



# A CANADIAN ENERGY STRATEGY

Why should local  
governments care?

by James Glave, John Chapman,  
Robert Duffy and Charley Beresford

May 2013

**Columbia**  
INSTITUTE

  
CENTRE FOR CIVIC GOVERNANCE

A CANADIAN ENERGY STRATEGY: Why should local governments care?

by James Glave, John Chapman, Robert Duffy and Charley Beresford

May 2013

No part of this publication may be reproduced  
without permission of the authors.

Copyedit and design: Nadene Rehnby, Hands On Publications



1200 – 1166 Alberni Street  
Vancouver, B.C. V6E 3Z3  
604.408.2500

[info@columbiainstitute.ca](mailto:info@columbiainstitute.ca)

[columbiainstitute.ca](http://columbiainstitute.ca)

# Contents

PART 1	INTRODUCTION .....	4
PART 2	NATIONAL ENERGY STRATEGY: AN OVERVIEW .....	5
	Why Canada needs a national energy strategy .....	5
	Interprovincial negotiations: What's happened so far .....	5
	Canadian energy strategy: 10 action areas .....	6
	Timelines: What happens next .....	7
PART 3	LOCAL GOVERNMENT ROLES AND OPPORTUNITIES .....	8
	Why municipalities should participate in the creation of a national energy strategy .....	8
	Energy, climate change and municipal infrastructure .....	9
	Energy security and communities .....	10
	Reducing local government and community GHG emissions .....	11
	Promoting green economic opportunities in communities .....	13
	Reforming municipal revenue to meet energy and climate challenges .....	14
PART 4	CONCLUSION: AN OPPORTUNITY TO ENGAGE .....	15
	Additional reading .....	16
	About the authors .....	17

# Introduction

**Municipalities can play an important role in ensuring that a Canadian energy strategy addresses the roles and interests of local communities across Canada.**

Canada's federal and provincial governments are actively developing a national energy strategy, and there are compelling reasons for municipalities to become a bigger part of this conversation.

Municipalities can play an important role in ensuring that a Canadian energy strategy addresses the roles and interests of local communities across Canada.

Local governments have key stakes in ensuring stable, sustainable and affordable energy supplies, and have important roles to play in national energy discussions as energy producers and consumers, and also as representatives of community interests. They are well positioned to help develop, implement and benefit from better choices in the direction of Canada's energy policy.

It's no exaggeration to say that energy is a defining challenge for this century. The role of energy resources in our Canadian economy and

the ways we use energy are both areas of intense interest and policy debate.

Addressing climate change means addressing the way we use energy. Put another way, using less energy, using cleaner energy—or both—will mean fewer greenhouse gas emissions and reduce the rate at which the planet is warming and the climate changing. It could help us avoid catastrophic climate change.

Local economy concerns, rising public sector energy costs, community energy security problems and climate change related strain on local infrastructure put municipalities on the front lines.

A national energy strategy could be a powerful tool to signal long-term policy direction, and allow all levels of government (as well as the private sector) to move forward with clarity and certainty as we build a clean energy future and craft a response to the threat of climate change.

# National energy strategy: An overview

## > Why Canada needs a national energy strategy

Canada's current approach to energy policy is fragmented, lacking coherence and driven primarily by individual provinces. There is a need for an overarching vision to encourage cooperation toward common goals.<sup>1</sup>

A comprehensive national energy strategy could effectively prepare Canada for present and future energy needs and lay the foundation for a more diversified economy. It could include production, distribution and consumption, as well as provide a framework for renewable and clean energy. It would signal to the world that Canada is prepared to be a global leader in a transition toward clean energy.

Regulatory certainty could better enable action at all levels of government.

## > Interprovincial negotiations: What's happened so far

Negotiations toward a Canadian energy strategy have been taking place through the Council of the Federation, an organization composed of Canada's provincial and territorial governments.

In 2007, Canada's premiers released *A Shared Vision for Energy in Canada*,<sup>2</sup> a policy document outlining a series of priorities for interprovincial cooperation on energy. It sets out an action plan to facilitate development of renewable and green energy, promote conservation and efficiency, accelerate research and development, and provide for secure and reliable energy transmission and distribution. Through 2012 and 2013, the premiers have updated and expanded the document, presenting it as the basis for a new Canadian energy strategy.

