

The Honourable Keith Irving
Minister of Environment and Climate Change
1894 Barrington Street
Suite 1800, PO Box 442
Halifax, NS B3J 2P8

Re. Nova Scotia needs a Climate Change Plan for Clean Growth

Dear Minister Irving,

I am writing to you in regards to the opportunity to contribute advice to the Climate Change Plan for Clean Growth in my capacity as QUEST's Senior Lead, Projects and Stakeholder Relations. QUEST is a national non-government organization that works to accelerate the adoption of efficient and integrated community-scale energy systems in Canada by informing, inspiring, and connecting decision-makers.

The attached policy brief provides key considerations on how communities can both contribute to and benefit from achieving the province's Sustainable Development Goals. The policy brief is group in five categories:

- 1.0 Community energy planning support
- 2.0 Supportive energy and transportation infrastructure
- 3.0 Access to clean energy opportunities
- 4.0 Alignment with the energy sector
- 5.0 A provincial retrofit strategy

Thank you for this opportunity to contribute to the development of the Nova Scotia Climate Change Plan for Clean Growth. We would appreciate an opportunity to meet with you to discuss further the gaps and opportunities we see needing to be realized if the Province is to successfully achieve its Sustainable Development goals, and how QUEST may be able to help.

Regards,

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cc: Jason Hollett, Assistant Deputy Minister Sachi Gibson, Senior Policy Analyst Engagement Coordinator, Clean Future Board of Directors
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Geoff Wright
Member / Membre

Tonja Leach
Executive Director /
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Policy Brief

Introduction: Building Community Capacity for Climate Action in Nova Scotia

We would first like to offer congratulations to you and the government as a whole not only for the national leadership Nova Scotia has shown to date in fighting climate change, but also for being unwilling to rest on past achievements and setting the most ambitious greenhouse gas (GHG) emissions reduction targets in Canada. The government's commitment to giving the public an opportunity to inform the Climate Change Plan for Clean Growth through the Clean Future project demonstrates both a dedication to transparency and inclusivity, and a confidence in the people of Nova Scotia.

Communities are the ecosystem in which our society functions, and must be empowered to drive the change that we need to achieve the net-zero by 2050 target. When we talk about communities, we are not just referring to municipal governments but also to all the businesses, organizations and institutions that make up the fabric of each community. The broader definition of community matters, as communities are responsible for the majority of Nova Scotia's GHG emissions. For our province to achieve its sustainable development goals, communities must be involved in the solutions.

Responding to the climate crisis, many Nova Scotia municipalities and Indigenous governing bodies have already adopted policies and implemented programs designed to reduce GHG emissions, improve energy efficiency, or generate clean energy. However, due to a lack of capacity and the pressure that they are under to address the climate crisis expediently, less than a third have developed Community Energy and Emission Plans to guide their efforts. Communities that do not have a community energy plan in place that is community- and evidence-based, comprehensive, forward looking, inclusive, and realistic are at risk of the following:

- Acting or investing without appreciating the impacts and unintended consequences of climate action efforts on the broader community.
- Misunderstanding questions of equity and accessibility.
- Increased potential for mis-alignment or conflict with other communities or actors.
- Being unable to effectively communicate the importance of public acceptance, including realistic timelines for people to change behaviour and accept the impact of the change.

Part of the problem is that we still do not have a good understanding of the magnitude of local action and change needed to address the climate crisis, or the implications of the provincial net-zero by 2050 target on our diverse communities. There is no one-size-fits-all approach to net-zero for our communities: some can and will fully electrify; others will opt for emission free options like hydrogen, renewable natural gas, and waste heat capture and usage; while others still will need to deploy alternative solutions to offset emissions from their activities and industries. Regardless of their pathway

they must understand the consequences of their pathway not just on the environment, but also on economic development opportunities and energy reliability, affordability, and resilience so that they are making informed decisions and the best choice for all community members and their unique circumstances.

Nova Scotia's Sustainable Development Goals cannot be achieved without the support of, or at the expense of, its communities. Just as there is an urgent need to fight climate change, there is an urgency to ensure that our diverse communities are clear in their understanding of the impacts, consequences, and opportunities offered by the path to net-zero by 2050. Funding to support local initiatives is important, but an initiative not supported by local stakeholders or firmly grounded in the community and an effective plan risks wasting time and resources in pursuit of poorly-considered and -conceived ends. Communities need to be empowered to be part of the solution and to be investors and benefactors of the evolution of the energy system. They need to understand how they fit in the broader energy system, what is transpiring beyond the 'municipal gate' that will contribute to their local emission reduction objectives, and understand what their part in achieving the province's net-zero target is, rather than striving to eliminate every emission that is produced in a community by themselves or balking at the daunting prospect of having to "go it alone".

