Research Article

Emergent and Regional: Networked Climate Governance Across Northern British Columbia

Sinead Earley
University of Northern British Columbia
Sarah Korn
University of Victoria

Abstract: Cities and municipalities have emerged as important actors in climate governance, building capacity and leverage through networks. City networks have led to increased agency for local governments at national and international scales but fail to represent northern, rural, and remote geographies. In response, the Northern British Columbia Climate Action Network (NorthCAN) emerged out of a desire to generate connections in the region and across public and private sectors. This research examined NorthCAN as a regional and multi-sector organization that has the goal of accelerating low-carbon transitions in northern British Columbia. It was informed by data collected via survey and qualitative interviews with active NorthCAN members. Our discussion explores the barriers and opportunities at play in this case of networked climate governance, while exploring equity, policy mobility, and community-centred transition as key themes.

The Northern Review 56: 167–192 https://doi.org/10.22584/nr56.2024.009
Published at Yukon University, Whitehorse, Canada | CC BY 4.0

1. Introduction

Local governments and municipalities have emerged as important actors in climate governance, building capacity and leverage through networks. City networks have emerged that are national in scope, such as the Canadian Partners for Climate Protection network (PCP), managed and delivered by the Federation of Canadian Municipalities (FCM). Others are transnational such as the Global Covenant of Mayors for Climate & Energy, one of the largest global alliances for city climate leadership, alongside other initiatives like the C40 Cities group. These forums have led to increased agency for local governments at national and international scales (Acuto and Rayner 2016; Haupt et al. 2020; Colombe, Maya-Drysdale, and McCormick 2022), yet primarily serve large urban centres. These networks fail to represent rural, remote, and northern geographies in Canada, and the many non-governmental actors who are engaging in climate change mitigation and adaptation.

In response, the Northern British Columbia Climate Action Network (NorthCAN) emerged in 2022 out of a desire to generate connections between rural and remote places and across public and private sectors. Some of the early mobilizers included elected government officials who recognized the need for a platform where northern perspectives could be expressed and heard. The Community Energy Association (CEA), a non-profit organization with a history of community energy planning in the region, also played a central role as they started to increase staffing and engagements (such as regular presentations to the North Central Local Government Association). NorthCAN's formation was also driven by the need to coordinate a forum that went beyond city-to-city learning. The key emblems of the network are its multisectoral, regional, and northern foci. This article uses NorthCAN as an example that brings new perspectives to multi-level governance literature and the role of northern communities in low-carbon transitions.

A singular northern perspective is impossible to define, and this article presents northern British Columbia (BC) people and places as heterogenous and diverse. They are all, however, situated in a settler colonial context where resource economies have shaped landscape and culture in major ways. Aldred et al. (2021) describe the region in ways that resist the dualities and oppositions so central to colonial logics, pointing to the diverse "socio-cultural and physical geographies that comprise the present-day states of coloniality that are northern BC" (84). This article explores north–south relations, primarily through a policy lens, but it also aims to resist dichotomous framings.

Another important northern characteristic is that resource regions are crucial in efforts to tackle climate change. Demands for critical minerals and electricity are forecast to increase sooner than previously expected (Government of British Columbia 2023b; Government of Canada 2022), placing new pressures on northern communities. Mining and hydropower infrastructure, for example, is expanding, while small town infrastructure is ageing (Markey, Halseth, and Manson 2013). This prompts questions about historical and future allocations of benefits and burdens derived from resource extraction activities. Gislason et al. argue (2021) that climate initiatives in northern BC need to be community-informed, reflect local realities, and address the role of industry in regional economies. There are many trajectories low-carbon transitions can take, some that may reproduce existing patterns of injustice, particularly where historic planning policy and spatially inequitable land uses have had lasting socio-economic impacts (Garvey et al. 2022). Thus, this article also explores networked climate governance as an opportunity to reflect local realities and advance social and spatial equity for northern communities. NorthCAN is an example that can be used to explore equity in low-carbon transitions from a geographical perspective.

This article adds to multi-level governance literature by going beyond a discussion of inter-jurisdictional dynamics, to include informal, non-governmental, and local actors that have chosen NorthCAN as a platform to exchange ideas and resources. Capacity challenges surface as major barriers for small towns, and regional organizing has emerged to overcome these challenges. The article argues that networked governance de-silos people and institutions, embedding them in a more open system that, it is intended, will allow them to better adapt to climate change. What remains unknown, however, is if and how networking translates into climate action. Still, a clear understanding of why this case of networked climate governance emerged will help to ascertain the contexts through which confidence, capacity-building, implementation, and measurement can occur.

The article begins by introducing NorthCAN and situating it within its northern context. It then describes the research methods and presents the results under four themes that emerged: intersectoral action, quality of life, northern rural leadership, and collective voice and purpose. The discussion integrates the results with the concepts of policy mobility and community-centred transition in ways that help to better understand climate governance in rural and resource-based economy contexts.

2. Northern BC Climate Action Network

NorthCAN's inaugural meeting in April 2022 brought together eighty participants from two-dozen communities across the region. In under three years, the network has grown to include more than 300 people on its distribution list, including representatives from local governments, Indigenous communities, business and industry, health care, education, and other non-governmental organizations. The Community Energy Association has been the primary administrator for the network, coordinating speakers, the virtual platform, and hosting meeting summaries and resources on their website. The network convenes quarterly online with at least one additional meeting per year as an in-person or a hybrid event. To acknowledge regional representation and share responsibilities, the network uses a rotating chair to introduce presenters and facilitate the meeting.

The drive to establish the network came from a recognition that assets, actors, and passion exist in northern communities, but capacity to advance climate action was limited and a forum for collaboration and sharing might help to address this. The CEA had history in the region, developing community energy plans, establishing electric vehicle infrastructure (e.g., the Charge North campaign), and coordinating training for builders adapting to the revised BC Energy Step Code (requiring higher levels of airtight construction and energy efficiency of new buildings). The CEA also identified a lack of northern representation in climate-related networks across British Columbia and directed BC Hydro funding toward the coordination of NorthCAN meetings starting in the spring of 2023. The story of how NorthCAN came to be is simplified here, but there was a constellation of people and institutions that had long-standing interests in fostering local leadership and relationships for the region, all orienting themselves towards climate issues at the same time. Coordination included those from multiple sectors: industry, the Health Authority, local government, and education, among others. The University of Northern British Columbia (UNBC), for example, has had a significant impact on the network's reach and orientation. Alumni work across all sectors and comprise approximately one-quarter of the NorthCAN membership.

NorthCAN has no explicit geographical boundaries for membership, projects, or speakers, but priority is given to presenters who live and work in northern BC. Approximately 290,000 people live in northern BC, spread out over two-thirds of the provincial land mass, and nearly 20% of the population is Indigenous (Northern Health 2022, 8). Participants have come from Secwépemc Territory as far south as 100 Mile House, Haida Gwaii and the Village of Old Masset in the west, Denendeh Territory and Fort Nelson in the north, and Dane'zaa lands and the Peace Region in the east. The region is diverse in culture and ecology across the landscape and, as is evident in the results of this research, includes distinct communities that require climate solutions that reflect place-based needs. Northern latitudes are disproportionately impacted by climate change (Gill et al. 2001; Gislason et al. 2021) and much of the impetus to connect across the North is linked to increases in the intensity and extent of climate impacts, such as wildfires, animal and plant species migrations, and extreme winter and summer temperatures.