In late April 2013, the premiers of Manitoba, Alberta and Newfoundland and Labrador met with media to provide an overview of negotiations. Discussions were grouped around three broad areas, with three provinces taking a lead in each area. Grouped under the three broad categories is a 10-point plan (see *Canadian Energy Strategy: 10 Action Areas*), with each "action item" represented by a provincial working group.<sup>3</sup>

**A comprehensive national energy strategy would signal to the world that Canada is prepared to be a global leader.**

<sup>1</sup> Winnipeg Consensus, 2009, [winnipegconsensus.org](http://winnipegconsensus.org)

<sup>2</sup> *A Shared Vision for Canada*, Council of the Federation, 2007, [councilofthefederation.ca/pdfs/energystrategy\\_EN.pdf](http://councilofthefederation.ca/pdfs/energystrategy_EN.pdf)

<sup>3</sup> "National energy strategy in works," Winnipeg Free Press, April 20, 2013; Canadian Energy Strategy Secretariat, Alberta Energy, "Canadian Energy Strategy – Action Areas," 2013.

## 87% of Canadians support a national energy strategy

Opinion polls show that Canadians want a national energy strategy that promotes energy efficiency and reduces greenhouse gas (GHG) emissions.

A July 2012 Harris-Decima poll found that 87% of Canadians strongly or somewhat agree that “We need a Canadian energy strategy to plan our nation’s energy future.” A majority also indicated that the following should be “top” or “high” priorities for a national energy strategy:

- Reducing our reliance on fossil fuels like oil, gas, and coal – 66%
- Creating more jobs in clean energy – 74%
- Reducing Canada’s carbon pollution to slow down climate change – 67%
- Improving energy efficiency – 82%

Harris–Decima for Tides Canada, 2012, [tidescanada.org/wp-content/uploads/files/energy/Tides%20Canada%20Polling\\_Results\\_Backgrounder.pdf](http://tidescanada.org/wp-content/uploads/files/energy/Tides%20Canada%20Polling_Results_Backgrounder.pdf)

Most of the action items covered in the 10 points have direct or indirect implications for local governments and communities. The emphasis on energy infrastructure and new regulatory processes is of key interest to local governments.

Premiers charged with developing a path toward a Canadian energy plan say the next stage is to consult Canadians.<sup>4</sup>

Implementation of a national energy strategy will necessarily involve laws, policies, economic instruments and tools that have important local government implications.

<sup>4</sup> Supra note 3, “National energy strategy in works.”

## > Canadian energy strategy: 10 action areas

(Council of the Federation, 2013)

### SUSTAINABILITY AND CONSERVATION

(Lead Manitoba)

1. Promote energy efficiency and conservation
2. Transition to a lower carbon economy
3. Enhance energy information and awareness

### TECHNOLOGY AND INNOVATION

(Lead Newfoundland and Labrador)

4. Accelerate the development and deployment of energy research and technologies that advance more efficient production, transmission and use of clean and conventional energy sources
5. Develop and implement strategies to meet energy-sector human resource needs now and well into the 21st century
6. Facilitate the development of renewable, green and/or cleaner energy sources to meet future demand and contribute to environmental goals and priorities

### DELIVERING ENERGY TO PEOPLE (Lead Alberta)

7. Develop and enhance a modern, reliable, environmentally safe, and efficient series of transmission and transportation networks for domestic and export/import sources of energy
8. Improve the timeliness and certainty of regulatory approval decision-making processes while maintaining rigorous protection of the environment and public interest
9. Promote market diversification
10. Pursue formalized participation of provinces and territories in international discussions and negotiations on energy

## A changing global energy economy

The world is undergoing an energy transformation. There is a growing urgency to deal with energy policy and climate change by shifting away from fossil fuels and toward clean, renewable energy sources.

## What is the low-carbon transition?

To avoid catastrophic climate warming, significant changes in energy production and energy policy are required. Canada is uniquely positioned to exploit emerging opportunities in clean energy technology with our large energy sector and abundant energy resources. Benefits of this approach will include the creation of new jobs and revenue sources, while realizing significant savings and creating healthier communities. Canadian local governments are already turning to a range of bylaws, regulations, and financial instruments to deliver low-carbon energy services, in turn saving money while improving health and quality of life.

## What are the implications for competitiveness and prosperity?

The International Energy Agency is calling for global renewable-energy investments of \$430 billion by 2020 and \$1.2 trillion by 2030. This represents a huge opportunity for economic growth and new green jobs in Canada.

International Energy Agency, 2012, [iea.org/newsroomandevents/pressreleases/2012/june/name,27474,en.html](http://iea.org/newsroomandevents/pressreleases/2012/june/name,27474,en.html)



ENGLISH BAY PHOTO COURTESY LISA/BEACH650 (FLICKR)

**“Climate change poses serious threats to urban infrastructure, quality of life, and entire urban systems.”**

— *Turn Down the Heat*, World Bank, November 2012

## > Timelines: What happens next

The premiers present for the April 2013 announcement say they are working with provincial and territorial energy ministers to tell the Council of the Federation how to move forward on a shared energy policy in time for the Council’s July 24, 2013 meeting.<sup>5</sup>

After that, “the next stage is to go out and consult Canadians on what their thoughts and ideas are for a Canadian energy strategy.”<sup>6</sup> This timeline suggests that local governments may have formal opportunities to provide input on a strategy as early as autumn 2013, though the process is likely to stretch at least into 2014.