QUEST works with communities across Canada to accelerate the adoption of efficient and integrated community-scale energy systems. We do this by building local capacity through informing, inspiring, and connecting community champions and decision-makers; commissioning applied research; communicating best practices; convening government, utility, and private-sector leaders; and working directly with local authorities to implement on-the-ground solutions. Through our work in recent years with communities across Canada, QUEST has identified the requisite building blocks communities need in order to navigate the energy transition that lies before us. Through our work coordinating the Nova Scotia Municipal Energy Learning Group, QUEST has developed an understanding of which of those components would most benefit our province's diverse communities. We would like to take this opportunity to share our insights with you.

1.0 Community Energy Planning Support

A community energy plan defines a community's priorities around energy and emissions, and serves as a roadmap to navigating the coming energy transition. While there is no standard approach for community energy plans, they often include community energy inventories, goals, and actions and timelines for implementation, and are ideally informed by ongoing, meaningful community engagement.

As Canada turns its attention to revitalizing the economy and establishing our new normal we must ensure the basic and critical foundations are in place at the local level to maximize the potential of stimulus funding to harness economic development opportunities and meet both Nova Scotia's Sustainable Development Goals and Canada's net-zero by 2050 objectives. These foundations are not currently in place. Business-as-usual scenarios forecast that the amount of energy consumed at the

community level could increase by 75% above 2005 levels by 2050. The inefficient production, delivery, and use of energy pose significant environmental, economic, health, and social risks to communities.

A program like QUEST's <u>Smart Energy Community Accelerator</u>, currently being piloted throughout New Brunswick, can assist municipalities and Indigenous governing bodies by equipping them with the tools and knowledge to develop and implement community energy plans and understand the net economic benefit such plans can provide. Participating communities receive support over three years to guide them through the development and implementation of a community energy plan, including monthly meetings with QUEST and other participants to support community energy literacy and share knowledge; a series of webinars and workshops engaging community stakeholders, along with customized services and tools, to guide them through the process of developing and/or implementing a collaborative plan tailored to their unique circumstances; and summary reports to help them assess their current achievements and advance their plans.

2.0 Supportive Energy and Transportation Infrastructure

The provincial electricity transmission grid, historically set up to transmit power from power generator stations to populated areas, needs to be upgraded in order to facilitate inclusive community participation in the energy transition. Improving the transmission and storage capacity of the grid to allow effective local power distribution will be key to enabling communities to explore and pursue local clean energy generation opportunities and decarbonization strategies.

Similarly, a private-vehicle focussed provincial transportation network, evolving transportation needs, and an aging population, make it challenging for communities to address their transportation-related climate goals. Again, funding to incentivize EV purchases and subsidize local transit providers is important as a first step. However, the Province needs to take on a coordinating and leadership role if communities are to move beyond the low-hanging fruit and provide viable alternatives to private internal combustion engine vehicles.

Two sets of mobility policies are required to move further:

- A Provincial EV strategy to identify and guide regulatory reforms and investments in charging
 infrastructure across Nova Scotia, and clear supply-side mechanisms and mandates, would drive
 confidence and uptake in electric vehicles at the scale required to achieve our Sustainable
 Development Goals.
- A robust, province-wide, inter-municipal public transit system or network is needed to reduce
 reliance on private vehicles and provide meaningful transportation accessibility to ensure
 vulnerable and historically marginalized communities are not left behind a system like the one
 the <u>Leading with Transit</u> project envisions, based on the proposition that the long term future of
 communities, villages, towns and cities across Nova Scotia depends on re-imagining transit as
 essential, extraordinary and permanent public infrastructure.

3.0 Access to Clean Energy Opportunities

While Nova Scotia's communities have been national leaders in clean energy generation and innovation for over a decade, recently, many are finding their clean energy ambitions stymied. This looks set to change with the announcement of new provincial clean energy programs, including Green Choice, Rate Base Procurement, and Shared Solar.

Moving forward, it will be critical to ensure that these innovative programs are accessible to Nova Scotia's diverse communities. Already, many communities have expressed the feeling that they were effectively excluded from the opportunity to purchase electricity from local renewable energy sources through the first round of the Green Choice program, whether because they didn't meet the minimum annual consumption threshold, lack of clarity around the aggregation option, lack of time, capacity, and expertise needed to navigate the enrollment process, or a combination of these factors.

Accessibility can best be ensured through open lines of communication, responsive and equitable program design, and helping communities build the capacity to develop their own plans and projects and engage with emerging programs. The Nova Scotia Municipal Energy Learning Group (MELG) is an ideal forum for communication and consultation. Already, the group has hosted provincial staff for informative and generative discussions on community priorities and emerging opportunities. Ongoing and proactive dialogue and consultation with the group and its members will help to ensure that there are effective opportunities for participation in emerging programs and opportunities, and that they are designed to meet the needs of Nova Scotia's diverse communities.

However, current MELG participants represent only a fraction of Nova Scotia's communities, many of which need additional resources to build the necessary capacity to participate fully in the coming energy transition. And communities participating in MELG often share stories about barriers to advancing their current plan.

Additional support for energy planning and staff development is needed to provide Nova Scotia's communities with the resources and technical expertise needed to engage both their members and with emerging opportunities. A program like the Smart Energy Community Accelerator will help more communities develop or implement their plans, enabling them to navigate the provincial energy landscape and pursue the opportunities best suited to their unique circumstances. And the continuation and expansion of Efficiency Nova Scotia's Energy Manager program to focus on community energy management will enable those communities with plans already in place to effectively resource and advance them.

4.0 Alignment with the Energy Sector

My experience being part of Nova Scotia Power's recently completed Integrated Resource Planning process helped me understand the incredible complexity and responsibility that comes with planning and operating a large electrical utility. At the same time, being both in the process of developing a community energy plan and in touch with several other communities undertaking a similar project, the experience also illustrated to me how disconnected the utility's plans and considerations were from those of the Province's communities.

The irony of this disconnect was driven home as I came to understand that the proponents of both planning processes — along with all of their stakeholders — were working towards essentially the same outcomes: affordable, reliable, and green energy for Nova Scotians. Yet with both processes proceeding without the involvement of the other party or an understanding of their broader considerations or interests, it was inevitable that the plans developed by each to reach their common goals around energy would be unlikely to harmonize or synergize with one another, if not directly conflict.

Efforts must be made to align the energy plans of communities with those of the energy sector and utility if Nova Scotia is to meet its Sustainable Development Goals on emissions reduction in a manner that does not negatively impact its citizens, who are both stakeholders in their communities and ratepayers to the Province's utilities. A <u>framework to align planning</u> processes, objectives, and outcomes would facilitate both parties finding common ground and aligning their efforts towards increased impact and mutual benefit. Amendments to the Public Utilities Act to give the Utility and Review Board a sustainability mandate — an <u>emerging best practice in jurisdictions across North America</u> — and give communities a voice in relevant proceedings through the appointment of an <u>advocate to ensure their interests are fairly represented</u>, would ensure that community energy and climate planning considerations are put on equal footing with competing interests.

5.0 A Provincial Retrofit Strategy

A <u>recent report by Efficiency Canada</u> determined that 47% of provincial GHG emissions came from its buildings — the highest proportion of any province in Canada. In 2030, more than 75% of Nova Scotia's building stock will be composed of buildings in use today, and an estimated 60% of those buildings will still be in use in 2050. This means that existing buildings will have a large impact on meeting Nova Scotia's Sustainable Development Goals; a strategy to reduce the carbon emissions of existing buildings is urgently needed.

Nova Scotia is a leader in energy efficiency. The Climate Change Plan for Clean Growth is an opportunity to sustain the Province's leadership role with an energy efficiency strategy that can respond to the climate crisis at the speed and scale necessary to meet the Province's Sustainable Development Goals,

while building local economies and creating sustainable careers. A tall order to be sure; fortunately, a made-in-Nova Scotia initiative is already working towards precisely such an end.

The <u>ReCover Initiative's</u> process for deep energy retrofits involves wrapping the building in a new prefabricated skin and replacing the mechanical systems with smaller, more efficient components. This method is faster and less disruptive than a typical renovation, and it allows for occupants to remain in their home throughout the work while reducing risk to the contractor and costs to the owner. Additionally, ReCover is building a community around their work to share research and lessons learned: emerging processes and technologies are non-proprietary and open source, and knowledge sharing and dissemination opportunities are embedded at each stage of the initiative's progress, with an aim to outfit as many businesses and communities as possible with the skills and knowledge to contribute towards the success of a provincial deep energy retrofit strategy.

ReCover has already received support from the Nova Scotia Department of Energy and Mines and is working to develop, test, and refine their process locally and in communities across Canada. But a vision this grand and audacious will require continued nurturing and support in its early stages to ensure it can realize its potential economic, employment, and environmental impacts. We urge the Province to continue supporting the ReCover team and their work.