



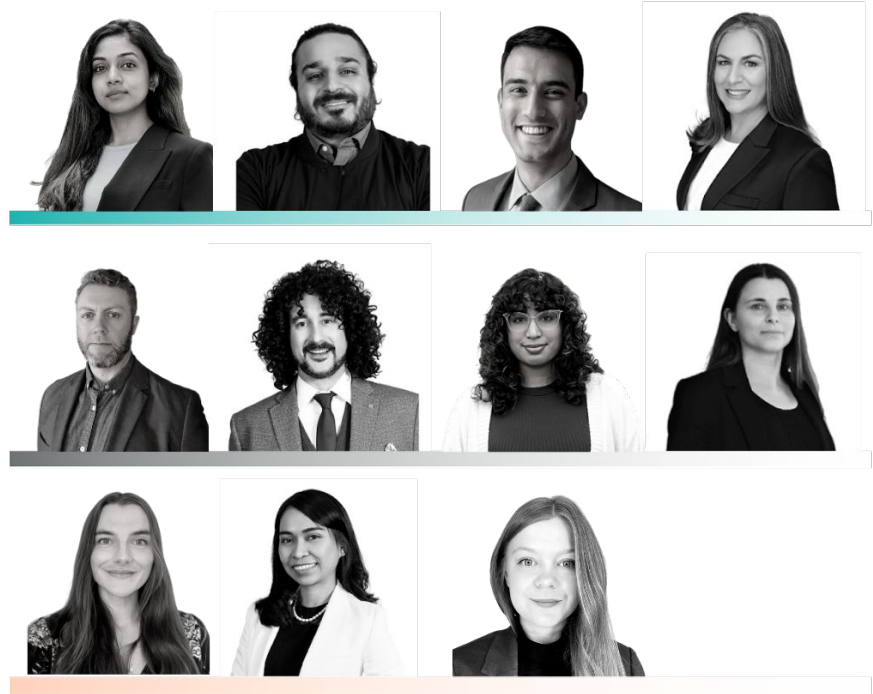
# Net-Zero Communities Accelerator Program

November 15th, 2023

# ABOUT QUEST CANADA

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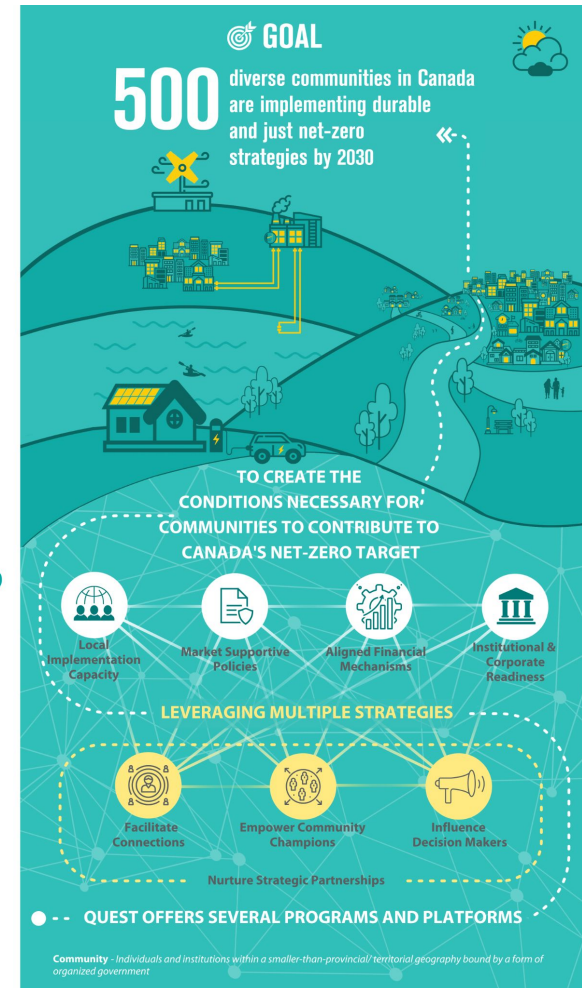
We are a registered Canadian charity that supports communities on the pathway to net-zero



