

# FCM

Federation of Canadian Municipalities

---

## Enlisting Municipal Governments in a National Approach to Clean Air and Climate Change

Submission by  
Federation of Canadian Municipalities (FCM)  
to  
The Minister of the Environment

October 16, 2006

---



24 Clarence Street • Ottawa, Ontario K1N 5P3

Telephone: 613-241-5221 • Fax: 613-241-7440

# Table of Contents

Introduction .....	3
Developing a Canadian Approach .....	3
The Municipal Role in Clean Air and Climate Change Action .....	4
Roles and Responsibilities of Municipal Governments .....	5
A New Canadian Approach: Some guiding principles .....	5
Recommendations and Next Steps .....	6
Conclusion .....	8

FCM acknowledges the contributions of the Delphi Group to this submission.

## Introduction

---

The Federation of Canadian Municipalities (FCM) shares with the Government of Canada a commitment to improving environmental performance and protecting the health of Canadians. Its 1,400 member municipalities make a significant contribution to Canada's environmental objectives. Initiatives large and small provide a daily showcase of innovation in environmental management.

Some of Canada's largest cities, including Ottawa, Calgary and Edmonton, are successfully using the financing mechanisms made available by FCM through the Green Municipal Fund to reduce their energy use, lower GHG emissions, and save money on their electricity bills. A project in Bécancour, Quebec, will replace more than 1,000 existing high-pressure sodium street lights with newly developed induction lamps, reducing electrical consumption for street lighting by more than 35 per cent. Greater Sudbury's energy plan will allow the city to become more energy self-sufficient by investing in local and renewable energy projects and retrofitting 175 municipal facilities. Under the energy retrofit initiative, the city has already saved nearly \$900,000 in energy costs and has reduced greenhouse-gas emissions by 26 per cent.<sup>1</sup>

But although municipal governments can make a significant contribution to cleaner air and reduced greenhouse-gas emissions, current efforts are largely independent and uncoordinated, without an overall plan or design. Much more could be achieved with national coordination and within a national plan.

Municipal governments share the federal government's concern about air quality and climate change because they deal with their effects in their own backyards every day. They see their emergency response and health units dealing with growing numbers of people in distress as smog chokes their communities. In the north, they watch as the permafrost melts, collapsing foundations and other infrastructure. On the coasts they clean up after storms rip through communities with unprecedented fury, often reaching far inland.

Plus, there is an immediate payoff. When they reduce energy consumption, they not only reduce emissions, they save money. They know their long-term economic health and the quality of life for their residents depend on cutting harmful emissions. And they have applied themselves willingly to the task.

But a challenge this complex and urgent is too big for any one order of government alone. With their limited fiscal resources, municipalities cannot handle this challenge without more federal and provincial/territorial support. Concomitantly, the federal government needs the nimbleness, creativity and energy of municipal governments to implement local responses to these national priorities. All orders of government need to work together toward the common goals of cleaner air and lower greenhouse-gas emissions. A national, concerted strategy could redefine Canada as a world leader in creating sustainable places to live. Our cities could serve as a model for others that struggle with smog-related health hazards. At the same time, it could catapult Canada into the ranks of a select handful of international leaders in greenhouse-gas reduction.

## Developing a Canadian Approach

---

The responsibility for fighting air pollution and climate change is shared among federal, municipal and provincial/territorial governments.<sup>2</sup> However, they continue to operate independently and, in the absence of a national plan, their policies and programs tend to overlap, which is both costly and inefficient. A true "Made in Canada" approach to clean air and climate change would involve all orders of government in a nationally coordinated effort, with roles appropriate to their capacities. This would create synergies and leverage the role and potential of each.

Recent announcements signal that the present federal government is prepared to take a leadership role and develop an environmental plan capable of delivering tangible results. This is welcome news for municipal governments, which have been assuming increasingly proactive roles in environmental protection and stewardship. However, their capacity to act is limited by an outdated and inadequate fiscal regime and often depends on decisions and policies made by provincial/territorial governments. If municipal government efforts are to reach their potential, they must not be blocked by confusing rules and regulations or lack of resources. The prospect of new federal action on clean air and climate change is an opportunity to redefine and clarify roles and responsibilities along more functional lines.