<sup>5</sup> “Premiers talk national energy strategy,” Peterborough Examiner, April 20, 2013, B6.

<sup>6</sup> Supra note 3, “National energy strategy in works.”

# Local government roles and opportunities

## > Why municipalities should participate in the creation of a national energy strategy

Communities across the country face many energy challenges, including rising prices, increased pollution and aging infrastructure.

Through infrastructure choices, land use zoning, property development, transportation systems and tax mechanisms, municipalities have a great deal of influence over energy use.

A significant number of Canadian municipalities are also energy producers and providers, through locally owned electric and gas utilities and district heating systems, and also via renewable energy generation for public buildings.

There is also growing municipal interest in supporting energy efficiency retrofits and other conservation measures for local residents and businesses.

**Local governments will bear much of the impact of fossil fuel related climate change on infrastructure.**

**If supplied with adequate resources and coherent policy direction, local governments are well positioned to manage many of these impacts.**

As the Federation of Canadian Municipalities noted in a 2011 submission to the Standing Senate Committee on Energy, the Environment and Natural Resources, “the more favourable the national policy environment, the more likely municipalities will be to maximize local policy levers at their disposal to reduce energy consumption in their communities and contribute to renewable energy production in Canada.”<sup>7</sup>

Local governments will bear much of the impact of fossil fuel related climate change on infrastructure. If supplied with adequate resources and coherent policy direction, local governments are well positioned to manage many of these impacts.

More broadly, local governments are the closest and most accessible level of government for many citizens, so participation by municipalities could be key to getting Canadians more engaged in the development of a national energy strategy.

<sup>7</sup> Shannon Joseph, Federation of Canadian Municipalities evidence before the Standing Senate Committee on Energy, the Environment and Natural Resources, Ottawa, October 27, 2011, [parl.gc.ca/Content/SEN/Committee/411/enev/49132-e.htm?Language=E&Parl=41&Ses=1&comm\\_id=5](http://parl.gc.ca/Content/SEN/Committee/411/enev/49132-e.htm?Language=E&Parl=41&Ses=1&comm_id=5)



## > Energy, climate change and municipal infrastructure

Energy use and production is intertwined with the issue of climate change. Local governments are especially vulnerable to the effects of climate change, and many are already beginning to examine the impacts of sea level rise and severe weather events on aging infrastructure.<sup>8</sup> As the climate continues to warm, severe weather events are also projected to increase, with major consequences for Canadian municipalities and infrastructure.

A national energy strategy needs to take unavoidable impacts into account and help municipalities meet infrastructural and other costs associated with climate change adaptation.

In Canada and around the world, the insurance industry is calling for action on these issues. Extreme weather events cost Canadians \$1.6 billion in 2011, and these costs are expected to increase as the climate changes.<sup>9</sup> Globally, the frequency and severity of weather-related catastrophes have increased over at least a 25-year period. Scientists strongly correlate these events to the rapid increase in carbon and other greenhouse gases in the atmosphere.

By 2020, the National Roundtable on the Environment and the Economy estimates the annual economic impact of climate change will be \$5 billion, and by 2050 could be more than \$40 billion.<sup>10</sup>

Climate change is costing Canadian municipalities — costs that are projected to increase. Communities are dealing with growing infrastructure costs, including inadequate storm drainage, old electricity grids, and underfunded transportation networks.

8 *Telling the Weather Story*, Insurance Bureau of Canada, June 2012, [ibc.ca/en/natural\\_disasters/documents/mcbean\\_report.pdf](http://ibc.ca/en/natural_disasters/documents/mcbean_report.pdf)

9 Ibid.

10 *Paying the Price: The Economic Impacts of Climate Change for Canada*, National Roundtable on the Environment and the Economy, 2011, <http://nrtee-trnee.ca/climate/climate-prosperity/the-economic-impacts-of-climate-change-for-canada/paying-the-price>



### Extreme weather

Hurricane Katrina and Superstorm Sandy provide recent examples of municipalities' exposure to climate change.

Recovery work from Sandy will cost New York State US\$32.8 billion, with another US\$9.1 billion in prevention expenses. Katrina was the costliest natural disaster in United States history, devastating sections of New Orleans and causing nearly 2,000 deaths. Property damage is estimated at over \$80 billion.

Though Canadian communities are less vulnerable to hurricanes, we need to be concerned about the impacts of climate change related sea level rise and severe weather events on our aging infrastructure.

