

# NATIONAL MEASURES REPORT 2019



How Canadian cities and communities are taking action on climate change



PARTNERS FOR CLIMATE PROTECTION



·I·C·L·E·I  
Local  
Governments  
for Sustainability

**FCM** FEDERATION  
OF CANADIAN  
MUNICIPALITIES FÉDÉRATION  
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MUNICIPALITÉS

PARTNERS FOR **CLIMATE** PROTECTION

The Partners for Climate Protection (PCP) program is a network of over 400 Canadian municipalities committed to taking action on climate change. The program helps local governments reduce greenhouse gas emissions and make a difference in protecting our climate.

PCP is a partnership between the Federation of Canadian Municipalities (FCM) and ICLEI—Local Governments for Sustainability. The program receives financial support from the Government of Canada and ICLEI Canada.

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Canada

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2019

# NATIONAL MEASURES REPORT

The 2019 National Measures Report shows that actions by Canada's municipalities and local governments to cut greenhouse gas (GHG) emissions are making a difference.

Canada's municipalities and local governments play a critical role in helping Canada meet its national and international GHG reduction targets. The policies, programs, and projects that they implement reduce local emissions, enhance community resilience, and contribute to a national low carbon future.

The Partners for Climate Protection program is a network of 400+ municipalities across Canada who are committed to taking action on climate change. The program is jointly delivered by FCM and ICLEI — Local Governments for Sustainability to support municipalities and build local capacity. Its five-milestone framework involves developing

local GHG emission inventories and forecasts, setting reduction targets, creating and implementing a local action plan, and monitoring and reporting on results.

Members of the Partners for Climate Protection (PCP) program were surveyed for the 2019 National Measures Report. Respondents reported more than 400 initiatives, many of which focus on residential and commercial building retrofits and improving electric and active transportation infrastructure.

# KEY TAKEAWAYS

65 PCP member municipalities reported 420 initiatives to reduce emissions across six sectors:



The top three most commonly reported measures:



**1**  
Building retrofit programs (41%)



**2**  
Electric vehicle charging stations for public use (38%)



**3**  
Enhancing walking and cycling infrastructure (31%)

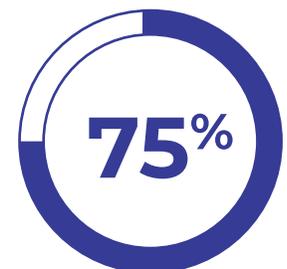


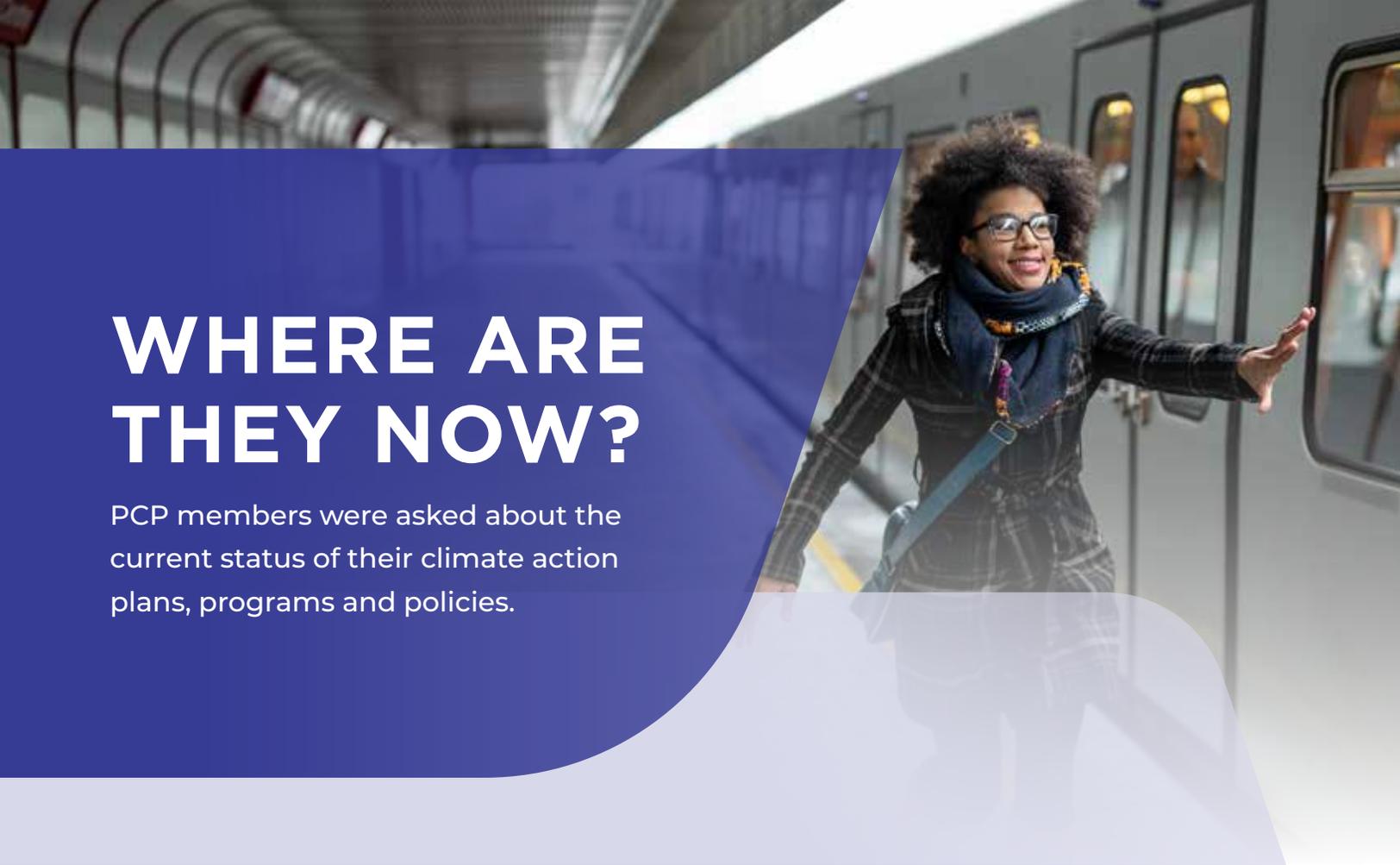
## TARGETS

More than one-quarter of all reported measures have project-specific targets designed to help measure progress and evaluate success.

## INITIATIVES

75% of the initiatives are either being implemented or have been completed





# WHERE ARE THEY NOW?

PCP members were asked about the current status of their climate action plans, programs and policies.

## Local action plan development and implementation

Forty-five per cent of respondents with existing climate action plans reported that over half of their corporate action plan measures had been implemented. Twenty-eight per cent had implemented more than half of the measures from their

community plans. This difference is consistent with previous survey findings<sup>1</sup> and research that developing a community plan often takes longer than a corporate climate plan.