Political factors also played a role in network formation. The region has been framed as the Provincial North by numerous scholars who discuss these areas of Canadian provinces as forgotten political or administrative entities that also serve provincial and federal governments as sites of intense, extensive, lucrative, and long-standing resource extraction (Coates and Morrison 1992; Hall and Donald 2009; Piper 2010; Coates, Holroyd, and Leader 2014). Thus, this research considers NorthCAN and the region as nested within provincial and federal jurisdictions. As foreground, it is also a region where Indigenous rights holders continue to uphold their governance systems and assert their enduring relationships with ancestral lands. The dynamics of power, politics, and sovereignty are complex within the settler colonial context.

NorthCAN also defines its reach in relation to institutional support from various northern organizations. The Northern Health Authority (NHA)[1] is the only institutional body that defines northern British Columbia as an administrative unit, and NHA's participation in the network has been significant from the outset. Other institutional participation has come from the First Nations Health Authority (FNHA), Northern Development Initiative Trust (NDIT),[2] Northern BC Tourism Association, and the Canadian Homebuilders Association of Northern BC. In addition, there are other groups that operate beyond the region but have shown long-standing leadership in the North on environmental matters, such as the Fraser Basin Council (FBC) and the New Relationship Trust (NRT).

Another aspect of early NorthCAN conversations was that the regional focus should be undertaken with an attentiveness to global connections and concerns. There was importance placed on hearing from others who are mobilizing to act on climate change across Canada and internationally. For example, hearing from Albert Edman of Viable Cities and the Research Institute of Sweden (RISE) oriented much of the discussion during NorthCAN's first in-person workshop in 2023. The Viable Cities model of local-level communities of practice, under the banner "sustainable, beautiful, together" (in the form of climate city contracts), has resonated within NorthCAN (Viable Cities 2024).

3. Methodology

The objective of the research was to offer current and future members important insights on the role of NorthCAN as an organization amplifying and encouraging climate action in northern BC. Thus, there is an action research orientation at play. The combination of action and research implies a move beyond conventional studies that aim to understand a problem, or applied research that aims to improve. The purpose of action research is to increase cognitive understanding *and* improve, prioritizing collaboration, experiential practices, and reflexivity (Bradbury 2015). It is a process-oriented approach that enrolls all those involved (research team, community organizations, and policy-makers) in social learning, shifting the focus from discussion of problems to facilitation of solutions. This often allows researchers to document and respond to research findings in an immediate way, relecting the need to alleviate the severity of ongoing climate impacts.

The action research framework reflects NorthCAN's goal of connecting across public and private spheres. Municipal representatives use policy and planning to address the twin issues of mitigation and adaptation, yet climate change governance is a matter of both public and private authority. Urban response to climate change often happens at sites and in spaces that are "off-plan" (Bulkeley, Castán Broto, and Edwards 2015). An action research framework allows us to understand NorthCAN as an organization that brings perspectives from multiple sectors to the fore, with potential to improve the environmental policy process.

Data collection for this study included a member survey (n=18) and qualitative interviews (n=13) with highly active[3] NorthCAN members. From a members list of 191, thirty-nine requests to interview were made and thirteen were conducted; in addition, eighteen surveys were completed. The survey was designed largely as a feedback tool for meeting administrators, asking respondents to identify when and how they wanted meetings to occur and topics of interest, but it also included questions about relationship building within the network and the application of knowledge gained in workplace settings. The interview questions were designed to solicit broader information about network purpose and composition, regional challenges and opportunities, and collective action. Survey and interview data have been anonymized, and quotes are referenced using codes (e.g., A5 for interviewees and Q14 B2 for survey respondents). We used a speech-to-text transcription application (Otter.ai) for the interviews, and then created edited transcripts (removing grammatical errors, pauses, run-on sentences, and so on) to increase clarity and readability.

To identify the themes featured in the discussion we followed an inductive coding approach, starting with a list of open codes derived from survey responses and interview transcripts. We then used these to identify recurring ideas, patterns, and relationships between concepts through an axial coding process, with further consolidation into selective codes. We used these observations to ground our analysis of NorthCAN's purpose and potential within the social, political, and climate context in northern BC. As we present our results, we have chosen to rely on frequent and extensive quotes in an effort to centre participant voice.

4. Results and Discussion

Four key themes emerged from what we heard through the interviews and the survey: intersectoral action, quality of life, northern leadership, and collective voice and purpose. We explore each theme in turn, integrating the data into our discussion. In conjunction with literature on the role of networks and socio-spatial justice, we explore policy mobility and community-centred transition through the lens of the NorthCAN network perspective. It is also relevant to note that there is an overarching tendency in the data towards opportune and hopeful ideas. Most interview respondents conveyed that they see the network as a source of hope in the way that it showcases examples of people who are leading in their own communities. Simply by meeting people and encountering projects (planned or realized), significant hope and inspiration is triggered. We acknowledge that as highly active network members, respondents are self-selected; they are people who have voluntarily "come to the table" because of personal or professional interest. Still, we think it is instructive to identify the formative period in network formation as one viewed positively.

4.1. Purpose and Possibilities across a Northern Region

4.1.1. Intersectoral Action

NorthCAN's cross-sectoral composition presents challenges, with diverse rights holders and stakeholders defining low-carbon transition in their own ways, yet the network allows for connections across a broad spectrum of issues and institutions. Members are thinking about how to connect across jurisdictions, which means "respect the jurisdictions but find ways to share resources. Regional districts, municipalities, province, federal government, First Nations, they all have a stake in this whole thing. So, just respecting them but find ways to share, find better ways to share" (A3).

Resource-based communities play a unique role in low-carbon transitions, meaning that private sector actors are also important collaborators. According to one interviewee, we need to:

> figure out how that looks for the resource sector that so many of the communities are dependent on. So, making sure that the policy or those types of things that need to happen for the low carbon and resilient transition, don't preclude or kind of limit those necessary industries that are going to be required for that transition. We're going to need wood products to build low carbon buildings and we're going to need mines to get the ... precious metals that we need for all the computers and batteries, and all those other types of things that are going to be required for this. (A4)

There is a role for corporate leadership in the resource sectors, but there are also many small business owners active in the network, including tourism operators, home builders, and clean energy consultants. Non-governmental organizations, not-for-profits, and energy cooperatives have also been vocal, seeking dialogue with others that might share mutual social and economic goals.