As federal environmental legislation, such as the *Canadian Environmental Protection Act* (CEPA) and the *Canadian Environmental Assessment Act* (CEAA), continues to be amended and reviewed, provincial and territorial governments are forced to respond with strengthened regulations and renewed policies. As a result, municipal governments are faced with the task of responding to new requirements, from upgrading wastewater treatment systems and improving landfill design to enhancing waste diversion and recycling programs or improving public transportation systems to help reduce air pollution and greenhouse-gas emissions. Often, they are doing so with inadequate consideration and compensation of the implementation challenges faced by municipal governments.

In some cases, municipalities can recover the costs of providing these services through user fees, such as transit fares and charges for water and sewers. However, most environmental services are funded through the property tax. The National Roundtable on the Environment and the Economy (NRTEE) noted in its 2003 report on environmental quality in Canadian cities that, because of heavy reliance on property tax revenues, "cities have been unable to meet these new fiscal challenges and maintain the levels of investment and reinvestment needed to sustain urban environmental quality." The challenge of responding to environmental and other responsibilities is even

---

<sup>1</sup> For more information, see the City of Greater Sudbury's Earthcare web site at: [http://www.city.greatersudbury.on.ca/cms/index.cfm?app=div\\_earthcare&lang=en&currid=1999](http://www.city.greatersudbury.on.ca/cms/index.cfm?app=div_earthcare&lang=en&currid=1999)

<sup>2</sup> The *Canadian Environmental Protection Act* is the primary legislative framework guiding provincial/territorial responsibilities.

more prevalent in Canada's rural, remote and northern communities, where revenue generated from property taxes and user fees is not sufficient to cover the costs of delivering services or implementing programs.

Little comprehensive national data exist to detail the cost to municipal government of meeting federal, provincial and territorial environmental regulations. This issue points to a need for all orders of government to analyze and publicly share the cost implications of new regulations on municipal government. Providing this analysis would strengthen public policy decision-making, and doing so would improve cooperation and coordination across all three orders of government.

Efforts to enlist the municipal sector in meeting broad national environmental goals, such as the Green Municipal Fund<sup>3</sup>, are producing results. However, the scope of the problem, as well as the untapped potential of our cities and communities, requires more. FCM is seeking dialogue on a national clean air and climate change plan that clearly identifies the roles and responsibilities of all orders of government, and ensures these responsibilities are supported with appropriate and sufficient resources.

## The Municipal Role in Clean Air and Climate Change Action

---

FCM believes there is a clear opportunity for the federal government to adopt an integrative and strategic approach to clean air and climate change. And, as the order of government closest to people, municipal governments must be seen as partners in developing and implementing this approach. Municipal governments own and operate numerous facilities and provide a wide range of services, including those that generate greenhouse gas and other emissions. Having this experience has made them leaders in issues of air and water quality and energy efficiency.

Municipal governments recognize that reducing emissions and energy consumption can result in significant financial, social and environmental benefits for their communities. They are prepared to partner with other governments in national clean air and GHG-reduction initiatives. One of the most important benefits of action on climate change and clean air is the impact on human health. Poor air quality has been linked to an increase in disability days, emergency room visits, and hospitalization for cardiac and respiratory disease. The Ontario Medical Association estimated that, in Ontario alone, 17,000 hospital admissions and 60,000 emergency room visits were attributable to air pollution in 2005. Clearly, reducing the risks to human health from poor air quality will benefit all Canadians.

Municipal governments also recognize that facilities, infrastructure, land and water resources will be vulnerable to the predicted effects of climate change, making it necessary to improve our understanding and respond to current and future risks. Canada's Commissioner of the Environment and Sustainable Development stated in her most recent report that "the government must better prepare for the impacts of climate change on federal programs, the economy and society." It was also acknowledged that the federal government should "work with other levels of government" in developing clear priorities for climate change adaptation.<sup>4</sup>

### Reducing Emissions

Municipalities generate emissions directly and indirectly through the operation of their buildings and facilities and as a result of management and provision of services, such as waste management, water treatment and public transit. In addition, they have influence over land-use practices, transportation systems, the energy efficiency of community building stock and the sources of energy used.

There is a strong business case for reducing municipal energy use and lowering emissions, because these actions can lead to lower operating and capital costs and fewer demands on physical assets. Action to reduce municipal emissions, combined with supportive policy decisions by other orders of government, will also yield significant environmental, social and economic results for Canada. It will leverage opportunities for environmental technology and innovation and can create economic development opportunities in rural, remote and northern communities. One of the greatest opportunities for rural economic development will be through producer participation in the ownership of biofuel facilities.

### Impact of Air Pollution and Climate Change

The impact of air pollution on municipal governments is largely related to its long- and short-term consequences for the health of Canadians. Municipal governments, which are responsible for maintaining a healthful environment for the people who live in their communities, are already seeing the effects of air pollution on their residents, with spikes in the use of emergency services on smog alert days. This is expected to increase if there is no improvement in our air quality.

The rise of global weather-related disasters and losses has been attributed, at least in part, to climate change.<sup>5</sup> Many cities and communities in Canada have already been affected by severe weather events. Climate changes projected for the 21<sup>st</sup> century are likely to result in increased weather hazards and

---

<sup>3</sup> A \$550-million endowment administered by the Federation of Canadian Municipalities

<sup>4</sup> 2006 Report of the Commissioner of the Environment and Sustainable Development to the House of Commons. Office of the Auditor General of Canada: Ottawa, September 28, 2006. Available at [www.oag-bvg.gc.ca](http://www.oag-bvg.gc.ca).

<sup>5</sup> Wakeford, Craig and Glenn McGillivray: "Climate Change: The changing municipal risk environment." Institute for Catastrophic Loss Reduction.

impacts that have very real implications for Canadian municipalities, including:

- Higher maximum temperatures, contributing to poorer air quality and increased incidence of death and serious illness in vulnerable populations;
- Increased cooling demand during extended heat waves, leading to reduced energy supply and reliability;
- More intense precipitation events implying increased flood, landslide, avalanche and mudslide damage causing increased pressure on government and private flood insurance systems and disaster relief;
- Increased summer drying over most mid-latitude continental interiors leading to decreased crop yields; decreased water resource quantity and quality; and increased risk of forest fires; and,
- Increases in tropical cyclone peak wind intensities, and average and peak precipitation leading to increased risk to human life, risk of infectious disease epidemics and other impacts, and causing pressure on health care systems.<sup>6</sup>

Municipal governments clearly are facing significant risks to facilities and to infrastructure and may encounter substantial liability as a result of climate change.<sup>7</sup> In addition, the current and future impacts of climate change in Canada's North have been identified by several recent studies and are particularly distressing. For instance, the 2004 Arctic Climate Impact Assessment (ACIA) Report—the most comprehensive regional climate change assessment ever undertaken— shows that the climate and environment in the Arctic are changing at an alarming rate and that communities and the Inuit way of life will be inevitably severely affected.<sup>8</sup>

Actions to adapt to climate change at the municipal level, such as improved land-use planning and infrastructure investment, will assist in minimizing expected loss and damage. Coupled with effective mitigation strategies, a national plan is needed for adaptation measures that can be implemented locally, in order to ensure that municipalities are not unfairly burdened by climate change.

## Roles and Responsibilities of Municipal Governments

---

The municipal potential for making a significant contribution to cleaner air and climate-change mitigation is significant. But facilitating and mobilizing action will require responsibility to be shared among all orders of government. This relationship requires an integrated approach and working partnership among all orders of government. Clearly defined roles and responsibilities for all orders of government and key stakeholders will ensure accountability and translate into effective results.

In defining these roles and responsibilities, the federal government should consider that:

- Municipalities' potential to reduce emissions lies in those activities that they control, directly and indirectly. For example, when providing services to the community, municipalities generate emissions through specific operations (for example, fleets, buildings and wastewater treatment). At the same time, they have a significant influence on a much broader set of emissions (e.g., emissions from the transportation and industrial sectors, and through land-use planning decisions).
- Municipal governments across Canada are implementing measures to reduce emissions and in many cases are well-advanced in their understanding of the issues and capacity for action.
- Municipalities are vulnerable to climate change and air emissions, and the effects of ever-increasing emissions on public health and infrastructure are already being felt in some communities.

## A New Canadian Approach: Some guiding principles

---

Municipalities can and want to be partners in the development and implementation of a "Made in Canada" federal plan that:

1. Ensures that, over time, all municipal governments have access to adequate resources, and the legislative authority to optimize their role in combating air pollution and climate change;
2. Contributes to the sustainability and security of small, rural or resource-based communities, as well as larger urban centres;
3. Ensures that no region of the country bears an unreasonable burden and considers the unique challenges for rural, remote and northern communities;
4. Attempts to maximize the full range of economic, social and environmental benefits, while at the same time minimize potentially negative impacts;
5. Emphasizes partnerships among all orders of government, industry and the community where appropriate;
6. Synergizes the unique role and potential of municipal and provincial/territorial governments;
7. Addresses several challenges that might obstruct effective action by municipal governments (including, for example, financial and market barriers);
8. Ensures municipal governments have access to the necessary tools and resources to identify impacts and vulnerabilities, and to implement necessary policies and programs to adapt to climate change and cope with air pollution.

---

<sup>6</sup> From Wakeford, Craig and Glenn McGillivray: "Climate Change: The changing municipal risk environment." Institute for Catastrophic Loss Reduction; and based on IPCC 2001 Impacts, Adaptation and Vulnerability

<sup>7</sup> Municipalities Table Options Paper Summary, January 2000

<sup>8</sup> See <http://amap.no/acia/> for this report and details.

## Challenges

The development and implementation of an integrated intergovernmental approach to air quality and climate change will not be without its challenges. For example, access to capital is often limited and/or inhibited by specific rules especially for long-term initiatives, such as public transit or other infrastructure projects. Heavily reliant on the property tax, municipal governments lack the resources and fiscal tools they need to meet new responsibilities they have acquired through offloading by other governments. As a result, they are facing a fiscal squeeze. This has caused the deferral of much-needed investments in infrastructure, leading to a reduced capacity to compete in the global economy and contribute to Canada's prosperity.

In addition, municipal governments must operate within a legislative framework set by other orders of government and may not always have the legislative authority to introduce new fees or levies to promote emission-reduction activities.

Finally, in order to maintain transparency and ensure accountability, municipal governments must report to the public on their progress in achieving environmental results. Some jurisdictions have established measurement and reporting protocols as a requirement for funding or regulatory compliance, but, in general, there are no comprehensive monitoring and assessment protocols to measure and document environmental quality at the local level. Key environmental indicators that provide an overview of national, regional and local environmental conditions should be identified, and the federal government should take the lead in ensuring each order of government has the necessary resources to participate in this reporting initiative.

## Recommendations and Next Steps

A long-term intergovernmental partnership is needed to meet the challenges posed by climate change and air pollution, and municipal governments are ready to do their part. Municipalities can provide significant value in several areas. Their most important and valuable role will be to implement and manage innovative policies and actions that will generate real results. Municipalities are seeking the resources to ensure that actions reduce emissions, produce economic and social benefits for the community, and encourage local action that will stimulate innovation, competitiveness and behavioural change.

Actions of particular significance to Canada that could be most effectively implemented by municipalities revolve around opportunities in the following areas:

## Enhancing Public Transit, Clean Transportation and Related Infrastructure

As one of the fastest growing areas of emissions, transportation and related systems offer a huge potential to improve air quality, particularly in major urban centres. A long-term plan with predictable revenue streams would also allow the Government of Canada to leverage more sustainable urban planning practices and a more efficient urban form.

The greatest opportunities for collaboration with the federal government include:

- Developing a national public transit plan (including identified priorities, clear roles, responsibilities and accountabilities, and partnership and collaboration mechanisms) and a predictable, long-term funding agreement. This would direct greater investment into local and regional transit infrastructure and support and enhance innovative sustainable land-use planning initiatives.
- Designing supportive policies and programs that would increase public-transit ridership, increase the share of nodal or compact development, and/or enhance the uptake of innovative approaches, such as transportation demand management systems.

## Improving Commercial and Residential Building Efficiency

Emission reductions in old and new building stock represent an opportunity to generate significant financial (e.g. lower energy costs) and social (e.g. local jobs) benefits through policies and initiatives that encourage the construction and retrofit of buildings with better energy efficiency. Some municipalities have already been successful in implementing measures that could be replicated across the country. FCM would be interested in working with the federal government to:

- Develop and implement enhanced national energy standards for buildings, industrial equipment and appliances, to be complemented by appropriate and adequate incentives and resources for municipal government. Programs such as Energuide for Houses that provide incentives for home renovations and improvements are an example of positive investments in energy performance, and investments in these areas should continue. Benefits of these programs are enhanced when designed to support other initiatives, including those targeting low income housing projects.
- Establish builder/developer incentives such as reduced development charges, or lower federal taxes (e.g. reduced GST) on newly built R2000 homes, LEED buildings, or innovative sustainable construction and community area design.
- Institute a national securitization or revolving fund(s) for energy efficiency retrofit investments (similar to Toronto's Better Building partnership).

## Municipal Operations and Services

Reducing emissions from municipally-owned facilities (buildings, water and wastewater systems, etc.) has been proven to be a net cost savings to those local governments that have successfully implemented measures. However, municipalities do not always have access to the technical knowledge or financial resources required to make the up-front investments needed to reap the downstream cost savings. Experience from communities (successes and failures) could be leveraged to design a suite of incentives and policies that could support and stimulate ongoing productivity and pollution prevention within municipal operations.

Key areas of opportunity include:

- Establishing a revolving loan fund for municipal energy efficiency projects in key operations. This could include, for example, water pumping, wastewater treatment, and street lighting retrofit programs.
- Introducing incentives that would encourage municipalities to increase the fuel efficiency of their fleet vehicles, use alternative bio-based fuels or demonstrate leading-edge clean technologies.
- Providing political support, incentives and the regulatory authority and encouragement to municipalities to institute bylaws and initiatives that would have a direct impact on emissions generated by activities under the direct control of local governments (e.g. idling, tree planting, green spaces, cycling).

## Enhancing Clean Energy

Shifting towards more sustainable energy sources will be critical to improving air quality and reducing GHG emissions. Leveraging the significant renewable resources in rural and remote communities across Canada would offer significant economic and social benefits for these communities.

Municipalities require enabling resources for the following initiatives:

- Working with provincial and federal governments to institute renewable energy portfolio standards across the country, to be supplemented by direct or targeted investments by the federal government to expand clean energy generation;
- Leveraging and building on existing initiatives, such as the *Aboriginal and Northern Community Action Program (ANCAP)*, to catalyze Canada's vast renewable energy resource potential and to spur economic development in northern, remote and rural communities in Canada;
- Streamlining, through governmental partnerships, environmental assessment and approval processes for renewable energy and waste-to-energy facilities;
- Establishing a landfill-gas capital infrastructure program and/or direct subsidies to municipalities that utilize landfill gas to generate heat or electricity;

- Continuing with the implementation of power production incentives<sup>9</sup> and introducing new producer or consumer tax credit systems for renewables;
- Encouraging and working with provinces to implement innovative programs to spur renewable energy development and commercialization. Ontario's Standard Offer program, for example, will offer preferential pricing, under long-term contracts, to producers of wind, biomass, small hydro and solar photovoltaic energy;
- Renewable fuels such as ethanol and biodiesel will become a growing part of our fuel supply. To maximize economic development opportunities for rural municipalities, there should be support for producer participation in the ownership of new, environmentally sound biofuel facilities.

In addition, new standards for vehicle fuel efficiency and air emissions should be consistent with the regulatory approach adopted by innovative jurisdictions, such as the State of California. Successful implementation of these regulations will lead to both clean air improvements and lower greenhouse gas emissions in our communities.

## Clean Air

Strengthened and enforceable air quality standards must lead to immediate reductions in emissions of smog precursors and should include mandatory and absolute reductions in greenhouse-gas emission for industry. New regulations must also address transboundary air pollution by ensuring bilateral agreements between Canada and the United States are maintained and/or strengthened. In addition, the federal government must ensure that all citizens and decision-makers have access to current information on local air quality conditions.

## Emissions Trading

Municipalities must be able to participate and gain credit for emission-reduction projects that they implement under any proposed emission-trading scheme developed by the federal government. Given the size and variety of possible initiatives, it is imperative that any domestic trading regime be efficient and allow participants to pool and aggregate credits in order to gain optimal value from smaller scale projects. As the official voice of municipal government in Canada, FCM is well positioned to serve as an aggregator of offset credits and is in the process of assessing the business case for moving forward in this capacity.

---

<sup>9</sup> RPPI, WPPI, or new incentives

## Climate Change Adaptation

The Government of Canada must support municipal government efforts to assess the vulnerability of municipal assets to climate change. This should include the establishment of a municipal adaptation fund that will assist municipal governments in assessing their vulnerability to climate change, and in responding to these vulnerabilities by strengthening existing and new infrastructure to withstand present and future climate conditions. The federal government can take a leadership role through:

- Continuing to strengthen the science related to climate change impacts;
- Working with engineering professionals and the insurance industry to determine if engineering standards should be adjusted to reflect future weather and climate conditions;
- Developing risk assessment protocols that will help decision-makers assess vulnerability to climate change;
- Ensuring local authorities have fully resourced emergency preparedness and response systems in place to respond to severe weather events.

## Public Education and Awareness

Municipal governments are able to influence community GHG emissions through leadership and public education and outreach. By effectively communicating successful results of internal energy/water conservation initiatives, for instance, or by organizing tree-planting events, municipalities could inspire local businesses to initiate similar programs in-house or to support community efforts. There is a broad range of public educational programs (focussing, for example, on waste reduction, water conservation or energy efficiency) that could be instituted by municipalities within the partnership model proposed by FCM.

## Demonstrating Success, Ensuring Accountability

As the Government of Canada moves forward in this process, it will be important to communicate clearly to Canadians how and what results will be achieved. Given the leadership of many Canadian municipalities, FCM is well-positioned to provide demonstrated tangible results and success stories illustrating how municipalities have effectively reduced emissions through specific policies, innovative programs and action at the community level. At the same time, significant experience and lessons learned, around obstacles to implementation and overcoming these challenges, could also be imparted.

## Developing the Partnership

Successful implementation of a national air quality and climate change plan will require municipal governments to be an integral partner in the process. As such, having facilitated and actively participated in the development of nationally-focused integrated environmental plans on various issues in the past,

FCM believes it can provide significant insight and value during the initial planning and design stages, by actively participating in the Government of Canada's process, and aiming to:

- Develop a unified set of goals and objectives that will guide action at all levels of jurisdiction while allowing the flexibility of creativity to promote innovative ways of working together toward common ends;
- Identify and define clear roles and responsibilities for all orders of government—for both adaptation and mitigation activities;
- Define feasible emissions reduction targets (near term, medium term and long term) for cities and communities and related sectors (buildings, public transport, etc.).

Overall, FCM believes that municipalities can play a significant role in generating substantial emission reductions, and in adapting to adverse impacts brought on by current and past emissions. However, it is imperative that all orders of government have the regulatory authority and access to the necessary human, technical and financial resources required to effectively respond to critical environmental issues such as air quality, and more importantly to ensure that key measures are initiated effectively across the country. In fact, meaningful engagement of all orders of government, as part of an integrated approach to mitigation and adaptation efforts, is the only sure path to maximizing economic, social and environmental benefits for all Canadians.

## Conclusion

Canada's municipal governments stand ready to work with the federal, provincial and territorial governments toward a common goal of cleaner air and lower greenhouse-gas emissions.

Municipal governments already make a significant contribution to Canada's environmental objectives, but current efforts are largely independent and uncoordinated. Much more could be achieved with national coordination and within a national plan. This is particularly important when dealing with air quality and greenhouse-gas emissions. A true "Made in Canada" approach would involve all orders of government in a nationally coordinated effort, with roles appropriate to their capacities. This would create synergies and leverage the role and potential of each.

A national, concerted strategy could redefine Canada as a world leader in creating sustainable places to live. Our cities could serve as a model for others that struggle with smog-related health hazards. At the same time, it could catapult Canada into the ranks of a select handful of international leaders in greenhouse-gas reduction.

Only a long-term intergovernmental partnership can meet the challenges posed by climate change and air pollution. FCM urges the Government of Canada to adopt an integrative and strategic approach to clean air and climate change. Such an approach must include enlisting municipal governments, already leaders in air and water quality and energy efficiency, as partners in both its development and implementation.