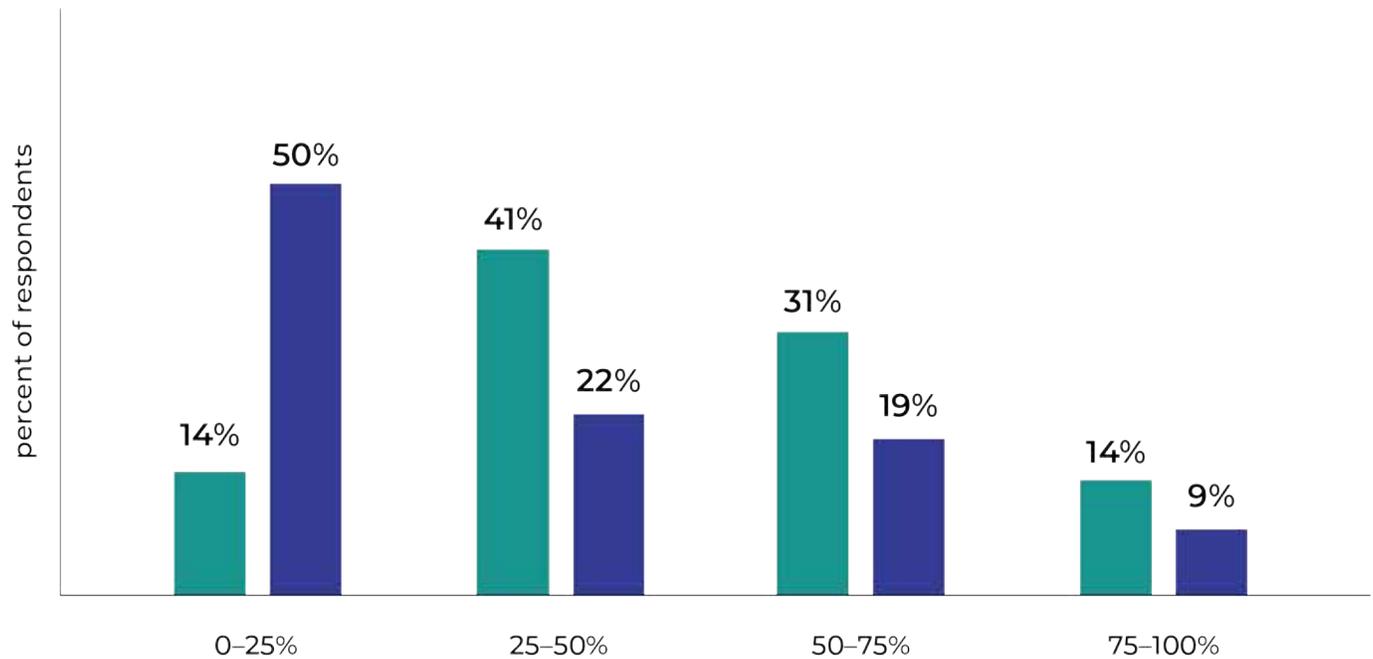
**Climate action plans, or local action plans, are endorsed by council and set out the actions required to reduce emissions and meet a GHG reduction target.** A corporate plan focuses on emissions generated from municipal services and operations, while a community plan targets emissions from the community at large.

An action or measure can be a policy, bylaw, program, initiative or project that has the potential to reduce GHG emissions. Actions and measures are typically found within a climate action plan.

<sup>1</sup> National Measures Report 2015, Partners for Climate Protection. <https://fcm.ca/en/resources/pcp/report-2015-national-measures-report>.