Still, representation from the public sector and local government in NorthCAN is high. Respondents stressed the importance of municipalities and regional districts as important bridging agents between policy dictates and implementation. As one interviewee noted, "I don't like using that word downloading because I think municipalities and local governments are actually really well positioned to tackle these issues meaningfully" (A10). Respondents stressed local empowerment, seeking a wider and more equitable distribution of capacity-building mechanisms and resources than what currently comes from provincial or federal agencies. Furthermore, there is potential for reciprocal learning within a multi-sector constellation:

> I think the way to local governments is through industry, business, post-secondary education, health care, all those community actors who can influence local government on one hand, but also so that local government can feel some courage in passing legislation that they feel that the rest of these people are there to deal with it, to implement the rules, and they don't feel that they're out on a limb. So, I think the two things really work together. (A13)

The research also revealed that staff, elected representatives, and community leaders are often bound by size and remote location. Many of the services and infrastructure taken for granted in larger centres are of compromised quality or do not exist in remote places. For example,

> one of the things that's missing in our First Nations communities, and even some of the other remote places, is setting up a process of approving designs and structures, energy advisors, plan checks. That doesn't happen on reserve much, a little bit, but it's not the same as a regional district or a municipality. It's not at the same level. First Nations are, they're all small governments. The capacity to do all of this is, it's too much. (A3)

Creating opportunity for people to connect across sectors and across communities is essential; "local governments, I think, are incapable of charting this course in isolation, or individually. They can only do this as a collective" (A13). The network can support local government through its collective capacity-building and knowledge-sharing approach with various sectoral actors.

4.1.2. Quality of Life

Interest in a co-benefits approach was common, with many respondents speaking about the ancillary benefits of reducing greenhouse gas emissions such as improved air quality, healthier communities, energy access, food security, poverty reduction, and adequate housing, among others. In other words, the benefits that come from climate change mitigation have other benfits too, which improve quality of life. Socio-economic factors and access to basic services influence what types of challenges northern BC communities face, and how they might work to address them. As expressed by one interviewee,

> having a healthier population overall makes you more resilient to the impacts of climate change, right? And so, when our health has already been compromised in the north, because of remoteness, or lack of resources, or staffing shortages, or certain environmental factors too, right? The cost of food, the cost of housing, poverty is such a big issue in the north, and yeah, makes us less resilient to when we have these big events like heat waves or wildfire smoke episodes. And extreme cold is even something that the health authority's looking at too in terms of what is the health burden there. (A11)

A co-benefits perspective prompts a different way to think about what low-carbon pathways might work for northern communities, with a focus on increasing qualities of life and health.

As examples, the digital equity gap is growing in Canada with disproportionate impacts in Indigenous, rural, and remote communities (SFU Public Square 2021). Communications infrastructure and connectivity are not to be taken for granted and there are large areas with insufficient internet speeds or no cell service. Lack of connectivity is a real barrier: "I don't know how many times you get into a Zoom meeting, and you get someone in a Band office somewhere and they're going in and out, missing out on all kinds of stuff" (A3). From a

transportation perspective, northerners living in rural and remote communities emit more carbon to access basic services, such as health care provision or educational programs. Residents often must travel, if they can, hundreds of kilometres to larger towns or cities to access services. One interviewee's vision of a low carbon future starts with access: "I feel like once you get the basic services to each of these communities or within a manageable range, I feel like that'll hugely help low carbon climate resilience in the North" (A12).

Respondents discussed equity in several dimensions: social equity, spatial equity, and procedural justice. From a representation perspective, they suggested how future membership might expand: "From an economic and social standpoint, people that are inequitably impacted by climate change impacts should be at the table and groups that maybe work with those portions of the population" (A5). Ultimately, discussions about quality of life need to be carefully navigated, keeping in mind that race, class, gender and other social indicators make some people and communities more vulnerable than others. From a co-benefits lens, there may be new ways to think about how to promote change at the local government level. For instance, "I think it's just gotten to the point now where [climate change is] not really about environmentalism, it's really about the economy and about quality of life. And it's gone way beyond it being a fringe issue, it's just embedded now in everything (A13).

4.1.3. Northern and Rural Leadership

We also heard from respondents that what defines quality of life needs to be informed by northern inhabitants. The network acts as an opportunity to hear from small, rural, and remote communities, and to create opportunities for leadership that stem from those places. Northern British Columbia is a large area with a dispersed population, and "there's this big disparity in the amount of resources we have for the size of the region. [My workplace] does have to do things a little bit differently because of that, and yeah, working with others is so essential" (A11). In other words, existing geographies require collaboration, and NorthCAN has embraced that as a positive thing: an opportunity to connect, share knowledge, and treat climate change as a chance to come together to develop solutions that work for northern communities. Rather than a barrier, NorthCAN is repurposing the common narrative of northern isolation and disconnect in constructive rather than debilitating ways: "I'd love to see something where collaboration was actually celebrated. I'm not sure our governance systems, our corporate systems truly celebrate collaboration, they talk about it, but are we really celebrating it?" (A13).

NorthCAN coordinated its first in-person workshop in April 2023 titled "Leading from the North: Connections across the Region for Climate Action." During the workshop, there was a palpable and distinctly northern pride, rooted in people's attachment to specific places, while also celebrating diverse landscapes and cultures across the north. As one interviewee describes, "there's an identity in the north that is peculiar, it's hard to put your finger on, but it's there" (A13). How these pieces of identity intersect with climate change will influence community response:

> I think when I say familiarity with the landscape, with the challenges we face, with each other, I also am thinking of that certain quality of being from the north which is resilient and adaptive. We all make something work. We're innovative and there's an appreciation for unique solutions. More even than an appreciation, there's a drive. There's a knowing that there's not going to be a blanket approach that works here (A10).

Despite important differences across the region, the results also indicate that there is a shared identity. Recognition and growth of this shared identity enables northern leadership through NorthCAN.

There are also misconceptions associated with a region whose inhabitants have relatively high per capita carbon emissions. Several interviewees spoke about the association between "the north" and a stereotyped reluctance to move away from fossil fuels that are a large economic driver in the region. In contrast, as one participant described, there is a "real opportunity for reframing the conversation. Why is it that all of these changes to be more green and clean have come so negatively? Like the attitudes here are so negative about environmental action, when actually the people here can get really excited about it. It just feels like we're always getting told off" (A10). Given the community focus that NorthCAN carries, it would be beneficial to see an increase in representation from smaller places. As one interviewee noted: "I'm always a big advocate for going to the smaller communities because not very many people go to the smaller communities and that's really the way to build relationships with people" (A6). Furthermore, people are seeking solutions that fit local contexts. Local resources and local solutions were commonly referenced. For example, "it's about strengthening local connections, utilization of local resources, food production, utilization of waste" (A13).

Northerners want to participate and actively design a climate resilient future. Yet, respondents noted some of the policy barriers:

> We've got unlimited renewable energy resources all around the world, but really strong up here in the north. Why can't we use it? Boy, what's going on there? I'd like to see those roadblocks eliminated, and the flow of energy really get cracking, from house

> to house, municipality to municipality, city to city, region to region all across the province. That would be fantastic. And that's exactly what's gonna have to happen if we're going to do this. (A7)

Interviewees were asked what a regional approach to climate action offers that organizing at other scales (municipal, provincial, international) does not. In many instances, dialogue is made easier:

> You're dealing with the same, similar problems. Geographically, between the coast and northeastern BC the climate is drastically different at times, but they're still dealing with the same challenges in terms of remoteness, and availability to services, that kind of thing ... So, I think having that regional approach, really, you're talking to someone who knows what you're dealing with. (A9)

Network members are relieved to be in the same "room" as others they can relate to: "[there are] common factors that you're all facing, so it's easier to communicate, and there's more benefit from having that regional aspect" (A1). The regional approach to climate transition also reflects the contexts of place. According to one member, "because it is a specific geographic region, with its own climate and landscape, unique to itself, it probably requires a unique approach. So, what does regional offer to people? I think it just offers more appropriate action because you have to take into account ... the landscape, the population density, the unique climate that we have in the north, that's very different than the south" (A7).