# Theory of Change

- **If we can:** Facilitate connections/Empower Community Champions/Influence Decision Makers
- **We will have:** Local Implementation Capacity and Institutional and Corporate Readiness
- **So that:** 500 diverse communities in Canada are implementing durable and just net-zero strategies by 2030

QUEST'S THEORY OF CHANGE



# WHAT IS A SMART ENERGY COMMUNITY?

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A Smart Energy Community seamlessly integrates local, renewable, and conventional energy sources to affordably, cleanly, and efficiently meet its energy needs.

## **Smart Energy Communities understand the importance of:**

- + Climate change policy built on a foundation of sound energy policy
- + Driving technological change while avoiding technological determinism
- + Maximizing the value of our infrastructure assets, both existing and new
- + Emphasizing institutional innovation
- + Reducing policy uncertainty through alignment and sense of community
- + Restoring public trust and confidence in decision-making institutions

# PRINCIPLES FOR SMART ENERGY COMMUNITIES

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## TECHNICAL PRINCIPLES

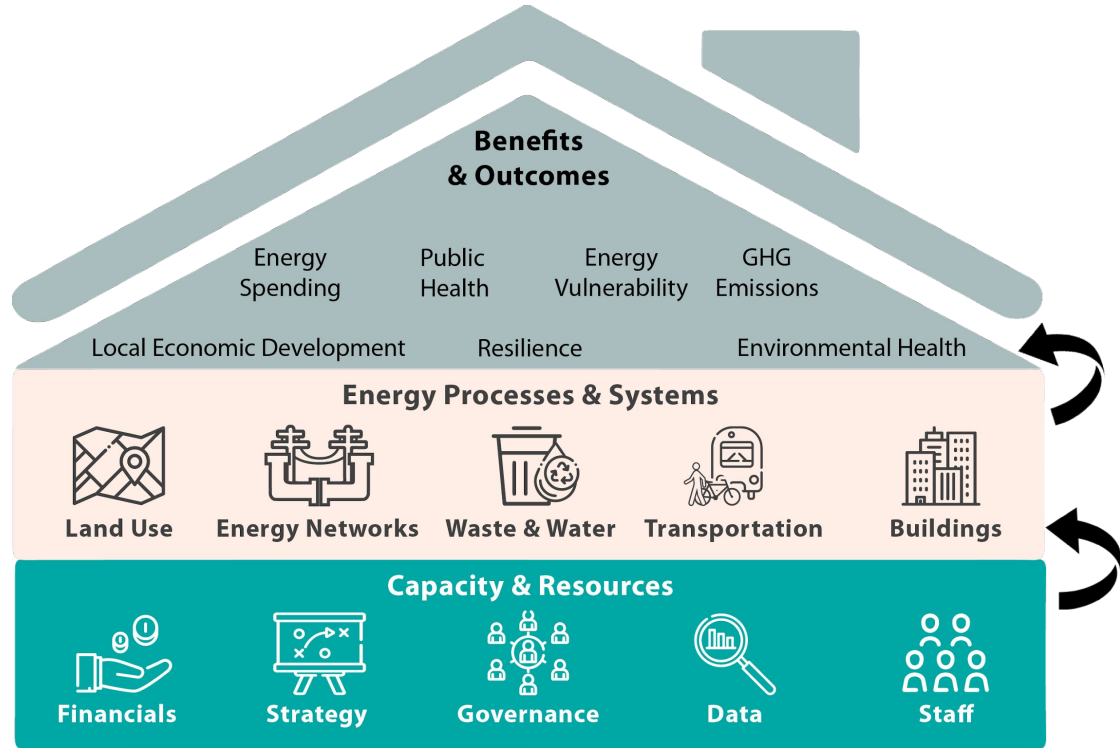
- + Improve efficiency
- + Optimize quality energy use
- + Manage heat
- + Reduce waste
- + Use renewable energy resources
- + Use energy delivery systems strategically

## POLICY PRINCIPLES

- + Match land use needs and mobility options
- + Match energy options to local context
- + Send clear and accurate price signals
- + Manage risks and be flexible
- + Emphasize performance and outcomes in policy and regulations
- + Pursue policy and program stability

# HOW TO MEASURE SMART ENERGY PROGRESS

The Smart Energy Communities Benchmark measures where a community stands relative to Canadian best practices on ten indicators that, taken together, constitute the core characteristics of a Smart Energy Community.





# ABOUT: Prairie NCA

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## Goal

To establish a community energy and emissions planning and implementation accelerator to equip 15 diverse communities in the Prairie Provinces with the tools and knowledge to develop and continuously implement community energy and emissions plans and/or initiate projects, programs, or policies.

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## Principles

- + Inclusive
- + Empowering
- + Adaptive

## Timeline

Spring 2023-Fall 2025

## Budget

\$3M

# ABOUT THE PROGRAM

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## Funders



SUNCOR  
ENERGY  
FOUNDATION



Prairies Economic  
Development Canada

Développement économique  
Canada pour les Prairies





# PROGRAM NEEDS ASSESSMENT OVERVIEW

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18 organizations and associated programs and services reviewed for gap analysis and needs assessment

## The Reality

- + Communities influence over half of all energy use and GHG emissions in Canada.
- + Local governments consistently rank lack of capacity and funding.
- + No energy-related program exists that works with all stakeholders, communities of all sizes, with a focus on foundational supporting structures.

## How NCA Addresses Needs

- + Capacity-building: Providing ongoing support and leading edge research to community energy stakeholders
- + Multi-stakeholder: Inclusivity is built into the program's approach via the work we do.
- + Reduce Redundancy: Amongst both community energy stakeholders and (E)NGOs in this space

# PARTICIPANT TYPES

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## Seeker

- + Curious about community energy and emissions planning but hasn't invested many resources into actioning it
- + May be a community champion interested getting started
- + Communities without a Community Energy & Emissions Plan (CEEP)

## Doer

- + Someone in the community has responsibility for CEEP development and some work has been done
- + May or may not be moving work forward in an uncoordinated, unsupported fashion
- + Has a CEEP
- + May or may not have an implementation-ready initiative

## Leader

- + Well on their way to becoming a net-zero community
- + Dedicated resources and plan exists to action CEEP
- + Requires highly customized services
- + Likely has implementation-ready initiatives

# PROGRAM STREAMS

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## FOUNDATION BUILDING

Building the foundational knowledge and plans needed to action community energy and emissions plans and initiatives.

Includes coaching and navigating services, and connecting communities with others learning about and actioning community energy and emissions planning.

## PROJECT INITIATION

Building the foundation to launch a program, a project or a policy that will result in reduced energy usage and emissions across the community or region.

Includes coaching and navigating services, and connecting communities with others learning about and actioning community energy and emissions planning.

# ONBOARDING

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- + Accelerator Plan and Terms of Reference established
- + Cohort Launch meeting (June / July)
- + **All participants** (regardless of stream) start with an Smart Energy Communities Benchmark assessment to establish baseline and identify priority areas
  - + Re-score after 24 months to assess progress
  - + Indigenous communities may or may not want to partake
- + Integrate participants into working groups
  - + NB/PEI Municipal Working Group, Low-Carbon Thermal, Distributed Energy Resources, Deep Energy Retrofits
- + Register participant on online hub (once launched)

# FOUNDATION BUILDING STREAM SERVICE OPTIONS

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	SEEKER	DOER	LEADER
Smart Energy Communities Benchmark Assessment (initial + final)	✓	✓	✓
Community Energy Mapping workshop	✓	(✓)	
Community Energy & Emissions Plan Development Workshop	✓	(✓)	
Energy and Emissions Inventory	✓	(✓)	
Community Energy & Emissions Plan Implementation Workshop	✓	✓	✓
Community Energy & Emissions Plan Economic Impact Analysis	✓	✓	✓

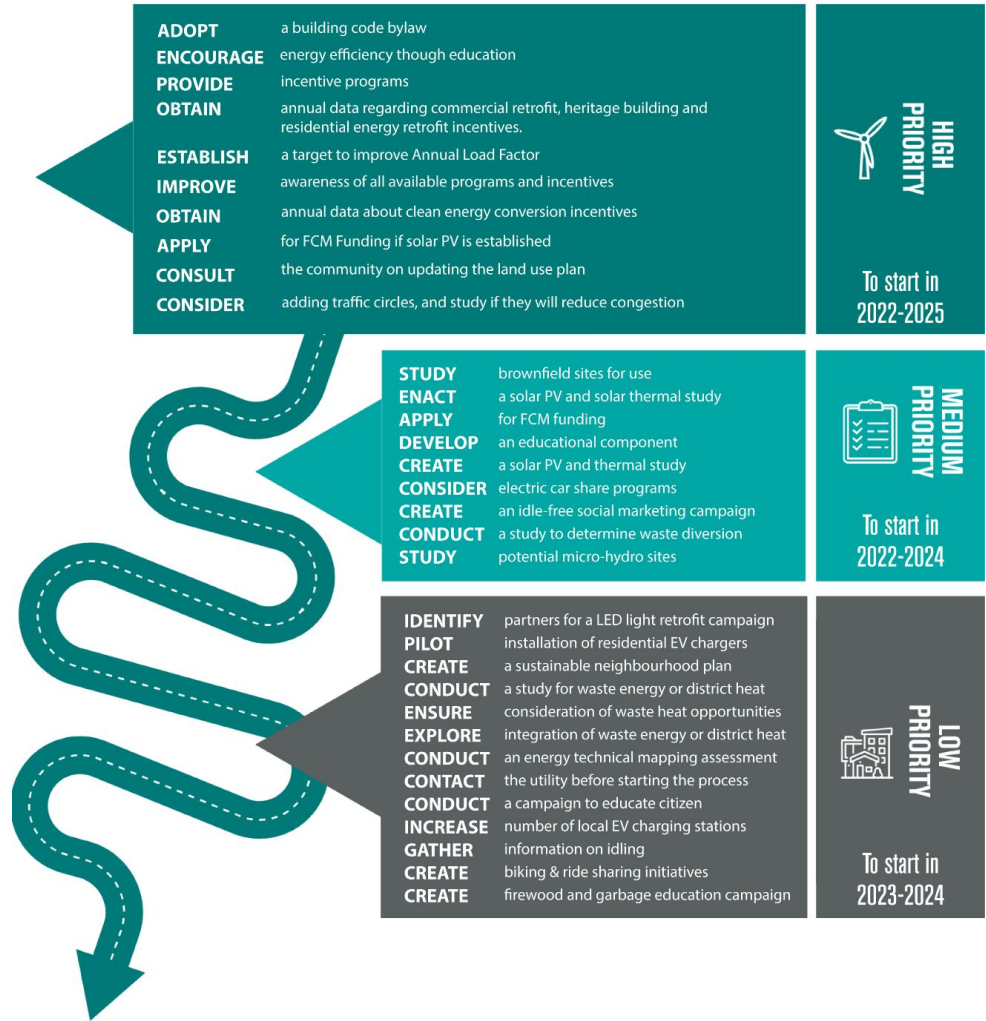


# FOUNDATION BUILDING: Engaging Utilities

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	Utility
Smart Energy Communities Benchmark Assessment (initial + final)	Pre-Survey Invitation to Plan
Community Energy Mapping workshop	Align Goals
Community Energy & Emissions Plan Development Workshop	Assign Roles
Energy and Emissions Inventory	Share Information
Community Energy & Emissions Plan Implementation Workshop	Clarify Roles and Accountability
Community Energy & Emissions Plan Economic Impact Analysis	Ongoing Stakeholder engagement

# Community Energy & Emissions Plan Implementation



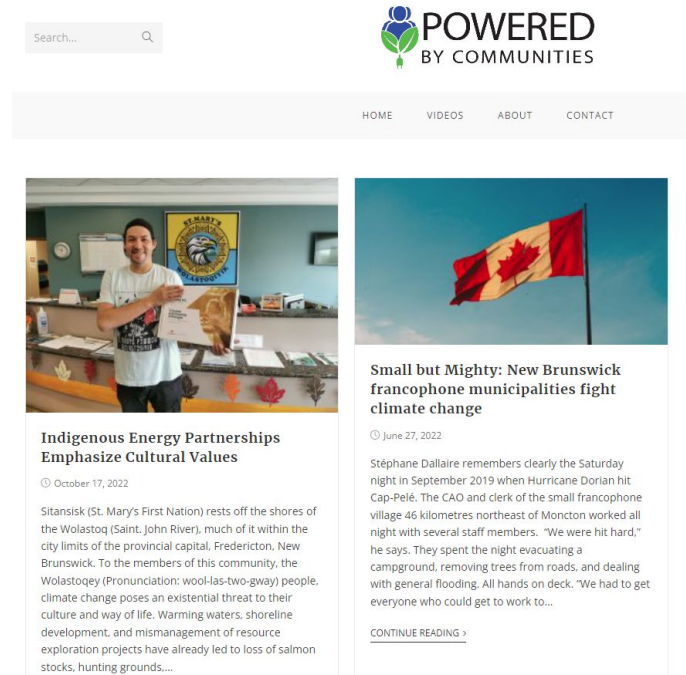
# PROJECT INITIATION STREAM SERVICE OPTIONS

	SEEKER	DOER	LEADER
<b>Smart Energy Communities Benchmark Assessment (initial + final)</b>	✓	✓	✓
<b>Build the Case:</b> Land-based Renewable Energy Mapping Assessment*, estimation of emissions reduction potential, economic development potential, energy cost savings potential, risks, and examples from other communities	✓	✓	
<b>Internal Alignment:</b> One-on-one and group meetings to develop staff support and assistance in council / board presentation	✓	(✓)	
<b>External Alignment:</b> One-on-one meetings or up to two online workshops to convene & engage stakeholders to develop understanding and momentum. Stakeholders may include neighboring local governments, industry, other levels of government, residents, and/or utilities.	✓	(✓)	✓
<b>Project Plan:</b> Refining project / program / policy definition and workplan to get to launch	✓	✓	✓
<b>Funding:</b> Identification of grants and support in grant development	✓	✓	✓
<b>Contracting:</b> development of requests for proposal and manage procurement process if needed (additional cost)	(✓)	(✓)	(✓)

\*This sub-service may not be applicable to all participants.

# SHARED SERVICES


- + Virtual Community Energy and Emissions Planning Course for Planners
- + Support and Navigation services (existing tools, resources, energy advisors, funding from partners, webinars) and Personalised Coaching for staff and elected officials (highly variable dependent on participant needs)
- + Promoting community successes - Powered by Communities, Publications, social media
- + Participation in relevant working groups and communities of practice
- + Webinar Series



Search... 🔍

POWERED BY COMMUNITIES


HOME VIDEOS ABOUT CONTACT



**Indigenous Energy Partnerships Emphasize Cultural Values**

🕒 October 17, 2022

Sitansisk (St. Mary's First Nation) rests off the shores of the Wolastoq (Saint. John River), much of it within the city limits of the provincial capital, Fredericton, New Brunswick. To the members of this community, the Wolastoqey (Pronunciation: wool-las-two-gway) people, climate change poses an existential threat to their culture and way of life. Warming waters, shoreline development, and mismanagement of resource exploration projects have already led to loss of salmon stocks, hunting grounds....



**Small but Mighty: New Brunswick francophone municipalities fight climate change**

🕒 June 27, 2022

Stéphane Dallaire remembers clearly the Saturday night in September 2019 when Hurricane Dorian hit Cap-Pelé. The CAO and clerk of the small francophone village 46 kilometres northeast of Moncton worked all night with several staff members. "We were hit hard," he says. They spent the night evacuating a campground, removing trees from roads, and dealing with general flooding. All hands on deck. "We had to get everyone who could get to work to..."

[CONTINUE READING >](#)

# OUTPUTS & OUTCOMES

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## Outputs

- + Development and implementation of 15 tailored Net-Zero Communities Recommendations and Prioritization Reports to help 15 participating communities (or clusters) assess their current achievements and next steps related to community energy and emissions planning (CEEP)
- + 7-8 implementable CEEPs
- + Case Studies to assess the economic impact of elements of CEEPs
- + 7-8 CEEP programs, projects or policies launched and/or implemented

## Outcomes

- + Built capacity of participants by  $\geq 25\%$
- + Increased Smart Energy Communities Benchmark scores by  $\geq 10\%$
- + Enhanced and ongoing CEEP knowledge sharing and support
- + Positive changes in behaviours of system actors that are durable
- + GHG emissions reductions
- + \$187.5 million in annual energy costs retained in local economies
- + 562.5 new jobs during the community energy and emissions plan implementation investment phase
- + 187.5 person-years of employment during the 20 year savings phase



# OUTPUTS & OUTCOMES



- + 13 implementable CEEPs
- + 6 Case Studies to assess the economic impact of elements of CEEPs
- + CEEP programs, projects or policies launched and/or implemented
  - + Updates to Municipal Plans and Bylaws for green energy (Perth-Andover)
  - + Feasibility analysis of Solar PV farm (Quispamsis)
  - + Increased public education on climate change and energy nexus (Florenceville)
  - + Hiring of new staff to coordinate CEEP implementation (Sussex)
  - + Formation of Net-Zero Climate Change Action committee (Oromocto)
  - + Municipal Climate Change Support Program and dedicated staff (NB Power)
- + FCM Partner for Climate Protection Milestones 1-3 achieved by several communities

Municipality	Year 1 Score	Year 2 Score	Δ
Town of Sussex	57%	72%	↑15%
Town of Saint Andrews	51%	70%	↑19%
Town of Florenceville-Bristol	68%	79%	↑11%
Village of Perth-Andover	55%	71%	↑16%
Town of Woodstock	65%	73%	↑8%
Town of Quispamsis	70%	79%	↑9%
Town of St. Stephen	45%	60%	↑15%
Town of Oromocto	46%	66%	↑20%

# NB COMMUNITY SEC BENCHMARK RESULTS

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Municipality	Year 1 Score	Year 2 Score	Percent Increase
Town of Sussex	57%	72%	15%
Town of Saint Andrews	51%	70%	19%
Town of Florenceville-Bristol	68%	79%	11%
Village of Perth-Andover	55%	71%	16%
Town of Woodstock	65%	73%	8%
Town of Quispamsis	70%	79%	9%
Town of St. Stephen	45%	60%	15%
Town of Oromocto	46%	66%	20%

# ECONOMIC IMPACT

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**1.**

Every 1% reduction in energy use = \$5-14M kept in local economy for small-mid sized communities

**2.**

Every \$1M spent on community energy and emissions plan implementation = minimum net increase of 3 jobs

**3.**

Throughout 20 year savings phase, net increase job creation = 8 jobs / \$M

*See our Economic Impact of NB CEEPs initiative!*

# IMPORTANCE TO FEDERAL GOVERNMENT

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The Smart Energy Community Accelerator will

**1.**

Assist Canada in reaching its 2030 and 2050 emissions reductions targets and FSDS goals

**2.**

Work with all energy stakeholders to create and align processes and achieve buy-in

**3.**

Be inclusive, cost-effective, and lay the foundation for a more efficient and just transition

# Get Involved

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- Newsletter
- Events
- Working Groups
- [Get involved | Join QUEST Canada's Network](#)





Seth Leon

Manager, Programs & Projects

[sleon@questcanada.org](mailto:sleon@questcanada.org)

[www.questcanada.org](http://www.questcanada.org)

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