## Reported climate action plan implementation

● Corporate climate action plan    ● Community climate action plan

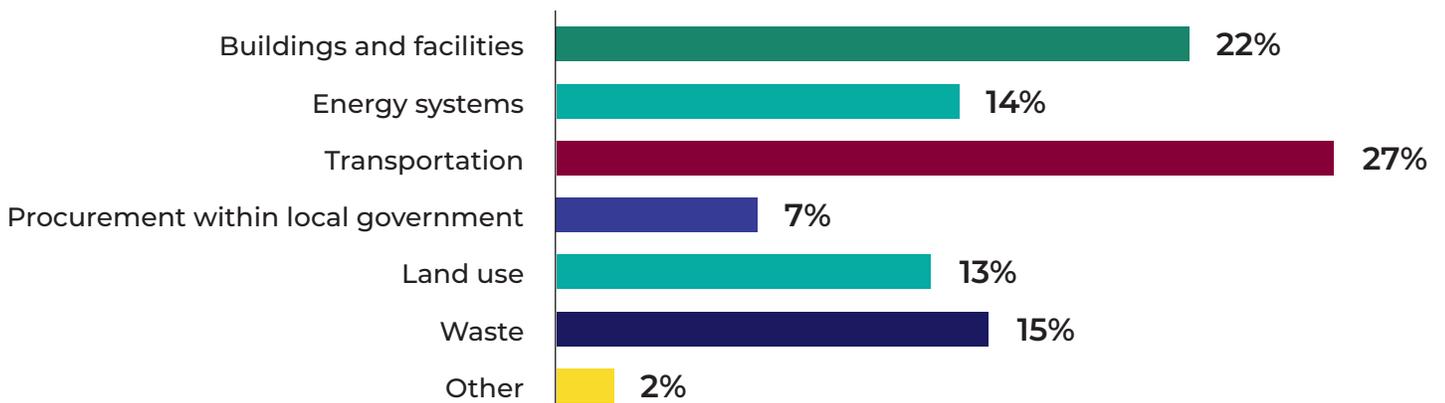


## Types of actions

Of the 420 measures reported, most targeted the emissions from the building and transportation sectors. The figure below shows the distribution of reported measures by sector, for corporate and community measures. The most common measures are also listed below, as well as in more detail later in the report.

### Percentage of measures reported per sector

In the graph below, "other" includes streetlight measures and public education and outreach activities. These measures account for about one per cent of the overall measures and were therefore not analyzed.



## Top 10 reported actions

1	Retrofit programs for residential and/or commercial buildings (27 reported)	6	Municipal electric vehicle procurement policy (17 reported)
2	Installation of electric vehicle charging stations for public use (25 reported)	7	Tree planting projects (17 reported)
3	Enhancement of walking and cycling infrastructure, e.g., sidewalks, multi-purpose trails, bike lanes, paved road shoulders, etc. (20 reported)	8	Organics collection and compost programs (15 reported)
4	Financial incentives to encourage on-site renewable energy generation, e.g., property assessed clean energy financing for rooftop solar (18 reported)	9	Green procurement policies for buildings and other assets, e.g., requiring ENERGY STAR™ equipment and EcoLogo™ certified furniture (15 reported)
5	Expanding public transit infrastructure or improving service levels (18 reported)	10	Financial incentives for developers to build compact developments (12 reported)

Numerous factors explain some of these patterns, not the least of which is the desire to reduce municipal energy costs. Many building retrofit projects, for example, can be done relatively quickly and at low cost or with a quick payback. There is a growing interest by developers and consumers in green buildings and utility, and provincial and federal programs aimed at improving energy efficiency are helping support more building retrofits at the municipal level. In the 2018 National Measures Report<sup>2</sup> actions in this sector were also the most commonly reported (64%).

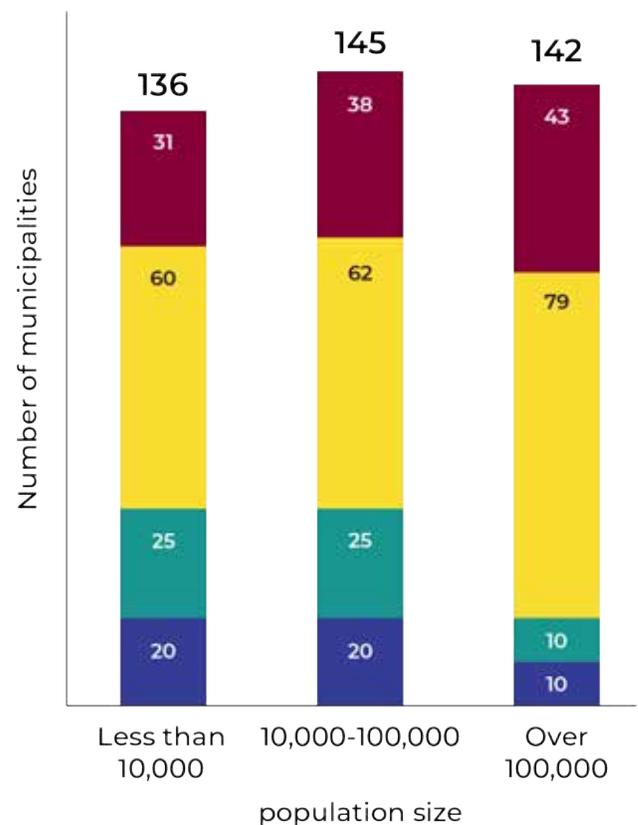
Transportation projects account for 27 per cent of the measures reported, up from 10 per cent in 2018. This may be due in part to the nature of last year's report, which discouraged the reporting of actions without quantifiable GHG benefits, such as new bike trails.