One interviewee described north–south relations as such:

> I'm sick and tired of the north following and I think we deserve to lead. We're the place where the energy comes from. We're the place that supplies the wood products that allow buildings to be built without steel. So, it bothers me whenever we lag and we were clearly lagging in this area. And part of it, I think, is because the solutions that we had in front of us, EVs, [heat pumps], being two good examples ... are primarily southern solutions, and southern and urban solutions. (A13)

The desire to increase representation from northern, resource-based communities in climate action is apparent. Yet, as described above, it goes beyond increased representation to thinking about how climate governance can be led by actors working at the local level. To do so, those local leaders need to work together to increase their critical capacities to enact change.

4.1.4. Collective Voice and Purpose

Commentary on small communities and isolation was recurring and surfaced as a two-sided coin: as both restricting and requiring cooperation. Isolation pulls communities towards collaboration, and the network has filled a gap in collective voice that no other climate-related organization has done at a regional scale. This research helps to answer several questions for NorthCAN: What purpose does the network serve? Why did the network form at this point in time (i.e., the drivers)? How will the network function to fulfill what its members are looking for? The final theme of collective voice and purpose speaks directly to functionality, while also admitting that this is not easy; "collective action is particularly difficult in a rural area with a sparse population. It's hard to bring people together" (A7). These spatial dimensions make NorthCAN's early achievements in membership numbers and regional representation significant.

Despite CEA's activity in the region, there is still concern that with mobility and built-infrastructure issues, "the north is not under the same amount of focus, or even proportional focus for me, that other regions get from the centres of power, so to speak, in government" (A1). There is dissatisfaction with "broad legislation that does not account for unique circumstances in remote, rural communities" and does not indicate "the ability to communicate with vulnerable populations" (Q15 B4). Appropriate action is something members do not necessarily associate with provincial level policy, and coordinating collectively might help to voice their concerns.

Northern geographies call for policies that are better designed to serve place-based needs. For instance,

> to run a home, to heat a home in the north, I don't know exact numbers, but I'm gonna say it's probably three times more than it is in the Lower Mainland, at least. And so, if we build a more energy efficient home, just by doing that, like a net zero or a step five home, is at least 50% more efficient. So, if we cut our emissions by 50% just by building a more energy efficient home, then we're actually reducing our carbon output more than a house in the Lower Mainland that goes to zero carbon. Just because of where we are ... I keep saying one size cannot fit all. It just doesn't, you know, it's not fair. (A2)

Respondents are expressing the need to be recognized as a distinct region from a regulatory perspective.

People across sectors also want to play a more active role in the policies that affect their everyday lives. NorthCAN members are interested in developing a shared focus, not necessarily on the complexities, tensions, or deficiencies of north–south relations, but on climate action coming from northern people and regions. There is "an opportunity ... for the north to be a little bit more proactive instead of just following along with regulations and sort of being seen as the, you know, needed to be dragged along and resource dependent, and nothing's happening up there" (A4). Some members expressed a sincere need to play a larger role in the policy process:

> We end up in a position where not only are we left behind because the voices of the north aren't adequately represented where the legislation is being written. Not only are we left behind, but we're actually in a position to be punished by the new legislation. So that's kind of what rings out for me is that it feels like there was a need. People are seeing that need to make a stronger voice more than ever. (A10)

Participants described how they have been left out of front-end dialogue that influences policy design, and marginalized through consultation or commentary. There is discomfort in this: "We get opportunities to comment on provincial initiatives, but we don't often get opportunities to say this would work in our area. And if we do, it's only in the form of a comment on something they've already done and have already got in place" (A10). There are significant opportunities for co-creation or co-production in climate policy that derives from "local customs, is community informed. And when I say community, I mean our frontline people, our residents and our Indigenous communities that are in the region. Community informed solutions and ideas" (A10).

Local government representatives and staff in northern communities are responsible for more complex portfolios, and resources are spread more thinly than in urban centres. As one local government staff described, "I jump in a day from healthcare, to accessibility, to animal control, to sustainability ... Everybody has so many files that they're juggling" (A10). They are often "left to [their] own devices," there are fewer staff and high turnover rates (A1), making it hard to engage in regional or provincial conversations. Capacity and ability are fundamental building blocks in transition. Barriers specific to small, rural, and remote communities need to be better understood, and regional collaboration recognized as a way to work beyond such barriers. The conversations around pride of place, identity, and shared values that surface in the data are precursors to a community-centred transition that NorthCAN might be able to facilitate. Respondents stressed the importance of collective voice and purpose where members can reinforce each other.

4.2. Implications for Climate Governance

The NorthCAN data shows how communities in northern BC need to collaborate so they can generate the capacity needed to respond to climate change. Northern BC is an extensive area with low-population density and ecological complexity, where climate change has ongoing impacts on the region in unpredictable ways. Here, we explore how the network is repurposing the common narrative of northern isolation and disconnect; smallness and remoteness is pulling communities toward knowledge-sharing opportunities. The discussion also explores policy dynamics through the lens of social and spatial equity. Climate change impacts all communities differently; the results in this study indicate that climate solutions need to be place-based but also that regional dialogue can facilitate this. The discussion concludes with an exploration of what is needed within policy processes to reflect place-based needs and support community-centred transition.

4.2.1. From Isolation to Collaboration

Cities and municipal governments are increasingly recognized for their potential to fill the governance gap resulting from government inaction and lack of support on climate change at national and international scales (Dow et al. 2013; Acuto and Rayner 2016). Theoretically, large cities are well-positioned to develop innovative, experimental, and relevant mitigation and adaptation solutions at the local level, but barriers related to political jurisdiction, institutional structure, intergovernmental relations, and capacity limitations inhibit implementation (Gordon 2016). In response, city networks (comprised primarily of cities and local government associations) have emerged as a tool for coordinating climate action. Networks facilitate collaboration, city-to-city knowledge exchange, and policy learning between local governments facing common barriers (Acuto and Rayner 2016).

The ultimate purpose of city networks, as described by Gordon (2016) and Haupt et al. (2020), is to close the implementation gap between local-level commitments and tangible results, and to connect local actions to aggregate impacts across urban centres. At their core, networks function to mitigate the capacity barriers of local governments. Yet, network composition is largely made up of medium to large-sized population centres[4] that have the staffing capacity to work on climate portfolios. In their review of the scholarship, Coulombe, Maya-Drysdale, and McCormick (2022) found a focus on large "climate leader" cities and on transnational linkages, leaving local-level perspectives underrepresented. City networks have led to increased agency for local governments at national and international scales, but rural and remote places remain isolated in relation to climate governance because they do not have the same level of capacity to

participate. Decentralization in multi-level change governance has opened the door for government actors, but impact is limited without wider coordination across sectors. As Tosun and Schoenfeld (2017) explore, networks that involve hybrid public–private partnerships (such as those triggered by NorthCAN) have different motivations and benefits. They often have more diverse citizen participation and a focus on collective action, serving a different role than city-to-city networks.