Other climate-driven impacts, such as wildfires, can prove equally devastating. The Okanagan Mountain fire in 2003 caused thousands of evacuations and cost British Columbia at least \$33 million.

In a 2011 publication, The National Round Table on the Environment and the Economy suggested that the economic impact of climate change may be as high as \$5 billion per year by 2020, and \$21 to \$43 billion per year by 2050. Action today on these issues can cause significant future savings.

The window to act is now. Preparing for future natural disasters and climate change by building resilient communities can provide significant cost savings and protect and allow communities to minimize damage to property and life.

PHOTOS COURTESY TRAN BC/Flickr



## Nelson Hydro

The City of Nelson owns and operates its own hydroelectric utility, supplying energy and managing energy transmission infrastructure for Nelson and surrounding regions. Just under half of the electricity is purchased from FortisBC, a large energy provider, while the balance is generated by Nelson Hydro's own Bonnington dam. Many benefits flow from Nelson Hydro. Consumers are protected from rate changes: electricity in Nelson is approximately 10 per cent less than in similar nearby communities. Dividends from the utility supply the city with an annual revenue source. Nelson Hydro is a local initiative that is increasing community resilience, self-reliance and energy security.

NELSON PHOTO COURTESY PRETELOS/FLICKR

Climate change affects all regions of the country. On the coasts, hurricanes, sea level rise, and storm surges require immediate attention. Northern Canada faces the most rapid warming, a trend that is projected to accelerate. Precipitation will increase, in the form of severe rain and snowstorms. Across the country, unpredictable and severe weather events are adding to the burden carried by municipalities and revealing the inadequacies of existing infrastructure.<sup>11</sup>

<sup>11</sup> "Telling the Weather Story," Insurance Bureau of Canada, 2012.

## > Energy security and communities

Energy security is another area of concern for local governments and Canadian communities. Dependence on imported oil leaves public sector organizations, businesses and residents susceptible to fluctuating prices and concerns about supply security. And energy poverty—when households spend over 10 per cent of income on energy costs—is of concern to a growing number of Canadians.<sup>12</sup>

Globally, many countries are already in the process of planned transitions to more sustainable, locally-based—and ultimately more secure—national energy systems. Germany, for example, has an extensive plan underway to expand renewable energy from 20 per cent of its electricity in 2011 to 80 per cent by 2050, and cut the country's overall energy consumption 50 per cent by 2050.<sup>13</sup> Renewable and district energy projects by municipalities are an important component of the Germany energy transition.<sup>14</sup>

Strong policy direction also helped Denmark produce 28 per cent of its electricity through wind in 2012, and the government has announced targets of 50 per cent of its electricity from wind by 2020.<sup>15</sup> Danish municipalities have played an important role in this transition, both through a nationwide process of "heat planning" and development of district energy systems carried out by local authorities, as well as through municipal leadership in wind and other renewable electricity generation.<sup>16</sup>

<sup>12</sup> "Current and Future State of Oil and Gas Pipelines and Refining Capacity in Canada," Standing Committee on Natural Resources, 2012, [publications.gc.ca/collections/collection\\_2012/parl/XC49-1-411-02-eng.pdf](http://publications.gc.ca/collections/collection_2012/parl/XC49-1-411-02-eng.pdf)

<sup>13</sup> Damien Carrington, "Germany's renewable energy revolution leaves UK in the shade," *The Guardian*, May 30, 2012, [guardian.co.uk/environment/2012/may/30/germany-renewable-energy-revolution](http://guardian.co.uk/environment/2012/may/30/germany-renewable-energy-revolution)

<sup>14</sup> See Lettemieke Mulder, "German Environmental Group Praises Municipal Utilities as the Pioneers of the German Energy Transition," [firstsolar.com/En/Press-Center/First-Solar-Blog?Post=Duhmunicipal&Blog=Lettemieke+Mulder&Edit=True](http://firstsolar.com/En/Press-Center/First-Solar-Blog?Post=Duhmunicipal&Blog=Lettemieke+Mulder&Edit=True)

<sup>15</sup> "Renewables share of Denmark's power tops 40 pct," *Reuters*, September 24, 2012, [reuters.com/article/2012/09/24/denmark-renewables-idUSL5E8KO8CV20120924](http://reuters.com/article/2012/09/24/denmark-renewables-idUSL5E8KO8CV20120924)

<sup>16</sup> "Energy Policy in Denmark," Danish Energy Agency, December 2012, [http://ens.omega.oitudv.dk/files/dokumenter/publikationer/downloads/energy\\_policy\\_in\\_denmark\\_-\\_web.pdf](http://ens.omega.oitudv.dk/files/dokumenter/publikationer/downloads/energy_policy_in_denmark_-_web.pdf)

Dependence on imported oil leaves public sector organizations, businesses and residents susceptible to fluctuating prices and concerns about supply security.