Land-use and waste actions were less commonly reported. While the benefits from transportation projects reduce emissions and provide many benefits to the community, land-use policies that promote mixed-use, transit-oriented development can be politically challenging. In the waste sector, the initiatives that can reduce the most emissions, such as waste-to-energy systems can be prohibitively expensive, especially for smaller municipalities.

<sup>2</sup> National Measures Report 2018, Partners for Climate Protection. <https://fcm.ca/en/resources/pcp/report-national-measures-report-2018>.

## Level of measure implementation by population size

- Design phase
- Ongoing/in-progress
- Planned but not yet implemented
- Completed/adopted



# Implementation status

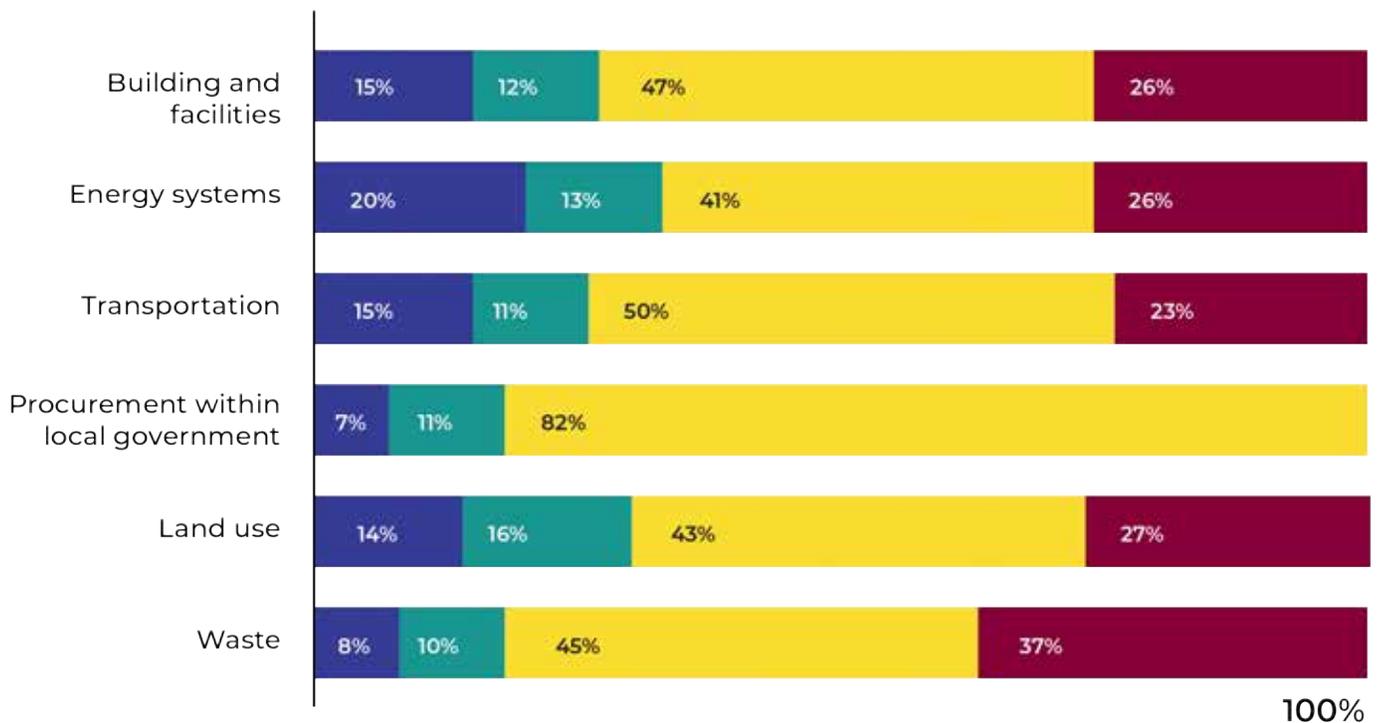
PCP members reported on the implementation status of each measure. The majority of measures (76%) were either ongoing or completed, 11 per cent were planned but not yet implemented, and 13 per cent were in the design phase. The figure below illustrates the implementation level of all reported measures, relative to the size of the municipality. The total number of measures for each municipality size is similar, yet the relative share of actions in the design or planning phases is higher among municipalities with populations less than 100,000.