For example, Aylett (2013) presents the case of the Solarize Portland project highlighting the success of community driven partnerships between municipal governments, community members, NGOs, and local businesses. Central to the project's success was the ability of community members to leverage their social capital and personal networks, as well as experiment with risk-taking strategies not typically available to municipal governments or staff members who face political constraints and agendas. Wagner, Torney, and Ylä-Anttila (2021) analyze Ireland's 2019 Climate Action Plan as a product of a multi-sector, multi-level policy implementation network, but one that was led and coordinated by the state. These examples are about inner-city collaboration or state-led initiatives. The NorthCAN case offers similar commentary on multi-sectoral work, but at the regional scale and from a non-governmental network.

Intersectoral action has been advanced by health-related agencies and researchers to better understand the complexities of the social determinants of health that implicate actors and agencies beyond traditional health sectors. In health, it is generally accepted that intersectoral approaches are necessary, but "knowledge around how to support, achieve and sustain multisectoral action is limited" (Amri, Chatur, and O'Campo 2022, 3). Similarly, climate change is a societal challenge that belies allocation to one sector, and there is plenty to learn from ecohealth researchers who have championed this approach. Such alignment may also be why the Northern Health Authority is keen to engage, and why health practitioners see NorthCAN as a network with the potential to achieve and sustain multi-sectoral action.

The intersectoral and economy-wide approach taken by NorthCAN provides opportunities for diverse actors from rural, remote, and small towns to engage. Such an approach elevates perspectives from workers and businesses closely tied to resource sectors in resource-based communities. Similar perspectives are present in just transition strategies; labour and the resource communities that workers call home play a key role in the disruptive political-policy actions that will overcome carbon lock-in (Healy and Barry 2017).[5] Resource workers are not "passive bystanders, but agents of change able to develop new pathways to sustainability" (Galgóczi 2018, 3). It is from resource peripheries that many cities issuing climate emergency declarations (such as those in the C40 Cities coalition) obtain their material and energy needs. As part of a resource-based economy, northern people and places are critical in efforts to tackle climate change.

Parag and Janda (2014) offer a new perspective on the literature surrounding intermediaries within intersectoral constellations, often defined as entities that emerge to achieve a specific and desired outcome, and therefore, have an implied sense of impermanence. Their "middle-out" approach highlights the role of the overlooked middle actors; not those at the top with government decision-making authority like elected or staff officials, or those at the bottom such as consumers and voters. Parag and Janda's (2014) middle actors already exist and function outside of mediation, and independently exercise their own capacity and agency. The authors use the example of building professionals, examining how they influence consumers through the encouragement of energy efficiency upgrades, and the integration of home building design and green technology. In turn, their role has multiple knock-on effects: shaping professional homebuilder associations, promoting professional practices, transforming supply chains, and influencing consumer knowledge and agency. The homebuilders and affiliated associations that participate in NorthCAN have made some gains in this regard.

In summary, NorthCAN's economy-wide approach is indicative of transition strategies unfolding in other places that "recognize the need for deep decarbonization beyond the energy sector, and typically align decarbonization with broader social goals such as improving societal welfare and reducing socio-spatial inequalities" (Bridge and Gailing 2020, 1037). The downloading of responsibility and management to local government has been chaotic and controversial in recent decades, providing opportunities for local empowerment on one hand while entrenching uneven capacity development on the other (Parkins et al. 2016). Respondents identified the need to tip the balance to the local empowerment side. Results indicate that participation from diverse sectors strengthens the ability of traditional government actors to implement climate projects. Intersectoral collaboration instills greater courage in state actors to initiate change.

4.2.2. Equitable Policy and Climate Action

One of the major barriers to climate action lies in the common but differentiated responsibility (CBDR) clause first articulated through the formation of the United Nations Framework Convention on Climate Change in 1992. The principle reflects the uneven and unequal distribution of benefits and burdens globally, as well as heightened violence, exposures, vulnerabilities, and risks experienced by many communities that have contributed least to the root causes of climate change. Yet, thirty years onwards, equity concerns continue to be downplayed or remain absent in many climate action strategies (Klinsky et al. 2017), and climate financing

promised to those experiencing disproportional impacts remain unfulfilled (Timperley 2021). Furthermore, climate change is exacerbating the root causes of inequity, leading Fernandez-Bou et al. (2021) to argue that research with frontline communities is needed to develop and implement impactful policies. They outline multiple challenges and solutions in their work, but one is the error of ignoring local knowledge, potentially solved through information exchange and expansion of community-based participatory research (Fernandez-Bou et al. 2021). Information exchange was one of NorthCAN's formative drivers.

Several respondents raised the idea of a policy hub to help with literacy and preparedness for implementation. As transformative policies are negotiated and mandated in Victoria (BC's capital city and home to the Legislative Assembly of British Columbia), such as the zero-emissions requirements for medium and heavy-duty vehicles (Government of British Columbia 2023a), companies are reviewing consultation papers and fulfilling the province's requests for comments piecemeal, while they reactively work to assess how their fleets and operations will be impacted. NorthCAN members describe their experience with climate policy as unpredictable, overburdening, and destabilizing. Clean BC is the province's most recent climate change action plan, and includes targets for pollution reduction that will have significant impacts on resource sectors (Government of British Columbia 2018), yet those in BC's resource-dependent communities do not have the information they need to navigate the transitional risks associated with regulatory change.

The results show, however, that the challenge is not merely about additional representation within provincial or federal-level policy cycles, such as invitations to comment or consult on policy options. It is not about access to information either. Northern BC has long been characterized by heartland–hinterland dynamics (Hayter, Barnes, and Bradshaw 2003), and political power, policy-making, and investment decisions remain concentrated in large urban centres. Many respondents discussed these inequities directly and listed them as reasons why they are compelled to participate in the network. There are few governmental supports specific to northern BC, and NorthCAN is the first regional body to collectively organize for low-carbon transition.[6] Respondents expressed that there is an interest in new ways to participate but, more so, they are seeking opportunities to lead or co-create policy development, and collective efforts via NorthCAN might allow them to do that.

These dynamics speak to some of the tensions around policy mobilities and the critical question posed by Theodore (2019): "How do 'ideas from elsewhere' shape local policy debates?" A central argument made by critical policy studies scholars is that social, political, and environmental conditions influence public policy successes in particular places and should not be assumed to work when reapplied and reused elsewhere (Peck and Theodore 2010; Cochrane and Ward 2012; Theodore 2019). Such critiques seem even more relevant in a changing climate, where impacts and adaptative measures are highly differentiated across space. If taking a "geographically sensitive approach to studying policymaking" (Theodore 2019), voices from northern, rural, and resource-based communities need to play a greater role in climate policy, and networks are one tool that can support increased representation. There is evidence here that local authority and autonomy are important in an era of multi-level governance, and there needs to be more analysis of the interactions between municipal or non-traditional actors under provincialism and federalism. Unpacking related questions can lead to a better understanding of the barriers and opportunities associated with regional leadership and participation in policy resolutions.

Gislason et al. (2021) argue that the literature on climate change communication inadequately addresses the challenges faced in rural and remote communities. With a focus on communication and engagement strategies in northern BC, the authors highlight that climate initiatives must be community-informed, reflect local realities, and address the role of industry in regional economies. This latter point is integral to "spatially targeted interventions" or a "whole systems approach" (Garvey et al. 2022) to policy-making. The legacy of extractive resource economies and colonial heartland–hinterland relations permeates governance structures in northern BC. A low-carbon future will look different in these communities given their ties to resource sectors. A spatially just transition sets the trajectory apart from models developed for urban centres with tertiary-oriented (service) economies. Spatially targeted policies can be one way to promote regional equity, understood here as a fair geographic distribution of benefits and burdens as rural regions navigate decarbonization pathways; examples such as consumption-based emission policies, regional target-setting, or citizens assemblies, can help to "shape context specific solutions" (Garvey et al. 2022, 10).

Those who work in legacy industries (e.g., oil and gas, construction, automotive) will be adversely affected, as will people living on low incomes and people of colour who currently face higher levels of precarity and insecurity (Carley and Konisky 2020). Electric vehicles, for instance, are owned mostly by high-income, highly educated males who are homeowners, and charging infrastructure is not equitably dispersed across space (Hardman et al. 2021). The shift to electric or hydrogen-powered transportation will impact rural and northern areas differently, where people often cover significant distances in cold temperatures to obtain basic social services such as health care or education. Flipo, Ortar, and Sallustio (2023) discuss several distributional and procedural justice implications for rural regions; the costs of mobility changes are assumed by individuals and policies are most

often promulgated by a central government without the input of residents (under wider neoliberal strategies privatizing transportation options).

Similarly, the shift to renewable energy sources is not benign. On one hand, renewables have been examined for their ability to localize and democratize energy systems (Szulecki, Ancygier, and Szwed 2015; van Veelen and van der Horst 2018; Burke and Stephens 2018), and on the other hand, as leading to uneven geographical development, core–periphery asymmetries, and energy peripheralization (Golubchikov and O'Sullivan 2020; O'Sullivan, Golubchikov, and Mehmood 2020). In any case, growing interest in NorthCAN is indicative that people are wanting to participate in creating trajectories that work for their communities. If agency can be increased through collaboration and information sharing, northerners might be more successful in designing community-based, locally relevant, geographically situated low-carbon transition pathways.

Conclusion

The people and places referred to in this article are nested within distinct regions throughout northern British Columbia. They are also nested within Indigenous Territories and within provincial and federal jurisdictions. Northern BC has an extended history as a globalizing region (Bowles and Wilson 2016) and communities are negotiating relationships, old and new, with international corporate actors that are also shifting to remain relevant in a low-carbon society. Within this context, over 300 northerners have chosen networking as a path toward climate solutions, participating in NorthCAN to share with and hear from others across the region. NorthCAN is presented here as an example of the dispersion of climate governance within nation states, with actors seeking a "collaborative approach to be able to work through barriers a lot faster" (A6).

The article starts with a description of why NorthCAN came to be and how it currently functions. It also starts with a description of the region as diverse and complex. We return to Coates and Poelzer's (2014) geographical-political definition that highlights Provincial Norths as "not homogenous units, but rather diverse, even fractured, regions, facing distinctive challenges, opportunities and social characteristics" (2) where there is "a strong juxtaposition of economic opportunity, regional distress, and political marginalization" (3). Yet, despite such geographic diversity, the network has been successful because of a shared identity of exclusion and isolation, compelling people to learn from each other. We then present research results under four themes: intersectoral action, quality of life, northern rural leadership, and collective voice and purpose. The discussion analyzes how the experience of isolation has brought people together collaboratively, across space and sectors, and how this has contributed to new constellations of climate governance in the region. We then discuss policy and climate action in relation to equity concerns.

This article brings a new perspective to multi-level governance. It argues that participation from northern resource regions is essential to understand "supply side" transition challenges. More so, it argues that place-based knowledge is a critical component of climate solutions. Social and technological transition strategies that are desired and championed by communities where implementation occurs will be more successful. NorthCAN exemplifies how intersectoral work is actualized, and that non-traditional actors in multi-level governance are providing a strong foundation to fill a policy mobilities gap that has left rural and northern needs underrepresented in provincial and federal-level programs.

It is useful to not only highlight that environmental decision making is power laden, but to articulate it specifically as a coloniality that has appropriated land, extracted resources, and accumulated capital in the hands of decision makers elsewhere. Given that the "global marketplace of policy solutions" is exceptionally busy in today's climate domain, it is important to attend to the "relationality of policymaking sites (whether as sites of emulation, implementation, or contestation)" (Theodore 2019). Applying a policy mobilities lens to north–south relations in British Columbia will help to address some of these inequities.

Lastly, the article argues that incentives for network members to engage go beyond participation to include leadership, with northern communities seeking greater influence over climate policy, investments, and initiatives. Contrary to depictions of resource-based communities as entrenched and allegiant to carbon intensive energy systems, the size and breadth of a network that coalesced within several months, and has consistently grown, is evidence that northern BC communities are ready to address climate change. People are eager but are limited by the resources and capacity needed to transform. As articulated by one respondent: "How do you do this in smaller communities that don't have a team of fourteen people working on risk reduction and adaptation? Networks" (A4). Intersectoral and regional collaboration is the salve for community-level capacity challenges related to low-carbon transitions.

Notes

1. The Northern Health Authority (NHA) delivers health care across thirty-three communities and fifty-five First Nations communities across six regional districts, serving approximately 300,000 people across 600,000 km^2.
2. NDIT covers approximately 70% of the provincial land base and represents thirty-nine municipalities, nine regional districts, one regional municipality, and eighty-nine First Nations communities.

3. High-activity status was attributed to those who had attended two or more meetings as of January 2023.
4. We follow Statistics Canada definitions of population centers as small (population between 1,000 and 29,999), medium (population between 30,000 and 99,999) and large (population of 100,000 or more) (Government of Canada 2016).
5. The concept of carbon lock-in refers to the structural features of society that are tightly tied to fossil fuels, such as technologies and governing institutions that are dependent on fossil fuel energy systems.
6. At the sub-regional level, extensive work on climate risks and vulnerabilities has been undertaken in northeastern BC through the Northeast Climate Resilience Network, facilitated by the Fraser Basin Council.

References

Acuto, Michele, and Steve Rayner. 2016. "City Networks: Breaking Gridlocks or Forging (New) Lock-Ins?" *International Affairs* 92 (5): 1147–66. https://doi.org/10.1111/1468-2346.12700.

Aldred, Terri-Leigh, Charis Alderfer-Mumma, Sarah de Leeuw, et al. 2021. "Mining Sick: Creatively Unsettling Normative Narratives about Industry, Environment, Extraction, and the Health Geographies of Rural, Remote, Northern, and Indigenous Communities in British Columbia." *Canadian Geographies / Géographies Canadiennes* 65 (1): 82–96. https://doi.org/10.1111/cag.12660.

Amri, Michelle, Ali Chatur, and Patricia O'Campo. 2022. "Intersectoral and Multisectoral Approaches to Health Policy: An Umbrella Review Protocol." *Health Research Policy and Systems* 20 (1): 21. https://doi.org/10.1186/s12961-022-00826-1.

Aylett, Alex. 2013. "Networked Urban Climate Governance: Neighborhood-Scale Residential Solar Energy Systems and the Example of Solarize Portland." *Environment and Planning C: Government and Policy* 31 (5): 858–75. https://doi.org/10.1068/c11304.

Bowles, Paul, and Gary Wilson, eds. 2016. *Resource Communities in a Globalizing Region: Development, Agency and Contestation in Northern British Columbia*. UBC Press.

Bradbury, Hilary. 2015. *The SAGE Handbook of Action Research*. 3rd ed. London: SAGE Publications Ltd. https://methods-sagepub-com.prxy.lib.unbc.ca/book/the-sage-handbook-of-action-research-3e.

Bridge, Gavin, and Ludger Gailing. 2020. "New Energy Spaces: Towards a Geographical Political Economy of Energy Transition." *Environment and Planning A: Economy and Space* 52 (6): 1037–50. https://doi.org/10.1177/0308518X20939570.

Bulkeley, Harriet, Vanesa Castán Broto, and Gareth Edwards. 2015. *An Urban Politics of Climate Change: Experimentation and the Governing of Socio-Technical Transitions*. Routledge. https://www.routledge.com/An-Urban-Politics-of-Climate-Change-Experimentation-and-the-Governing-of/Bulkeley-Broto-Edwards/p/book/9781138791107.

Burke, Matthew J., and Jennie C. Stephens. 2018. "Political Power and Renewable Energy Futures: A Critical Review." *Energy Research & Social Science*, Energy and the Future, 35: 78–93. https://doi.org/10.1016/j.erss.2017.10.018.

Carley, Sanya, and David M. Konisky. 2020. "The Justice and Equity Implications of the Clean Energy Transition." *Nature Energy* 5 (8): 569–77. https://doi.org/10.1038/s41560-020-0641-6.

Coates, Ken, and Bill Morrison. 1992. *The Forgotten North*. Lorimer. https://lorimer.ca/adults/product/the-forgotten-north/.

Coates, Ken, Carin Holroyd, and Joelena Leader. 2014. "Managing the Forgotten North: Governance Structures and Administrative Operations of Canada's Provincial Norths." *Northern Review* 38. https://thenorthernreview.ca/index.php/nr/article/view/324.

Coates, Ken, and Greg Poelzer. 2014. "The Next Northern Challenge: The Reality of the Provincial North." *Macdonald-Laurier Institute*, True North in Canadian Public Policy. https://www.macdonaldlaurier.ca/files/pdf/MLITheProvincialNorth04-14-Final.pdf.

Cochrane, Allan, and Kevin Ward. 2012. "Researching the Geographies of Policy Mobility: Confronting the Methodological Challenges." *Environment and Planning A: Economy and Space* 44 (1): 5–12. https://doi.org/10.1068/a44176.

Coulombe, Cynthia, David Maya-Drysdale, and Kes McCormick. 2022. "Local Municipalities and the Influence of National Networks on City Climate Governance: Small Places with Big Possibilities." *Frontiers in Sustainable Cities* 4: 970968. https://doi.org/10.3389/frsc.2022.970968.

Dow, Kirstin, Benjamin K. Haywood, Nathan P. Kettle, and Kirsten Lackstrom. 2013. "The Role of Ad Hoc Networks in Supporting Climate Change Adaptation: A Case Study from the Southeastern United States." *Regional Environmental Change* 13 (6): 1235–44. https://doi.org/10.1007/s10113-013-0440-8.

Fernandez-Bou, Angel Santiago, J. Pablo Ortiz-Partida, Leticia M. Classen-Rodriguez, et al. 2021. "3 Challenges, 3 Errors, and 3 Solutions to Integrate Frontline Communities in Climate Change Policy and Research: Lessons From California." *Frontiers in Climate* 3. https://www.frontiersin.org/articles/10.3389/fclim.2021.717554.

Flipo, Aurore, Nathalie Ortar, and Madeleine Sallustio. 2023. "Can the Transition to Sustainable Mobility be Fair in Rural Areas? A Stakeholder Approach to Mobility Justice." *Transport Policy* 139: 136–43. https://doi.org/10.1016/j.tranpol.2023.06.006.

Galgóczi, Béla. 2018. "Just Transition Towards Environmentally Sustainable Economies and Societies for All." ACTRAV Policy Brief. International Labour Organization. https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_647648.pdf.

Garvey, Alice, Jonathan B. Norman, Milena Büchs, and John Barrett. 2022. "A 'Spatially Just' Transition? A Critical Review of Regional Equity in Decarbonisation Pathways." *Energy Research & Social Science* 88: 102630. https://doi.org/10.1016/j.erss.2022.102630.

Gill, M. J., A. Munier, A. Ogden, et al. 2001. "Climate Change Impacts in Northern Canada: Assessing our Current Knowledge." *The Northern Review* 24. https://thenorthernreview.ca/index.php/nr/article/view/230.

Gislason, Maya K., Lindsay Galway, Chris Buse, Margot Parkes, and Emily Rees. 2021. "Place-Based Climate Change Communication and Engagement in Canada's Provincial North: Lessons Learned from Climate Champions." *Environmental Communication* 15 (4): 530–45. https://doi.org/10.1080/17524032.2020.1869576.

Golubchikov, Oleg, and Kate O'Sullivan. 2020. "Energy Periphery: Uneven Development and the Precarious Geographies of Low-Carbon Transition." *Energy and Buildings* 211: 109818. https://doi.org/10.1016/j.enbuild.2020.109818.

Gordon, David J. 2016. "Lament for a Network? Cities and Networked Climate Governance in Canada." *Environment and Planning C: Government and Policy* 34 (3): 529–45. https://doi.org/10.1177/0263774X15614675.

Government of British Columbia. 2018. "CleanBC: Our Nature. Our Power. Our Future."

Government of British Columbia. 2023a. "B.C. Medium- and Heavy-Duty Zero-Emissions Vehicles: 2023 Consultation Paper."

Government of British Columbia. 2023b. "Clean Power to Electrify B.C.'s Future." *BC Government News*, June 15, 2023, sec. Ministry of Energy, Mines and Low-Carbon Innovation. https://news.gov.bc.ca/releases/2023EMLI0036-000941.

Government of Canada. 2022. "The Canadian Critical Minerals Strategy: From Exploration to Recycling: Powering the Green and Digital Economy for Canada and the World." Strategy. Government of Canada. https://www.canada.ca/en/campaign/critical-minerals-in-canada/canadian-critical-minerals-strategy.html.

Government of Canada, Statistics Canada. 2016. "Population Centre (POPCTR)." Census of Population. November 16, 2016. https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/geo049a-eng.cfm.

Hall, Heather M, and Betsy Donald. 2009. "Innovation and Creativity on the Periphery: Challenges and Opportunities in Northern Ontario." In *Martin Prosperity Insitute*. Working Paper Series: Ontario in the Creative Age, 2009-WPONT-002. University of Toronto Rotman School of Management. https://rogerlmartin.com/mpi/wp-content/uploads/2009/02/Innovation_and_creativity_on_the_Periphery-H_Hall-B_Donald.pdf.

Hardman, Scott, Kelly L. Fleming, Eesha Khare, and Mahmoud M. Ramadan. 2021. "A Perspective on Equity in the Transition to Electric Vehicles." Edited by Bertrand Neyhouse and Yana Petri. *MIT Science Policy Review* 2: 46–54. https://doi.org/10.38105/spr.e10rdoaoup.

Haupt, Wolfgang, Lorenzo Chelleri, Sebastiaan Van Herk, and Chris Zevenbergen. 2020. "City-to-City Learning within Climate City Networks: Definition, Significance, and Challenges from a Global Perspective." *International Journal of Urban Sustainable Development* 12 (2): 143–59. https://doi.org/10.1080/19463138.2019.1691007.

Hayter, Roger, Trevor J. Barnes, and Michael J. Bradshaw. 2003. "Relocating Resource Peripheries to the Core of Economic Geography's Theorizing: Rationale and Agenda." *Area* 35 (1): 15–23. https://doi.org/10.1111/1475-4762.00106.

Healy, Noel, and John Barry. 2017. "Politicizing Energy Justice and Energy System Transitions: Fossil Fuel Divestment and a 'Just Transition.'" *Energy Policy* 108: 451–59. https://doi.org/10.1016/j.enpol.2017.06.014.

Klinsky, Sonja, Timmons Roberts, Saleemul Huq, et al. 2017. "Why Equity is Fundamental in Climate Change Policy Research." *Global Environmental Change* 44: 170–73. https://doi.org/10.1016/j.gloenvcha.2016.08.002.

Markey, Sean, Greg Halseth, and Don Manson. 2013. *Investing in Place: Economic Renewal in Northern British Columbia*. UBC Press. https://www.ubcpress.ca/investing-in-place.

Northern Health. 2022. *Population Health Status Report*. https://www.northernhealth.ca/sites/northern_health/files/health-professionals/community-health-information/reports/documents/population-health-status-report.pdf.

O'Sullivan, Kate, Oleg Golubchikov, and Abid Mehmood. 2020. "Uneven Energy Transitions: Understanding Continued Energy Peripheralization in Rural Communities." *Energy Policy* 138: 111288. https://doi.org/10.1016/j.enpol.2020.111288.

Parag, Yael, and Kathryn B. Janda. 2014. "More than Filler: Middle Actors and Socio-Technical Change in the Energy System from the 'Middle-Out.'" *Energy Research & Social Science* 3: 102–12. https://doi.org/10.1016/j.erss.2014.07.011.

Parkins, John R., Michael Dunn, Maureen G. Reed, and A. John Sinclair. 2016. "Forest Governance as Neoliberal Strategy: A Comparative Case Study of the Model Forest Program in Canada." *Journal of Rural Studies* 45: 270–78. https://doi.org/10.1016/j.jrurstud.2016.04.006.

Peck, Jamie, and Nik Theodore. 2010. "Mobilizing Policy: Models, Methods, and Mutations." *Geoforum* 41 (2): 169–74. https://doi.org/10.1016/j.geoforum.2010.01.002.

Piper, Liza. 2010. *The Industrial Transformation of Subarctic Canada*. UBC Press. https://www.ubcpress.ca/the-industrial-transformation-of-subarctic-canada.

SFU Public Square. 2021. "Overcoming Digital Divides: Low-Income Communities." Community Summit Series. Towards Equity. 2021. https://www.sfu.ca/publicsquare/events/2021/low-income-communities.html.

Szulecki, Kacper, Andrzej Ancygier, and Dariusz Szwed. 2015. "Energy Democratization? Societal Aspects of De-Carbonization in the German and Polish Energy Sectors." SSRN Scholarly Paper. https://doi.org/10.2139/ssrn.2575695.

Theodore., Nik. 2019. "Policy Mobilities." In *Oxford Bibliographies*. https://doi.org/10.1093/obo/9780199874002-0205.

Timperley, Jocelyn. 2021. "The Broken $100-Billion Promise of Climate Finance — And How to Fix It." *Nature* 598 (7881): 400–402. https://doi.org/10.1038/d41586-021-02846-3.

Tosun, Jale, and Jonas J. Schoenefeld. 2017. "Collective Climate Action and Networked Climate Governance." *WIREs Climate Change* 8 (1): e440. https://doi.org/10.1002/wcc.440.

Veelen, Bregje van, and Dan van der Horst. 2018. "What Is Energy Democracy? Connecting Social Science Energy Research and Political Theory." *Energy Research & Social Science* 46: 19–28. https://doi.org/10.1016/j.erss.2018.06.010.

Viable Cities. 2024. "Climate City Contract 2030." Viable Cities. 2024. https://viablecities.se/en/klimatneutrala-stader-2030/klimatkontrakt/.

Wagner, Paul M., Diarmuid Torney, and Tuomas Ylä-Anttila. 2021. "Governing a Multilevel and Cross-Sectoral Climate Policy Implementation Network." *Environmental Policy and Governance* 31 (5): 417–31. https://doi.org/10.1002/eet.1942.

The Northern Review
Exploring human experience in the North

This article is a Kalaallisut (West Greenlandic) translation summarizing a longer English article originally published in the *History Education Research Journal*, University College London Press, 2023: https://doi.org/10.14324/HERJ.20.1.04

Research Perspective

Issittumi paasinnittaatsinik misissuineq: Oqaluttuarisaaneq pillugu ilinniartitsineq aqqutigalugu nunasiaataanerup oqaluttuarisaanerani pullaviit apeqquserlugit

Unthinking Historical Thinking: Lessons from the Arctic

Silke Reeploeg
University of Greenland

Translated by Tukummeq Maliina Møller-Steffens
Proofread by Sussi Jensen, Ilisimatusarfik

Eqikkaaneq: Ilisimatusartut ilinniartitsisullu nunaqavissut avataaneersullu ilarpassuisa nunat killiit avataanniittut ilisimasaat oqaluttuarisaanerallu pingaarnertut ilisimatusarfigineqartunut ilinniagarineqartunullu naleqqiullugit sammineqannginnerusarlutillu atorumaneqannginnerusarnerat qangalili isornartorsiortarsimavaat. Oqaluttuarisaaneq pillugu ilinniartitsinerup ajornartorsiummut tamatumunnga qanoq aaqqiissutaaqataasinnaanera misissuiviginiarlugu allaaserisami matumani ilisimatusartut Issittumi naqavissuusut aallaavigineqarput. Qanga pisimasut pillugit qanoq ilisimasaqartoqartigineranut nunasiaataanerup sunniutaanik ilisimatuutut siornatigut misissorneqarsimasunik atorluaanikkut allaaserisami matumani siunnersuutigineqarpoq UNESCO-p Piujuartitsilluni Ineriartortitsineq pillugu Ilinniartitsinermut (ESD) tunngavissiaa nutaaq 2021-mi maajimi saqqummiunneqartoq aallaavigineqassasoq. Allaaserisaq naggaserlugu nunap inuii sammisatut ilisimatusarfiginagit nunap inuiisa ilisimatusarfigisaannit ilinniarfiginninnissap pingaaruteqassusia erseqqissarneqarpoq. Ilisimatusartullu nunaqavissut ilisimasanik assigiinngitsunik aallerfigisinnaasanut naapertuilluartumik naligiissumillu pullaveqarnissatsinnut taakkuninngalu atorluaanissatsinnut iluaqutigisinnaasatsinnik pingaarutilinnik periusissiorsimanerat erseqqissarneqarpoq.

English abstract on page 2

The Northern Review 56: 193–208 https://doi.org/10.22584/nr56.2024.008
Published at Yukon University, Whitehorse, Canada | CC BY 4.0