## > Reducing local government and community GHG emissions

Municipalities are on the front lines of climate change mitigation and adaptation.

Local governments have direct or indirect control of 45 per cent of national greenhouse gas emissions, most of which are driven by energy consumption, and in some jurisdictions are expected to meet mandated or voluntary GHG reduction targets.<sup>17</sup>

When citizens can live, work and play in complete, walkable communities, social capital is improved and less energy is used in transportation. Strengthening building codes, capturing waste heat from landfill and sewage infrastructure, establishing deconstruction incentives, setting targets for energy efficiency in municipal operations, greening vehicle fleets and using land use decisions and official community plans for more complete communities increases resiliency and reduces energy consumption along with GHGs.

### **Municipalities and community energy conservation: Residential energy retrofit financing**

Energy-efficiency retrofits in residential buildings offer a fast and potentially affordable way to cut GHG emissions, conserve energy and save consumers money on their utility bills. Retrofitting is also good for the local economy and creates a lot of jobs.

However, the up-front cost of retrofitting is a deterrent for many homeowners. One potential solution is residential retrofit financing programs offered by municipalities. Under these programs, municipalities provide low-cost financing to cover the up-front cost of energy-efficient retrofits and property owners use money saved on energy to repay the financing over time, either as a charge on their local property taxes or on local utility bills. These programs can operate on a full cost recovery basis, at no net-cost to municipalities.

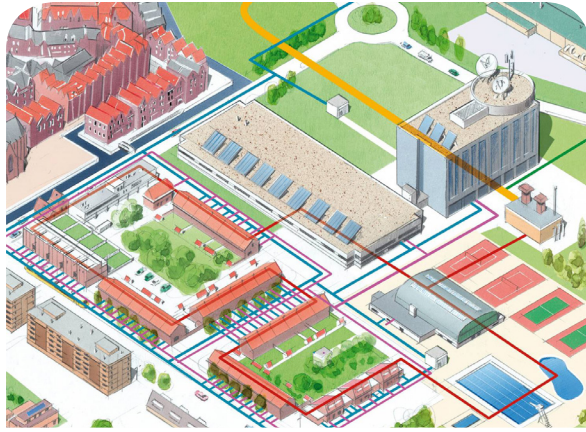
Similar programs are up and running in the U.S. and other countries, but are just getting off the ground in Canada. A municipal “on-utility bill” (or pay as you save) financing pilot was launched in Nelson, B.C. in 2012 through the city’s municipally-owned electric utility (see page 10). Halifax has the first property tax based repayment pilot project for energy retrofits in Canada, and a first round of solar hot water system installations began there in March 2013.

Provincial and federal governments could support the growth of this model through key legislative changes and the establishment of capital funds to backstop retrofit financing. Both Ontario (2012) and Nova Scotia (in 2010 for Halifax) have already implemented important legislation allowing municipal governments to use local improvement charges as a mechanism for financing energy efficiency and renewable energy retrofits on private property, and B.C. passed legislation enabling utilities to implement financing programs in 2012.

For more information on residential energy retrofit financing in Canada, see the Centre for Civic Governance report “This Green House” at [civicgovernance.ca](http://civicgovernance.ca)



<sup>17</sup> *Act Locally*, Federation of Canadian Municipalities, 2009.



## District heating

District heating is a system for distributing heat generated in a centralized location for use in residential, commercial and public sector space and water heating. Already widely used across Europe, the number of district heating systems in Canada is growing. Often run by municipalities, district heating projects have been implemented in most major cities, including Montreal, Toronto, Calgary and Vancouver, and in numerous smaller communities across the country. These systems provide high heating efficiency, reducing municipalities' energy costs and GHG emissions.

One example of district heating in action is in Yellowknife, NT, a city of 20,000 just south of the Arctic Circle. Long, cold winters mean serious heating costs. A 2004 study showed that heating accounted for over two thirds of Yellowknife's GHG emissions. In 2007, Yellowknife committed to installing a biomass boiler to heat several municipal buildings. The project has led to annual savings of \$200,000, a payback period of three years, and reduced annual GHG emissions by 800 tonnes.<sup>18</sup>

Better support for effective local energy solutions like district heating could play an important role in a national energy strategy.

ILLUSTRATION SMARTENERGYCOLLECTIVE.COM

<sup>18</sup> "Partners for Climate Protection," Federation of Canadian Municipalities, 2013, [fcm.ca/Documents/case-studies/PCP/2013/Yellowknifes\\_Biomass\\_Boiler\\_District\\_Energy\\_System\\_EN.pdf](http://fcm.ca/Documents/case-studies/PCP/2013/Yellowknifes_Biomass_Boiler_District_Energy_System_EN.pdf)

While municipalities can develop community energy, climate action, and adaptation plans, they are often constrained by cost downloading and inadequate funding and support from other orders of government.<sup>19</sup> Better tools and more resources to help municipalities reduce GHG emissions are crucial to any national climate change strategy.<sup>20</sup>

A more integrated approach to climate policy, embedded within a Canadian energy strategy endorsed by all provinces, could potentially provide some policy certainty and also a framework for allocating much needed resources. Federal subsidies could be streamlined to support low-emissions options and encourage green and renewable options. For example, the Federation of Canadian Municipalities has called for a "long-term, predictable infrastructure funding plan that makes sustainable transportation a priority, and federal-municipal collaboration on energy efficient building retrofits."<sup>21</sup>

Today's municipal energy, transportation and other infrastructure decisions will have long-lasting associated costs and therefore must be made carefully. Choosing low-emission or carbon-neutral options may increase local resiliency and decrease future costs, while facilitating the energy transition. A national strategy could help to streamline and better support these efforts.

<sup>19</sup> *The Road To Jobs And Growth: Solving Canada's Municipal Infrastructure Challenge*, Federation of Canadian Municipalities, November 2012, [fcm.ca/Documents/backgrounders/The\\_Road\\_to\\_Jobs\\_and\\_Growth\\_Solving\\_Canadas\\_Municipal\\_Infrastructure\\_Challenge\\_-\\_Submission\\_EN.pdf](http://fcm.ca/Documents/backgrounders/The_Road_to_Jobs_and_Growth_Solving_Canadas_Municipal_Infrastructure_Challenge_-_Submission_EN.pdf)

<sup>20</sup> *Act Locally: The Municipal Role in Fighting Climate Change*, Federation of Canadian Municipalities, December 2009, [fcm.ca/Documents/reports/Act\\_Locally\\_The\\_Municipal\\_Role\\_in\\_Fighting\\_Climate\\_Change\\_EN.pdf](http://fcm.ca/Documents/reports/Act_Locally_The_Municipal_Role_in_Fighting_Climate_Change_EN.pdf)

<sup>21</sup> David Thompson and Shannon A. Joseph, *Building Canada's Green Economy: The Municipal Role*, Federation of Canadian Municipalities (FCM, 2011), [fcm.ca/Documents/reports/Building\\_Canadas\\_green\\_economy\\_the\\_municipal\\_role\\_EN.pdf](http://fcm.ca/Documents/reports/Building_Canadas_green_economy_the_municipal_role_EN.pdf)

The Federation of Canadian Municipalities has called for a long-term, predictable infrastructure funding plan and federal-municipal collaboration on energy efficient building retrofits.

## > Promoting green economic opportunities in communities

Municipalities stand to benefit from a policy framework that encourages clean energy development, green technologies and energy conservation.

Canada has abundant renewable and hydrocarbon resources, and energy exports are a large part of our economy. However, the ways we produce and use energy are changing. Alternative, renewable and low-carbon energy production is rapidly growing.<sup>22</sup> This is a global transformation, and without concerted action, Canada risks being left behind.

Jobs and economic activity in the clean energy sector are increasing, and a comprehensive national energy strategy will allow municipalities to capitalize on these new opportunities. Beyond opening up new markets for Canada's raw natural resources, a strategy supporting clean energy production and technologies could enable communities to capture a larger share of the growing global market for low-carbon goods and services, such as wind turbines, solar panels, biofuels production, and efficient vehicles, industrial processes and buildings.

A 2012 report by the National Round Table on the Environment and the Economy assesses the current value of Canada's green low-carbon goods and services market at about \$8 billion, and notes it could grow to \$60 billion by 2050.<sup>23</sup> In the United Kingdom, low-carbon industries (the green jobs sector) have been the only sector showing consistent growth since 2008, and now account for 8 per cent of GDP.<sup>24</sup>

<sup>22</sup> *Medium-Term Renewable Energy Market Report*, International Energy Agency, 2012, [iea.org/w/bookshop/add.aspx?id=432](http://iea.org/w/bookshop/add.aspx?id=432)

<sup>23</sup> "More Bang for our Buck: How Canada can create more energy jobs and less pollution," Blue Green Canada, 2012, <http://bluegreencanada.ca/Canadian%20Energy%20Strategy>

<sup>24</sup> Mary Creagh, "Strength of the green economy points to future success" (Business Green, 2012), [businessgreen.com/bg/opinion/2203730/strength-of-the-green-economy-points-to-future-success](http://businessgreen.com/bg/opinion/2203730/strength-of-the-green-economy-points-to-future-success); "Green Economy: a UK success story" (Green Alliance, 2012), [green-alliance.org.uk/uploadedFiles/Publications/reports/British\\_success\\_story\\_Issuu.pdf](http://green-alliance.org.uk/uploadedFiles/Publications/reports/British_success_story_Issuu.pdf)

Globally, the market for low-carbon goods and services is already \$339 billion annually, and could reach as high as \$8.3 trillion annually by 2050 if concerted efforts are made to address climate change.<sup>25</sup>

Clean-energy and high-technology jobs tend to be less vulnerable to the boom-and-bust cycles that have historically characterized resource economies. Diversifying Canada's economy into these sectors could help reduce our country's vulnerability to the cyclical ups and downs of global commodities markets, and reduce the incidence of hardship in our communities.



Clean-energy and high-technology jobs tend to be less vulnerable to the boom-and-bust cycles that have historically characterized resource economies.

### Acceptable risk?

There are many reasons that municipalities may wish to accelerate Canada's clean-energy transition. Beyond the threat posed by climate change, Canada's presently expanding petroleum export sector presents additional risk to tourism-oriented economies, or those that depend on healthy ecosystems for resources such as fisheries. For example, the City of Vancouver recently passed a motion declaring that a major oil spill would unleash "enormous" impacts on tourism, development, fisheries and reputational capital. For smaller coastal communities that similarly depend on healthy and abundant ecosystems for employment, revenue and tourism, such an incident could prove irrecoverable.

VANCOUVER PHOTO COURTESY ECSTATICIST/FLICKR

<sup>25</sup> Supra note 23, "More Bang for our Buck."



## Taking action

In October 2012, Prince Rupert city council chose to position their city for a clean energy future by endorsing *Towards a Clean Energy Accord*, a set of energy strategy recommendations developed by Clean Energy Canada.

Municipalities, First Nations, industry, labour, academic and non-profit groups are coming together to call on Canada to develop a new energy strategy prioritizing green-sector jobs and clean-energy innovation, to remain globally competitive in the 21<sup>st</sup> century.

*"We believe...*

*that Canada should bet on a 21<sup>st</sup> century energy model, and accelerate its transition to a clean and renewable energy future to remain competitive in a fast-changing world.*

*our leaders should work with industry and civil society organizations to leverage the economy we have today to create the new energy economy we want and need tomorrow.*

*any Canadian energy strategy must have a framework that prioritizes jobs and low carbon prosperity, eliminates energy waste, unleashes new energy innovation, fosters more livable communities, moves the nation forward on transportation, enables funding for the energy transition, and cleans up our existing energy supply."*

PRINCE RUPERT PHOTO COURTESY LISA/BEACH650 (FLICKR)

## > Reforming municipal revenue to meet energy and climate challenges

At present, half of every tax dollar collected goes to the federal government while 42 cents goes to provincial and territorial governments, leaving local governments with just 8 cents per tax dollar. As a result, there is an estimated \$60 billion municipal infrastructure deficit.<sup>26</sup>

Municipalities raise 80 per cent of their own revenues, primarily through property taxes and user fees, receiving only 20 per cent through transfers. For several decades, municipal expenditures have been increasing, but the limited revenue-raising tools available to local governments remain unchanged. There is a large and growing imbalance; energy and climate-change expenditures are increasingly expensive for municipalities. Infrastructure, emergency response, and environmental-related costs are growing, without adequate funding resources.<sup>27</sup>

Intergovernmental transfers have declined at the same time as service provision is downloaded to municipalities, and municipalities are surviving by deferring needed upgrades to infrastructure and service delivery.<sup>28</sup>

Municipalities clearly need more resources for the roles they will play in the transition to a cleaner, more energy efficient economy in Canada and also for upgrading local infrastructure to cope with a more chaotic climate.

<sup>26</sup> "Building Prosperity From the Ground Up: Restoring Municipal Fiscal Balance," Federation of Canadian Municipalities, 2006.

<sup>27</sup> "The Canadian Infrastructure Report Card," 2012, canadainfrastructure.ca

<sup>28</sup> "Evidence: Standing Committee on energy, the environment and natural resources," 2011, parl.gc.ca/Content/SEN/Committee/411/enev/49132-e.htm?Language=E&Parl=41&Ses=1&comm\_id=5

# Conclusion: An opportunity to engage

*“The more favourable the national policy environment, the more likely municipalities will be to maximize local policy levers at their disposal to reduce energy consumption in their communities and contribute to renewable energy production in Canada.”*

— FCM testimony to the Standing Senate Committee on Energy, the Environment and Natural Resources, 2011

A national energy strategy that reduces dependence on fossil fuels and accelerates Canada’s prosperity in the new global clean energy economy will also advance the concerns of municipalities. Canada can have a bright energy future if all orders of government collaborate.

There are high stakes and a wide range of roles local governments could play in a national energy strategy. Key issues from a local government perspective include the rising cost of damage to community infrastructure from climate change related natural disasters such as flooding, forest fires and sea level rise, the relationship between energy use and community

planning, local energy security, participating effectively in a low-carbon economy, and GHG emissions reductions by municipalities.

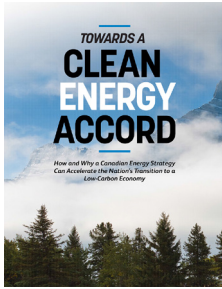
From financial and economic perspectives, a national energy strategy could open up important opportunities to address fiscal imbalances between local and senior levels of government, as well as stimulate green economic activity and job creation while diversifying Canada’s economy.

Municipalities have both an interest in the outcome of the Council of the Federation consultation with Canadians on a national energy strategy and expertise to bring to the table.

**There are high stakes and a wide range of roles local governments could play in a national energy strategy.**

## > Additional reading

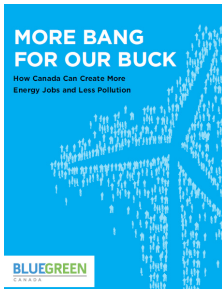
A substantial amount of information has been compiled on Canada's energy policies. Here are some resources:



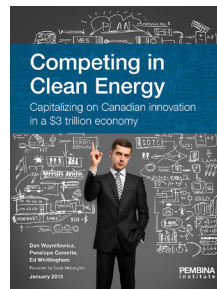
Tides Canada: *Towards a Clean Energy Accord.*  
[tidescanada.org/wp-content/uploads/Towards-a-Clean-Energy-Accord.pdf](http://tidescanada.org/wp-content/uploads/Towards-a-Clean-Energy-Accord.pdf)



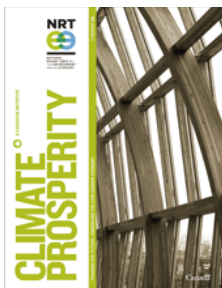
The Council of the Federation. *A Shared Energy Vision for Canada.*  
[councilofthefederation.ca/pdfs/energystrategy\\_EN.pdf](http://councilofthefederation.ca/pdfs/energystrategy_EN.pdf)



BlueGreen Canada: *More Bang for our Buck: How Canada Can Create More Energy Jobs and Less Pollution.*  
[bluegreencanada.ca/more-bang-for-our-buck](http://bluegreencanada.ca/more-bang-for-our-buck)



Pembina Institute. *Competing in Clean Energy.*  
[pembina.org/pub/2406](http://pembina.org/pub/2406)



National Round Table on the Environment and the Economy. *Climate Prosperity.*  
[nrtee-trnee.ca/wp-content/uploads/2012/10/framing-the-future-report-eng.pdf](http://nrtee-trnee.ca/wp-content/uploads/2012/10/framing-the-future-report-eng.pdf)



Insurance Bureau of Canada. *Telling the Weather Story.*  
[ibc.ca/en/natural\\_disasters/documents/mcbean\\_report.pdf](http://ibc.ca/en/natural_disasters/documents/mcbean_report.pdf)



Clean Energy Canada:  
[tidescanada.org/energy/](http://tidescanada.org/energy/)

An important way Canadian local governments can share knowledge and best practices is through Partners for Climate Protection, the Canadian part of a global campaign led by ICLEI (the International Council for Local Environmental Initiatives) and the Federation of Canadian Municipalities. Through this program, Canadian municipalities are part of a network of more than 900 communities worldwide that are committed to reducing greenhouse gases and taking action on climate change. [www.iclei.org](http://www.iclei.org)

**ICLEI** Local Governments for Sustainability



## > About the authors

James Glave writes on a wide range of climate change solutions, with a particular interest in green buildings and neighbourhoods. He works with Clean Energy Canada at Tides Canada.

John Chapman has a particular interest in risk management and strategic planning. He is a graduate of the School of Community and Regional Planning at UBC, where he specialized in development and urban planning.

Robert Duffy, Columbia Institute Research Analyst, holds a Masters in Communications from Simon Fraser University. He writes widely on topics of interest to local governments.

Charley Beresford is Executive Director of the Columbia Institute. Climate change and social equity challenges are at the forefront of her work with the Institute.



The Columbia Institute fosters individual and organizational leadership for inclusive, sustainable communities. We nurture strong local leadership, and support community leaders with cutting-edge research on emerging issues through our Centre for Civic Governance.

[columbiainstitute.ca](http://columbiainstitute.ca)

**Columbia**  
INSTITUTE



CENTRE FOR CIVIC GOVERNANCE