There is no clear trend on the implementation of actions by sector (see figure below) and the responses did not vary significantly. This could be explained by a reporting bias, where more respondents were likely to report on actions that are already being implemented than on actions not fully designed or approved. Some of these issues are discussed in the next section.

Smaller municipalities are often constrained by a lack of financial and human resources, limiting their ability to implement the same breadth of actions at the same speed as larger ones. Nonetheless, many small municipalities continue to implement numerous climate actions and some of these examples are presented later in the report.

## Implementation status by sector

- Design phase
- Planned but not yet implemented
- Ongoing/in-progress
- Completed/adopted



# WHAT DRIVES SUCCESS?



## Internal sources of funding

Funding is always a challenge for municipalities engaged in meeting climate commitments, and the time commitment to find new sources can be considerable. Dedicated funding sources, like a revolving fund where savings from energy efficiency projects are reinvested for future project funding, can address some of these challenges. Analysis suggests that the existence of a dedicated fund does not have an effect on the implementation status of a corporate climate action plan, but may have an impact on community plan implementation. Thirty-seven per cent of survey respondents have internal funding sources dedicated to climate action initiatives.

For more information on how to set up internal funding sources and other innovative financial tools, consult the PCP Guidebook *On the Money: Financing Tools for Local Climate Action*<sup>3</sup>.

<sup>3</sup> <https://fcm.ca/en/resources/pcp/guide-financing-tools-local-climate-action>



## Meaningful partner engagement

Early and meaningful engagement with all stakeholders throughout a plan's development and beyond is crucial for building support and it needs to start early. Open communications among all stakeholders provides a clearer view of the barriers and opportunities, gains everyone's insights and perspectives, assigns responsibility for taking action, and helps build support and awareness.



## Dedicated staff & resources

Having designated staff ensures that actions get implemented. Almost all of the survey respondents (90%) reported having one or more full-time-equivalent municipal staff carrying out climate and energy work. Larger municipalities are more likely to have greater staff capacity.

Check out some of these programs that provide funding for staff salaries: FCM's staff grant program<sup>4</sup> or the Municipal Climate Change Action Centre's Energy Manager Program<sup>5</sup>.



## Oversight and governance

The most successful results are often achieved when an individual or team is assigned to oversee a plan's implementation and coordinate all the steps in between. In the City of Kawartha Lakes, for example, Development Services will oversee implementation of the Healthy Environment Plan<sup>6</sup>, with a dedicated coordinator to facilitate communication between internal and external working groups.



## Monitoring & measurement

Measuring and monitoring tracks a project's success. Care must be taken to select appropriate and measurable indicators, and methodologies, and to develop action-specific targets. For each measure reported, respondents were asked if it had associated performance targets. Most action-specific targets were found in the building sector, followed by energy, waste and transportation, which are more easily tracked and quantified than measures related to procurement and land-use planning.

Check out the PCP's Guidebook on Quantifying Greenhouse Gas Reductions at the Project-Level<sup>7</sup> to support your efforts in monitoring and measuring progress.

4 <https://fcm.ca/en/news-media/news-release/mcip/climate-change-staff-grants>  
5 <https://mccac.ca/programs/MEM>  
6 Healthy Environment Plan 2019. <https://www.kawarthalakes.ca/en/resourcesGeneral/Documents/Healthy-Environment-Plan-Long.pdf>.  
7 <https://fcm.ca/en/resources/pcp/guide-quantifying-greenhouse-gas-reductions-the-project-level>

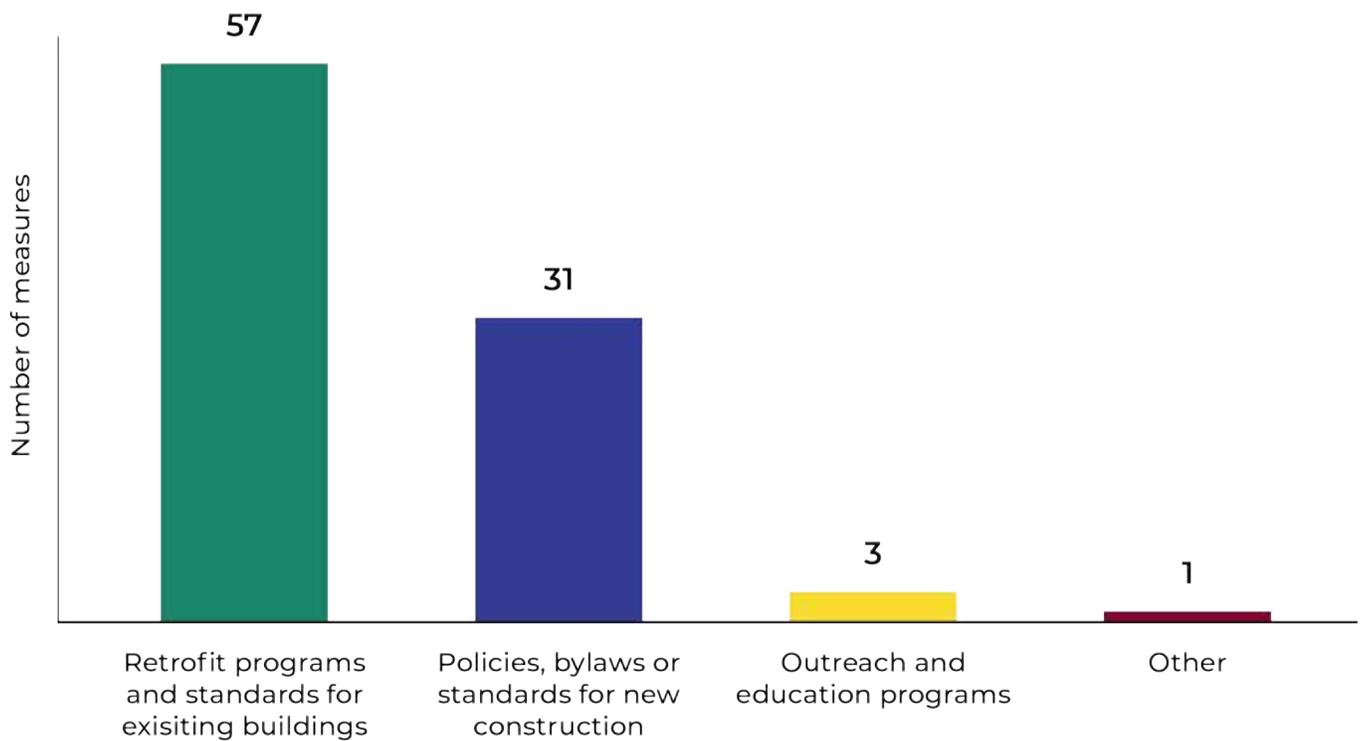


# Actions by Sector

## BUILDINGS AND FACILITIES

Buildings contribute a significant share of a municipality’s corporate and community GHG emissions. Measures that reduce emissions from buildings and facilities have significant potential to reduce local emissions.

### Types of buildings and facilities measures



### 34% of actions in this category have performance targets

#### Target examples

- Reduce the annual heating costs of a single building by \$10,000
- Reduce emissions from all municipal buildings by 50 per cent by 2030
- Set policy to ensure that new buildings meet high performance energy standards by 2030
- Set a percentage of residential homes to be retrofitted each year

## Reported corporate measures

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### Existing buildings:

- HVAC systems and building envelope upgrades
- Green roofs and green walls
- Alternative fuel sources for heating
- Passive building design

### Policies, bylaws or standards for new construction:

- Going beyond provincial building codes (e.g., BC Energy STEP Code)
- Meeting or exceeding green building standards (e.g., Leadership in Energy and Environmental Design (LEED) standards)

### