



Quality Urban Energy
Systems of Tomorrow

PRE-BUDGET SUBMISSION TO THE HOUSE OF COMMONS STANDING COMMITTEE ON FINANCE

www.questcanada.org

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Executive Summary

Communities – the places where we live, work, move, and play – account for 60 percent of energy use in Canada, as well as over half of all greenhouse gas emissions (GHGs). Communities are essential for achieving federal, provincial, and territorial government energy and GHG objectives, and Smart Energy Communities offer a solution to how they get there.

Smart Energy Communities prioritize energy efficiency, integrate conventional energy networks, make smart land use decisions, and harnesses local energy opportunities.

Through the advancement of Smart Energy Communities, QUEST is helping Canadian communities and community stakeholders improve energy efficiency, enhance reliability, cut costs, and reduce greenhouse gas emissions at the local and regional levels. QUEST accomplishes this by conducting research, engaging stakeholders, partnering with likeminded organizations, and advocating for the advancement Smart Energy Communities.

In Budget 2017, QUEST proposes that the Government of Canada create a dedicated fund offering significant financial support for Canadian communities, organizations, and businesses to positively engage in the development of Smart Energy Communities. Designed to support specific projects, policies, and programs that help to improve energy efficiency and reduce GHG emissions, this fund would bring together community and business leaders to find innovative climate solutions, and share knowledge between sectors and across provincial and territorial boundaries.

In addition, QUEST proposes that the Government of Canada create a dedicated funding program for communities to develop and implement Community Energy Plans. This fund would work directly with provincial programs, such as Ontario's Municipal Energy Plan program, to support underserved communities in developing Community Energy Plans (CEPs), and supporting communities that have Community Energy Plans in overcoming some of their implementation challenges.

About QUEST

QUEST is the leader advancing Smart Energy Communities that reduce GHG emissions, lower energy use, drive the adoption of clean technologies, and foster local economic development in Canada. Established in 2007, QUEST has a national grassroots network including over 10,000 contacts in organizations across Canada from local, provincial and territorial governments, utilities, energy service providers, building and land owners and operators, and clean technology companies working at the community level to advance Smart Energy Communities.

QUEST was created because industry, governments, business, and the eNGO community needed a place to come together and advance energy end-use solutions at the community level that balanced environmental and economic considerations. QUEST has eight provincial and regional caucuses from coast to coast to coast in Canada. These caucuses bring community stakeholders to the table to work on initiatives and CEPs that reduce GHG emissions.

QUEST is Helping Canadian Communities and Businesses

Through the advancement of Smart Energy Communities, QUEST is helping Canadian communities and community stakeholders to improve energy efficiency, enhance reliability, cut costs, and reduce greenhouse gas emissions at the local and regional levels. QUEST accomplishes this by conducting

research, engaging stakeholders, partnering with likeminded organizations, and advocating for the advancement Smart Energy Communities.

Partnering to Help Canadian Communities

Community Energy Planning: Getting to Implementation in Canada! (GTI), is a national initiative being led by the leading community energy planning experts in Canada, the Community Energy Association, QUEST, and Sustainable Prosperity, with an aim to accelerate the implementation of Community Energy Plans across Canada.

Today more than 50 percent of Canadians live in communities with a CEP. These communities recognize the importance of defining and addressing their energy priorities. CEPs can be targeted to address a range of local issues, such as stimulating local economic development, reducing greenhouse gas emissions, and improving energy security and community resiliency.

The national work of GTI has validated that communities and their stakeholders are key to managing Canada's energy use and GHGs, and that CEPs provide a practical solution to support communities in addressing their energy and GHG objectives. But while CEPs often present solutions to complex problems requiring multi-stakeholder approaches to implementation, they also require a new way of doing things for every stakeholder involved, including municipal and provincial staff members, utilities, developers and real estate agents, and other community energy practitioners. Since 2014, GTI has delivered research, engagement, and program delivery activities to identify challenges, success factors, and solutions to accelerate CEP development and implementation across Canada.

Driving Innovation

The 2015 Energy and Mines Ministers' Conference (EMMC) Co-Hosts, the Nova Scotia Department of Energy and Natural Resources Canada, partnered with QUEST to deliver the National Policy Symposium on Energy Delivery and Management: Pathways to Innovation in preparation for EMMC 2015.

Across Canada, there are important innovations happening in the energy sector that are making the production, distribution, and use of energy cleaner, more efficient, more affordable, and more reliable. New technology is influencing how we think about and operate our energy delivery and management systems. The challenge is that technological innovation is happening at a pace that is often difficult for policy and regulation to keep up with.

The most impactful innovations are taking place at the local level, where technological innovations in energy service delivery and management can lead to lower energy costs, enhanced reliability, greater environmental performance, and local economic benefits for consumers, industry, and governments.

The Symposium provided an opportunity for more than 80 senior representatives from government, industry, utilities, regulators, and not-for profit organizations from across Canada to share insights, solutions, and best practices about how to accelerate the uptake of technological innovations in the energy delivery and management sector in Canada.

Addressing Climate Change and Stimulating the Economy with Smart Energy Communities

Communities – the places where we live, work, move, and play – account for 60 percent of energy use in Canada, as well as over half of all GHGs. Communities are essential for achieving federal, provincial, and

territorial government energy and GHG objectives and Smart Energy Communities offer a solution to how they get there.

Smart Energy Communities prioritize energy efficiency, integrate conventional energy networks, make smart land use decisions, and harnesses local energy opportunities.

From building automation to street lights, Smart Energy Communities take advantage of the full potential of energy efficiency and capitalize on lower energy costs, cutting emissions, and improving operating performance.

Smart Energy Communities integrate conventional electricity networks. Electricity, natural gas, district energy, and transportation fuel networks in a community are better coordinated to match energy needs with the most efficient energy source. When conventional energy networks are integrated, it opens the door to innovations like alternative fuel vehicles, energy storage, waste heat capture, and combined heat and power applications.

Smart Energy Communities harness local energy opportunities. These can be stock opportunities like solar, wind, and geothermal, or they can be opportunities that are tailored to a community like water source cooling, sewage heat capture, biomass for heating, and capturing biogases for electricity and transportation fuel.

Lastly, Smart Energy Communities integrate land use, recognizing that poor land use decisions can equal a whole lot of energy waste.

Smart Energy Communities tap into opportunities to strengthen local economies, reduce current and future energy costs and GHGs, and create jobs by investing in smarter and more integrated approaches to energy use at the local level. Communities that have analyzed these opportunities have consistently identified a strong value proposition for these approaches, with solid economic returns on investments, environmental gains, health benefits, and an improved quality of life for local residents.

Energy is a significant cost in Canadian communities. Each year millions, and in some cases billions, of dollars are spent on energy, much of which leaves the local economy. This cost plays a significant role in the financial well-being of Canadian communities, and to the businesses and households in these communities.

Decisions made within communities regarding land use and urban form, buildings, transportation, waste, and distributed energy resources can reduce these energy costs and present an opportunity to recirculate dollars back into the local economy. The initiatives of communities to reduce energy costs will also reduce operating costs for businesses, making a community attractive to investors. These decisions can also make communities more futureproof to the risks of rising energy costs, potential carbon emissions pricing and regulation, and to disruptions in energy supply or changes in energy costs.

Community-level decisions can consequently drive significant emissions reductions and are critical to nation-wide efforts to address climate change. Equally, these decisions can support social priorities at the community level.

QUEST Recommendations for Budget 2017

QUEST offers the following recommendations to the Government of Canada for consideration to meet its objectives of addressing climate change, stimulating the economy, and encouraging innovation.

1. QUEST proposes that the Government of Canada create a dedicated fund offering significant financial support for Canadian communities, organizations, and businesses to positively engage in the development of Smart Energy Communities.

This fund should support specific projects, policies, and programs that help to improve energy efficiency, reduce GHG emissions, bring together community and business leaders to find innovative climate solutions, and share knowledge across provincial and territorial boundaries and between sectors.

For its part, QUEST envisions being able to tap into this funding; allowing us to continue to build and leverage our national grassroots network and to doing things like:

- Facilitate topic specific working groups to address policy and regulatory barriers to the advancement of Smart Energy Communities.
- Advocate for and contribute to the advancement of projects that improve energy efficiency, enhance reliability, cut costs, and reduce greenhouse gas emissions.
- Build the marketplace that serves Smart Energy Communities.

2. QUEST proposes that the Government of Canada create a dedicated funding program for communities to develop and implement Community Energy Plans.

This fund should work directly with provincial programs, such as Ontario's Municipal Energy Plan program, to support underserved communities in developing and implementing Community Energy Plans and supporting communities that have Community Energy Plans to overcome some of their implementation challenges.

For its part, QUEST envisions being able to tap into this funding; allowing us to continue to deliver the *Community Energy Planning: Getting to Implementation in Canada!* collaborative initiative to:

- Coordinate and lead a National Energy Community of Practice, targeting local elected officials (e.g. Mayors and Councillors), to support Community Energy Plan implementation.
- Lead a 'Canada Climate Corps' of young professionals and senior coaches to advise small communities on implementation.
- Identify new business models to support accelerated energy efficiency retrofits as well as the improved integration of transportation/land use.
- Conduct a series of research examining the efficacy of provincial, territorial and federal policies supporting CEP implementation.

Conclusion

Canadian communities play a particularly important role in national and global efforts to address climate change as they have direct or indirect control of 60 percent of Canada's total energy use and over half of GHG emissions.

Through support for Smart Energy Communities, the Government of Canada can tap into opportunities to strengthen local economies, reduce current and future energy costs and GHGs emissions, and create jobs by investing in smarter and more integrated approaches to energy use at the local level.

Communities that have analyzed these opportunities have consistently identified a strong value proposition for these approaches, with solid economic returns on investments, environmental gains, health benefits, and improved quality of life for local residents.

Encouraging the development of Smart Energy Communities across Canada through dedicated funding programs offering support to specific projects, policies, and programs that help to improve energy efficiency, reduce GHGs, bring together community and business leaders, find innovative climate solutions, share knowledge between sectors and across provincial and territorial boundaries, will enable the Government of Canada to meet its objectives of addressing climate change, stimulating the economy, and encouraging innovation.

QUEST welcomes the opportunity to appear before the House of Commons Standing Committee on Finance to provide more detail on this submission.