## Smart Prosperity Institute

# INSIGHTS FROM THE FIELD:
## Unlocking SME Emissions Reductions in the Green Recovery

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# 1  Conflict of Interest Declaration

# 2  Executive Summary

Significant changes in the private sector must occur for Canada to meet the federal government's emissions reduction target to become net zero by 2050. Decarbonization will be particularly critical among small and medium sized businesses (SMEs)—meaning those with less than 500 employees—as these firms make up 98% of the Canadian economy and employ over 70% of the Canadian labour force. Yet SMEs are largely left out from federal and provincial support, programming, and policymaking. In recognition of this governance gap, there has been a "Cambrian explosion"[1] of non-governmental initiatives aimed at supporting decarbonization in the private sector.

However, scaling up non-governmental decarbonization interventions is hard. Many such voluntary initiatives have struggled to grow beyond their first few years of operation. To explore the barriers to scaling these initiatives, we conducted in-depth interviews with a national network of non-governmental organization called Green Economy Canada (GEC). GEC provides capacity support to SMEs and other organizations to reduce their emissions. We also interviewed a similar U.S.-based organization, Sustainable Silicon Valley (SSV), as well as federal and municipal policymakers with direct experience working with GEC or other similar organizations.

GEC hubs experienced rapid membership growth in first few years of operation that relatively plateaued afterwards. We find that most of the members GEC was initially able to onboard appear to be "first movers"—businesses with a pre-existing interest in taking on voluntary action without significant external prompting. However, it is important to note that primarily recruiting first movers does not necessarily mean that joining GEC had little or no effect on the behaviour of these businesses and organizations. Rather than prompt voluntary action, the value of membership for these businesses is to guide first movers to select impactful, transformative changes to decarbonize their businesses.

Once this first tranche of SMEs joins, voluntary programs struggle to attract new members. We find that as businesses gain general knowledge and awareness of emission reduction strategies and sustainable business practices, it becomes increasingly difficult for voluntary initiatives to justify the costs of membership.

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1 Robert O. Keohane and David G. Victor, "The Regime Complex for Climate Change," *Perspectives on Politics* 9, no. 1 (March 2011): 12, https://doi.org/10.1017/S1537592710004068.

Unfortunately, this has negative consequences for both the growth of the voluntary initiatives as well as for climate action among SMEs. While businesses believe that can make effective changes on their own, smaller businesses tend not to take effective action in the absence of external prompting. Paradoxically, we find that while normalizing low carbon business practices is both the objective and outcome of these voluntary initiatives, it is also the primary barrier to their continued growth.

Yet these barriers are not determinative for scaling voluntary initiatives beyond their first few years of operations. We identify three paths that organizations like GEC can follow to continue to scale: first, they can strategically partner with supportive municipal governments to establish programs that serve the interests of the municipality. Second, voluntary programs can grow their operations geographically by developing a supportive and symbiotic relationship with a national (or potentially regional) government. Third, these organizations may grow the scope of their mandate (mission-drift) by focussing on a larger number of environmental issues to increase their access to government grants. Notably, in all three cases, the result is that these nongovernmental organization become increasingly reliant on governments. Thus, we find that the state and its policies remain a crucially important factor for the prospects of scaling up voluntary capacity-building initiatives aimed at climate action.

# 3 Table of Contents

# 4  Introduction

SMEs represent a critical group for normalizing low carbon business practices in the private sector. SMEs make up over 98% of Canadian businesses[2] and emit an estimated 30% of overall emissions in Canada[3]. SMEs also employ over 70% of the Canadian workforce[4], and therefore have an important role in the diffusion of low carbon norms and practices. Given that most Canadians who are employed in the private sector work for SMEs, wide-spread acceptance of low carbon practices within these firms is likely to have spill-over effects for normalizing these behaviours in the private lives of their employees as well as in the wider business community[5].

However, SMEs are currently underserved by government programming and policymaking aimed at decarbonizing the private sector. In a previous working paper with Smart Prosperity Institute, we found that SMEs are currently underserved by government support programs and climate change mitigation policies[6]. Out of a total 99 decarbonization federal policies and programs aimed at decarbonization, we only identified five that specifically targeted or engaged SMEs. While provincial governments are perhaps best positioned to engage these businesses. We did not identify any provincial decarbonization programs or policies in Ontario for SMEs or at the municipal level from the sample we selected.

Most Canadian SMEs have yet to take voluntary action on climate change. The Chartered Professional Accountants of Canada (CPAC) finds that most Canadian businesses (63% of those surveyed) are not currently tracking, and have no plans to track, corporate emissions[7]. This finding is supported by a recent a survey of SMEs in the UK by Carbon Trust: of the 564 SMEs that participated, 68% had not measured their carbon footprint [8]. Given that tracking baseline emissions is a necessary first step to reducing emissions, it seems that most SMEs are not taking any measures at all to reduce their emissions.

A lack of voluntary action among SMEs is not necessarily surprising. Other research has shown that SMEs are generally less likely than larger firms to take on

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2 Innovation, Science and Economic Development Canada and Government of Canada, "Key Small Business Statistics — 2020," December 10, 2020, https://www.ic.gc.ca/eic/site/061.nsf/eng/h_03126.html.

3 ClimateSmart, "200 Million Tonnes of Opportunity: How Small and Medium-Sized Businesses Can Drive Canada's Clean Economy," 2018, https://businessinsurrey.com/wp-content/uploads/2018/05/2018-02-Climate-Smart-SME-200M-Tonnes.pdf.

4 Innovation, Science and Economic Development Canada and Government of Canada, "Key Small Business Statistics — 2020."

5 Interviews #4, #26.

6 Michaela Pedersen-Macnab, "The Low Carbon Policy Ecosystem: Leaving Small and Medium Sized Enterprises Behind," Working Paper, Clean Economy Working Paper Series (Ottawa: Smart Prosperity Institute, September 2020), https://institute.smartprosperity.ca/publications/carbon_policy.

7 Chartered Professional Accountants Canada, "Are Canadian Businesses Aware of the Need to Manage Greenhouse Gas Emissions?," June 2018, https://www.cpacanada.ca/en/business-and-accounting-resources/other-general-business-topics/sustainability/publications/are-canadian-businesses-managing-emissions.

8 UK Carbon Trust, "SMEs and Energy Efficiency," February 4, 2020, https://www.carbontrust.com/news-and-events/insights/energy-efficiency-starts-here-sme-survey-results.

voluntary sustainability projects[9], and often require more external prompting compared with larger firms [10]. Capacity support is most needed by smaller firms that lack the time and expertise on sustainability issues[11]. Most SMEs have limited internal capacity to take climate action on their own: 54% of Canadian businesses only have between 1-4 employees[12] so it is unlikely that such firms would be able to dedicate internal resources to sustainability projects. As further evidence of this, a lack of time and money were the barriers most frequently cited by the UK Carbon Trust's 2020 SME survey[13].

The impact of voluntary action also remains unclear. The Canadian Federation of Independent Business (CFIB) argues that "the majority of small business owners have already been implementing environmentally friendly measures" [14]. However, the CFIB report includes "introducing or expanding recycling, reducing their electricity usage or using more environmentally friendly products in their business" and does not make mention of efforts to reduce emissions specifically. In other words, while SMEs may be broadly aware of environmental, sustainability, or climate issues—and indeed appear to be interested in taking action—these firms are still unlikely to undertake impactful mitigation projects without external prompting.

Thus, there appears to be both a need and a demand for supporting Canadian SMEs in decarbonizing their businesses. In the absence of substantive government action, non-governmental organizations have begun to provide this external support for SMEs[15]. However, despite the clear need, many voluntary decarbonization initiatives have still struggled to expand their operations and SME membership base. Why is scaling these initiatives so difficult? What are the barriers to scaling up these voluntary initiatives aimed at supporting SME decarbonization?

9 Stephen J. Brammer and Stephen Pavelin, "Corporate Reputation and Social Performance: The Importance of Fit," *Journal of Management Studies* 43, no. 3 (May 2006): 435–55, https://doi.org/10.1111/j.1467-6486.2006.00597.x.

10 Erik G. Hansen and Johanna Klewitz, "The Role of an SME's Green Strategy in Public-Private Eco-Innovation Initiatives: The Case of Ecoprofit," *Journal of Small Business & Entrepreneurship* 25, no. 4 (January 2012): 451–77, https://doi.org/10.1080/08276331.2012.10593584.

11 Interviews #8, #15, #27, #28, and #31.

12 Innovation, Science and Economic Development Canada and Government of Canada, "Key Small Business Statistics — 2020."

13 UK Carbon Trust, "SMEs and Energy Efficiency."

14 Canadian Federation of Independent Businesses, "Green Growth: How SMEs Are Working toward a Greener Future," April 21, 2017, https://www.cfib-fcei.ca/en/media/cfib-environment-report-independent-businesses-already-taking-action-grow-greener.

15 Benjamin Cashore, "Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority," *Governance* 15, no. 4 (October 2002): 503–29, https://doi.org/10.1111/1468-0491.00199; Graeme Auld, Steven Bernstein, and Benjamin Cashore, "The New Corporate Social Responsibility," *Annual Review of Environment and Resources* 33, no. 1 (November 1, 2008): 413–35, https://doi.org/10.1146/annurev.environ.32.053006.141106; Jessica F. Green, *Rethinking Private Authority: Agents and Entrepreneurs in Global Environmental Governance* (Princeton: Princeton University Press, 2014); Hamish van der Ven, *Beyond Greenwash? Explaining Credibility in Transnational Eco-Labeling* (New York, NY: Oxford University Press, 2019).

# 5 Methods

To investigate these questions, we conducted an in-depth case study of Green Economy Canada, a national network of non-profits that supports voluntary climate and environmental action among SMEs. We also compared GEC to a similar U.S. organization, Sustainable Silicon Valley (SSV) that was the initial inspiration for GEC.

GEC was selected as the primary case to examine the dynamics of scaling decarbonization initiatives due to its unique organizational structure. GEC contains three distinct organizational layers: the central network office, the hubs (which are standalone non-profits that apply to join the network) and hub members (which include businesses, municipalities, religious organizations, and public institutions (such as hospitals and universities). GEC's network model acts as a kind of natural experiment: variation in membership growth across the hubs allows us to identify critical differences within a single case while holding the programming GEC hubs offers its members constant. Thus, success of a particular hub in recruiting and retaining members cannot be explained by effective/ineffective programming and is instead reflective of the challenges that voluntary programs face more generally.

We combined three methods of data collection: participant observation, semi-structured interviews, and document analysis of GEC members' websites. We first attended a strategic planning retreat on June 19, 2019 to make an initial assessment of the relationship dynamics within the GEC network. The purpose of this planning session was for the GEC office to communicate its newly approved strategic plan for the organization, to receive feedback on this plan from the hubs, and to strategize with the hubs on tactics to implement this strategic plan. The results of the participant observation session are in a complementary report, available upon request.

Participant observation is appropriate in this context for several reasons: first, it enabled us to gain familiarity with the culture of the organization, and to build preliminary rapport with GEC and hub staff [16]. We are not aware of any other non-governmental organizations doing similar work that utilizes GEC's model. Given this unique organizational structure, participant observation allowed us to gain an understanding of how the model operates in practice [17]. The use of participant observation also prevented us from prematurely imposing our hypothesized mechanisms for bottom-up governance that may exhibit poor fit with participants' perspectives [18].

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16 Barbara B. Kawulich, "Participant Observation as a Data Collection Method," *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* Vol 6 (May 31, 2005): Reuse, https://doi.org/10.17169/FQS-6.2.466.

17 Kathleen Musante DeWalt and Billie R. DeWalt, *Participant Observation: A Guide for Fieldworkers*, 2nd ed (Lanham, Md: Rowman & Littlefield, Md, 2011).

18 Stephen L. Schensul, Jean J. Schensul, and Margaret Diane LeCompte, *Essential Ethnographic Methods: Observations, Interviews, and Questionnaires*, Ethnographer's Toolkit 2 (Walnut Creek, Calif: AltaMira Press, 1999); Edward Schatz, ed., *Political Ethnography: What Immersion Contributes to the Study of Power* (Chicago ; London: The University of Chicago Press, 2009).

We then embarked on a series of semi-structured interviews (both in-person and virtual) with central office staff and hub personnel, as well as governmental officials. A total of 31 interviews were conducted: the total population of GEC network staff (5); the Executive Directors and Program Managers for each of the hubs (11)—except for the Hamilton/Burlington and Edmonton hubs in which the Executive Director also serves the function of Program Manager—as well as the Executive Directors of the Kingston and Waterloo hubs (invitation declined). Three former hub staff members were also interviewed. One interview was obtained from a staff member of a comparison case: Sustainable Silicon Valley.

A snowball sampling approach was used to identify relevant federal, provincial, and municipal policymakers who had direct contact with GEC network and hub staff members. Eight interviews were obtained with municipal government policymakers in the communities where hubs currently operate, as well as four interviews with federal government policymakers in Natural Resources Canada and Environment and Climate Change Canada who had direct contact with GEC. No interviews were obtained for provincial policymakers as neither the hubs nor the network office reported any direct interactions with the provincial government.

Finally, to understand the characteristics of SMEs that GEC hubs have successfully recruited as members, we coded website content of the 208 business members of the GEC network (as of January 2021, excluding municipalities, universities, school boards, and religious organizations). More information on the coding of these websites is available in Section 7.

# 6  Green Economy Canada

GEC was first incorporated in 2008 as Sustainable Waterloo Region (SWR), a non-profit servicing the Waterloo Region aimed at supporting local businesses to incorporate sustainability into their operations. SWR launched a voluntary carbon registry in 2009 called the Regional Carbon Initiative (later rebranded to Regional Sustainability Initiative) to help its members to track their carbon emissions. The program initially saw rapid growth: membership in Waterloo Region grew to more than 50 members its first few years of operation, with an engaged core group of local businesses[19]. Building on the success of SWR, a regional network was launched (under the name Sustainability Co-Lab, later renamed Green Economy Canada) to replicate the Waterloo program in other Ontario communities[20].

Since 2013, GEC has expanded into a national network with over 250+ members, operating in eight communities in Ontario, Alberta, and New Brunswick. Yet compared with SWR's initial recruitment success, membership growth and the network expansion into new communities has unfolded slower than expected. This led us to explore the barriers that may prevent or slow voluntary initiatives like GEC from scaling their operations and impact on Canadian SMEs.

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19 Interview #23.

20 Interviews #18 and #22.

As an organization, the primary objective of the GEC network is to support "an economy where environmental sustainability, human well-being, and business success are synonymous"[21]. In other words, GEC will have achieved its vision when low carbon practices are normalized in the routine planning and operations of Canadian SMEs. This is referred to as "normalization" in the climate governance literature: a dynamic of shifting expectations about appropriate behavior through the "buildup of everyday action on climate change—practices—that shift perceptions of the necessity and appropriateness of climate action."[22]

In terms of its operations, GEC pursues normalization through a division of labour between the central office and the hubs. The central office develops a standardized emissions reduction program that is then tailored to the local context and delivered by hubs. The central office also provides financial support, research, and program support to the hubs, and is in direct contact with provincial and federal governments. However, only the hubs themselves have direct contact with the members of the network.[23] The rationale for this model is that it allows the non-profit hubs to focus on implementation and program delivery, rather than creating their own programming or carbon accounting tools[24]. Hubs would (theoretically) be able to recruit more members compared with the central office, given their integration in local business contexts and ability to adjust programming to fit their community's specific needs[25]. This would in turn allow the central office to focus on research, program development, outreach, and growth of the network.

## 6.1  Impacts of the COVID-19 Pandemic

The COVID-19 pandemic introduced an exogenous shock for scaling both the network itself and hub membership. For this reason, this paper examines the network from its establishment in 2013 up until 2020. Recruitment from 2021-2022 would necessarily be impacted by both the pandemic and government actions to stop the spread of COVID-19. This is particularly true for recruitment of SMEs to the program, as small businesses were disproportionated impacted by the pandemic and public health restrictions[26]. This paper therefore does not explore the network's growth from 2020-

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21 Green Economy Canada, "Business Made Better Together," accessed November 17, 2021, https://greeneconomy.ca/.

22 Steven Bernstein and Matthew Hoffmann, "The Politics of Decarbonization and the Catalytic Impact of Subnational Climate Experiments," *Policy Sciences* 51, no. 2 (June 2018): 189–211, https://doi.org/10.1007/s11077-018-9314-8; Steven Bernstein and Matthew Hoffmann, "Climate Politics, Metaphors and the Fractal Carbon Trap," *Nature Climate Change* 9, no. 12 (December 2019): 919–25, https://doi.org/10.1038/s41558-019-0618-2.

23 At the time of data collection, this was the organizational and relationship structure between the hubs and the central office. However, the central office recently established a National Hub, which functions similarly to the regional hubs by offering support directly to SMEs, however this hub services SMEs across Canada in locations without a local hub office.

24 Interviews #22 and #23.

25 Interviews #28 and #10.

26 Statistics Canada, "Impact of COVID-19 on Small Businesses in Canada" (Government of Canada, May 11, 2020), https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00018-eng.htm.

222 as the exogenous shock would likely disproportionately impact the responses of participants about barriers to growth.

However, it is important to note that this was a methodological choice, and not a reflection of GEC's post-pandemic future. There are good reasons to believe that the impact of COVID-19 may not be a long-term barrier for GEC to scale up. As the federal government ramps up efforts to achieve its net zero by 2050 target, it is likely that funding for capacity support for SME decarbonization may become more available. As evidence of this, GEC has added two additional hubs, one in Peterborough, Ontario, and a hub that services SMEs throughout the province of New Brunswick during the pandemic through federal government support. Future paths to scale organizations like GEC are discussed further in detail in Section 10.

## 6.2 Scaling Membership

GEC's organizational objective is to normalize sustainability and low carbon practices on business communities. Normalization requires the attraction and retention of new business members. For this reason, we examined the cumulative membership of the network and its hubs, rather than year-over-year membership growth. Cumulative membership of the network has steadily increased over time—however, most of this membership growth was achieved by adding new hubs, as opposed to growth in the membership base of existing hubs.

A general trend across hubs is that membership peaks after two to three years of operation, at which time membership has tended to plateau. The Waterloo hub has maintained the largest share of members (by a significant margin) out of the entire network, however even Waterloo has struggled to scale its membership beyond its initial years. Yet comparatively, the newest hubs had higher recruitment numbers: the London hub recruited 25 members in its first year, more than almost all the other hubs had in their best year of recruitment. At the time of writing, the Edmonton hub was on track to double its recruitment in 2021 compared with its first year of operation, despite the COVID-19 pandemic.
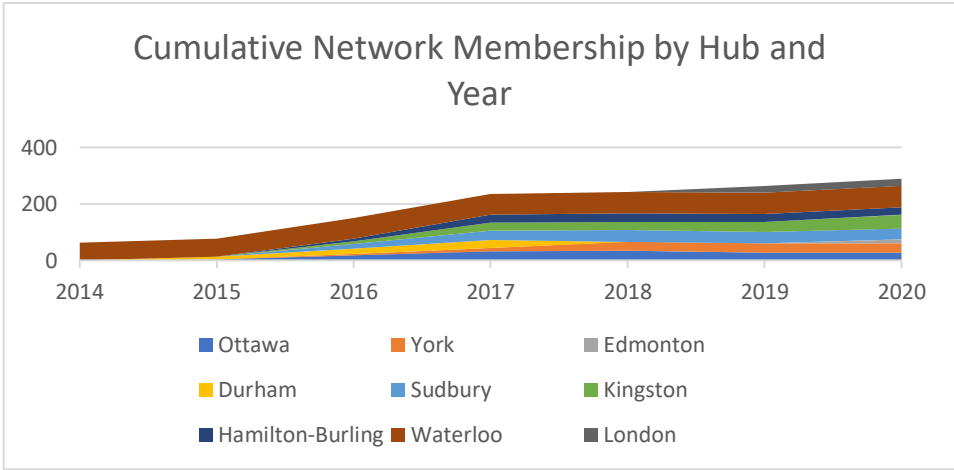


Chart 3: Shares of Cumulative Membership (March 2020)

## 6.3 Scaling The Network

Scaling up GEC as a climate experiment or intervention requires both the growth of the network's operations, as well as its cumulative impact on Canadian business communities. To achieve this objective, the network must continue to expand its reach into new communities by growing the number of hubs in in the network.

Expansion into new communities has unfolded slowly: in 2020 there were the same number of hubs in operation as four years previously, with the loss of two hubs in Niagara and Durham in 2017 and 2018 respectively. Six out of the eight hubs were created by organizations that pre-dated the creation of the GEC network and took on the network's standardized programming in addition to the other programming these organizations already offered. Two new hubs were added in 2019 (Green Economy London) and 2020 (Edmonton). Unlike any of the previous hubs, the Edmonton hub began as a pre-existing municipal program and the municipality contracted GEC in 2020 to deliver the program. The Edmonton hub is the only hub that is not entirely separate from government.
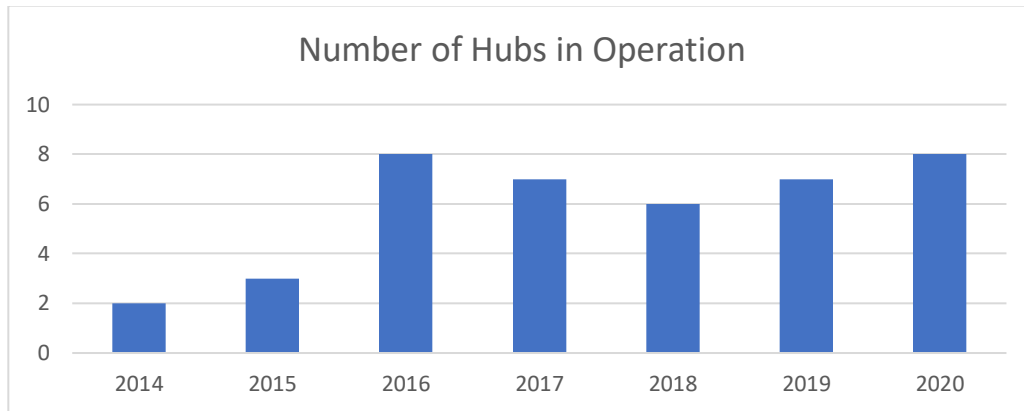


Chart 1: Number of GEC hubs in operation over time (March 2020)

| Regional Sustainability Initiative | Sustainable Business Initiative | Carbon 613 | Sustainable Kingston | Green Economy North | Climate Wise | Green Economy London | Corporate Climate Leaders |
|---|---|---|---|---|---|---|---|
| Waterloo | Hamilton/ Burlington | Ottawa | Kingston | Sudbury | York Region | London | Edmonton |
| 2009 | 2014 | 2015 | 2016 | 2016 | 2016 | 2019 | 2020 |

Chart 2: Dates that GEC hubs joined the network (March 2020)

# 7 The 'First Movers' Plateau

Why does membership growth plateau after the first few years of a hub's operation? We find that initial membership growth, followed by the plateau, is explained by the type of business that GEC was able to recruit in these initial years. Hubs appear

to reach a specific group of SMEs—termed 'first movers'—which are businesses likely to undertake voluntary action even in the absence of external prompting or support. In other words, 'first movers' are businesses that are likely to have taken some kind of climate action in the absence of external prompting.

Determining whether a business is a 'first mover' is difficult because it requires the counterfactual – that the business would have taken on voluntary climate action even if GEC did not exist. However, it seems likely a business could be a considered a 'first mover' based on three characteristics:

i)    The core products or services the business offers are environmentally focused
ii)   Sustainability or social responsibility are stated as core values of the business
iii)  The firm has certifications, awards, or partnerships with environmental programs other than GEC

We coded the 208 business members of the GEC network (as of January 2021, excluding municipalities, universities, school boards, and religious organizations) as a 'first mover' using three criteria:

i)    If the business offers products that are explicitly focused on environmental protection, conservation, or sustainable sourcing;
ii)   If the 'About Us' tab of their website included words like 'sustainability', 'nature/natural', 'social responsibility' 'energy efficiency' etc.; or
iii)  If there was a separate sustainability tab on their website that included environmental awards, partnerships etc. with sustainability organizations other than GEC

Using these criteria, we find that approximately 63% of GEC network falls into the likely 'first mover' category, meaning that taking voluntary environmental action is integrated into their core values. This suggests that most GEC members were likely "accessible" for membership because doing so was already aligned with its routine business planning and operations. Onboarding of first movers also explains why there is a plateau in membership after a hub's first few years of operation: GEC hubs onboarded the most "accessible" businesses within their community first, after which it becomes comparatively harder to recruit.

An internal poll among GEC's members found that nearly 60% of their business members had joined and made environmental commitments primarily because doing so aligned with their personal values: members reported that they decided to make climate-friendly changes to green their operations mainly because 'it was the right thing to do'[27]. As such, it seems likely that GEC has not onboarded members that were broadly representative of Canadian SMEs but has instead mainly recruited businesses

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27 Internal poll conducted by Green Economy Canada, shared with author.

that were already considering or actively making low carbon changes to their operations. Taking climate action was already "normalized" for these businesses prior to joining the network. This is further supported by interviews with staff members at GEC hubs and the network office; several staff members raised concern that the network was only successfully reaching and impacting businesses that had already integrated sustainability into their corporate identity[28].

However, it is important to note that primarily recruiting first movers does not necessarily mean that joining GEC had little or no effect on the behaviour of these businesses and organizations. Quite the opposite; previous research suggests when SMEs do take on voluntary sustainability projects, they are also more likely to select projects that are less effective, such as recycling and environmental audits, rather than transformational measures such as life cycle planning, eco-designs, retrofits, or alternative power generation[29]. The value of joining for first movers is therefore not to prompt action—as doing so was already normalized within their businesses—but to help first movers select impactful changes to decarbonize their businesses. Interview subjects confirmed this: hub staff repeatedly confirmed that they believe the value that GEC brings to its members is to help them select impactful or transformative changes to their operations[30]. Yet communicating this value proposition to potential new members outside of the first movers category has been somewhat challenging[31].

Once first movers are onboarded, new members become harder to recruit. From an organizational perspective, staff members are required to expend significant resources making the business case to potential members outside of 'first movers' [32]. Advocating for membership among less motivated SMEs has drawn significant resources away from creating value for existing members[33]; many hub staff reported that they spend far more time and resources cold calling and trying to convince less receptive businesses to join the network rather than working with existing members on emission plans with existing members[34]. Almost every hub and network staff member we spoke with cited a lack of internal organizational capacity to continue to recruit members beyond first movers. In other words, the return on time invested in recruiting new members beyond first movers is much smaller.

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28 Interviews #18 and #23.

29 María Quintás, Ana Martínez-Senra, and Antonio Sartal, "The Role of SMEs' Green Business Models in the Transition to a Low-Carbon Economy: Differences in Their Design and Degree of Adoption Stemming from Business Size," *Sustainability* 10, no. 6 (June 20, 2018): 2109, https://doi.org/10.3390/su10062109.

30 Interview #8, #26, #29, #31. 2022-08-30 7:09:00 PM

31 Interview #23.

32 Interview #23.

33 Interviews #10, #14, #23.

34 Interview #14 and #28.

# 8 Normalization and its Unintended Effects

Hub staff reported that as generalized knowledge of climate change grows within both business communities and the public, it has become increasingly difficult to convince businesses (outside of first movers) that they need external support to reduce their emissions. Counterintuitively, we find that the normalization of low carbon business practices has an unintended and negative effect on GEC's membership growth, retention, and ultimately its normative impact.

Issue salience and public awareness about climate change has more than doubled over the last fifteen years; CBC's 2021 Vote Compass (developed by Vox Pop Labs) found that the environment and climate change was the primary voting issue for 32% of Canadians in the federal election[35]. By contrast, in 2008 (the election year just before the Waterloo hub launched) a Strategic Counsel poll found that only 15% of Canadians viewed the environment and climate change to be the most important election issue [36]. In parallel with growing public awareness, SMEs have become increasingly aware and interested in responding to climate change: the UK Carbon Trust found that 87% of SMEs surveyed were aware of governments declaring a climate emergency and were in support of it [37]. Likewise, 28% of SMEs indicated that they were likely to be asked by customers to reduce their environmental impact, compared with just 12% in 2017 [38].

Staff reported that this growing awareness of sustainability and low carbon business practices has created barriers for GEC's membership growth. In pitches to potential new members, hub staff found that businesses were counterintuitively resistant to joining when they believed they already had enough general knowledge to implement energy efficiency projects or retrofits without the support of the hub: "w*e definitely talked to a lot of organizations about joining the program who say '…we're already talking about it, so what benefit is there for us joining the network?'*"[39] Overall, hubs struggled to make the "business case" to SMEs to become a member, beyond joining for moral or ethical reasons; network staff noted that "*being able to show businesses in a way that's believable how they'll benefit…has been the biggest challenge to date*"[40].

GEC's ability to make the case for membership has become more challenging as awareness of low carbon business practices becomes more widespread. Recruitment and retention become more difficult as businesses are generally aware of climate change issues but believe they do not require external support from a nongovernmental initiative with membership fees. Hub staff members reported that, based on

35 Samantha Beatie, "The Environment Is the Top Issue for Ontario Voters, but Are Candidates Taking It Seriously Enough?," August 26, 2021, https://www.cbc.ca/news/canada/toronto/environment-gta-voters-1.6152765.

36 Olivia Glauberzon, "Election Issues: Political Parties Make Their Environmental Pitch," September 22, 2008, https://www.investmentexecutive.com/news/research-and-markets/election-issues-political-parties-make-their-environmental-pitch/.

37 UK Carbon Trust, "SMEs and Energy Efficiency."

38 Ibid.

39 Interview #8.

40 Interview #1.

conversations with prospective members, these *"businesses have just enough awareness to start it alone. But not enough to go to the next level. They don't think they need us. So, awareness and education [are] as big of a hurdle as money is"*[41].

Many businesses indicated interest in taking climate action but had no technical understanding of carbon accounting specifically; hubs reportedly struggled to communicate the importance of rigorous and standardized accounting procedures[42]. Relatedly, some hub staff reported that SMEs were less interested in joining a network with specific and measurable benchmarks: "*as more businesses are getting on board of the idea of sustainability and want to be seen as sustainable, I think greenwashing [is] something we worry about"*[43]. In other words, SMEs were interested in taking some steps towards sustainability and climate action, but in the absence of regulatory requirements, did not want to be held to a stringent standard that their competitors were not held to[44]. Staff reported that this was particularly an issue with medium-sized SMEs (with more size and internal capacity) as many of these firms already had sustainability procedures or a sustainability officer in place and were unwilling to adjust to a program with strict reporting requirements[45].

As demand among SMEs for capacity support has risen with wider awareness of climate change issues, there has also been a proliferation of similar—albeit less stringent— voluntary programs to support SMEs. This in turn hindered membership recruitment: hub and network staff noted that GEC has had to complete with other institutions, including the Chambers of Commerce, for members[46]. In this sense, normalization combined with the governance gap around SME emissions created the conditions necessary for GEC to emerge but also created competition among decarbonization initiatives. After first movers are onboarded, voluntary programs begin to compete with one another for new members.

Not only did normalization hinder membership growth, but it also slowed organic growth of the network's expansion into new communities. GEC's objective of normalization necessarily translates to a single imperative for network operations: grow or die. Membership stagnation risks contraction of the network, as network staff noted that *"we've seen [the Niagara and Durham] hubs fold because they were standing still"*[47]. Network staff noted that selling potential new hubs requires proof of concept; slowing membership growth, combined with a lack of government incentive programs, made it difficult continue to grow the network despite continued interest in voluntary programs within business communities[48].

41 Interview #31.

42 Interview #6.

43 Interview #8.

44 Interview #28.

45 Interview #20.

46 Interviews #23 and #25.

47 Interview #26.

48 Interview #21.

Yet it is important to note that while normalization appears to have hindered the network and hub's ability to scale up, these pressures are not deterministic. As an organization, GEC recognized and responded to the challenges of normalization by changing its approach and became significantly more active in cultivating relationships with government. These strategic shifts appear to be viable pathways for overcoming the unintended effects of normalization on scaling interventions and are explored further in Section 10.

# 9 Sustainable Silicon Valley

The SWR program (and later, the GEC network) was initially modeled after a U.S. based organization called Sustainable Silicon Valley (SSV)[49]. SSV is a U.S.-based social enterprise focused on a single region in the Bay area of California. Originally founded in 2000 as a California Environmental Protection Agency initiative, SSV is a non-profit "think & do tank" that began as a as a voluntary carbon registry but later expanded to become a project-focused non-profit in 2004. While the voluntary small business carbon registry is still an important part of SSV's operations, the organization now focuses on specific, collaborative regional and municipal projects.

SSV independently confirmed the same normalization barriers to scaling that GEC staff members identified, which strengthens our confidence in this explanation. Just like GEC, SSV struggled to grow their membership beyond a certain threshold. As businesses began to bring on *"their own sustainability teams…in some ways it's a success story because we were you know kind of at the ground floor here and now there's companies that are doing it on their own and it's very sophisticated at doing it [sic]. So, this idea of [a] voluntary carbon registry wasn't needed anymore"*[50]. The SSV staff member reported that they experienced the same impact and operational scaling pressures as GEC, and that "a*fter a certain point when carbon accounting became so much more widespread and there's many ways of doing it and more formal ways of doing it, there wasn't such a need... So, then we pivoted and really became a project-based organization and so we continue to have members. We value our members quite a bit and we would like to have more but membership is very challenging"*[51].

This provides further evidence that as normalization progresses, and companies became increasingly aware of decarbonization practices, it became increasingly difficult to scale both organizations. Yet while both organizations felt the pressures of normalization, SSV's response to normalization pressures was different. Unlike GEC, which continues to focus on decarbonization among SMEs, SSV chose to pivot their activities to become less reliant on membership fees. This pivot will be returned to later in Section 10.3.

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49 Interview #18.

50 Interview #12.

51 Interview #12.

# 10 Paths to Scale: Relationship with Government

While normalization can explain why attracting membership has plateaued, it is not sufficient to explain why network growth (number of hubs) has been slow and non-linear. Nor can it explain why there is some variation in membership growth across the network: for example, the newest hubs in London and Edmonton appear to most successfully recruit new members compared with other hubs.

We argue the most important factor in the ability of both the network and hubs to continue to scale is the level of support and interaction made available to GEC by governments. We identify three paths that non-governmental organization may pursue to continue to scale up. All three paths demonstrated that collaboration between government and non-governmental initiatives is critical for overcoming normalization pressures and continuing to scale voluntary decarbonization initiatives.

## 10.1 Municipal Collaboration

The growth of the two newest hubs in Edmonton and London are reflective of a strategic shift within the GEC network towards municipal collaboration. Beginning in 2019 and 2020, the GEC central network office began prioritizing the creation of new hubs in locations with supportive local governments[52].

Much attention has been paid to ways that municipal governments have pushed decarbonization forward in the absence of action by national governments[53]. Other work has examined the role which non-governmental actors have played in private sector standard-setting[54]. Yet there has been limited research on the interplay between the state and non-state initiatives, and how their relationship may impact decarbonization in the private sector. A recent study by Westman, Moores and Burch (2021) examines how SMEs are mobilized in a variety of sustainability initiatives in the Greater Toronto Area[55]. The authors find a governance divide that prevents SMEs from joining sustainability programs, which include practical barriers (such as financial considerations), a disjuncture in the modes of operations between the public and private sectors, as well as normative barriers.

We are not aware of any other studies that examine the relationship between governments and non-state initiatives that support decarbonization in the private sector, particularly with respect to SMEs. However, our findings suggest that the relationship

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52 Interviews #2, #22, and #23.

53 Harriet Bulkeley and Vanesa Castán Broto, "Government by Experiment? Global Cities and the Governing of Climate Change: *Government by Experiment?,*" *Transactions of the Institute of British Geographers* 38, no. 3 (July 2013): 361–75, https://doi.org/10.1111/j.1475-5661.2012.00535.x; Matthew J. Hoffmann, *Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto* (Oxford ; New York: Oxford University Press, 2011); Green, *Rethinking Private Authority.*

54 Auld, Bernstein, and Cashore, "The New Corporate Social Responsibility"; Magnus Boström, "Establishing Credibility: Practising Standard-Setting Ideals in a Swedish Seafood-Labelling Case," *Journal of Environmental Policy & Planning* 8, no. 2 (June 2006): 135–58, https://doi.org/10.1080/15239080600772126; van der Ven, *Beyond Greenwash?*

55 Linda Westman, Ericha Moores, and Sarah Lynn Burch, "Bridging the Governance Divide: The Role of SMEs in Urban Sustainability Interventions," *Cities* 108 (January 2021): 102944, https://doi.org/10.1016/j.cities.2020.102944.

between local municipalities and these non-governmental decarbonization initiative is critical for scaling up voluntary SME climate action.

## 10.1.1    Edmonton

Recall that the Edmonton hub was created by the municipality, rather than by a standalone non-profit. In 2018, the municipality of Edmonton hosted the Global Covenant of Mayors for Climate and Energy, which lead to the signing of the Edmonton Declaration. As a part of the Council's commitment to climate action, the Climate Leaders program was created by the municipality to engage local businesses in voluntary emission reduction. In 2020, delivery of the Climate Leaders program was awarded to GEC.

The convergence of municipal and GEC organizational objectives was important for both partners. Scaling the Edmonton hub's operations and normative impact served the objectives of the municipality to meet its commitments under the Edmonton Declaration. Hub staff stated that the creation of the hub program was a recognition that the municipality "*couldn't just make a declaration in the absence of action and so they created this energy transition plan and a host of other programs in support of that plan*"[56] . Scaling the program thus served the municipality to help meet both its municipal emissions and energy targets.

The municipality saw value in a program that could help maximize possible emissions reductions among voluntary members by choosing impactful or transformative low carbon practices. For example, a municipal policymaker noted that approximately 60% of emissions in the construction sector in Edmonton are attributable to transportation[57]. If, on their own, construction SMEs attempted to reduce as another kind of institution might (for example, a corporate office or post-secondary institution might effectively reduce their emissions by retrofitting their building), the construction company would not make meaningful reductions[58]. This is because they may lack internal expertise and choose ineffective strategies or target emissions in areas other than transportation. In this sense, the value of the Climate Leaders program for the municipality is to help push local businesses to make *effective* decarbonization choices, thereby contributing towards the municipality's climate targets. As previously noted, this is precisely the value that GEC provides to first movers.

The municipality's investment in the success of organizations like GEC appears to be deeply important for a hub's successful scaling, as "*it's a whole lot easier to go out more broadly to the business community when the municipality is at the forefront*"[59]. Hub staff reported that recruitment was easier for the Edmonton hub, in part because the operation of the hub is not contingent on membership fees[60]. The municipality

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56 Interview #15.

57 Interview #19.

58 Interview #19.

59 Interview #22.

60 Interview #22.

covers 100% of the membership fee—meaning there are no costs for members to join, aside from costs associated with actually reducing their emissions, and as a result, fees were no longer a barrier to membership.

Likewise, the municipality introduced "pull" incentives, in which Climate Leaders Members received access to a rebate of up to 50% of costs incurred from a service provider, such as creating a carbon inventory or retrofits[61]. The rebate helped to draw in SMEs and non-profits with small operating budgets for whom undertaking a potentially costly emissions reduction strategy and joining a voluntary program would not otherwise be feasible. This is particularly important given the SME governance gap in the Canadian context: almost all of the hub staff noted more government incentives for capital-intensive updates to "pull" SMEs towards climate action to be extremely helpful for onboarding new members outside of 'first movers'[62].

Staff from other hubs noted that local recognition is one of the strongest incentives for local businesses to join in general[63]. In the Edmonton case, the high degree of municipal involvement in the Climate Leaders program was viewed by businesses as an opportunity to be seen and recognized by the municipality as a good corporate citizen and was seen as prestigious[64]. Invitations to local businesses are sent out on behalf of the mayor and counsellors that sponsor the program, and the municipality and GEC have also co-led information sessions about the program for Edmonton businesses. Hub staff believed this helped recruit more kinds of businesses and institutions beyond the 'first movers' to create a "*cross-section of the Edmonton corporate scene*"[65], and legitimated the program in the eyes of local businesses.

## 10.1.2    London

Similar to the Edmonton hub, the London hub was created with explicit municipal backing. Both municipal policymakers and hub staff noted their extremely close and collaborative relationship. Policymakers and hub staff also noted that the  Council was strongly supportive of the creation of the hub[66]. Although the municipality of London has set overall emissions reductions goals for over a decade, policymakers discovered that the municipality itself only has direct control over about 4-5% of emissions produced in the city[67]. London thus became interested in finding a community partner to convene and coordinate events that brought together the sustainability teams of local businesses, in alignment with the municipality's climate action and community energy plans. The City of London began to reach out to community partners that could engage the private sector. Indeed, it was the municipality itself that reached out to the GEC

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61 Interview #15 and #19.

62 Interviews #1, #4, #8, #15, #21, #25, #27, #28, #30, and #31.

63 Interviews #6, #17 and #28.

64 Interview #19.

65 Interview #15.

66 Interviews #20, #21, #22, #28.

67 Interview #20.

network (called Sustainability Co-lab at the time) about creating a hub in London[68]. An existing non-profit partner was then identified, and the GEC hub was launched in 2019.

Like the Edmonton case, the convergence of municipal and nongovernmental objectives allowed the municipality to support membership growth. From the perspective of the municipality, having a non-profit engage the private sector was resource-efficient and more flexible for the municipality[69]; the hub was able to engage the private sector in ways that would be inappropriate for the municipality to do so. For example, the hub was able to refer members to local contractors or businesses that offered low carbon retrofits or services[70]. Municipalities themselves cannot make referrals to specific local service providers, and so the hub provided an important intermediary service for the municipality and served as an information hub and convener for businesses to procure services like retrofits.

Policymakers also noted that non-governmental organizations have a "*clarity of focus*" compared with the municipality[71], as the municipality has many competing priorities at any given time. As such, the hub provided useful advice on municipal policies, such as a stormwater incentive, and policymakers noted the high quality of feedback and expertise that the hub has provided in the municipality's community consultations[72]. For these reasons, the municipality of London itself benefitted from the success of the London hub to recruit and retain members and has actively participated in recruitment for the hub. The municipality has since awarded the London hub several service contracts, which included community engagement projects, as well as a multi-year community grant[73]. This support has allowed the hub to continue to scale by focussing solely on creating value for its members, rather than continually chasing new sources of funding.

### 10.1.3    Weaker Municipal Relationships

By contrast, weaker municipal involvement or a less supportive relationship with the municipality appears to have prevented some hubs from overcoming the barriers associated with normalization. One such hub[74] initially received support from its local municipality as a means for the municipality to comply with provincial regulations: municipal policymakers noted that the Ontario Green Energy Act required the municipality to submit energy consumption of large facilities, which in turn spurred the municipality to take climate action.

To achieve its emission reduction targets, the municipality joined as a founding member of its local GEC hub. However, the municipality ultimately decided to end its

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68 Interview #20.

69 Interview #20.

70 Interview #28.

71 Interview #20.

72 Interview #28.

73 Interview #28.

74 Interview not identified here to protect confidences.

membership to reallocate funding to other city sustainability priorities. The decision to end its relationship with GEC was to avoid doing "*a duplication of work*"[75], since during its membership, the municipality developed its own internal expertise in carbon accounting (an example of normalization pressures). Additionally, municipal policymakers reported that when its local hub's membership roster reached a critical mass, it was the municipality's view that the hub should have been able to attract and retain members without the municipality's membership to legitimize it[76]. This hub's membership has since plateaued, suggesting that a lack of support from the local municipality was detrimental for breaking through the first movers plateau.

Another hub[77] reported both slow membership growth as well as a challenging relationship with its local municipality. At the time the hub was created, the municipality already had a sustainability program in place, however the program did not have specific emission reduction requirements for its members. The municipality viewed the creation of the GEC hub as a competitor for buy-in from the business community, rather than as capacity support for the municipality (like the London hub) or a complementary partner to the municipality's own climate goals (like the Edmonton hub). This further demonstrates the unintended effects of normalization. Growing demand for support from businesses has caused the proliferation of sustainability programs. As a result, GEC was forced to compete with the municipality's program for members. When the municipality is the competitor, rather than a supporter, the organization has fewer ways to overcome barriers to scaling.

## 10.2 National Expansion

As previously noted, the expansion of the network into new communities in Ontario unfolded slower than anticipated based on the Waterloo hub's initial growth and success. From 2016 to 2018, the network actually contracted in size with the closure of hubs in Niagara and Durham. However, in addition to the Edmonton hub in 2020 the network returned to a total of eight hubs, however two additional hubs have since been added in Ontario and New Brunswick. This more rapid and recent network expansion is explained by a second scaling pathway: the central network office pivoted away from regional/provincial towards national growth by developing a closer relationship with the federal government. A supportive relationship with the federal government appears to be another pathway to scale up GEC's national reach by adding and retaining hubs.

The GEC network was first launched with government support from the Province of Ontario: as Sustainability Colab, the organization received $482,800 over 24 months in grant funding through the Province of Ontario's Trillium Foundation in the 2015-2016 fiscal year. However, this funding stream was not renewed following the 2016 election of Premier Doug Ford's Conservative government. The lack of provincial support, and slower-than-expected membership growth in Ontario, caused GEC to pivot towards national (rather than regional) expansion by engaging the federal government. During

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75 Interview not identified here to protect confidences.

76 Interview not identified here to protect confidences.

77 Interview not identified here to protect confidences.

this period, GEC submitted policy proposals and participated in stakeholder consultations and Advisory Councils for potential new programs with Environment and Climate Change Canada (ECCC) and Natural Resources Canada (NrCan)[78]. In July 2019, it was announced that NrCan provided $256,250 to GEC to establish two new city hubs in Edmonton, Alberta, and in Peterborough, Ontario, as well as a hub to service the entire province of New Brunswick.

Policymakers stated that GEC's work was viewed as complementary to the objectives of ECCC and NrCan for making progress towards the federal government's net zero by 2050 target: GEC provided insight into the climate priorities of SMEs which the federal government did not have[79]. With respect to climate change priorities, policymakers noted that the federal government has difficulty engaging with SMEs on decarbonization[80]. Policymakers attributed this lack of voice to SMEs being underserved by national lobbying organizations like the Canadian Federation of Independent Businesses (CFIB), which have been slow to move on progressive issues like climate change[81]. Likewise, SMEs lack a strong collective voice at the national level, in part due to their diversity in size and sector. Finally, policymakers notes that there is a general lack of data about the emissions, operations, and needs of SMEs, and that these data deficits made program development more difficult for SMEs compared with larger firms or sectors for the federal government[82]. This lack of data and experience working with SMEs has made the relationship with GEC valuable for the federal government[83].

Building a relationship between the federal government and GEC was symbiotic: as previously noted, there is a clear governance gap in federal support for SME decarbonization. Like with municipal governments, GEC built capacity within (the federal) government with respect to engaging with SMEs. This closer relationship between GEC and the federal government in turn opened up new funding opportunities for GEC's national expansion into Alberta and New Brunswick.

A closer relationship with the federal government was important for hub retention. While hub staff indicated that the network's "national reach" and engagement with federal policymakers didn't seem to matter for recruiting new SME members—who were more interested in local recognition[84]--GEC's strengthened relationship with the federal government seemed to add value for the hubs themselves. Events such as a lobbying day on Parliament Hill, organized by the central office, was repeatedly referenced as a key benefit and value of being a part of the network [85]. Many hub staff noted that they

78 Interview #5.

79 Interview #9.

80 Interviews #5 and #7.

81 Interview #5.

82 Interview #5.

83 Interview #5.

84 Interview #24, #25, and #28.

85 Interviews #8, #25, #27.

would never have ever engaged with the federal government directly without the leadership of the central network office. Direct access to policymakers was a valuable benefit of being a part of the network by enhancing the credibility, reach, and impact of GEC and its individual hubs[86].

## 10.3   Scope Expansion

Sustainable Silicon Valley took a third path to overcoming normalization pressures. Given that GEC explicitly replicated SSV in the Canadian context,[87] it is interesting to note that these organizations became very different over time. In terms of scale, SSV remains a regional organization focused on the Bay area, while GEC has since scaled to become a national network. In terms of scope, SSV now focuses more on research-based collaborative projects with municipalities and other non-profits, rather than operating solely as a voluntary carbon registry.

As membership became increasingly harder to grow, SSV pivoted to project-based work that includes collaborative research projects with other non-profit organizations[88]. Rather than geographically grow the scope of its operations to the state or national level—as GEC chose to do—SSV grew the scope of its mandate to a broader, more general environmental focus. The relationship with local municipalities and regional governments was a critically important to allow SSV to make this shift. For example, one of SSV's projects was a study that identified barriers to energy efficiency improvements in multifamily residential buildings. Through the municipality's Energy Project, SSV developed research that identified incentives for landlords of multifamily buildings to implement efficiency upgrades and renewable energy for the municipality of San Jose [89]. SSV also developed a focus on water sustainability, which staff noted was responsive to the specific needs of Californian municipalities to address water shortages[90].

By expanding the scope of its mandate to include a broader array of environmental issues, SSV was able to continue to scale work and broader impact. In an operational sense, expanding its mandate allowed SSV to access more sources of funding through municipal grants. Project-based grants allowed SSV to scale its impact by focusing on critically important local issues that municipalities are already invested in, leading to the convergence of municipal and organizational goals that was necessary for scaling in the Edmonton and London cases. Changing the scope of SSV's mandate thus represents an alternative strategy that can be used to overcome impact and operational scaling pressures that arise from normalization. SSV's decision to pivot to project-based work has allowed the organization to maintain its membership roster— and thus impact on the local business community—without depending solely on

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86 Interview #21 and #10.

87 Interview #18.

88 Interview #12.

89 Sustainable Silicon Valley, "Net Positive Communities," accessed November 17, 2021, https://www.sustainablesv.org/project/net-positive-communities/.

90 Interview #12.

membership growth for the survival of the organization. While GEC has focused significantly on geographic expansion and expanding connections to government, it has also recently engaged in some level of scope expansion as well. Scope expansion therefore represents a third pathway by which these non-governmental initiatives can continue to scale up their operations and community impact.

# 11 Conclusion

In the absence of government regulations and programming for SMEs to reduce their emissions, non-governmental organizations are providing critical support to help these firms decarbonize. Yet despite this critical role, scaling up these organizations can be difficult. We find that GEC appears to have primarily attracted members who would have taken some kind of climate action on their own, regardless of external prompting. However, once these first movers are onboarded, it becomes difficult to continue to recruit new members. A growing general awareness of sustainability and climate change issues has made many businesses believe they have enough knowledge and capacity to take action on their own. In effect, capacity-building programs are "normalized" out of a job before reaching their objective. Yet paradoxically capacity-building support is still needed to select impactful low carbon changes—whether or not Canadian SMEs recognize this need themselves.

However, barriers to scaling are not deterministic; we identify (at least) three paths that nongovernmental initiatives may use to overcome normalization pressures. First, these organizations can form an explicit partnership with a supportive municipality whose priorities align with those of the social enterprise. Second, the organization can scale nationally by seeking a closer relationship with the federal government. Third, the organization can expand the scope of its mandate to seek government grants and support in related environmental fields. Notably, all three paths require a supportive relationship with at least one order of government.

Moving forward, these findings have several implications—both practical and theoretical—for the future of scaling initiatives like GEC. Counterintuitively, this paper shows how increased public awareness can be a hinderance for these initiatives to scale up. However, support from government seems to be critical to break through the 'first movers' plateau and to continue to access new members. In practical terms, marketing the benefits of voluntary non-governmental organizations to governments—rather than among SMEs as potential new members—seems to be more impactful for scaling these organizations. A recommendation to voluntary decarbonization initiatives seeking to scale up both their operations and impact is therefore to focus their advocacy efforts on the state, rather than the broader public or business communities. Non-governmental organizations would also do well to leverage relationships with local municipalities and regional and national governments, and to seek to align their operations and organizational objectives with those of sitting governments.

From a theoretical perspective, our findings suggests that, despite the gap in government programming directed at SME decarbonization, the state is still at the heart of voluntary private actor governance. Coalition-building with governments appears to

be critical for overcoming normalization barriers from normalization. Government incentives, subsidies or rebates can "pull" SMEs towards taking on voluntary low carbon projects into their normal business planning and can legitimize these organizations among potential new members.

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