



# Resilience on the Shore

# QUEST

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starring as,

Atlantic Region Climate Advisor, for the  
Partners for Climate Protection Program

# Agenda

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- Introduction to QUEST, in our role as the **Atlantic Region Climate Advisor**
- Introduction to the Partners for Climate Protection (PCP) Program
- Regional Advisor Role
- Small Town Case Study
- Current FCM Funding for Climate Change

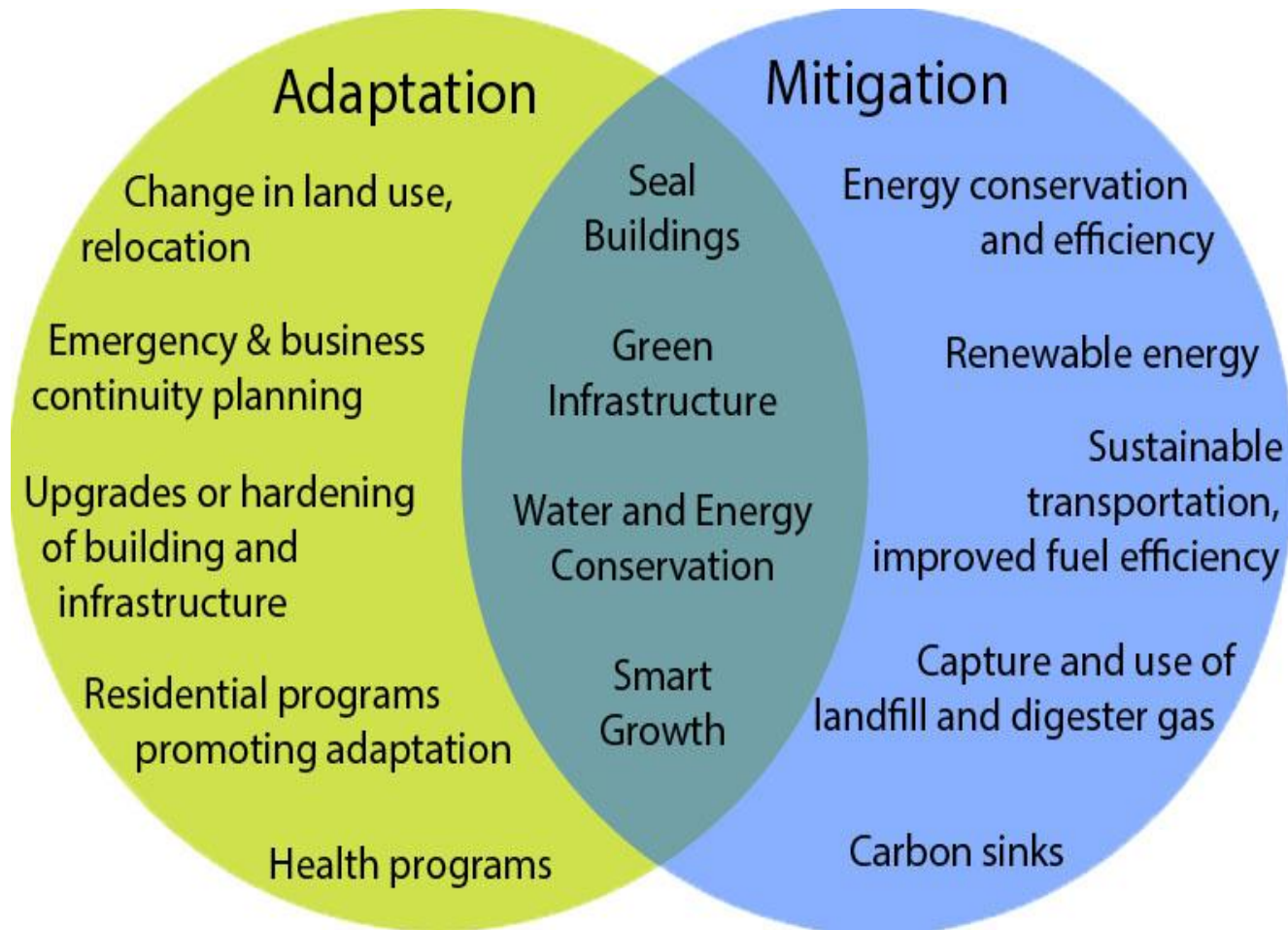
# About QUEST

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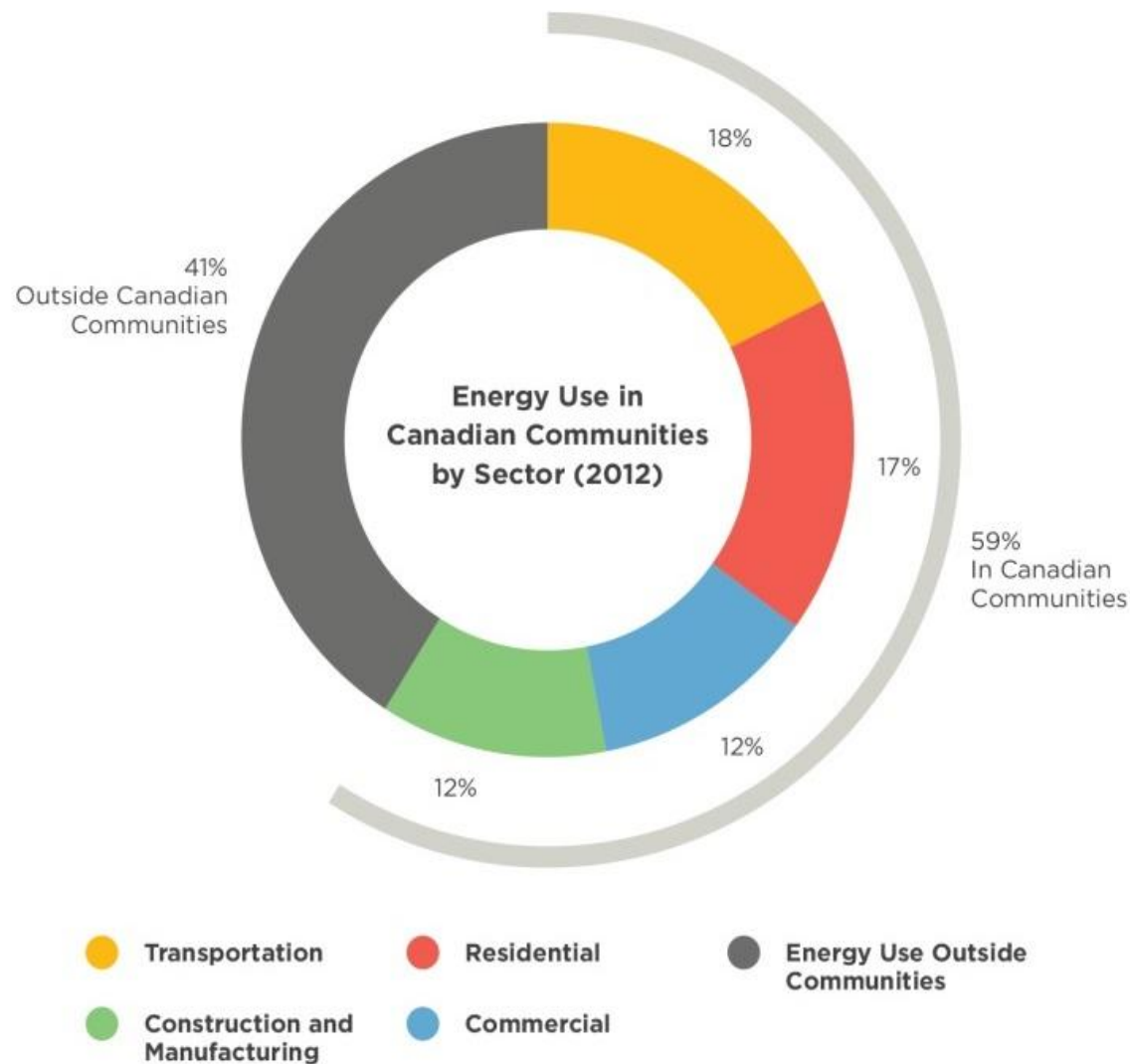
- QUEST is the national voice for the Smart Energy Communities marketplace.
- 8 provincial and regional Caucuses plus working groups
- a reach of thousands of stakeholders
- QUEST is supporting and connecting:
  - governments,
  - utilities & energy service providers,
  - the real-estate sector (owners, operators and builders),
  - and the product and professional service sector,
  - **to implement Smart Energy Communities.**



# Resilience



# Energy Use in Canadian Communities



Source: (Natural Resources Canada, 2012)

## Community spending on energy is high

Community Size	Average Spending on Energy
Ranges from \$2,000 - \$4,000 per capita per year	
Small Communities (5,000 people)	\$10 - 20 million
Mid-sized Communities (20,000 – 100,000 people)	\$60 million to \$400 million

Much of this money leaves the community

# Community Energy Planning in Canada

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- Over 400 communities across Canada are engaged in community energy planning
- A CEP is a tool that defines community priorities around energy with a view to improving energy efficiency, reducing GHG emissions, driving economic development and improving community resilience
- CEPs typically contain:
  - Energy and emissions inventory
  - Energy and emissions reduction targets
  - Broad scope of actions



# QUEST SMART ENERGY COMMUNITIES SCORECARD



- The Scorecard is a tool to evaluate and benchmark the progress of municipalities, utilities and the real-estate sector along the pathway to becoming a Smart Energy Community.
- Based on the American Council for an Energy-Efficient Economy (ACEEE) City Energy Efficiency Scorecard.
- Indicators are being developed with input from six pilot communities, senior advisors and Subscribers.
- Scorecard will evaluate the strengths and weaknesses of policies and processes supporting energy efficiency, conservation, distributed energy, transportation and land use.





# ACEEE SCORECARD METHODOLOGY - example scoring



Local Government



Community



Buildings



Utilities



Transportation

Policy area & subcategories	Maximum score
<b>Local government operations</b>	<b>10</b>
Local government energy efficiency-related goals	4.5
Procurement and construction policies	3
Asset management	2.5
<b>Community-wide initiatives</b>	<b>12</b>
Community-wide energy efficiency-related goals	7.5
District energy and combined heat and power	2
Urban heat island mitigation	2.5
<b>Buildings policies</b>	<b>28</b>
Building energy code stringency	8
Building energy code compliance	6
Requirements and incentives for efficient buildings	8
Benchmarking, rating, and transparency	6
<b>Energy and water utilities</b>	<b>20</b>
Electric efficiency spending and saving	6
Natural gas efficiency spending and saving	3
Low-income and multifamily programs	4
Energy data provision	2
Efficiency efforts in water services	5
<b>Transportation policies</b>	<b>30</b>
Sustainable transportation plan	4
Location efficiency	6
Mode shift	6
Transit	5
Efficient vehicles	3
Freight	3
Affordable housing in transit-oriented developments	3
<b>Maximum total score</b>	<b>100</b>

Table 5. Scoring methodology for energy efficiency goals in local government operations

Energy-related goals for local government operations	Score (2 pts)
The local government has a formal energy efficiency target (or a related target such as a greenhouse gas reduction goal) for municipal operations that has been adopted through an executive order or city resolution and mainstreamed across government operations	2
The local government has a formally adopted municipal operations energy efficiency target or a related target, but has not integrated the target across municipal operations.	1.5
The local government has identified an energy efficiency target or related target for municipal operations, but it has not been formally adopted.	1
The local government has engaged a formal agency stakeholder group to set energy efficiency goals or related goals, although no targets have yet been identified.	0.5

# QUEST in the Atlantic

## Capacity Building:

Municipal Working Groups in NS, PEI/NB  
QUEST will engage 6 municipalities, their utilities, and community stakeholders, through workshops to inform a climate risk assessment and make recommendations for resilience and create a best practice guide.

## Research:

2018 - Atlantic Canada Energy Data Roadmap  
2018 - NS Community Momentum Report  
- NB Primer on Community Energy Planning  
2014- The Role of District Energy in Making Nova Scotian Communities Energy Resilient





# Partners for Climate Protection Program



# What is PCP?

- Network of over **300** Canadian municipal governments
- Commitment to reduce GHGs and act on climate change
- Partnership between the Federation of Canadian Municipalities (FCM) and ICLEI-Local Governments for Sustainability
- Founded in 1994 - 24 Years and Running



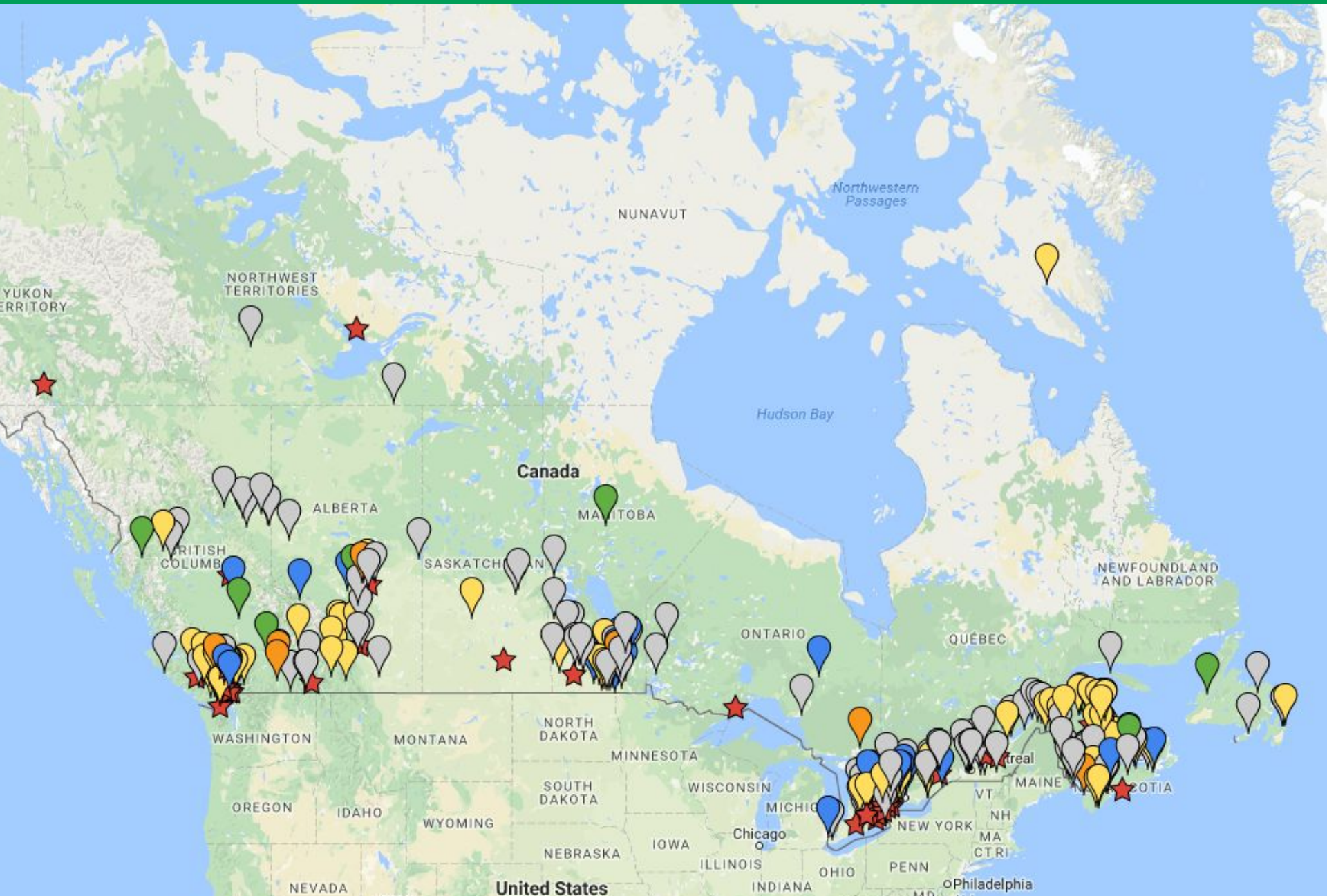
FEDERATION  
OF CANADIAN  
MUNICIPALITIES

FÉDÉRATION  
CANADIENNE DES  
MUNICIPALITÉS





# A Canada-wide network...



# Current Newfoundland and Labrador Members

Corner Brook

Conception Bay South

Gander

Paradise

Mount Pearl

Stephenville - newest member

Marystown

St. John's



# Corporate & Community Scale

City of Regina, SK  
LEED Gold fire station



City of Halifax, NS  
Solar City program





# Five-Milestone Framework



1. Establish a baseline GHG inventory and forecast



2. Set GHG reduction targets



3. Develop a local action plan



4. Implement the plan or set of activities



5. Monitor progress and report results



# How to Join

- 1:** Contact PCP for our orientation package
- 2:** Download the sample resolution to join PCP
- 3:** Appoint staff and elected official liaisons to be the main contacts with PCP
- 4:** Submit adopted Council resolution, along with the staff liaison's contact information
- 5:** Receive information package, resources, and PCP Milestone Framework to begin implementation.



# Available Resources and Support

- One-on-one technical support line: [pcp@iclei.org](mailto:pcp@iclei.org)
- Peer-review service for milestone applications
- Tools, case studies and guidance documents
  - Access to the [PCP Milestone Tool](#)
- Networking and training
  - Access to PCP hub
  - Webinars, workshops and peer to peer learning
- Quarterly newsletter
- Regional Climate Advisors



# Regional Advisors



Patricia, Day One. “Try to tease out what is unique, and what is common.”

Our advisors offer a range of services and direct, on the ground support, tailored specifically to the needs of municipalities in the regions they serve.

These consulting-type services are provided free of charge, exclusively to PCP members.

# Regional Advisors Role

They offer **training, knowledge-sharing and networking opportunities**:

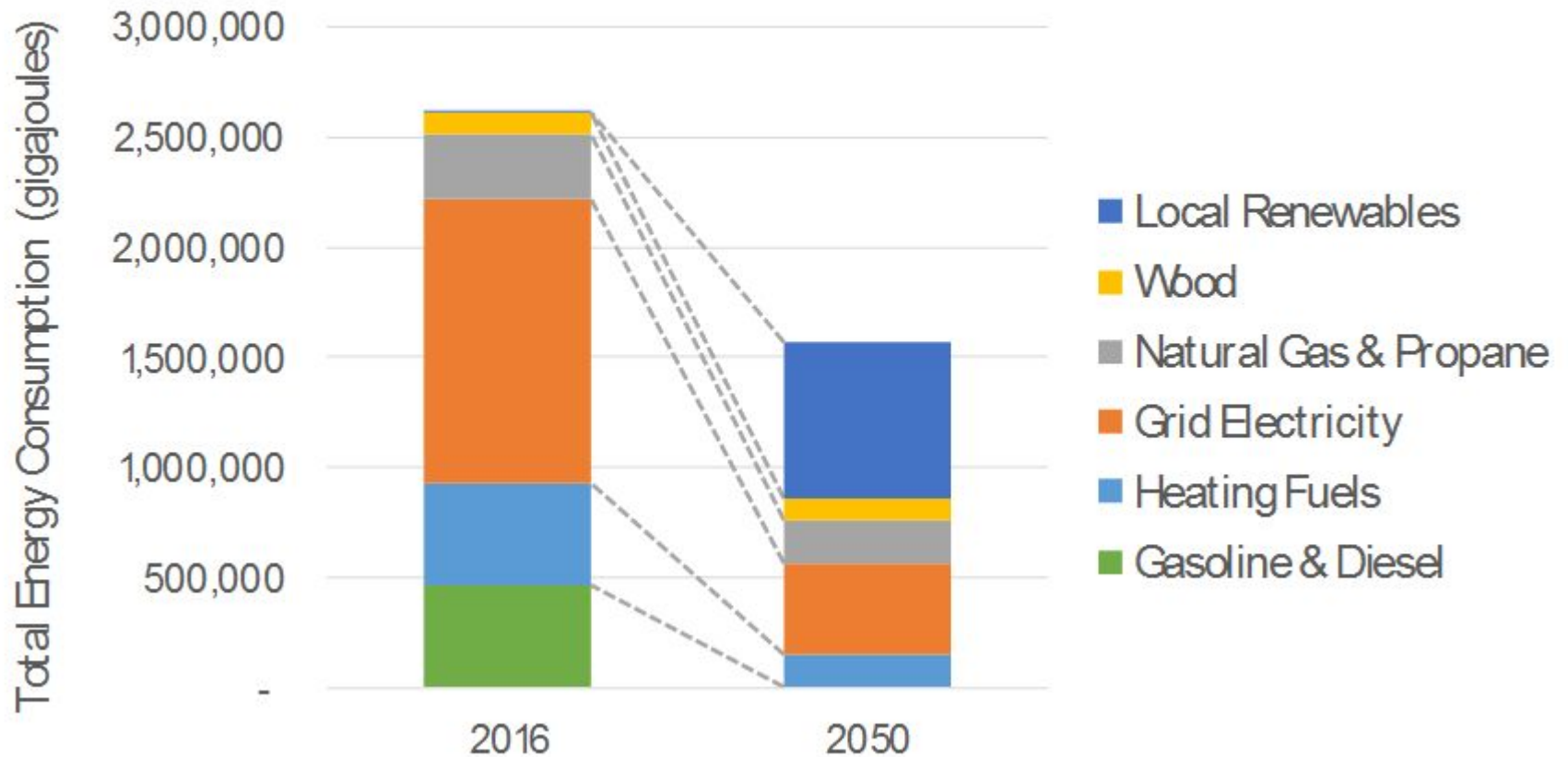
- Workshops, webinars and other types of training
- Peer learning and networking activities
- Opportunities to expand your network of nearby municipalities so you can learn from their experiences
- Information about funding, local resources and programs

Our advisors can also:

- Help you identify and apply for grant funding
- Provide in-depth, technical information about the PCP program to help further your PCP Milestone progress
- Help you complete reports or documentation for the PCP program

# Bridgewater's Community Energy Investment Plan

## Bridgewater's Energy Shift



# Town of Bridgewater

## 3 Key Strategies

1. Energy Efficient Buildings  
\$153 million investment  
(57% of GHG reductions)
2. New Community Scale  
Energy Systems  
\$157 million investment  
(40% of GHG reductions)
3. Clean and Active  
Transportation  
\$64 million investment  
(3% of GHG reductions)





Investment opportunity	Economic benefit (2018-2050)			Energy benefit (GHG emissions reduced, 2018-2050, kilotonnes)
	Investment (\$ millions)	Savings (\$ millions)	Return on investment (%)	
Net zero and passive house performance standards: by 2030, all newly constructed buildings meet the highest energy performance standard.	1.7	15	805%	45
Retrofit existing buildings: by 2050, the envelope efficiency of all homes and apartments, and all commercial facilities is improved by 50%, and industrial facilities operate 50% more efficiently.	84	382	353%	1,290
Heat pumps: by 2050, 60% of all residential buildings and 85% of all commercial buildings have heat pumps installed.	19	105	451%	354
Solar PV and hot water: by 2050, 80% of all buildings have solar PV systems, and 50% of buildings have solar hot water systems installed.	48	80	65%	308

# Federation of Canadian Municipalities (FCM) Funding Green Municipal Fund

We provide funding for environmental initiatives that improve air, water, and soil, and reduce greenhouse gas emissions. GMF funding is available to all Canadian municipal governments and their partners for eligible projects.

Up to 50% of eligible costs.

Continuing intake of applications.

Funding is allocated in the following focus areas.

- Sustainable neighbourhood and brownfields action plans
- Energy efficiency and recovery
- Transportation and fuel efficiency
- Water quality and conservation
- Waste management and diversion
- Brownfields

We fund the following types of initiatives:

- Plans
- Feasibility studies
- Pilot projects
- Capital projects

# Federation of Canadian Municipalities (FCM) Funding Climate Change Staff Grants

Grants of up to \$125,000 to cover the salary of one staff person

Funding for up to 80% over a two-year period

Applications are accepted until June 29, 2018. Limited funding is available.

Can be shared amongst municipalities and with First Nations communities.

Activities must include these three areas:

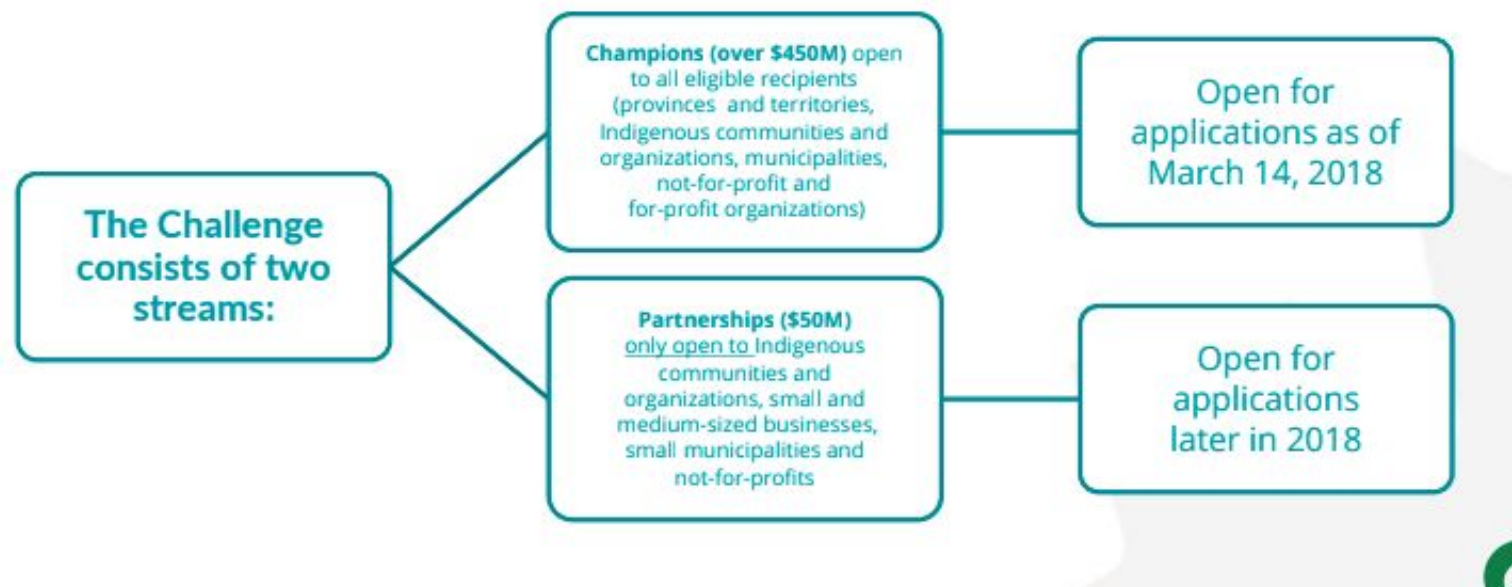
- Planning related to mitigation OR adaptation
- Institutional and operational changes
- Implementation of climate mitigation or adaptation projects

Examples of municipal initiatives

- Developing a climate mitigation or adaptation vision
- Preparing and holding public consultation
- Implementing a feasibility study or capital project
- Setting up a steering committee

# Low Carbon Economy Funding

## Challenge Streams



For Partnerships- Municipalities (under 100,000 residents) get 40% cost coverage.

\$1M minimum, \$10M maximum

For specific projects or portfolio of projects resulting in measurable GHG reductions.  
Not studies, research, capacity building, new buildings.

# QUEST | *talks: Resilience*

**Responding to Climate Change - Withstand, Respond & Recover**

June 19 Halifax

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# Contact Information

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For further information on the Partners for Climate Protection program, see: [www.fcm.ca/pcp](http://www.fcm.ca/pcp)