website as

*“a visual tool where organizations can register their names, with no focus on networking, discussion, or exchange. It is not designed to foster partnership or communication. Instead, it serves as a Ville de Montréal initiative to list company activities within its territory. Companies can sign up and input their data, which the city then uses to report emission reductions.”*¹⁹⁷

¹⁹⁴ Interview with a member of the Executive Committee

¹⁹⁵ Interview with a partner from the public sector

¹⁹⁶ Interview with a partner

¹⁹⁷ Interview with a partner

4.3.2.2.2 Role Of Partners

This partnership benefits from a network of partners fulfilling distinct functions. These roles can be categorized as funders, conveners, consultants, action partners, capacity builders and working group leads.

For instance, the city of Montréal, the Trottier Family Foundation, the McConnell Foundation and the ‘Fondation du Grand Montréal’ are partial financial backers. These organizations fund part of the activities and are active members of the steering committee. An interviewee stated,

*“So, in terms of both our operating structure and our means of action, we have a steering committee of around twenty-five, twenty-seven members. So, there's a representative of the City of Montréal, a civil servant, the director of the Bureau de la transition écologique. And in our action groups, there's always a representative of the City as well. And the staff works closely with the City on several issues to keep each other informed about how the City is progressing on certain issues.”*¹⁹⁸

The project website identifies a group of partners acting as consultants and action partners.¹⁹⁹ These consultants are considered industry leaders with substantial experience and influence in their areas of fields.²⁰⁰ Their expertise significantly informs decision-making processes within their respective fields.²⁰¹

Certain partners assume leadership roles within working groups.²⁰² These working group leads convene regular meetings with group members, monitor project progress, and establish priorities.²⁰³ As one partner described,

*"They organize periodic meetings with the members of the Committee, and they monitor the progress of the various projects, ...establishing it took several months, but by establishing project priorities, and every few months, there are plenary meetings, with all the committee members, to review the progress of each project. There are also separate meetings for the people involved in each project.”*²⁰⁴

¹⁹⁸ Interview with a member of the partnership secretariat

¹⁹⁹ <https://climatMontréal.com/en/partenaires/>

²⁰⁰ Interview with a member of the Executive Committee

²⁰¹ Interview with a member of the Executive Committee

²⁰² Interview with a partner

²⁰³ Interview with a partner

²⁰⁴ Interview with a partner

Lastly, some partners actively participate in planning and co-organizing events such as the Climate Summit.²⁰⁵ These partners facilitate discussions by bringing together panellists and experts for key event sessions.²⁰⁶

4.3.2.2.3 Recruitment Strategy

The recruitment strategy employed is a voluntary approach, prioritizing both resource fit and mission fit. A partner aptly described it as a "volunteer partnership organization,"²⁰⁷ emphasizing the collaborative nature of participation. The partnership seeks to mobilize key industry players who possess the necessary resources and expertise to contribute meaningfully and influence change in their sectors.²⁰⁸ This alignment between an organization's resources and the partnership's mission of achieving net-zero carbon emission is termed "resource fit" and "mission fit," respectively. While some organizations join primarily to achieve their own carbon neutrality goals, the partnership remains open to all Montréal-based organizations.²⁰⁹

4.3.2.2.4 Frequency of Engagement

The frequency of engagement among partners varies considerably. While some partners have roles that require frequent participation, sometimes on a near-weekly basis,²¹⁰ other partners have roles that limit their involvement to bi-monthly work meetings.²¹¹ Additionally, the involvement of some partners fluctuates based on events or partnership's activity, leading to more sporadic, needs-based communication patterns.²¹²

One partner organization reported attending quarterly steering committee meetings²¹³, while another partner estimated their monthly time commitment to be "a few hours voluntarily."²¹⁴ This partner further clarified that their involvement involved "three to four hours a month" and was primarily focused on

²⁰⁵ Interview with a partner

²⁰⁶ Interview with a partner

²⁰⁷ Interview with a partner

²⁰⁸ Interview with a member of the secretariat

²⁰⁹ Interview with a member of the secretariat

²¹⁰ Interview with a member of the secretariat

²¹¹ Interview with a member of the secretariat

²¹² Interview with a member of the secretariat

²¹³ Interview with a partner

²¹⁴ Interview with a partner

providing "suggestions, recommendations, and comments" through workshops, presentations, and substantive responses to proposals.²¹⁵

4.3.2.2.5 Partner Commitment

Partners' commitment varies within the partnership. While some partners actively participate, others struggle with time constraints, as evidenced by a partner's statement: "It's always difficult to put in the time that's available when it's a voluntary partnership"²¹⁶. Conversely, some partners demonstrate leadership by spearheading working groups and fostering communication, as exemplified by another partner's description: "They organize periodic meetings... We have, I think, they call them action groups... There are also separate meetings for the people involved in each project".

Some partners are willing to share information and resources free of charge, as well as their expertise on a subject matter. For instance, a partner emphasizes their expertise in public policy, regulations, energy efficiency, and decarbonization programs, expressing a willingness to contribute this knowledge "totally free of charge"²¹⁷. Additionally, they offer to share non-confidential data relevant to the initiative, such as "the cost of certain decarbonization measures or energy consumption or management emissions typical of different kinds of buildings". They further mention access to market data from their previous role, underlining the breadth of potential contributions beyond personal expertise.²¹⁸

Another partner highlights that their involvement involved "presenting proposals" and offering "opinions on the different points."²¹⁹ While acknowledging it wasn't entirely passive, they suggest a level of engagement distinct from leadership roles but in adherence to "established procedures," indicating a willingness to operate within the initiative's existing framework.²²⁰

Table 4.9: Partner Engagement

Category	Sub-category	Consolidated information
Partner Engagement	Diversity of partners	Public sector, civil society, private sector ²²¹

²¹⁵ Interview with a partner

²¹⁶ Interview with a partner

²¹⁷ Interview with a partner

²¹⁸ Interview with a partner

²¹⁹ Interview with a partner

²²⁰ Interview with a partner

²²¹ [Partenaires - Partenariat Climat Montréal \(climatMontréal.com\)](http://Partenaires - Partenariat Climat Montréal (climatMontréal.com))

	Role of partners	Consultants, Funders, Conveners, Working group leads, capacity builders, action partners ²²²
	Recruitment strategy	Resource fit, mission fit ²²³
	Frequency of engagement	Regular (weekly) ²²⁴ ; varies, depending on the role of partners and working groups.
	Level of engagement	High, medium, low, no engagement ²²⁵
	Partner Commitment	Varies ²²⁶ Partners with leadership roles including working group leads, Executive Committee (high level of commitment) Action partners (medium to low levels of commitment) in terms of time and resources

4.3.2.3 Coordination

The secretariat is administratively attached to the Foundation of Greater Montréal. The administration comprises the steering committee,²²⁷ the Executive Committee,²²⁸ and members of the dedicated staff²²⁹ who oversee the partnership's operations, and six different working groups.

The internal team comprises six members responsible for the partnership's day-to-day operations and is administratively attached to the Foundation of Greater Montréal.²³⁰ The internal team is made up of six individuals, comprising a co-executive director, a co-director in charge of partnerships and development, a senior advisor, a communications manager, a partnership and development manager and a project manager.

²²² [Partenaires - Partenariat Climat Montréal \(climatMontréal.com\)](http://climatMontréal.com)

²²³ Interview with a partner

²²⁴ Interview with a partner

²²⁵ Interview with partners across the three sectors

²²⁶ Interviews with partners across different sectors

²²⁷ [Comité directeur - Partenariat Climat Montréal \(climatMontréal.com\)](http://climatMontréal.com)

²²⁸ [À propos - Partenariat Climat Montréal \(climatMontréal.com\)](http://climatMontréal.com)

²²⁹ [À propos - Partenariat Climat Montréal \(climatMontréal.com\)](http://climatMontréal.com)

²³⁰ [À propos - Partenariat Climat Montréal \(climatMontréal.com\)](http://climatMontréal.com)

4.3.2.4 Communication

4.3.2.4.1 System/Process for Communication

The partnership has a dedicated staff who invest significant time in establishing and maintaining connections with partner organizations through various methods, such as calls, face-to-face meetings, lunches, emails, and other follow-up activities.²³¹ The communication approach is tailored to the type of partner, ensuring the most effective means of interaction.²³² To meet the needs of stakeholders, the staff schedules work meetings via email, conducts follow-up calls, and arranges in-person meetings to discuss and explore pertinent issues.²³³ Various communication methods are utilized to effectively engage with stakeholders.²³⁴

The partnership's communication systems and processes are designed to inform and highlight its partners' actions rather than the partnership itself. The external communication systems are strategically used to inform the public and showcase the achievements of partner organizations. Public speaking engagements and event representations often feature steering committee members who are considered pioneers or ambassadors of climate action or co-presidents rather than co-directors. Previously, communication was managed part-time by individuals with other responsibilities. The recent addition of a dedicated communications manager aims to enhance this strategy, emphasizing the collective actions occurring in Montréal across various sectors. According to an interviewee

*“Until recently, we typically had one person handling communications alongside other job responsibilities, never a full-time communications role. Consequently, we only used basic tools like a website and social media to highlight our members' achievements rather than our own. With a newly dedicated communications person, we're now focusing on showcasing our members' actions and collective efforts in Montréal and advancing key issues through our external communications.”*²³⁵

²³¹ Interview with a member of the partnership secretariat

²³² Interview with a member of the partnership secretariat

²³³ Interview with a member of the partnership secretariat

²³⁴ Interview with a member of the partnership secretariat

²³⁵ Interview with a member of the partnership secretariat

4.3.2.4.2 Channels/Format for Communications

For internal communications, meetings are held in person and virtually, sometimes via Teams or Google Meet²³⁶. Other channels include interactive workshops²³⁷ e-mails and calls, which vary depending on the type of partner.

Externally, communication is done through public channels, a newsletter linked to the Climate Summit, which updates members on upcoming activities and invites participation, various social media platforms, and a website.²³⁸ However, the challenge remains to maintain an up-to-date and user-friendly website that effectively communicates ongoing collective projects and activities.²³⁹

The cost of communication varies depending on the channel or format utilized. For instance, expenses can arise from booking rooms, catering, and other logistical needs for in-person meetings. Additionally, videoconferencing for hybrid meetings can incur costs. Furthermore, licenses for platforms like MailChimp also contribute to the overall expenses.

4.3.2.4.3 Conflict Resolution Mechanism

In resolving conflicts, the partnership emphasizes communication, collaboration, consultation, and responsiveness to identified needs, even if it means making difficult decisions and not always reaching a consensus. An instance was narrated about how challenges within a working group were addressed through a structured process. Initially, there was a recognition of an issue within the group where collaboration was not effectively progressing. Instead of ignoring the problem, the situation was assessed internally and discussed with the Executive Committee to determine an appropriate course of action. Subsequently, the group coordinators were consulted, resulting in a decision to halt the group's activities while ensuring that partners' contributions were respected.

²³⁶ Interview with a partner from the public sector

²³⁷ Interview with a partner from the public sector

²³⁸ Interview with a member of the partnership secretariat

²³⁹ Interview with a partner

Table 4.10: Communication

Category	Sub-category	Consolidated information
Communication	System/Process of communication	Presence of dedicated staff who invest significant time in establishing and maintaining connections with partner organizations through various methods, such as calls, face-to-face meetings, lunches, emails, and other follow-up activities. ²⁴⁰ Tailoring communication approaches to suit the partner(s) involved. ²⁴¹
	Channels for recognition	website, newsletters, media coverage; the Climate Summit ²⁴²
		Internal: Emails, in-person and virtual meetings via Teams or Google Meet, interactive workshops, emails, phone calls External: Newsletters, website, social media platforms, Climate Summit

4.3.2.5 Resourcing, Budgeting and Financing

4.3.2.5.1 Sources of Funding

The partnership is primarily funded through voluntary donations from partner organizations - Fondation du Grand Montréal, la Fondation Familiale Trottier, la Fondation McConnell and la Ville de Montréal.²⁴³ Since the inception of the partnership, other philanthropic foundations have also contributed to funding the partnership. Additionally, fundraising is also done to cover event costs.²⁴⁴ According to an interviewee “Although tickets are sold money raised through tickets is insufficient to cover the costs associated with the events. Fundraising is time-consuming and success is not always

²⁴⁰ Interview with a member of the partnership secretariat

²⁴¹ Interview with a member of the partnership secretariat

²⁴² Interview with a partner

²⁴³ Interview with a member of the partnership secretariat

²⁴⁴ Interview with a member of the partnership secretariat

guaranteed. It sometimes happens that there is an over-solicitation of funds from funding partners, who may not have enough resources to sponsor the events, owing to the general economic post-pandemic recession.”²⁴⁵

4.3.2.5.2 Processes for Resourcing, Budgeting and Financing

Partenariat Climat Montréal has a dedicated staff member tasked with fundraising and managing budgets.²⁴⁶ Despite the sustained commitment of the primary funders, a substantial need for additional financial support still persists.²⁴⁷ Securing funding from other levels of government, including provincial and federal levels, is particularly challenging due to the partnership’s mobilization-focused structure, which does not align well with government projects and programs that emphasize tangible achievements and projects.²⁴⁸ Following the COVID-19 pandemic, event costs have risen, necessitating fundraising efforts to host the summit.

The Executive Committee is crucial in approving budgets and advocating for financial plans.²⁴⁹ The Executive Committee of Partenariat Climat Montréal is responsible for budget adherence to the annual plan.²⁵⁰ Regular budget reports are prepared by a dedicated staff and presented to the Executive Committee on a monthly basis.²⁵¹ These reports highlight any potential issues or deviations from the budget. If financial concerns arise, the Executive Committee acts as a sounding board, assisting in decision-making related to budgeting and financing.²⁵² This collaborative approach ensures informed decisions are made to maintain financial stability and support the partnership's activities.

Table 4.11: Budgeting and Financing

Category	Sub-category	Consolidated information
Budgeting and financing	Sources of funding	Philanthropic organizations, including McConnell Foundation, Trottier Family Foundation ²⁵³ Public sector- Federal, City of Montréal ²⁵⁴

²⁴⁵ Interview with a member of the partnership secretariat

²⁴⁶ Interview with a member of the Executive Committee

²⁴⁷ Interview with a member of the Executive Committee

²⁴⁸ Interview with a member of the Executive Committee

²⁴⁹ Interview with a member of the Executive Committee

²⁵⁰ Interview with a partner from the public sector

²⁵¹ Interview with a partner from the public sector

²⁵² Interview with a partner from the public sector

²⁵³ Interview with a member of the partnership secretariat

²⁵⁴ Interview with a member of the partnership secretariat

		Other organizations, including Fondation du Grand Montréal
	Process for resourcing, budgeting and financing	Solicitation of funds: Dedicated staff Approval of budget: Executive Committee Modification of budget: Executive Committee

4.3.2.6 Measuring, Monitoring and Reporting

4.3.2.6.1 System/Process for Measuring and Monitoring

Quantitative indicators and qualitative assessments are used to measure and monitor partnership objectives. These include the number of partners reached, the number of meetings held, the attendance rate of partner organizations at meetings, the number of people who register for summits, the number of people willing to contribute to the summit, the number of people contacting the partnership, and number of partners reached. When more people are eager to attend the summit, it shows that the internal team comprising the dedicated staff did a great job at publicity and has generated excitement and enthusiasm around climate action in Montréal. Currently, no indicators are in place to track progress on reducing greenhouse gas emissions. According to an interviewee,

“Despite the primary focus on reducing greenhouse gas emissions, there is no definitive method to measure the impact of the partnership's actions and those of its partners on emission reductions. Assessing resilience and adaptation to climate change is even more challenging. Discussions with several partners have highlighted the difficulty of measuring these outcomes, often leading to a postponement of such evaluations in favour of immediate action. Consequently, the partnership has not consistently revisited these indicators or evaluation aspects. Instead, the emphasis has shifted to qualitative measures, tracking member involvement, the unique collaborations facilitated by the partnership, and the collaborative or collective projects initiated. These qualitative aspects are detailed in the annual reports.”²⁵⁵

²⁵⁵ Interview with a member of the partnership secretariat

4.3.2.6.2 Frequency of Measurement and Monitoring

The frequency of measurement and monitoring varies according to working groups. A partner noted that his action group meets every three months to provide updates. Specifically, the partner mentioned

*“updates, I think, every three months on the progress of the work. It's done in face-to-face meetings. They do a PowerPoint presentation in a conference room with all the members who are there. The progress of the various works has occurred in the preceding months. That's all there is to it.”*²⁵⁶

Additionally, the Climate Summit is held annually. Partners detail their commitments and achievements from the previous year.²⁵⁷

4.3.2.6.3 Structure And Process for Reporting on Progress and Lead Organization

The partnership does not require mandatory activity reports to be generated for the community. However, funders like the Ville de Montréal require an annual report detailing the partnership's activities. While this report is not publicly available, it can be provided to partners who often request activity summaries. The dedicated staff is responsible for drafting the annual report and evaluating achievements. Additionally, summary presentations of the action groups are prepared and shared.²⁵⁸

During the Climate Summit, there are follow-up activities on commitments, including a dedicated panel where partners discuss their accomplishments. A commitment follow-up booklet is also produced annually, which makes it possible to track the progress of partner organizations in relation to their respective commitments. The follow-up booklet, along with the Climate Summit proceedings produced afterward, provides a comprehensive synthesis of collective climate action in Montréal. The progress of the partnership is closely tied to the advancements made by its partners and its influence on external stakeholders, reflecting its ability to mobilize and drive forward climate initiatives.²⁵⁹

4.3.2.7 Multi-Level Integration

The importance of multi-level integration is evident in Partenariat Climat Montreal. Although the City of Montreal is involved in the partnership, its influence is limited in certain industries, including finance, which is under the province's jurisdiction. Hence, the finance team had to be

²⁵⁶ Interview with a partner

²⁵⁷ Interview with a member of the partnership secretariat

²⁵⁸ Interview with a member of the partnership secretariat

²⁵⁹ Interview with a member of the partnership secretariat

dissolved, as no tangible decisions could be made to influence change towards climate mitigation in the industry.²⁶⁰

4.3.3 Plan Outcomes

The overarching goal of the Montréal Climate Partnership is to mobilize a wide array of actors within the greater Montréal ecosystem, encompassing economic sectors, environmental NGOs, and businesses, to collectively advance the city's climate objectives. This mobilization strategy fosters collaboration and drives collective action toward achieving Montréal's climate goals.

Since its inception, Partenariat Climat Montréal has engaged diverse stakeholders from various industries, including academia, finance, and non-governmental organizations, thus ensuring broad representation and contributing to the partnership's credibility. This wide-ranging participation, supported by the City of Montréal, has significantly enhanced the partnership's visibility and legitimacy, attracting attention from both municipal and provincial governments. The City of Montréal's endorsement and support from the Quebec government have further strengthened the initiative despite the provincial government not being a direct stakeholder.

Furthermore, the partnership has produced high-quality documents that have been influential in shaping policy discussions. Notable achievements include a comprehensive brief submitted for a Ville de Montréal consultation and another well-received brief presented to the provincial government, both demonstrating the partnership's capacity for substantive contributions to climate policy. According to a partner

“there are a lot of different stakeholders who represent different horizons and different sectors, so there's a good representation in that sense, which brings good credibility to the Partenariat Climat Montréal... So, there's a wide range of representation. the partnership has produced high-quality documents that have been influential in shaping policy discussions²⁶¹

4.4 Comparative Analysis

Table 4.12 provides a summary of findings on the relationship between structural features and outcomes in small and large CSPs focused on climate mitigation.

²⁶⁰ Interview with a member of dedicated staff

²⁶¹ Interview with a partner

Table 4.12: Relationship between Structure and Outcomes in Cross-sector Partnerships

	Category	Sub-Category	Bayview Glen SNAP project	Partenariat Climat Montréal
Background	Municipality	Province/Territory	York Region, Ontario ²⁶²	Quebec ²⁶³
		Urban/Rural	Urban ²⁶⁴	Urban ²⁶⁵
		Size of population	338,5032 ²⁶⁶	1,762,949 ²⁶⁷
		Multi-level governance structure	Lower-tier municipality ²⁶⁸	Two-tier government ²⁶⁹
	Partnership	Name of partnership	Bayview Glen Sustainable Neighbourhood Retrofit Project (SNAP) ²⁷⁰	Partenariat Climat Montréal ²⁷¹
		Timeframe	2012-2018 ²⁷²	2021-ongoing ²⁷³
		Stage of partnership	Complete ²⁷⁴	Intermediate ²⁷⁵
	Climate plan	Type of plan	Markham's Green Print Sustainability Plan ²⁷⁶	Montréal's climate plan
		Tied to the partnership in what way	The SNAP project's objectives align with Markham's Greenprint Sustainability Plan ²⁷⁷	The Partenariat Climat Montréal initiative aligns with the Ville de Montréal Climate Plan
	Type of the partnership	Size of the partnership	Small CSP. Lead partners: TRCA, City of Markham, York Region	Large CSP: Over 100 partner organizations across all sectors ²⁷⁸
	Motivation to form the partnership	Integrative	The partnership was formed based on the needs of members of the community.	The partnership was formed based on the need to mobilize key

²⁶² <https://www12.statcan.gc.ca/census-recensement/2021>

²⁶³ Profile table, Census Profile, 2021 Census of Population - Montréal, Ville (V) [Census subdivision], Quebec (statcan.gc.ca)

²⁶⁴ <https://www12.statcan.gc.ca/census-recensement/2021>

²⁶⁵ Profile table, Census Profile, 2021 Census of Population - Montréal, Ville (V) [Census subdivision], Quebec (statcan.gc.ca)

²⁶⁶ <https://www12.statcan.gc.ca/census-recensement/2021>

²⁶⁷ Profile table, Census Profile, 2021 Census of Population - Montréal, Ville (V) [Census subdivision], Quebec (statcan.gc.ca)

²⁶⁸ <https://www12.statcan.gc.ca/census-recensement/2021>

²⁶⁹ Profile table, Census Profile, 2021 Census of Population - Montréal, Ville (V) [Census subdivision], Quebec (statcan.gc.ca)

²⁷⁰ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

²⁷¹ Climat Montréal - Partenariat Climat Montréal (climatmontréal.com)

²⁷² Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

²⁷³ Climat Montréal - Partenariat Climat Montréal (climatmontréal.com)

²⁷⁴ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

²⁷⁵ Climat Montréal - Partenariat Climat Montréal (climatmontréal.com)

²⁷⁶ Markham's green print sustainability plan

²⁷⁷ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

²⁷⁸ Climat Montréal - Partenariat Climat Montréal (climatmontréal.com)

				players to achieve Montréal's climate goals ²⁷⁹
Structural Features	Decision-making	Configuration	<p>Constellation model Decentralized Structure: The partnership has committees, stakeholder working groups, and partnerships with various entities (NGOs, institutions, businesses). These groups work semi-independently but are coordinated by the Sustainability Office.²⁸⁰</p> <p>Catalyst collaboration model: Collaborative effort aimed at initiating and accelerating change in the community. The project focused on improving accessibility by retrofitting roads and adding bike lanes, addressing specific needs through the combined efforts of various departments and external partners.²⁸¹</p>	Presence of a steering committee, Executive Committee, internal team members who work at the secretariat and six action groups who work toward achieving a reduction of 55% in greenhouse gas emissions by 2030 and carbon neutrality by 2050 ²⁸²
		Decision-making process	Involves all partners, with regular consultations with community members ²⁸³	Decisions are made by the Executive Committee and members of the internal team but sometimes, in consultation with the steering committee and other partners ²⁸⁴
		Mode of governance	<p>Enabling: Involvement of the community, including Bayview Glen Residents Association, Bayview Glen Public School (and its parent council), as well as homeowners and businesses²⁸⁵</p> <p>Provisioning:</p>	Enabling: Involvement of the community, including the youth, the indigenous people, the marginalized voices to know how to better address their needs and learn from them ²⁸⁷

²⁷⁹ [Climat Montréal - Partenariat Climat Montréal \(climatMontréal.com\)](https://climatMontréal.com)

²⁸⁰ Interview with a sustainability officer

²⁸¹ Interview with a sustainability officer

²⁸² <https://climatMontréal.com/en/>

²⁸³ Interview with a sustainability officer

²⁸⁴ Interview with a member of the Executive Committee

²⁸⁵ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan

²⁸⁷ Interview with a member of the Executive Committee

			Tangible actions taken to enhance community infrastructure and engagement, including the implementation of the park renewal project, organizing information sessions, and involving the community members in the planting of trees and shrubs. ²⁸⁶	Provision of recommendations and resources to guide partners as they make progress towards carbon neutrality.
	Partner Engagement	Diversity of partners	Public sector -Markham and York region ²⁸⁸ Civil society- TRCA ²⁸⁹ Private sector- Businesses ²⁹⁰	Public sector, civil society, private sector ²⁹¹
		Role of partners	Consultants (Businesses), ²⁹² Service providers (TRCA, Businesses and Markham), ²⁹³ Funding (Markham), ²⁹⁴ Convening (TRCA), ²⁹⁵ Recruiting (Markham) ²⁹⁶	Consultants, Funders, Conveners, Working group leads, capacity builders, action partners ²⁹⁷
		Recruitment strategy	Resource fit, mission fit ²⁹⁸	Resource fit, mission fit ²⁹⁹
		Frequency of engagement	Regular (weekly) ³⁰⁰	High, medium, low, no engagement ³⁰¹
		Partner Commitment	Varies Lead partners (throughout the project) Service providers (limited to tasks assigned) ³⁰²	Varies ³⁰³ Partners with leadership roles including working group leads, Executive Committee (high level of commitment) Action partners (medium to low levels of commitment) in terms of time and resources

²⁸⁶ <https://trca.ca/conservation/sustainable-neighbourhoods/snap-neighbourhood-projects/bayview-glen-snap/projects-glencrest-park/>

²⁸⁸ [Sustainable Neighbourhood Retrofit Action Plan \(markham.ca\)](#)

²⁸⁹ [Sustainable Neighbourhood Retrofit Action Plan \(markham.ca\)](#)

²⁹⁰ Bayview Glen Sustainable Neighbourhood Retrofit Action Plan p.3

²⁹¹ [Partenaires - Partenariat Climat Montréal \(climatMontréal.com\)](#)

²⁹² Interview with a partner

²⁹³ Interview with a partner

²⁹⁴ Interview with a partner

²⁹⁵ Interview with a sustainability officer

²⁹⁶ Interview with a partner

²⁹⁷ [Partenaires - Partenariat Climat Montréal \(climatMontréal.com\)](#)

²⁹⁸ Interview with a partner

²⁹⁹ Interview with a partner

³⁰⁰ Interview with a partner

³⁰¹ Interview with partners across the three sectors

³⁰² Interview with a sustainability officer

³⁰³ Interviews with partners across different sectors

	Communication	System/Process of communication	<p>Conducting demographic analysis before engaging the community³⁰⁴</p> <p>Printing publications in the languages spoken by community members.³⁰⁵</p> <p>Hiring local community members who can facilitate communication with other members.³⁰⁶</p>	<p>Presence of a dedicated staff who invest significant time in establishing and maintaining connections with partner organizations through various methods, such as calls, face-to-face meetings, lunches, emails, and other follow-up activities.³⁰⁷</p> <p>Tailoring communication approaches to suit the partner(s) involved.³⁰⁸</p>
		Channels for recognition	<p>Media coverage, website³⁰⁹;</p> <p>The SNAP project received an award National Award of Excellence for New Directions from the Canadian Society of Landscape Architects³¹⁰.</p>	<p>website, media coverage; the Climate Summit³¹¹;</p>
		Channels/format for communication	<p>Internal: Emails, workshops, meetings³¹²</p> <p>External: homeowner survey, Key informant interviews, Municipal staff and agency sessions, Two fun fairs, community meetings and focus group³¹³</p>	<p>Internal: Emails, in-person and virtual meetings via Teams or Google Meet, interactive workshops, emails, phone calls</p> <p>External: Newsletters, website, social media platforms, Climate Summit</p>
	Coordination	Secretariat	No secretariat	Hosted secretariat: Fondation du Grand Montréal
			Presence of a coordinator, the city representative	Presence of a steering committee, Executive Committee, and six dedicated staff

³⁰⁴ Interview with a partner

³⁰⁵ Interview with a partner

³⁰⁶ Interview with a partner

³⁰⁷ Interview with a member of the partnership secretariat

³⁰⁸ Interview with a member of the partnership secretariat

³⁰⁹ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

³¹⁰ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

³¹¹ Interview with a partner

³¹² Interview with a sustainability officer

³¹³ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

	Resourcing, Budgeting and Financing	Sources of funding	Private sector -RBC Blue Water Project ³¹⁴ Public sector- Federal, City of Markham ³¹⁵ Civil society-FCM, TRCA ³¹⁶	Philanthropic organizations, including McConnel Foundation, Trottier foundation ³¹⁷ Public sector- Federal, City of Montréal ³¹⁸ Other organizations including Fondation du Grand Montréal
		Process for resourcing, budgeting and financing	Allocation of funds: City of Markham ³¹⁹ Budgeting and prioritization of project needs: discussion forums	Solicitation of funds: Dedicated staff ³²⁰ Approval of budget: Executive Committee ³²¹ Modification of budget: Executive Committee ³²²

Table 4.13 below summarizes the relationship between the size and outcomes of small and large CSPs focused on climate mitigation.

Table 4.13: Relationship between size and outcomes in CSPs

Category	Existing Literature	Bayview Glen SNAP project	Partenariat Climat Montreal
Knowledge of the issue	Local Knowledge (Ahmad & Shukla, 2014; Laird et al., 2024)	Knowledge from community members and city officials ³²³	Professional expertise ³²⁴

³¹⁴ [Projects: Glencrest Park Renewal - Toronto and Region Conservation Authority \(TRCA\)](#)

³¹⁵ Interview with a sustainability officer

³¹⁶ Interview with a sustainability officer

³¹⁷ Interview with a member of the partnership secretariat

³¹⁸ Interview with a member of the partnership secretariat

³¹⁹ Interview with a sustainability officer

³²⁰ Interview with a member of the partnership secretariat

³²¹ Interview with a member of the civil society

³²² Interview with a member of the civil society

³²³ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

³²⁴ Interview with a member of dedicated staff

Focus	Narrow vs. broad (Samuel & Clarke, 2022; Suhendra et al., 2023)	Renovation of the Glencrest Park ³²⁵	Mobilizing key players in Montreal to achieve a 55% reduction in GHG emissions by 2030 and net-zero emissions by 2050 ³²⁶
Duration	Short-term vs. long term (Ahmad & Shukla, 2014; Laird et al., 2024)	2012-2018 ³²⁷	2019-ongoing ³²⁸
Challenges	Financial vs. bureaucratic hurdles (Ahmad & Shukla, 2014)	Secured funding from several sources ³²⁹	Has financial struggles ³³⁰

³²⁵ [Bayview Glen SNAP - Toronto and Region Conservation Authority \(TRCA\)](#)

³²⁶ [Partenaires - Partenariat Climat Montréal \(climatMontréal.com\)](#)

³²⁷ Interview with a partner

³²⁸ Interview with a member of dedicated staff

³²⁹ Interview with a sustainability officer

³³⁰ Interview with a member of dedicated staff

4.4.1 Influence of Size and Structure on Plan Outcomes in the Bayview Glen SNAP Project

The Bayview Glen SNAP project research revealed that identifying funding sources at the early stages of planning and formation played a key role in achieving plan outcomes. According to an interviewee, all the different divisions of the city contributed, which was unique, along with many other groups, including the private and public sectors. Furthermore, securing funding for the implementation stage is crucial for the project to be successful. The project secured funding from external partners like FCM and the RBC Blue Water project. According to an interviewee

“And I think a lot of our external partners, sorry, external funding partners, I think FCM was a major one. They really saw that we were doing something new, doing something that would actually increase sustainability within our community, and saw the value in it essentially. And award us with the funding...”³³¹

Another contributing factor to the partnership's success was the collaborative decision-making process, which was evident in making decisions around planning and refining the project plan and resource allocation and budgeting. An interviewee mentioned

“Definitely more collaborative, we brought in the players that we needed into one room and hashed out what everyone wanted, what was mandatory, what was nice to have, and what worked within the budgets, for example. And when something was over budget, we wanted to put it in any way because it enhanced the neighbourhood.”³³²

The partnership also noted that the engagement strategy employed included partners and stakeholders, including the residents and government organizations, which was crucial in designing the project's framework. Some of the identified strategies include conducting homeowner surveys, interviews, sessions with municipal staff and agencies, community meetings and focus groups. Gathering information from the different stakeholders impacted by the project contributed to 'local knowledge which is vital for the success of small cross-sector partnerships.

4.4.2 Influence of Size and Structure on Plan Outcomes in Partenariat Climat Montreal

Partenariat Climat Montréal's mobilization structure is centred on bringing together organizations from many sectors, and its size -large CSP- has been cited as one of the reasons contributing to its

³³¹ Interview with a partner

³³² Interview with a sustainability partner

success. The partnership's size allows for the mobilization of organizations that can pioneer the transition to net-zero greenhouse gas emissions. Regarding the size, an interviewee noted

*“This involved a broad consultation to shape the Climate Plan. This is because very few GHG emissions are actually under the city’s direct control, so we need contributions from all sectors.” “So, we don't feel ourselves to be experts on every subject, but we do have bodies for consultation or points of support in the community that enable us to create a dialogue between the city and these players.”*³³³

Another contributing factor to its success in initiating the partnership is learning from the best practices of international mobilization models, such as the Green Ribbon Commission in Boston and London Business Climate Leaders. Partnership recruitment strategy is also critical, as a respondent mentioned that for significant action to take place, the members of the steering committee have to be on the management team in their individual organizations. Specifically, the interviewee mentioned

*“For the steering committee - to have similar hierarchical levels. So, we also want to have only decision-makers, CEOs, general managers or vice presidents. And not sometimes the environmental director, who is much more involved in these issues. But we really want to be on an equal footing in terms of management, and for us all to be at strategic levels where everyone has their place at the table.”*³³⁴

Moreover, the partnership designs strategies to guarantee efficient communication among its members. As one interviewee pointed out, listening to partners is critical to determining whether the action will be swift and have a significant impact rather than just having partners.

*“... have to listen carefully to our partners. That's why we meet a lot of them, and that's why, well, we evolve according to priorities, and we also go by opportunity.”*³³⁵

The annual strategic planning, which comprises establishing annual targets and enables partners to focus on particular, well-defined goals, is another important element that has been emphasized as crucial to success. This allows partners to direct their actions and our methods of action. Additionally, the Climate Summit gives partners a platform to commit to actions and report on their progress, which is one approach to motivate partners to work together to advance the goals of the partnerships.

³³³ Interview with a member of dedicated staff

³³⁴ Interview with a member of dedicated staff

³³⁵ Interview with a member of dedicated staff

5 Discussion

5.1 Introduction

This study examines the relationship between the size and design of cross-sector partnerships focused on climate mitigation and its influence on achieving plan outcomes, particularly climate goals. To answer the research questions in this study, this chapter synthesizes and assesses the empirical research findings against the literature review. The analysis situates the findings of this thesis within the existing body of research, highlighting their relevance and contributing to a deeper understanding of the subject matter in the context of contemporary scholarly discourse.

5.2 Research Question #1: Size and Design

This research focuses on answering two research questions. The first is “what is the relationship between the size and design of cross-sector partnerships focused on climate mitigation?”

Existing literature indicates that structural features of partnerships focused on addressing sustainability problems adapt to the size of the partnership (Ordonez-Ponce et al., 2021). These structural features include communication, coordination, decision-making, resourcing, budgeting and financing, measuring, monitoring and reporting, multi-level integration, and partner engagement (Dewulf & Elbers, 2018; Peng, 2011; Pfisterer & Van Tulder, 2020; Wong et al., 2020). The table below highlights the key distinctions and similarities between small and large CSPs, validating and extending the existing literature through the Bayview Glen SNAP project and Partenariat Climat Montréal examples.

Table 5.1: Relationship between size and design of partnerships focused on climate mitigation

Structural Feature	Sub-category	Size of partnership	Existing literature	Bayview Glen SNAP project	Partenariat Climat Montréal	Comments	
Decision-making	Decision-making process	Small	Involves all partners	Involves all partners		Validate	
		Large	Has a delegated body		Internal team and executive committee	Validate	
	Configuration models	Small	Constellation model Hub and spoke model Networked Constellation model	Constellation model		Validate	
		Large	Decentralized model Catalyst collaborations model Mission-oriented model Systems connectors model Coalitions model		Constellation model	Validate	
	Modes of governance	Small	Enabling Provisioning	Enabling, Provisioning		Validate	
		Large	Self-governing Regulation		Enabling Provisioning	Validate	
	Coordination	Presence of secretariat	Small	No secretariat, hosted secretariat	No secretariat		Validate
			Large	Hosted secretariat, separate secretariat		Hosted secretariat	Validate
Communication	Process/System	Small	Communications framework Openness and accessibility	Conducting demographic analysis Printing publications in different languages Hiring locals		Validate	

		Large			Presence of a dedicated staff Tailoring communication approach to suit the needs of the partners	Validate
	Channels/ Format	Small	Newsletter Website Meetings Workshops Emails Social events	Emails, workshops, meetings		Validate/Extend External: surveys, interviews, fun fairs, community meetings and focus group discussions
		Large	Annual assembly/gala		Emails, meetings. interactive workshops, emails, Newsletters, website, Climate summit	Validate/Extend Internal: in-person and virtual meetings via Teams or Google Meet, phone calls External: social media platforms, Climate summit
	Conflict Resolution Mechanism	Small	Managerial intervention, internal communication,	Collaboration approach		Validate
		Large	Control approach, collaboration approach		Managerial intervention, collaboration approach	Validate
	Channels for recognition	Small	Awards Media coverage	Media coverage, website, award		Validate
		Large	Events Newsletter Website Meetings Emails		website, media coverage; the climate summit	Validate

			Events Annual assembly			
Resources, Budgeting and Financing	Sources of funding	Small	Government, partner donations, equity investments from investors, or loans	Private sector Public sector Civil society		Validate/ Extend External organizations
		Large	Federal Provincial Private sector		Civil society, Public sector	Validate/Extend- Addition of civil society
	Systems/Processes	Small	Joint decision-making concerning the allocation of resources	Joint decision- making	Solicitation of funds: Collective action Approval of budget: Joint decision- making Modification of budget: Joint decision-making	Validate/Extend: Requires approval from a superior
		Large	The presence of a dedicated staff		The presence of a dedicated staff	Solicitation of funds: Dedicated staff Approval of budget: Executive committee Modification of budget: Executive committee
Measuring, Monitoring and Reporting	Monitoring and Measuring	Small	Baseline metrics Progress indicators Feedback mechanism	Presence of baseline metrics Progress indicators Feedback mechanism		Validate
		Large			Progress indicators Feedback mechanism	Validate

	Reporting	Small	Partner goals Partnership goals	Partnership goals: Website		Validate
		Large	Inclusion of community		Partner goals: Reports during summit Partnership goals: Annual reports, reports from working groups.	Validate

5.2.1 Decision-making

Several configuration models are discussed extensively in existing literature, including the constellation model, hub and spoke model, decentralization model, networked constellation model, coalitions model, and missions-oriented model (Chaplyn et al., 2020; Collaborate CIC, & Dartington Service Lab Design, 2019; Elrod & Fortenberry, 2017; Tamarack, 2017). The constellation model facilitates partnership among organizations across different sectors to achieve a common objective or address a shared issue, with a primary focus on actionable solutions (Chaplyn et al., 2020; Surman & Surman, 2008). In this model, 'constellations' are formed, referring to small, self-organizing action groups, made up of partners involved in the partnership (Chaplyn et al., 2020; Surman & Surman, 2008), as exemplified by the Bayview Glen SNAP project and Partenariat Climat Montréal. A unique feature of the constellation model is its flexibility: when engagement is low or there are indications that the constellation has become irrelevant, it can become inactive or be dissolved without negatively affecting the overall partnership. New action groups can also be formed based on arising needs or opportunities. This adaptability allows for the accommodation of possible changes that naturally occur when organizations collaborate (Surman & Surman, 2008). The constellations evolve opportunistically rather than following a rigid strategic plan, balancing the interests and needs of each action group within the broader intended outcome of the CSP (Surman & Surman, 2008). Additionally, this model preserves the organizational autonomy of partners, as organizations engage only in constellations that address issues that align with their interests (Surman & Surman, 2008).

Catalyst collaboration models are a form of systemic collaboration in which partners build long-term quality relationships as a drive for change (Collaborate CIC, & Dartington Service Lab Design, 2019). Partners work around a common vision or purpose. The catalyst collaboration model has three key unique features. First, it prioritizes learning, not merely for evaluation purposes but to understand trends and past initiatives, using this knowledge to inform and advance innovation and approaches to addressing sustainability-related issues (Collaborate CIC, & Dartington Service Lab Design, 2019). The Bayview Glen SNAP project incorporated several strategies to facilitate learning from local residents and businesses, which contributed to enhancing innovation and improving sustainability efforts. These strategies emphasize the importance of experience and knowledge, which characterize the catalyst collaboration model.

Second, it adopts a systemic perspective, identifying the broad range of factors influencing the issue to be tackled, including mapping the wider ecosystem of actors involved (Collaborate CIC, & Dartington Service Lab Design, 2019). In the Bayview Glen SNAP project, partners and service delivery companies were actively involved in mapping out underlying factors and addressing gaps in

the project. This collaborative effort led to a comprehensive understanding of the issue to be addressed and enabled the implementation of several initiatives, including bike lanes, bike routes, racks and benches, solar lighting for trails, pedestrian walkways and trail systems, improved urban tree canopy cover, enhanced habitat and ecological functions, naturalized plantings including rain gardens and the presence of reforestation areas, demonstrating the effectiveness of the model in achieving transformative and actionable solutions.

Third, it emphasizes equity and inclusion often incorporating technology and platforms to ensure broad accessibility and inclusivity (Collaborate CIC, & Dartington Service Lab Design, 2019; Surman & Surman, 2008). By incorporating community members' feedback into decision-making processes, the Bayview Glen SNAP project enhanced the partnership's approach to integrating accessibility into the project design. Consequently, the project fulfilled the needs of vulnerable populations, such as those with mobility challenges, demonstrating a commitment to equity, inclusion, and diversity.

The empirical findings validate existing literature, demonstrating the adoption of the constellation model by Partenariat Climat Montréal. The partnership has a steering committee, an executive committee, and an internal team comprised of the partnership's dedicated staff and different working groups, referred to as 'constellations' in the literature, focused on buildings, mobility, businesses, and adaptation. Each partner organization belongs to one or more action groups, operating semi-autonomously while aligning with the strategic direction set by the Executive Committee and the internal team. The decision-making efforts of the constellation model are evident in the dissolution of the finance team, and the evolution of the citizens' group into an independent initiative known as the 'Transition en Commun' which reflects the flexibility that characterizes the constellation model.

5.2.1.1 Decision-Making Process

Existing literature highlights two primary approaches to decision-making within small CSPs. In the first approach, CSPs engage in horizontal, non-hierarchical relationships. Here, most or all partners are involved in the decision-making, with each participating organization actively involved in actions and no single partner organization possessing superior authority to enforce rules (Kamiya, 2011; Wettenhall, 2003). This structure ensures equality among partners and promotes collaborative decision-making (Kamiya, 2011; Wettenhall, 2003). Conversely, the second approach is characterized by vertical, hierarchical relationships. In this model, one partner organization holds superior authority over others, sometimes, owing to the provision of funding, controlling decisions and actions within the partnership, and often has the right to unilaterally invoke closure (Wettenhall, 2003).

For large CSPs, decision-making can either be centralized, where a single entity such as a secretariat, an executive committee or a few partners are vested with the decision-making authority (MacDonald et al., 2019; Worthington et al., 2003), or decentralized (Alfantoukh et al., 2018; Osborne & McLaughlin, 2003). For centralized decision-making, power may be delegated to certain committees within the partnership (Kamiya, 2011), which is evident in Partenariat Climat Montréal. The executive committee made up of different partner organizations, makes decisions with the support of the dedicated staff involved in the partnership. For significant decisions, strategic consultations are conducted with the steering committee. Although partners may not have direct decision-making power, they are consulted to provide guidance and direction based on their expertise. This consultation ensures that decisions are well-informed and reflect the collective knowledge of the partnership.

5.2.1.1 Modes Of Governance

According to existing literature, there are four primary modes of governance: self-governing, enabling, provisioning, and regulating. Self-governing refers to the ability of local governments to independently manage and oversee their activities. This includes proper management of properties owned by municipalities (Alber & Kern, 2009). Governance by enabling highlights the role of local government in facilitating and supporting partnership development with other sectors (Ordonez-Ponce et al., 2021). It also involves consultation with partners and external stakeholders who could be impacted by the partnership's outcome, including community members. Bayview Glen SNAP projects reflect this mode of governance through their frequent interactions with community members. In contrast, Partenariat Climat Montréal seeks to enhance engagement with vulnerable populations and marginalized voices, including youths and First Nations. This inclusive governance framework encourages collaboration and shared responsibility, empowering organizations across different sectors and community members to actively participate in advancing the municipality's climate action goals.

Governing by provision involves influencing behaviour through the provision of resources and services (Alber & Kern, 2009). In the case of Partenariat Climat Montréal, governance by provisioning is exemplified by the provision of recommendations and resources to partner organizations and members of the public, facilitating the move towards net-zero GHG emissions. Partenariat Climat Montréal aims to enhance the visibility and accessibility of resources, including high-quality documents and tools, by making them readily available to municipalities, real estate managers, citizens, and the partners involved in the partnership. For the Bayview Glen SNAP project, governance by provisioning is demonstrated through tangible actions to improve community infrastructure and engagement, including efforts to engage local residents in planting native trees and shrubs within the community. Additionally,

the partnership introduced an educational component by organizing training sessions to equip residents with knowledge about environmental improvements for their homes, further illustrating governance by provisioning. Furthermore, during the project's launch event, enlightenment programs were facilitated to educate the community members on the critical role of the park in stormwater management and ecosystem health, highlighting the provision of knowledge and infrastructure to advance sustainable development within the community.

Another mode of governance is 'regulation,' which is considered a traditional governance model. It relies on regulatory measures and enforcement to achieve its goals. The various modes of governance often intersect, with some partnerships incorporating more than one mode of governance in their operations (Alber & Kern, 2009; Linton et al., 2021). These modes of governance provide a framework for understanding how municipalities can address sustainability challenges through different strategies and tools, tailored to their unique contexts and objectives.

5.2.2 Partner Engagement

Existing literature provides a comprehensive understanding of partner engagement levels in cross-sector partnerships, emphasizing the importance of commitment, engagement, and frequency of participation among partner organizations (Koschmann et al., 2012; Ordonez Ponce, 2018). According to Hall and O'Dwyer (2017), engagement levels and frequency of participation in partnership activities reflect how committed and involved partners are, often depending on their roles in the partnership. Sustaining engagement at different levels of the partnership is critical for the partnership's effectiveness, as it ensures that most or all relevant partners are actively contributing toward shared objectives (Gray, 1985). Furthermore, it highlights that the engagement of key partners significantly enhances the likelihood of achieving the partnership's goals. Partners whose mission aligns with the partnership's objectives typically demonstrate higher engagement levels, ensuring that their presence and contributions are both relevant and vital for the partnership's success (Berger et al., 2004; Iteke et al., 2020; Koschmann et al., 2012).

Levels of engagement in multi-stakeholder partnerships are shaped by factors such as power dynamics, discursive constructions, and the broader contextual setting (Benítez-Ávila et al., 2018; Hardy et al., 2005). Partners with greater persuasion, discursive influence or higher status often exhibit higher engagement levels as they significantly shape the partnership's objectives and strategies (Benítez-Ávila et al., 2018; Dewulf & Elbers, 2018). These influential actors help create and sustain shared understandings or "common constructions" that facilitate effective communication and coordination (Hardy et al., 2005). Active participation by these partners enables the production of resources and fosters meaningful conversations, leading to general agreement on issues and solutions

(Hardy et al., 2005; Provan & Kenis, 2008). For instance, in the Partenariat Climat Montréal, engagement varied considerably among partners. A high level of engagement was observed in working group leads and executive committee members who actively contributed to decision-making, budget adherence, capacity building, staff training, and media relations. Conversely, partners with less influence within their industry and less power in the partnership may experience lower engagement due to marginalization or perceived ineffectiveness in shaping discourses (Benítez-Ávila et al., 2018; Hardy et al., 2005). In Partenariat Climat Montréal, low engagement was exhibited by partners who primarily implemented recommendations without participating in development or decision-making processes, with the lowest levels of engagement noted in partners merely listed on the Partenariat Climat Montréal website without any form of involvement. This variance illustrates how power dynamics, discursive constructions, and communication effectiveness influence partner engagement in cross-sector partnerships. Another level of engagement not identified in the literature is the medium level, which was observed in partners who attended meetings and provided feedback but did not assume leadership roles and joined meetings based on their availability.

Disengagement may occur in a partnership due to several factors, including a lack of common understanding, an ineffective communication framework, frustration, perceived marginalization or misalignment with the partners' interests. Additional reasons include inadequate managerial processes, such as an absence of or insufficient training and difficulties in negotiating competing values, inadequate coordination, lack of supervision, and inefficiencies in evaluation mechanisms (Babiak & Thibault, 2009; Selsky & Parker, 2005). Small cross-sector partnerships are usually characterized by high engagement levels, as most or all the partners demonstrate active participation in the partnership (Clarke et al., 2023; Kamiya, 2011). Such partnerships tend to engage their participants more deeply when the objectives are narrow, clearly defined and actionable (Provan & Kenis, 2008). Sometimes, these collaborations tackle technical issues and typically involve a dedicated technical staff who play an active role in the partnership's activities. However, it is common for these staff members to require approval from higher management for major decisions (Waddock, 1991). Consistent with existing literature, the partners involved in the Bayview Glen SNAP showed high engagement levels through substantial and frequent participation. This engagement was evident throughout the project's planning and implementation phases. The initiative included full-day in-person workshops that brought together technical staff and community members to promote social innovation and collaborative problem-solving. These workshops concentrated on identifying key action areas and developing projects within those areas. Additionally, extensive community engagement efforts such as school involvement, public presentations, surveys, and nature walks, further enhanced broad-based input and involvement.

5.2.2.1 Role of Partners

In small CSPs that involve the government, it's not uncommon for the government to take up multiple roles which may have conflicting interests. These roles may include policy advocacy, economic development, elected representative for decision-making, regulator, commercial signatory to the contract, and planner (Becqué et al., 2019; Hodge & Greve, 2007). In the Bayview Glen SNAP project, owing to the limited number of partners, partners assumed various essential roles to ensure success and community impact. The Toronto and Region Conservation Authority played a key role as the initiator, engaging the City of Markham to mitigate flooding and provide watershed protection within the community. It also served as a convener, bringing together community members and partners for events such as electric vehicle festivals and bike days. The City of Markham, along with other municipal divisions and community agencies, contributed by facilitating and coordinating engagement activities. This collaborative effort extended to local schools, businesses, not-for-profit organizations, and utility companies, ensuring comprehensive service delivery and effective community outreach. The diverse roles of partners, including consulting, funding, convening, and service provision, underscore the integrative approach that drove the project's success and sustainability.

Generally, partners in large cross-sector partnerships have defined roles to ensure the partners' engagement and the partnership's continuity. These roles include serving as a coordinator, facilitating interactions and brokering relationships, providing funding, and acting as a convener to bring together various partners, possibly to form action groups (Salon et al., 2010; Yan et al., 2018). Some partners also deliver programs and services, build capacity through the provision of educational services including training and instructional materials, and facilitate the involvement of other levels of government (Becqué et al., 2019; Yan et al., 2018). The roles of partners in Partenariat Climat Montréal align with existing literature, and partners play distinct roles in supporting the initiative. Some partners were financial backers, including the City of Montréal, the Trottier Family Foundation, the McConnell Foundation, and the Fondation du Grand Montréal.

Additionally, partners may function as consultants, initiate projects, advocate for specific causes, and introduce innovative solutions (Becqué et al., 2019; Salon et al., 2010; Yan et al., 2018). These diverse roles highlight partners' contributions, which often depend on their expertise, in advancing collective goals and addressing complex challenges. Partenariat Climat Montréal has partners who are either consultants or action partners, most of whom are industry leaders with specialized expertise. Yet, others are working group leads, responsible for organizing meetings, monitoring project progress, and setting priorities. Some partners are also involved in the planning and co-organization of events, such as the climate summit, where they facilitate discussions and bring together experts and panellists.

5.2.2.2 Recruitment Strategy

A structured framework is essential for defining the roles of partners and the stages involved in recruiting new partners (Austin & Seitanidi, 2012). This framework not only facilitates continuity but also ensures that the partnership goals are consistently met (Kamiya, 2011).

Existing literature identifies some considerations for the recruitment of new partners including mission fit, resource fit, evaluation fit, cycle fit, management fit, workforce fit, cause fit, and cultural fit (Berger et al., 2004; Escher & Brzustewicz, 2020; Peng, 2011). The recruitment strategy for the Bayview Glen SNAP project and Partenariat Climat Montréal illustrate both mission fit and resource fit. Resource fit is demonstrated by the TRCA which leverages its specialized expertise and regulatory mandate in managing watershed plans and floodplains. As one of the 36 conservation authorities in Ontario, TRCA provides municipalities with access to critical environmental management resources and expertise without the need for municipalities to develop these capabilities internally. This arrangement is cost-effective and ensures that municipalities benefit from TRCA's established knowledge and skills. Additionally, it is evident in the selection of utility companies as service providers to facilitate the partnership's activities and implement the partnership's objectives. On the other hand, Partenariat Climat Montréal's resource fit approach is evidenced in the engagement of key industry players with the requisite expertise and resources to achieve the partnership's objective. By focusing on organizations with relevant resources and expertise, the partnership enhances its capacity to drive meaningful change in carbon reduction efforts. This approach helps to mobilize organizations that not only support the mission but also bring valuable assets to the table.

Another recruitment strategy employed by both Partenariat Climat Montréal and Bayview Glen SNAP project is "mission fit" (Linton et al., 2021). For the Bayview Glen SNAP project, this approach is evident in how TRCA's recruitment strategy aligns with its core mission of conserving and managing natural resources. While TRCA is legally mandated to regulate floodplains and develop watershed plans, it also engages in voluntary agreements to provide specialized environmental programs like SNAP. This approach reflects a strong mission fit, as TRCA's goals of environmental stewardship align with the objectives of municipalities seeking to enhance their environmental practices. The voluntary nature of these agreements indicates that municipalities value TRCA's mission-driven approach and choose to collaborate based on shared environmental goals, thereby reinforcing TRCA's commitment to sustainable environmental management through proactive partnerships. Partenariat Climat Montréal prioritizes "mission fit" by seeking organizations whose goals align with the partnership's mission of achieving net-zero carbon emissions. This alignment ensures that new members are committed to the partnership's overarching objectives.

5.2.2.3 Frequency of Engagement

Existing literature on partner engagement often highlights the high level of involvement without specifying the frequency of interactions (Clarke et al., 2023; Ordonez Ponce, 2018; Sdunzik et al., 2022). The research provides information about the frequency of engagement which is underexplored in existing literature. Practical examples like the Bayview Glen SNAP project demonstrate a structured approach to engagement, with regular meetings, ranging from weekly to several times a week, among partners, service providers and other stakeholders, including residents. For Partenariat Climat Montréal, the frequency of engagement varies significantly due to the diverse roles and responsibilities of its partners. Some partners participate in near-weekly meetings, others on a bi-monthly basis, while others contribute only a few hours per month. Yet, there are partners whose engagement is more sporadic, driven by certain events or specific project needs. Additionally, steering committees convene quarterly to review suggestions, recommendations, and responses to proposals, facilitating a structured yet flexible approach to partner interaction and decision-making.

5.2.2.4 Partner Commitment

Typically, commitment is expected to be higher in partners in small CSPs owing to the few number of partners involved (Kamiya, 2011; Koschmann et al., 2012). Commitment in large CSPs varies, depending on the role they assume in the partnership (Alfantoukh et al., 2018; Gray & Purdy, 2018; Rühli et al., 2017). Lead partners, such as the TRCA and Markham, demonstrated a high level of commitment by actively participating throughout the entirety of the Bayview Glen SNAP project, from its formation to its execution. Their involvement encompassed both strategic oversight and hands-on management, ensuring cohesive and continuous support for the project. In contrast, other businesses, including utility companies, were engaged predominantly in the capacity of service providers. These partners concentrated on executing specific tasks and delivering specialized expertise and resources as delineated by the project's needs.

5.2.3 Coordination

According to existing literature, there are three primary models for coordination within networks. The first model involves hosted secretariats, which are sometimes led by an organization with sufficient resources, assuming a central role in managing network activities. When an organization takes the lead in a secretariat, it is referred to as a lead organization-governed network (Kamiya, 2011; Provan & Kenis, 2008). In this model, a single participating member coordinates all major network-level activities and key decisions, resulting in highly centralized governance with asymmetrical power dynamics. Another model is the shared participant governance, in which no single organization acts as a lead or

central coordinator, and the partnership's activities are managed collaboratively among partners, also referred to as 'without or no secretariats' (Clarke et al., 2023; Kamiya, 2011; Provan & Kenis, 2008). This model is often observed in smaller cross-sector partnerships, which typically have low levels of institutionalization and may or may not have hosted secretariats. The Bayview Glen project exemplifies this shared-participant governance model, owing to the absence of a secretariat, otherwise known as 'no secretariat', as the coordination was carried out by the partners involved in the partnership. In contrast, large CSPs usually have 'hosted secretariats' or 'separate secretariats'. Separate secretariats are characterized by high institutionalization and involve a distinct, often independent entity with dedicated staff responsible for coordinating activities and managing the CSP's operations (Clarke et al., 2023; Kamiya, 2011). Hosted secretariats often reflect a medium level of institutionalization, and it involves the presence of a secretariat administratively attached to a partner organization, as shown in Partenariat Climat Montréal. The partnership is managed through a structured administrative framework associated with the Fondation du Grand Montréal, which acts as the hosted secretariat and maintains a medium level of institutionalization.

5.2.4 Communication

The systems and processes of communication within cross-sector partnerships, as highlighted in the literature, are crucial for successfully sharing information among partner organizations (Babiak & Thibault, 2008; Koschmann et al., 2012). Empirical studies emphasize the need to have strategies that facilitate communication encompassing both verbal and nonverbal exchanges and involve the identification of appropriate communication channels and frequency to enable networking, configuration, and achievement of partnership goals and objectives (Dietrich et al., 2010; Koschmann et al., 2012). The effectiveness of communication strategies is evident in the frequency and openness with which partners share ideas and keep each other informed about ongoing changes (Dietrich et al., 2010). The Bayview Glen SNAP project validates and extends information found in existing literature. The partnership adopts an open and accessible communication system to engage with partners and community members continuously. Demographic analysis was conducted to aid the design of effective communication strategies, identifying factors such as spoken languages, income levels, and countries of origin. Additionally, meetings were regularly organized at accessible locations, like local schools, to facilitate community participation. These meetings provided a platform for transparent dialogue, allowing residents to contribute and stay informed about the project's progress. Printed publications were produced in the languages the community spoke, and a local community member was involved to aid communication efforts. Furthermore, the project's communication and public engagement efforts were highly customized to each neighbourhood. For instance, owing to the language barrier, the

Bayview Glen SNAP project engaged a program assistant with cultural connections to the Chinese population making it possible to inform them of changes being made in their community and the need to promote climate action. This personalized approach ensured that the communication process was inclusive and responsive to the community's unique needs.

According to Anderson et al. (2006), project managers should focus on rich communication, both internally within the project team and externally towards the broader project environment. This approach highlights the importance of orientation to ensure project success (Andersen et al., 2006). Koschmann et al. (2012) emphasizes that effective communication practices are essential for increasing the potential of cross-sector partnerships. Such practices include managing the diversity of participants and encouraging meaningful participation. Successful communication practices involve not only having the right partners but also ensuring that communication is compelling enough to manage diverse interests and promote active involvement in the decision-making process (Koschmann et al., 2012; Rein & Stott, 2009).

Communication in large CSPs is typically managed by one or more dedicated staff (Clarke et al., 2023). The communication system for the Partenariat Climat Montréal benefits from a communications manager who ensures regular dialogue with partners and external stakeholders. This is achieved through various methods, including calls, face-to-face meetings, lunches, emails, and other follow-up activities. The communication approach is customized based on the type of partner to ensure the most effective interaction.

5.2.5 Communication Channels

Existing literature mentions two main categories for an open communication climate: external communication and internal communication (Rein & Stott, 2009). Internal communication involves interactions that take place between and within partner organizations (Rein & Stott, 2009). Kolk et al. (2010) mention three possibilities: trickle-up, trickle round, and trickle-down. Trickle-up communication involves communication with superiors, which could be between dedicated staff and superiors, such as members of the executive and steering committees. Trickle-round communication refers to interaction with peers or within or between partnering organizations. Lastly, trickle-down communication involves interaction with subordinates.

The empirical findings reveal that the large cross-sector partnership has three possibilities of open climate communication. Specifically, the Partenariat Climat Montréal mentioned communication among internal members and members of a working group, also known as trickle-round communication. The partnership also has trickle-up communication, which is shown through interactions with members of the executive committee, such as in conflict resolution and decision-

making. Trickle-down communication is evidenced in training new staff, which often involves the executive committee members.

Furthermore, some recognized channels of communication in existing literature include periodic meetings (Schmid & Almog-Bar, 2020), taskforce meetings (Wong et al., 2020), monthly breakfast meetings (Wong et al., 2020) email correspondence (Schmid & Almog-Bar, 2020), and newsletters (Clarke et al., 2023). External communication involves interaction with external constituents, and some identified channels include reports, media coverage, award events and links with international and external organizations (Clarke et al., 2023; Rein & Stott, 2009).

For internal communication, the small and large cross-sector partnerships corroborated existing research; both partnerships used email correspondence, working group meetings, and interactive workshops. Partenariat Climat Montréal further mentioned phone calls and in-person and virtual meetings via Teams or Google Meet.

For external communication, the Bayview Glen SNAP project mentioned conducting surveys, interviews with relevant stakeholders, sessions with the city staff and agency, fun fairs and focus groups. On the other hand, the Partenariat Climat Montréal mentioned the Climate Summit, newsletters, the website, social media platforms, and meetings with indigenous members.

5.2.5.1 Conflict Resolution Mechanism

According to existing literature, divergence in partners' objectives and expectations can lead to misunderstandings (Sdunzik et al., 2022; Selsky & Parker, 2005). Another cause of conflict is power imbalances, which can occur due to the partner's dominance stemming from greater financial assets or higher reputation (Berger et al., 2004; Sdunzik et al., 2022) and may hinder the partnership from reaching its full potential if the main resources are not used efficiently or remain unused (Berger et al., 2004). Research underscores the importance of careful partner selection and implementation to address these challenges. Key factors that drive and improve cross-sector interactions, reduce conflicts, and build trust include alignment of missions and values, emotional bonds between managers, clarity of mutual expectations, and employee involvement at all organizational levels (Berger et al., 2004; Selsky & Parker, 2005).

Effective conflict resolution mechanisms in CSPs thrive in an environment where frequent, open, and efficient communication are prioritized, which builds trust and reduces tension (Kolk et al., 2010). For large CSPs, a structured conflict resolution mechanism is indispensable, emphasizing leadership support and effective communication are essential (Dowling et al., 2016; Koschmann et al.,

2012), as shown in Partenariat Climat Montréal. The partnership emphasizes communication, collaboration, and responsiveness to the needs of all partners. Managerial intervention is prioritized as it engages in extensive consultations with the executive committee. The partnership also seeks inputs from partners ensuring that diverse perspectives are considered and that decision-making processes are inclusive.

Furthermore, internal communication mechanisms, such as employee newsletters or involvement opportunities, further strengthen trust within the partnership (Kolk et al., 2010). Partenariat Climat Montreal employs this approach by creating avenues for open and frequent communication, such as within working groups to build trust and reduce tensions. While striving for consensus, the partnership is also realistic about challenges and has an executive committee charged with decision-making authority. This balanced approach ensures accountability and adherence to the partnership's goals while fostering a cooperative environment that supports shared objectives and mutual understanding.

Another conflict-resolution mechanism includes the collaboration approach (Pfisterer et al., 2020). The collaboration approach prioritizes goal convergence and reaching a consensus, fostering a cooperative environment where partners collaboratively work toward a common objective (Pfisterer & Van Tulder, 2020), which was evident in the Bayview Glen SNAP project. The partnership emphasized transparency, trust, and proactive communication, which are critical elements for fostering cooperation and mutual understanding among partners. By leveraging the Toronto and Region Conservation Authority's extensive experience with previous SNAP projects, the partnership ensured open discussions about risks and uncertainties associated with new approaches. This transparency allowed all partners and stakeholders to understand potential challenges, build trust in the process, and align expectations. The proactive communication and established track record of the TRCA helped foster a shared sense of purpose, contributing significantly to the project's success. Thus, the Bayview Glen SNAP project exemplified a collaborative strategy, prioritizing goal convergence and consensus-building to effectively manage conflicts and achieve its objectives.

Lastly, the control approach emphasizes the use of control mechanisms to prevent opportunistic behaviour and ensure compliance with agreed-upon standards and expectations (Pfisterer & Van Tulder, 2020). This ensures accountability and adherence to the partnership's goals.

5.2.6 Resourcing, Budgeting and Financing

The resourcing, budgeting, and financing systems and processes within cross-sector partnerships exhibit distinct characteristics based on the size and scope of the partnerships. Small CSPs typically depend on collaborative discussions for fundraising (Provan & Kenis, 2008). Existing literature identify funding constraints as a challenge associated with small CSPs, sometimes due to a lack of expertise in grant writing (Ahmad & Shukla, 2014; Provan & Kenis, 2008). However, the Bayview Glen SNAP project had sufficient funding for the implementation of its project. It leveraged funds from the City of Markham, including funds generated by different departments in the municipality, and strategically redirected surplus budgets from infrastructure projects towards advancing the renovation of the Glencrest park, demonstrating an adaptive and resource-efficient budgeting approach. Such financial decisions necessitated approvals from senior staff and the City Council, reflecting a structured and accountable financial management system. The project also had external funding sources including the Federation of Canadian Municipalities and the RBC Blue Water project. The external funding was driven by the project's innovative nature and its potential sustainability impact, which ultimately led to its completion. For budget allocation and adherence, discussion forums were instrumental, and partners engaged in consensual decision-making, collaboratively prioritizing needs and exploring additional funding opportunities. These forums facilitated open dialogue, allowing participants to align goals, share resources, and develop innovative solutions for financial support. This collaborative approach not only optimized budgeting but also fostered trust and transparency among partners, enabling them to address challenges and adjust budgets as necessary while ensuring the project's success and community benefits.

In contrast, large CSPs benefit from the diversity of their partners, sometimes generating funds from partners, making fundraising less challenging (Provan & Kenis, 2008). Governance structures within partnerships are often shaped by mandates or funding incentives, which have significant implications for their effectiveness (Bryson et al., 2006). Government mandates may require funding recipients to engage in collaborative efforts, even in the absence of substantial evidence supporting the efficacy of such partnerships (Bryson et al., 2006). This imposition can affect partnership dynamics and outcomes, potentially resulting in less effective or misaligned initiatives (Emerson et al., 2012). Additionally, the availability of grants or new funding opportunities can catalyze the creation of new partnerships, demonstrating the value of funding in kickstarting partnerships (Emerson et al., 2012; Thomson & Perry, 2006). Successful CSPs hinge on effective budgeting and financial management, as well as the availability of essential resources (Pattberg & Widerberg, 2016; Reinicke & Deng, 2000). These resources are not limited to funding but also include time, technical and logistical assistance,

administrative and organizational support, and the requisite skills for analysis and execution of tasks. Partenariat Climat Montréal's financial management is overseen by an executive committee that approves budgets, ensures adherence to annual budgets and advocates for financial plans. This committee works closely with a dedicated staff member who is responsible for preparing monthly financial reports. These reports identify potential issues or deviations from the budget, allowing the committee to address financial concerns promptly. This collaborative approach enables the partnership to make informed decisions, maintain financial stability, and support ongoing and future activities effectively.

5.2.6.1 Sources Of Funding

Existing literature mentions some identified sources of funding for small CSPs, including the government, partner donations, equity investments from investors, or loans (Ahmad & Shukla, 2014; Suhendra et al., 2023). The Glencrest Park renewal project secured funding from various sources, including federal, municipal and corporate contributions. Notably, the project received a \$60,000 grant from the RBC Blue Water Project, which was part of the private sector support. Federal funding was also a significant contributor, alongside municipal and TRCA support, though no provincial funding was involved at the time.

In addition, several divisions within the City of Markham contributed financially, such as the Urban Design, Sustainability Office, and Infrastructure Department. The project also benefited from external funding partners like the Federation of Canadian Municipalities, which recognized the project's innovative approach to addressing sustainability issues. Internally, Markham's asset management contributed excess funding from related projects, further supporting the initiative.

Large CSPs have more funding opportunities such as government grants, voluntary contributions from partner organizations, and membership fees, among others (Pattberg & Widerberg, 2016; Reinicke & Deng, 2000). Consistent with existing literature, the Partenariat Climat Montréal is primarily funded through voluntary donations from several partner organizations, including Fondation du Grand Montréal, la Fondation familiale Trottier, la Fondation McConnell, and la Ville de Montréal. In addition to these key donors, other philanthropic foundations have contributed since the partnership's inception. Fundraising efforts are also undertaken to cover event costs, though revenue from ticket sales often falls short of covering all expenses.

5.2.7 Measuring, Monitoring and Reporting

The Bayview Glen Partnership and Partenariat Climat Montréal both lack comprehensive monitoring, measuring, and reporting systems with regards to GHG emissions reduction, but they incorporate

assessments for their respective partnership's objectives. For the Bayview Glen Partnership, the approach is consistent with van Tulder et al. (2016) research, which emphasizes the need for monitoring systems to evaluate partnership success. The Bayview Glen project integrates metrics to assess its projects, including enhanced pedestrian connections, recreational upgrades, drainage improvements, and tree canopy restoration. Process indicators are utilized to assess progress, including the presence of playgrounds, naturalized plantings, solar lighting, and improved amenities such as bike racks and softball fields. The project also measures the increased connectivity of sidewalks, establishing designated bicycle routes, improved walkability, positive resident feedback, and enhanced pedestrian safety. This structured approach provides a clear framework for assessing the project's impact and ensures alignment with community needs.

Similarly, Partenariat Climat Montréal integrates feedback mechanisms and adopts quantitative and qualitative indicators to track progress. These include the number of partners engaged, meetings held, attendance rates, and summit registrations. The level of participation and engagement reflects the partnership's success in generating excitement and enthusiasm among stakeholders, including external organizations around climate action. However, the partnership does not currently track progress on reducing carbon footprint which presents a gap in measuring long-term reduction of GHG emissions. Both partnerships highlight the importance of feedback mechanisms but reveal a gap in measuring environmental outcomes, suggesting an area for potential improvement.

Reporting mechanisms for the Partenariat Climat Montréal adhere to the literature on effective partnership management, as outlined by Albers (2010) and Bäckstrand (2006). Regular updates are provided every three months through in-person meetings, sometimes utilizing PowerPoint presentations, keeping partners informed of recent developments and allowing ongoing assessment of activities, especially within working groups. Furthermore, the annual climate summit serves as an avenue for reporting, where partners provide details on their achievements and reinforce their commitments. Although the partnership does not mandate activity reports, it produces an annual report for funders like the City of Montréal, which is available to partners upon request. This report, prepared by the dedicated staff members, synthesizes annual achievements and includes summary presentations of the working groups.

5.2.8 Multi-Level Integration

A multi-level integration framework is crucial for understanding the relationships and interdependencies between federal, provincial and municipal governments across deep decarbonization policy issues (Akomolafe et al., 2024). This framework encompasses the vertical dimension across governance levels and the horizontal dimension of governance (Akomolafe et al., 2024; Corfee-Morlot

et al., 2009). The vertical dimension of multi-level governance recognizes that national governments must partner with sub-national governments to implement climate action strategies effectively. For Partenariat Climat Montréal, although it includes municipal representation, the lack of partnership with Quebec City limited the reach and impact of the partnership. This issue contributed to the dissolution of the finance team, whose decisions were influenced by the provincial government. On the contrary, the Bayview Glen SNAP project exemplifies effective multi-level integration. The partnership included municipal representation, and the provincial government mandated collaboration with the TRCA to carry out specific tasks. This partnership with the TRCA was based on a service-level agreement as recommended by the province.

5.3 The Intended Plan Outcomes of the Partnerships

The following sections provide answers to the second research question: “How do partnership size and structure influence plan outcomes in local CSPs focused on achieving net-zero greenhouse gas emissions?”

The objective of the Partenariat Climat Montréal mission is to mobilize key players in the Montréal community to help reduce GHG emissions by 55% by 2030 and put the metropolis on the path to carbon neutrality by 2050. This ambitious goal underscores the need for a large and diverse partnership structure. The size and structure of Partenariat Climat Montréal allow for a wide range of expertise, resources, and influence, enhancing the partnership's capacity to drive systemic change and achieve significant reductions in GHG emissions. Regarding plan outcomes, particularly climate action, the partnership has successfully engaged over 100 key industry actors across various sectors. It has made significant progress in drafting plans and recommendations to reduce GHG emissions, gaining decision-makers' commitment in these organizations. The progress of the partners in relation to their commitments is reviewed annually against the set objectives.

In contrast, the Bayview Glen partnership focused on a more localized and specific objective: the renovation of Glencrest Park. This completed project demonstrates the efficacy of small CSPs in addressing identified and targeted community needs. The partnership had three lead partners: Toronto and Region Conservation Authority, the City of Markham, and York Region. The City of Markham hired other organizations to assist in developing, enhancing, and implementing the project. Concerning plan outcomes, according to the action plan, the completion of the project is expected to reduce GHG emissions by 6% within 10 years, increase active transportation, reduce the number of trips by car, and achieve net-zero energy, water, waste and emissions by 2050. This is owing to the presence of bike routes, racks and benches, solar lighting for trails, pedestrian walkways and trail systems, improved

urban tree canopy cover, enhanced habitat and ecological functions, naturalized plantings including rain gardens and the presence of reforestation areas. The partnership's size and structure were crucial in ensuring the project's success. The following sections discuss the role of size and structures in achieving the plan outcomes.

5.3.1 Influence of Size on Plan Outcomes

According to existing literature, small CSPs succeed when they focus on narrow or specific issues (Ahmad & Shukla, 2014; Suhendra et al., 2023). For example, the Bayview Glen Partnership concentrated on the renovation of GlenCrest Park and achieved success by maintaining a clear focus on its primary objective while incorporating additional projects such as energy efficiency education. This concentrated focus played a crucial role in ensuring the partnership's success. On the other hand, broad or complicated societal problems are more effectively addressed by large CSPs (Gray & Purdy, 2018; Rühli et al., 2017; Samuel & Clarke, 2022). The Partenariat Climat Montréal exemplifies this approach. It has successfully mobilized key influential organizations from various industries to achieve the ambitious goals set out in the Montréal Climate Plan. This large-scale mobilization is necessary to decarbonize the entire municipality, which cannot be accomplished by a few organizations alone.

"Local knowledge" is another critical factor for small CSPs. The location must be familiar to the partner organizations, either through lived experiences or professional expertise (Laird et al., 2024). This local knowledge enables partners to understand the problem more deeply and design actionable solutions. In the case of the Bayview Glen Partnership, the City of Markham's familiarity with its inhabitants was complemented by a demographic analysis to better reach the community. The partnership also engaged a program assistant with cultural connections to the Chinese population, enhancing its outreach and effectiveness. The partnership also incorporated several strategies to learn from the locals, including incorporating interviews and meetings to better understand the problem.

Identifying potential challenges before forming the partnership is also crucial. For small CSPs, common barriers include funding restraints and the limited scope of the project (Ahmad & Shukla, 2014; Laird et al., 2024). However, limited project scope can be advantageous by allowing the partnership to achieve its objectives and dissolve once the goal is met, as seen with the Bayview Glen SNAP project. Early-stage deliberations can help identify sources of resources needed to kickstart the partnership. It is also essential to ensure adequate funding sources during the project to ensure continuity, preventing the partnership from being disrupted mid-project. The Bayview Glen SNAP project did not experience funding issues, as it got funding from several sources, including partners and external stakeholders.

In contrast, large CSPs typically benefit from various funding sources, as reflected in Partenariat Climat Montréal. However, Partenariat Climat Montréal identified funding as an ongoing challenge. Although it has secured funding from philanthropic organizations, it acknowledged the need for additional financial support to sustain the partnership and implement its projects, including the annual climate summit. The organization has taken actionable steps to secure funding. Other challenges associated with large CSPs include bureaucratic hurdles and power asymmetry, which can hinder inclusivity (Banerjee et al., 2020; Dewulf & Elbers, 2018). While Partenariat Climat Montréal did not mention any bureaucratic hurdles, it recognized the need to be more inclusive. The partnership has plans to effectively engage First Nations, marginalized voices, and youth in the community.

Furthermore, small CSPs are better suited for achieving short-term, localized goals due to their agility and strong internal cohesion (Ahmad & Shukla, 2014; Suhendra et al., 2023), as exemplified by the Bayview Glen partnership that ended upon completion of the project. Conversely, larger partnerships with more formalized structures may be better suited for long-term, large-scale projects due to their capacity to mobilize extensive resources and expertise (Bryson et al., 2006; Gray & Purdy, 2018).

5.3.2 Influence of Structure on Plan Outcomes

A defined structure is critical in achieving desired outcomes in CSPs. Existing literature underscores the importance of structure in achieving sustainability outcomes, including decision-making, communication, resourcing, budgeting and financing, monitoring, measurement and reporting, and multi-level integration (Wong et al., 2020). The findings of this research show some similarities and differences in the structure of small and large CSPs.

Existing literature emphasizes the importance of regular and effective communication practices for successful partnerships (Koschmann et al., 2012). Effective communication strategies facilitate trust, reduce conflicts, and ease tensions (Benítez-Ávila et al., 2018; Dowling et al., 2016; Yaziji, 2009). In facilitating communication, the Bayview Glen SNAP project prioritized regular communication among partners and stakeholders, including local residents and businesses, while Partenariat Climat Montréal benefits from a communications manager who ensures regular communication with partners and external stakeholders. Furthermore, interviews with partners involved in Partenariat Climat Montréal highlighted the importance of recognizing the achievements of partner organizations through newsletters and the Climate Summit. This encourages the partners to increase active participation and collaborative efforts toward achieving the partnership's objectives.

Partner engagement is another crucial structural feature. It is important to select partners with the capacity and willingness to actively engage in the partnership (Berger et al., 2004). In the Bayview Glen SNAP project, the TRCA brought valuable experience from executing similar projects in other municipalities, while the City of Markham provided essential resources and played a key role in recruiting service providers necessary for project execution. In the second case, Partenariat Climat Montréal focuses on engaging influential partners capable of making significant decisions to advance climate action within their respective organizations and industries. This underscores the importance of strategic partner recruitment to effectively meet climate goals. Furthermore, in small CSPs, active engagement from most or all partners is essential for achieving the partnership's goals (Ahmad & Shukla, 2014; Laird et al., 2024). The Bayview Glen SNAP project exemplifies this, with all partners and stakeholders, including city representatives, actively participating. Depending on the project's needs, some partners and community members held in-person workshops daily to advance planning and implementation. For large CSPs like Partenariat Climat Montréal, maintaining engagement across a broad base of partners is vital. Sustainable outcomes depend on the partnership's ability to maintain engagement. This level of engagement highlights the importance of clearly defined partner roles and tasks in achieving the partnership's objectives. To achieve this, the partnership has working group leads who ensure the involvement of their team members in the partnership.

Another important structural feature is engaging the right partners who possess the requisite skills or resources to facilitate the achievement of desired outcomes (Berger et al., 2004; Itেকে et al., 2020; Koschmann et al., 2012). Current literature highlights several recruitment strategies depending on the need of the partnership, including mission fit, resources fit, workforce fit, cycle fit, and culture fit (Berger et al., 2004; Hardy et al., 2003; Koschmann et al., 2012). In the Bayview Glen partnership, the Toronto and Region Conservation Authority brought valuable experience from executing similar projects in other municipalities, while the City of Markham provided essential resources and played a key role in recruiting service providers necessary for project execution. In the second case, Partenariat Climat Montréal focuses on engaging influential partners capable of making significant decisions to advance climate action within their respective organizations and industries. This underscores the importance of strategic partner recruitment to effectively meet climate goals.

Decision-making processes also significantly influence plan outcomes. Decision-making is often consensual in small CSPs, with all or most partners actively involved. This structure, known as participant-governed networks, ensures equality among partners and promotes collaborative decision-making (Kamiya, 2011; Wettenhall, 2003). However, it can be time-consuming and can slow down processes (Provan & Kenis, 2008). This was evident in the Bayview Glen SNAP project, where

gathering inputs from stakeholders was time-consuming but ultimately beneficial for understanding community needs. For large cross-sector partnerships, a decentralized decision-making process is ideal (Clarke et al., 2023). Lead organization-governed networks, where decision-making authority is vested in one or a few organizations, streamline processes and enhance accountability (Provan & Kenis, 2008). This structure is beneficial for quickly implementing large-scale initiatives. Partenariat Climat Montréal employs an executive committee to make decisions, a steering committee to inform decisions, and a staff team to facilitate the decision-making process.

Baseline metrics, progress indicators, and feedback mechanisms are essential for measuring and monitoring both small and large CSPs (Babiak, 2009; van Tulder et al., 2016). The Bayview Glen SNAP project did not have baseline metrics to measure its starting point for GHG emissions, but they incorporated qualitative assessments, such as the lack of designated bicycle routes, trails and bike paths, and introduced several feedback mechanisms during the project's planning and implementation, ultimately leading to the project's completion. Similarly, Partenariat Climat Montréal did not establish baseline metrics but now utilizes output indicators, such as the number of partners reached, the number of meetings held, the attendance rate of partner organizations at meetings, the number of people who register for summits, and the number of partners willing to contribute to the summits. Partenariat Climat Montréal does have Montreal's community-wide GHG inventories to assess if it is making progress at that scale. The two cases show that the absence of baseline metrics for GHG emissions and lack of tracking of emission reductions through the partnership's efforts hampers the ability to measure progress in reducing GHGs through collaborative efforts.

In the literature, reporting is considered vital in partnerships (van Tulder et al., 2016). It helps to inform and support the legitimacy and credibility of partnerships as an effective and efficient approach to addressing complex sustainability-related or environmental issues (van Tulder et al., 2016). Sometimes, reporting may not have a direct or immediate benefit on the partnership, as demonstrated in the Bayview Glen partnership. However, as noted by Suhendra (2023), reporting contributes to identifying best practices and helps to prevent wasted efforts on redundant strategies. Furthermore, documenting best practices facilitates the replication of successful models in similar contexts and conserves resources that would otherwise be utilized for researching effective strategies (Ahmad & Shukla, 2014; Suhendra et al., 2023). The Partenariat Climat Montréal case indicates that reporting motivates partners by highlighting outcomes and achievements, encouraging further efforts. However, it emphasized the need to prevent greenwashing by ensuring the accuracy of reports.

Another key structural feature is multi-level integration, which is crucial when addressing climate-related challenges (Akomolafe et al., 2024). Understanding the jurisdiction of the problem,

which could be at the federal, provincial, or municipal level, is vital (Akomolafe et al., 2024; Corfee-Morlot et al., 2009). This understanding determines the level of government to recruit in the partnership and the strategies for effectively engaging the right partners. For instance, due to jurisdictional policies and challenges, the Partenariat Climat Montréal had to dissolve its finance team. However, given the partnership's size and configuration model, the dissolution did not impact the overall partnership. This highlights the resilience that characterizes large CSPs and the importance of multi-level integration in CSPs.

Financing, budgeting, and resourcing are crucial to the success of partnerships. According to existing literature, the availability of resources including time, funds, knowledge, technological and logistical support, and the requisite skills for implementation, along with their proper allocation, is crucial for effective collaboration and the achievement of climate goals (Bryson et al., 2006; Emerson et al., 2012; Huxham & Vangen, 2004). In the Bayview Glen partnership, the success of the project can be attributed to its access to adequate funding from multiple sources, which facilitated the successful execution of its planned outcomes. The partnership's ability to leverage multiple funding streams ensured that the necessary resources were available to meet its objectives. Conversely, Partenariat Climat Montréal, despite its ongoing efforts to secure additional funding, highlights a persistent need for further financial support to effectively manage and execute its projects. This underscores the significant correlation between access to sufficient funding and the ability to efficiently carry out administrative and operational tasks and achieve intended plan outcomes.

6 Conclusion

6.1 Introduction

This section synthesizes the research objectives and outlines the key contributions of this thesis to practice. It provides an overview of the practical implications and discusses the study's limitations. Additionally, the section offers recommendations for future research and identifies potential areas for further study.

6.2 Objectives of the Study

The study examines the relationship between the size and design of climate mitigation partnerships, highlighting the similarities and differences between small and large CSPs and their influence on achieving plan outcomes, specifically, net-zero climate action goals.

A common feature across both partnerships is the presence of qualitative assessments and the lack of baseline metrics for GHG emission reduction. The Bayview Glen Partnership established qualitative assessments to monitor advancements with regard to the renovation of Glencrest Park, which helped achieve its objective. Similarly, the Partenariat Climat Montréal uses qualitative assessments to track progress, identifying gaps, areas for improvement, and growth. Hence, highlighting the relevance of monitoring mechanisms in both small and large CSPs. Partenariat Climat Montréal also emphasizes the importance of reward systems, which propel partners to increase participation and meaningfully engage in the partnership. Reward systems in Partenariat Climat Montréal include highlighting the achievements of partners through avenues like newsletters and the Climate Summit.

Communication emerged as another key similarity in both small and large CSPs. The Bayview Glen SNAP project demonstrated the importance of communication by incorporating multiple internal and external communication channels while prioritizing community engagement, which contributed to refining and enhancing the project plan. Partenariat Climat Montréal also emphasized the importance of communication, demonstrated through the presence of a dedicated staff which addresses partners' needs and tailors communication strategies accordingly and through developing strategies aimed at involving vulnerable populations and marginalized voices, including the youth and Indigenous peoples.

Another similarity is the emphasis on funding by both partnerships. Bayview Glen SNAP project had multiple funding sources and engaged in collaborative decision-making, which is a characteristic of small CSPs, while Partenariat Climat Montreal had funders who contributed funding that enabled the formation of the partnership. Additionally, both partnerships secured funding at the implementation stage. The Bayview Glen SNAP project got funding from different organizations,

including FCM and RBC, which played a key role in achieving the partnership's objective. Partenariat Climat Montreal also has a dedicated staff in charge of fundraising to fund its partnership's activities including the Climate Summit. Therefore, highlighting the importance of identifying funding sources at the inception and across different stages of the partnership.

A notable divergence lies in engagement strategies. Typically, small CSPs are characterized by high levels of engagement, which was evident in the Bayview Glen SNAP project. The Bayview Glen SNAP project highlighted the frequent involvement of partners, which accelerated the project's progress and contributed to achieving the project's objective. In contrast, large CSPs have varied levels of engagement, often determined by the roles of the partners. The Partenariat Climat Montréal has committees (steering and executive) and action groups, with each partner organization's level of involvement depending on their role in the partnership. Engagement levels range from high to no engagement, prioritizing engagement from partners essential to advancing the 'Montréal Climate Plan' objectives. For large cross-sector partnerships, it's crucial to establish partner roles to sustain partners' engagement across different stages of the partnership.

Another key finding is the differing emphasis on reporting. While the Bayview Glen SNAP project did not mention reporting as crucial for achieving plan outcomes, the Partenariat Climat Montréal recognized it as crucial for success. Verbal reports presented during summits encouraged partners to contribute significantly to implementing strategies to reduce greenhouse gas emissions.

Furthermore, 'local knowledge' is highlighted as crucial for success in small CSPs, as shown in the Bayview Glen SNAP project. To enhance its knowledge of the problem, the partnership incorporated several strategies, including conducting demographic analysis, facilitating meetings with community members, conducting interviews and organizing focus groups. On the other hand, Partenariat Climat Montreal depended on the professional expertise of the partners and prioritized engaging partners with substantial experience and influence in their respective industries.

Additionally, the study revealed the importance of multi-level integration within small and large CSPs and its impact on outcomes. For instance, the finance team in the Partenariat Climat Montréal was dissolved due to the province's financial regulations, highlighting the influence of jurisdictional boundaries on decision-making processes, which may hinder plan outcomes.

6.3 Contribution to Scholarship

This research contributes to research focusing on sustainable cities and communities by conducting an empirical study to advance the literature on the relationship between the size and design of cross-sector

partnerships and their influence on advancing climate mitigation. The research advances knowledge on small and large CSPs and structural features that are crucial for success in climate mitigation. The findings will be useful to academic scholars researching net-zero climate action, climate change, CSPs, and strategies for implementing municipal climate action plans. It also provides recommendations for future research areas that can be explored by other scholars in the management field.

6.4 Practical Implications

The findings of this thesis are significant for sectors focused on climate mitigation, including private, public, and civil society organizations. For practitioners seeking to establish CSPs to mitigate climate change, it is crucial to identify the scope of the partnership's objective which could be project-focused, industry-specific, or community-wide. This is key in determining the size and structural features needed to achieve the partnership's intended outcome. It is also important to identify the jurisdiction of the issue to be tackled if it's regulated by the local, provincial or national government, as it would determine the level of government to engage in the partnership if the CSP's objective is to be achieved. Furthermore, defining baseline metrics, particularly in relation to GHG emissions, progress indicators, and accountability mechanisms, is crucial to the success of CSPs. This will allow for tracking of progress, gathering of insights and introduction of refinements, where applicable and necessary and ultimately, keep the partnership on track to achieve its objective.

Another essential step is identifying the strategies to keep partners engaged in the partnership. CSPs' effectiveness hinges on the active participation of relevant partners. Defining strategy for engagement at the early stages of the partnership includes defining roles and expectations and identifying recruitment strategies, while at the latter stages of the partnership, it identifies key partners needed to execute tasks. Documentation of best practices and lessons learned is equally vital. It aids in replicating similar models within similar contexts, possibly in other locations. Identifying funding sources is also crucial to success, as a lack of funding can stunt the progress of the partnership and hinder plan outcomes.

This research enhances understanding of SDG 11 -Sustainable Cities and Communities and SDG 13 - Climate Action by highlighting actionable strategies that have been employed by municipalities to advance climate initiatives. Additionally, it contributes to SDG 17 (Partnerships for the Goals) by offering valuable information on the structural features and scales of partnerships that are conducive to achieving these goals. This study is a practical guide for organizations looking to form effective CSPs and implement sustainable practices within their respective fields, particularly in municipalities that have developed climate action plans and are actively working towards urban sustainability.

6.5 Limitations and Future Research

The research examined the size and design of two CSPs in Canada -one small and one large, which are either in the implementation phase or have completed their action plans. Twelve additional case partnerships within Canada were explored as part of the Municipal Net-Zero Research Action Partnership. However, the research's scope is geographically limited to Canada. Future research could extend to other regions outside Canada, identifying best practices from international CSPs that could significantly enhance outcomes. Notably, one of the cases - Partenariat Climat Montréal mentioned learning from the best practices of two international mobilization models, the Green Ribbon Commission in Boston and the London Business Climate Leaders and adapting these insights to strengthen the partnership.

Additionally, future research could explore the impacts of climate action plans on marginalized or vulnerable populations and their involvement in these partnerships. This area of study would provide valuable insights into ensuring that climate action initiatives are inclusive and equitable, addressing the needs and challenges of all community members. In essence, tackling climate change without overlooking other SDGs.

Another potential area of future research is exploring the role of power dynamics, focusing on episodic power, in shaping partner engagement and its impact on environmental and plan outcomes. Empirical studies have extensively explored systemic power, referring to power relations based on structural features, including configuration models and their influence on decision-making processes (Collaborate CIC, & Dartington Service Lab Design, 2019; MacDonald et al., 2019; Surman & Surman, 2008). However, studies on power relations remain underexplored, particularly with those involved in decision-making in CSPs. These power relations include direct power- the influence one actor has on another actor to undertake an action that does not align with their interest; indirect power ability of an actor to influence the decision-making process by marginalizing or disregarding the issues and suggestions presented by another actor and ideological power- the manipulation of another actor's perception of their own interests, subtly shaping their decisions and actions (Dewulf & Elbers, 2018; Gray & Purdy, 2018)The research could focus on how these shape the engagement of partner organizations across different stages of the partnership and influence its achievement of outcomes, especially climate mitigation.

In conclusion, the findings of this research are significant for sectors focused on climate mitigation, including private, public, and civil society organizations. It contributes by conducting an empirical investigation to advance the literature on the implications of the size

and structure of CSPs on advancing the implementation of climate action plans in municipalities. The findings from this research highlight the importance of a large CSP for achieving community-wide action, but also that a small partnership can be ideal for a targeted project. The structure of the partnership should match its size and consider the implication of structure to ensure success. Given the urgency for addressing the climate emergency, learning from replicable partnerships will help others to pursue collaborative climate action. While the research focuses on CSPs within Canada, future studies could expand on best practices available globally and investigate the inclusion of marginalized communities in climate action plans.

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7 Appendices

Appendix A: University of Waterloo Ethics Clearance

University of Waterloo

Notification of Ethics Clearance to Conduct Research with Human Participants

Principal Investigator: Amelia Clarke

Student Investigator: Naima Samuel

Student Investigator: Ebosetale Isabu

Administrative Support: Samantha

Linton

Collaborator: Eduardo Ordonez-Ponce

(Athabasca University)

Faculty supervisor: Laura Tozer

(University of Toronto)

Collaborator: Adriane MacDonald

(Concordia University)

Faculty supervisor: Manuel Reimer

(Wilfrid Laurier University)

Collaborator: Mark Roseland (Simon

Fraser University)

Student investigator: Iccha Kuar Kohli

(University of Toronto)

Research assistant: Jennifer Dobai

(Wilfrid Laurier University)

Faculty Supervisor: Corrine Cash

(Mount Allison University)

Research assistant: Carleigh MacKenzie (Mount

Allison University)

Research assistant: Kat Dervenis (Mount Allison

University)

File #: 45753

Title: Exploring cross-sector partnership structures for equitable climate action in Canadian municipalities

The Human Research Ethics Board is pleased to inform you this study has been reviewed and given ethics clearance.

Initial Approval Date: 11/07/23 (m/d/y)

University of Waterloo Research Ethics Boards are composed in accordance with and carry out their functions and operate in a manner consistent with, the institution's guidelines for research with human participants, the Tri-Council Policy Statement for the Ethical Conduct for Research Involving Humans (TCPS2 2022), the Ontario Personal Health Information Protection Act (PHIPA), and all laws and regulations of the province of Ontario (as applicable). Additionally, CREB operates in a manner consistent with the International Conference for Harmonization of Technical Requirements for Pharmaceuticals for Human Use (ICH) Guidance E6(R2): Good Clinical Practice, the International Organization for Standardization of Good Clinical Practices (GCP) as set out by ISO 14155 - Clinical investigation of medical devices for human subjects, Part C, Division 5 of the Food and Drug Regulations, Part 4 of the Natural Health Products Regulations, Part 3 of the Medical Devices Regulations. Both Boards are registered with the U.S. Department of Health and Human Services under the Federal Wide Assurance, FWA00021410, and IRB registration number IRB00002419 (HREB) and IRB00007409 (CREB).

Expiry Date: 11/08/24 (m/d/y)

Multi-year research must be renewed at least once every 12 months unless a more frequent review has otherwise been specified. Studies will only be renewed if the renewal report is received and approved before the expiry date. Failure to submit renewal reports will result in the investigators being notified ethics clearance has been suspended and Research Finance being notified the ethics clearance is no longer valid.

Level of review: Delegated Review

Signed on behalf of the Human Research Ethics Board



Karen Pieters, Manager, Research Ethics, karen.pieters@uwaterloo.ca, 519-888-4567, ext. 41495

This above-named study is to be conducted in accordance with the submitted application and the most recently approved versions of all supporting materials.

Documents reviewed and received ethics clearance for use in the study and/or received for information: file: N-ZAPWG4-recruitment-email-interview_v2_20231031.pdf

file: N-ZAPWG4-information-letter_v2_20231031.pdf

file: N-ZAPWG4-confirm-interview-email-v2_20231031.pdf file: N-ZAPWG4-reminder-interview-email-v2_20231031.pdf file: N-ZAPWG4-cancellation-interview-email-v1_20230913.pdf

file: N-ZAPWG4-validate-interview-responses-email_v2_20231106.pdf file: N-ZAPWG4-interview-guide_v2_20231031.pdf

file: N-ZAPWG4-thank-you-email_v2_20231031.pdf

file: N-ZAPWG4-consent-interview-email-v3_20231106.pdf file: N-ZAPWG4-interview-script_v2_20231106.pdf Approved Protocol Version 3 in Research Ethics System This is an official document. Retain for your files.

You are responsible for obtaining any additional institutional approvals that might be required to complete this study.

Appendix B (English): N-Zap WG4 Interview: Recruitment Email

Subject: Interview: Exploring cross-sector partnerships for equitable climate action in Canadian municipalities (N-ZAP)

Sender: University of Waterloo,

Dear [Title Name],

We are inviting you to participate in an interview that aims to understand cross-sector partnerships for local climate action across Canada. This interview is one of many interviews under the initiatives from the Municipal Net-Zero Action Research Partnership (N-ZAP)*. This case study is being conducted by Ebosetale Hope Isabu under the supervision of Dr. Amelia Clarke. In addition, this is part of a PhD research study led by Naima Samuel, under the supervision of Dr. Amelia Clarke at the University of Waterloo, that seeks to explore cross-sector partnership governance structures adopted by Canadian municipalities for implementing local climate action plans, and understand how effectiveness of these partnerships is measured in delivering outcomes, including the embedding of equity in the partnerships structures. As part of Naima's PhD dissertation, case stories will be created from information gathered through this interview and other interviews, and a cross-case analysis will be done to generate findings.

By agreeing to participate in this interview, you will:

- Take part in a 90-minute virtual interview to answer questions on the background, purpose, governance structures, evaluation of cross-sector partnerships for local climate action.
- Gain access to cutting-edge resources on climate accounting, measurement and collaborative governance produced by the N-ZAP team.
- Have the opportunity to aid in the development of key deliverables, including an advanced collaborative governance guide for equitable climate action.
- Have the opportunity to contribute to the climate conversation at a national level.
- Help us have a complete picture of the local efforts underway across the country.

The primary goal of N-ZAP is to support Canadian municipalities as they monitor, measure and achieve their greenhouse gas (GHG) targets. We aim to ensure that municipal emissions reduction projects, policies and programs are aligned with Canada's national reduction commitments.

Your insight will be extremely valuable in allowing us to create innovative climate resources and help municipalities accelerate their climate action efforts. The information collected in this interview will be compiled and analyzed to aid in the development of a key deliverable, specifically the advanced collaborative governance guide for equitable climate action.

Participation in this interview is voluntary. Attending the interview does imply consent of participation. You may decline answering any questions you feel you do not wish to answer, and you can withdraw your participation at any time by not providing your responses or exiting the interview. You are unable to withdraw after the interview is complete. Any attributed quotations from you will be first validated by you to obtain your consent. There are no known or anticipated risks to your participation in this interview. The information collected from this interview will be stored for at least ten years and only accessed through a password-protected cloud platform.

Please take a few moments to review the attached information letter and to schedule an interview through the Acuity Scheduling link below by [Date and Time]. The questions in the interview focus on the background and purpose of the partnership and your organization's role in it, as well as structures for governing and evaluating the partnership.

[Acuity Link]

You will receive an email confirming the date and time of the interview, and the format of the interview. Please note the interview will take place virtually over Zoom. The Zoom link will be shared in the confirmation email.

We are looking forward to hearing from you and learning more about your progress towards advancing Canada's climate commitments.

Regards,

Ebosetale Hope Isabu

MES Candidate, University of Waterloo

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Board (REB 45753). If you have questions for the Board, contact the Office of Research Ethics, toll-free at 1-833-643-2379, 1-519-888-4440, or reb@uwaterloo.ca.

*N-ZAP is a research partnership funded by the Government of Canada through the Climate Action and Awareness Fund (CAAF) and jointly led by the University of Waterloo, the Federation of Canadian Municipalities' Green Municipal Fund (FCM) and ICLEI Canada, working with 11 other academic institutions, and 9 other national organizations and 13+ municipal partners.

Appendix B (Français) : N-ZAP GT4 Entrevue : Courriel de recrutement

Objet : Interview : Exploration des partenariats intersectoriels pour une action climatique équitable dans les municipalités canadiennes (PRAC)

Expéditeur : Université de Waterloo, Candidate à la maîtrise, Ebosetale Hope Isabu

Cher [Nom du titre],

Nous vous invitons à participer à un entretien visant à comprendre les partenariats intersectoriels pour l'action climatique locale au Canada. Cet entretien est l'un des nombreux entretiens réalisés dans le cadre des initiatives du Partenariat de recherche-action du Partenariat de recherche-action sur la carboneutralité municipale (P-RAC). Cette étude de cas est menée par Ebosetale Hope Isabu sous la supervision d'Amelia Clarke. En outre, cette étude fait partie d'une recherche doctorale menée par Naima Samuel, sous la supervision du Dr. Amelia Clarke à l'Université de Waterloo, qui vise à explorer les structures de gouvernance des partenariats intersectoriels adoptés par les municipalités canadiennes pour mettre en œuvre les plans d'action climatiques locaux, et à comprendre comment l'efficacité de ces partenariats est mesurée en termes de résultats, y compris l'intégration de l'équité dans les structures de partenariat. Dans le cadre de la thèse de doctorat de Naima, des études de cas seront créées à partir des informations recueillies lors de cet entretien et d'autres entretiens, et une analyse croisée des cas sera effectuée pour générer des conclusions.

En acceptant de participer à cet entretien, vous vous engagez à

- Participer à un entretien virtuel de 90 minutes pour répondre à des questions sur le contexte, l'objectif, les structures de gouvernance, l'évaluation des partenariats intersectoriels pour l'action climatique locale.
- Accéder à des ressources de pointe sur la comptabilité climatique, la mesure et la gouvernance collaborative produites par l'équipe du PRAC.
- Avoir la possibilité de contribuer à l'élaboration de produits clés, y compris un guide avancé de gouvernance collaborative pour une action climatique équitable.
- Avoir la possibilité de contribuer à la conversation sur le climat au niveau national.

- nous aider à avoir une vue d'ensemble des efforts locaux en cours dans tout le pays.

L'objectif principal du PRAC est d'aider les municipalités canadiennes à surveiller, mesurer et atteindre leurs objectifs en matière de gaz à effet de serre (GES). Nous voulons nous assurer que les projets, les politiques et les programmes de réduction des émissions municipales sont conformes aux engagements nationaux du Canada en matière de réduction des émissions.

Votre point de vue sera extrêmement précieux pour nous permettre de créer des ressources climatiques innovantes et d'aider les municipalités à accélérer leurs efforts en matière d'action climatique. Les informations recueillies lors de cet entretien seront compilées et analysées afin de contribuer à l'élaboration d'un produit livrable clé, à savoir le guide de gouvernance collaborative avancée pour une action climatique équitable.

La participation à cet entretien est volontaire. Le fait d'assister à l'entretien implique un consentement à la participation. Vous pouvez refuser de répondre à toute question à laquelle vous ne souhaitez pas répondre, et vous pouvez retirer votre participation à tout moment en ne fournissant pas vos réponses ou en quittant l'entretien. Vous ne pouvez pas vous retirer une fois l'entretien terminé. Toutes les citations qui vous sont attribuées seront d'abord validées par vous afin d'obtenir votre consentement. Votre participation à cet entretien ne présente aucun risque connu ou anticipé. Les informations recueillies lors de cet entretien seront conservées pendant au moins dix ans et ne seront accessibles que par l'intermédiaire d'une plateforme en nuage protégée par un mot de passe.

Veuillez prendre quelques instants pour lire la lettre d'information ci-jointe et pour planifier un entretien via le lien Acuity ci-dessous avant le [Date et heure]. Les questions de l'entretien portent sur le contexte et l'objectif du partenariat et le rôle de votre organisation dans celui-ci, ainsi que sur les structures de gouvernance et d'évaluation du partenariat.

[Lien Acuity]

Vous recevrez un courriel confirmant la date et l'heure de l'entretien, ainsi que son format. Veuillez noter que l'entretien se déroulera virtuellement sur Zoom. Le lien Zoom sera communiqué dans l'e-mail de confirmation.

Nous sommes impatients de vous entendre et d'en savoir plus sur les progrès que vous avez accomplis pour faire avancer les engagements du Canada en matière de climat.

Je vous prie d'agréer, Madame, Monsieur, l'expression de mes salutations distinguées,

Ebosetale Hope Isabu

Candidate à la maîtrise, Université de Waterloo

Cette étude a été examinée et a reçu l'approbation du comité d'éthique de la recherche de l'Université de Waterloo (CER n° 45753). Si vous avez des questions à poser au Comité, veuillez contacter le Bureau d'éthique de la recherche au numéro gratuit 1-833-643-2379, au 1-519-888-4440, ou par courriel à l'adresse reb@uwaterloo.ca.

Le P-RAC est un partenariat de recherche financé en partie par le gouvernement du Canada par l'intermédiaire du Fonds d'action et de sensibilisation pour le climat (FACC) et dirigé conjointement par l'Université de Waterloo, le Fonds municipal vert (FMV) de la Fédération canadienne des municipalités et ICLEI Canada, en collaboration avec 11 autres établissements universitaires, 9 autres organisations nationales et 13 partenaires municipaux.

Appendix C (English): N-ZAP WG4 Interview Guide

Subject: Interview - Exploring cross-sector partnerships for equitable climate action in Canadian municipalities (N-ZAP)

Preamble

This study aims to capture information about cross-sector partnerships for local climate action across Canada. This interview is one of many interviews under the initiatives from the Municipal Net-Zero Action Research Partnership (N-ZAP).

This interview will take approximately 60 minutes to complete. The questions relate to the background, purpose, governance structures, and evaluation of the partnership that your organization has formed with the local government and other partners to take action towards climate mitigation by reducing the quantity of Greenhouse Gases (GHG) emitted into the atmosphere.

Interview Questions

Partnership Perspective (interview conducted with members of oversight body and/or secretariat)

Background

1. Please tell me about yourself starting with your name, your role, how you are involved, and for how long have you been involved in this partnership. (Background of participant)

Purpose

2. Tell me about purpose and goals of this partnership, including key climate and equity goals of the partnership and intervention/approach used.

Governance structure

The next series of questions are about the partnership's governance structure.

3. Tell me about the governance structure of the partnership.

Oversight

Next, I am going to ask about decision-making systems and oversight

4. Tell me how decisions are made in this partnership and how partners are involved in decision-making.

Coordination

Next, I am going to ask about coordination mechanisms.

5. Tell me how partnership activities are coordinated.

Measuring, monitoring, and reporting

Next, I am going to ask about measuring, monitoring, and reporting

6. Describe how measuring, monitoring, and reporting on progress, impact, and outcomes are done in this partnership, and how the community is included in this process.
7. Describe how accountability is integrated into measuring, monitoring, and reporting on progress, impact, and outcomes.

Communication

Next, I am going to ask about communication systems

8. Tell me about the approach to communications in this partnership, including conflict resolution mechanisms used.

Partner engagement

Next, I am going to ask about partner engagement

9. Tell me about the approach to partner engagement in this partnership and the diversity of partners.

Resourcing, budgeting, and financing

Next, I am going to ask about resourcing, budgeting and financing.

10. Tell me about the resourcing, budgeting, and financing in this partnership.
Finally, in this section on the partnership structure, I am going to ask about equity considerations.

11. Tell me about equity considerations in the governance structure.

Evaluation

This next set of questions goes deeper into your evaluation systems.

- 12. Tell me about the outcomes and impact you hope to achieve through this partnership.
- 13. Tell me how effectiveness for this partnership is defined and evaluated.

Reflections

And lastly, ...

- 14. What are your reflections on lessons learned and any advice you would you give about partnerships for equitable local climate action.

Conclusion

- 15. May I follow-up with you over email at a later date if I want to clarify anything in this interview?

Partner Perspective (interview conducted with staff in partner organizations)

Background

- 1. Please tell me about yourself starting with your name, your role, how you are involved, and for how long have you been involved in this partnership. (Background of participant)

Purpose

- 2. Tell me about your goals for this partnership, including key climate and equity goals.

Governance structure

The next question is about the partnership’s governance structure.

- 3. Tell me about your involvement in the governance structure of this partnership, including in oversight, coordination, communications, engagement with partners, measuring, monitoring, and reporting, and resourcing, budgeting, and financing.

Evaluation

Next, I am going to ask about evaluation systems.

- 4. Tell me about the outcomes you hope to achieve through this partnership.

Reflections

And lastly, ...

5. What are your reflections on lessons learned and any advice you would give about partnerships for equitable climate action?

Conclusion

6. May I follow-up with you over email at a later date if I want to clarify anything in this interview?

Thank you for participating in this interview. The response from this interview will be compiled and analyzed. I will be following-up with you to share the compiled information and obtain your consent, to ensure the analysis accurately capture and reflect your responses.

Appendix C (Français): Guide du GT4 PRAC

Sujet : Interview - Explorer les partenariats intersectoriels pour une action climatique équitable dans les municipalités canadiennes (PRAC)

Préambule

Cette étude vise à recueillir des informations sur les partenariats intersectoriels pour l'action climatique locale à travers le Canada. Cet entretien est l'un des nombreux entretiens réalisés dans le cadre des initiatives du Partenariat de recherche-action sur la carboneutralité municipale (P-RAC). Cet entretien durera environ 90 minutes. Les questions portent sur le contexte, l'objectif, les structures de gouvernance et l'évaluation du partenariat que votre organisation a formé avec le gouvernement local et d'autres partenaires afin de prendre des mesures d'atténuation du climat en réduisant la quantité de gaz à effet de serre (GES) émis dans l'atmosphère.

Questionnaire

Perspective du partenariat (entretien avec des membres de l'organe de surveillance et/ou du secrétariat)

Contexte

1. Veuillez-vous présenter en commençant par votre nom, votre rôle, la manière dont vous êtes impliqué et la durée de votre implication dans ce partenariat. (Contexte du participant)

Objectif

2. Décrivez-moi l'objet et les objectifs de ce partenariat, y compris les principaux objectifs du partenariat en matière de climat et d'équité, ainsi que l'intervention/l'approche utilisée.

Structure de gouvernance

La série de questions suivante porte sur la structure de gouvernance du partenariat.

3. Décrivez-moi la structure de gouvernance du partenariat.

Contrôle

Je vais ensuite poser des questions sur les systèmes de prise de décision et de contrôle

4. Expliquez-moi comment les décisions sont prises dans ce partenariat et comment les partenaires sont impliqués dans la prise de décision.

Coordination

Je vais ensuite vous interroger sur les mécanismes de coordination.

5. Expliquez-moi comment les activités du partenariat sont coordonnées.

Mesure, suivi et rapports.

Je vais maintenant vous poser des questions sur la mesure, le suivi et l'établissement des rapports

6. Décrivez comment les progrès, l'impact et les résultats sont mesurés, suivis et rapportés dans le cadre de ce partenariat, et comment la communauté est incluse dans ce processus.

7. Décrivez comment l'obligation de rendre compte est intégrée à la mesure, au suivi et à la communication des progrès, de l'impact et des résultats.

Communication

Je vais maintenant vous poser des questions sur les systèmes de communication

8. Parlez-moi de l'approche de la communication dans ce partenariat, y compris des mécanismes de résolution des conflits utilisés.

Engagement des partenaires

Par la suite, je vais vous interroger sur l'engagement des partenaires

9. Parlez-moi de l'approche de l'engagement des partenaires dans ce partenariat et de la diversité des partenaires.

Ressources, budget et financement

Je vais maintenant vous poser des questions sur les ressources, le budget et le financement.

10. Parlez-moi des ressources, de la budgétisation et du financement dans ce partenariat.

Enfin, dans cette section sur la structure du partenariat, je vais poser des questions sur les considérations d'équité.

11. Parlez-moi des considérations d'équité dans la structure de gouvernance.

L'évaluation

La prochaine série de questions porte sur vos systèmes d'évaluation.

12. Parlez-moi des résultats et de l'impact que vous espérez obtenir grâce à ce partenariat.

13. Expliquez-moi comment l'efficacité de ce partenariat est définie et évaluée.

Réflexions

Enfin, ...

14. Quelle est votre réflexion sur les enseignements tirés et quels conseils donneriez-vous sur les partenariats pour une action climatique locale équitable.

Conclusion

Puis-je vous contacter ultérieurement par courrier électronique pour clarifier certains points de cet entretien ?

Point de vue des partenaires (entretien mené avec le personnel des organisations partenaires)

Contexte

1. Veuillez-vous présenter en commençant par votre nom, votre rôle, de, quelle manière vous êtes impliqué et depuis combien de temps vous êtes impliqué dans ce partenariat. (Contexte du participant)

Objectif

2. Décrivez-moi les objectifs de ce partenariat, y compris les objectifs clés en matière de climat et d'équité.

Structure de gouvernance

La question suivante porte sur le partenariat de la structure de gouvernance.

3. Parlez-moi de votre participation à la structure de gouvernance de ce partenariat, notamment en ce qui concerne la supervision, la coordination, la communication, l'engagement avec les partenaires, l'évaluation, le suivi et l'établissement de rapports, ainsi que les ressources, la budgétisation et le financement.

Évaluation

Ensuite, je vais vous poser des questions sur les systèmes d'évaluation.

4. Parlez-moi des résultats que vous espérez obtenir grâce à ce partenariat.

Réflexions

Enfin, ...

Quelles sont vos réflexions sur les leçons apprises et les conseils que vous donneriez sur les partenariats pour une action climatique équitable ?

Conclusion

Puis-je vous contacter ultérieurement par courrier électronique pour clarifier certains points de cet entretien ?

Merci d'avoir participé à cet entretien. Les réponses de cet entretien seront compilées et analysées. Je vous contacterai donc pour vous communiquer les informations compilées et obtenir votre consentement, afin de m'assurer que l'analyse reflète fidèlement vos réponses.

Appendix D (English): N-ZAP Research Information Letter

You have been invited to participate in an interview that aims to understand cross-sector partnerships for local equitable climate action across Canada. These interviews are part of the Municipal Net-Zero Action Research Partnership (N-ZAP) project. This interview is one of many interviews under the initiatives from the Municipal Net-Zero Action Research Partnership (N-ZAP)*. This case study is being conducted by Ebosetale Hope Isabu under the supervision of Dr. Amelia Clarke. In addition, this is part of a PhD research study led by Naima Samuel, under the supervision of Dr. Amelia Clarke at the University of Waterloo, that seeks to explore cross-sector partnership governance structures adopted by Canadian municipalities for implementing local climate action plans and understand how effectiveness of these partnerships is measured in delivering outcomes, including the embedding of equity in the partnerships structures. As part of Naima's PhD dissertation, case stories will be created from information gathered through this interview and other interviews, and a cross-case analysis will be done to generate findings.

The interview questions are on the background and purpose of the partnership that you are part of the structures that are setup to govern the partnership, and evaluation of the effectiveness of the partnership. The interview responses will be used by the University of Waterloo, the Federation of Canadian Municipalities' Green Municipal Fund (FCM) and ICLEI Canada to develop an advanced collaborative governance guide for equitable climate action. The name of your organization and your role may be identified in research papers and reports as a study participant where quotes are attributed. All quotes attributed to you will be validated prior to inclusion and will not be published without your permission.

By agreeing to participate in the study you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

The interview will be approximately 60 minutes long and can be scheduled at your convenience using Acuity, an online scheduling software. The interview will be hosted through Zoom, so you can join the interview through a laptop, or you can dial in by phone. Zoom has implemented technical, administrative, and physical safeguards to protect the information provided via its services from loss, misuse, and unauthorized access, disclosure, alteration, or destruction. However, please note that no Internet transmission or phone call is ever fully secure or error free.

Participation in this interview is voluntary. Attending the interview does imply consent of participation. You may decline answering any questions you feel you do not wish to answer, and you can withdraw your participation at any time by not providing your responses or exiting the interview.

You are unable to withdraw after the interview is complete. Any attributed quotations from you will be first validated by you to obtain your consent. There are no known or anticipated risks to your participation in this interview. The information collected from this interview will be stored for at least ten years and only accessed through a password-protected cloud platform.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Board (REB 45753). If you have questions for the Board, contact the Office of Research Ethics, toll-free at 1-833-643-2379, 1-519-888-4440, or reb@uwaterloo.ca.

If you would like to receive a copy of the results from this study, please confirm your contact information during the interview so that we may follow up with you.

Thank you for your consideration.

N-ZAP is a research partnership funded by the Government of Canada through the Climate Action and Awareness Fund (CAAF) and jointly led by the University of Waterloo, the Federation of Canadian Municipalities' Green Municipal Fund (FCM) and ICLEI Canada, working with 11 other academic institutions, and 9 other national organizations and 13+ municipal partners.

Appendix D (Français) : Lettre D'information sur la Recherche P-RAC

Vous avez été invité à participer à une entrevue visant à comprendre les partenariats intersectoriels pour une action climatique locale équitable à travers le Canada. Ces entrevues s'inscrivent dans le cadre du projet de Partenariat de recherche-action sur la carboneutralité municipale (P-RAC). Cet entretien est l'un des nombreux entretiens réalisés dans le cadre des initiatives du Partenariat de recherche-action sur la carboneutralité municipale (P-RAC). Cette étude de cas est menée par Ebosetale Hope Isabu sous la supervision du Dr Amelia Clarke. En outre, cette étude fait partie d'une recherche doctorale menée par Naima Samuel, sous la supervision du Dr. Amelia Clarke à l'Université de Waterloo, qui vise à explorer les structures de gouvernance des partenariats intersectoriels adoptés par les municipalités canadiennes pour mettre en œuvre les plans d'action climatiques locaux, et à comprendre comment l'efficacité de ces partenariats est mesurée en termes de résultats, y compris l'intégration de l'équité dans les structures de partenariat. Dans le cadre de la thèse de doctorat de Naima, des études de cas seront créées à partir des informations recueillies lors de cet entretien et d'autres entretiens, et une analyse croisée des cas sera effectuée pour générer des conclusions.

Les questions de l'entretien portent sur le contexte et l'objectif du partenariat dont vous faites partie, les structures mises en place pour gouverner le partenariat et l'évaluation de l'efficacité du partenariat. Les réponses à l'entretien seront utilisées par l'Université de Waterloo, le Fonds municipal vert (FMV) de la Fédération canadienne des municipalités et ICLEI Canada pour élaborer un guide de gouvernance collaborative avancée pour une action climatique équitable. Le nom de votre organisation et votre rôle peuvent être identifiés dans les documents de recherche et les rapports en tant que participant à l'étude lorsque des citations sont attribuées. Toutes les citations qui vous sont attribuées seront validées avant d'être incluses et ne seront pas publiées sans votre autorisation.

En acceptant de participer à l'étude, vous ne renoncez pas à vos droits légaux et vous ne libérez pas le(s) chercheur(s) ou l'institution impliquée de leurs responsabilités légales et professionnelles.

L'entretien durera environ 90 minutes et pourra être programmé à votre convenance à l'aide d'Acuity, un logiciel de programmation en ligne. L'entretien aura lieu sur Zoom, de sorte que vous pourrez participer à l'entretien à partir d'un ordinateur portable ou par téléphone. Zoom a mis en place des mesures de protection techniques, administratives et physiques pour protéger les informations fournies via ses services contre la perte, l'utilisation abusive, l'accès non autorisé, la divulgation, l'altération ou la destruction. Cependant, veuillez noter qu'aucune transmission par Internet ou appel téléphonique n'est jamais totalement sécurisée ou exempte d'erreurs.

La participation à cet entretien est volontaire. Le fait d'assister à l'entretien implique un consentement à la participation. Vous pouvez refuser de répondre à toute question à laquelle vous ne souhaitez pas répondre, et vous pouvez retirer votre participation à tout moment en ne fournissant pas vos réponses ou en quittant l'entretien. Vous ne pouvez pas vous retirer une fois l'entretien terminé. Toutes les citations qui vous sont attribuées seront d'abord validées par vous afin d'obtenir votre consentement. Votre participation à cet entretien ne présente aucun risque connu ou anticipé. Les informations recueillies lors de cet entretien seront conservées pendant une période de dix ans et ne seront accessibles que par l'intermédiaire d'une plateforme en nuage protégée par un mot de passe.

Cette étude a été examinée et a reçu l'approbation du comité d'éthique de la recherche de l'Université de Waterloo (CER n° 45753). Si vous avez des questions à poser au Comité, veuillez contacter le Bureau d'éthique de la recherche au numéro gratuit 1-833-643-2379, au 1-519-888-4440, ou par courriel à l'adresse reb@uwaterloo.ca.

Merci de votre attention.

Le P-RAC est un partenariat de recherche financé en partie par le gouvernement du Canada par l'intermédiaire du Fonds d'action et de sensibilisation pour le climat (FACC) et dirigé conjointement par l'Université de Waterloo, le Fonds municipal vert (FMV) de la Fédération canadienne des municipalités et ICLEI Canada, en collaboration avec 11 autres établissements universitaires, 9 autres organisations nationales et 13 partenaires municipaux.

Appendix E (English): N-ZAP WG4 -Thank You Email

Subject: Thank you for participating in the N-ZAP research interview

Sender: University of Waterloo, MES Candidate, Ebosetale Hope Isabu

Dear [Title Name],

Thank you for participating in the recent Municipal Net-Zero Action Research Partnership (N-ZAP) research interview. We appreciate your time and are pleased that you are involved and are contributing to local climate action, helping advance progress on climate mitigation in Canada.

Work on the project progresses steadily every day and we will be sure to notify you as our resources, workshops, and updates about the deliverables become available. You will be added to the N-ZAP e-newsletter, it comes out about three times a year. You can opt-out if you choose.

If you have changed your mind and would like to withdraw your participation in this study, please contact me. You may withdraw within 14 days of the interview, however, because responses from different participants will be used to create case stories, it will be challenging to withdraw your participation after the case stories are created due to the interconnectedness of responses. Any identified attributed quotations from you will be first validated by you to obtain your consent through a follow-up email.

Thank you for your time and cooperation, and for the efforts of your organization towards local climate action.

Ebosetale Hope Isabu

MES Candidate, University of Waterloo

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Board (REB 45753). If you have questions for the Board, contact the Office of Research Ethics, toll-free at 1-833-643-2379, 1-519-888-4440, or reb@uwaterloo.ca.

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Appendix E (Français): Interview Du GT4 PRAC: Courriel De Remerciement

Objet : Merci d'avoir participé à l'interview de recherche PRAC

Expéditeur : Université de Waterloo, Candidate à la maîtrise, Ebosetale Hope Isabu

Cher [Nom du titre],

Nous vous remercions d'avoir participé à l'entretien de recherche du Partenariat de recherche-action sur la carboneutralité municipale (P-RAC) qui s'est déroulé récemment. Nous apprécions le temps que vous nous avez accordé et nous sommes heureux que vous participiez et contribuiez à l'action climatique locale, en aidant à faire progresser l'atténuation du changement climatique au Canada.

Le travail sur le projet PRAC progresse régulièrement chaque jour et nous ne manquerons pas de vous informer de la disponibilité de nos ressources, de nos ateliers et de nos mises à jour sur les produits livrables. Vous serez ajouté à la lettre d'information électronique du P-RAC, qui est publiée environ trois fois par an. Vous pouvez vous désinscrire si vous le souhaitez.

Si vous avez changé d'avis et souhaitez mettre fin à votre participation à cette étude, veuillez me contacter. Vous pouvez vous retirer dans les 14 jours suivant l'entretien. Toutefois, étant donné que les réponses de différents participants seront utilisées pour créer des études de cas, il sera difficile de retirer votre participation après la création des études de cas en raison de l'interconnexion des réponses. Toute citation attribuée à un participant sera d'abord validée par ce dernier afin d'obtenir son consentement par le biais d'un courriel de suivi.

Nous vous remercions pour votre temps et votre coopération, ainsi que pour les efforts de votre organisation en faveur de l'action climatique locale.

Ebosetale Hope Isabu

Candidate à la maîtrise,

Université de Waterloo

Cette étude a été examinée et a reçu l'approbation du comité d'éthique de la recherche de l'Université de Waterloo (CER n° 45753). Si vous avez des questions à poser au Comité, veuillez contacter le Bureau d'éthique de la recherche au numéro gratuit 1-833-643-2379, au 1-519-888-4440, ou par courriel à l'adresse reb@uwaterloo.ca.

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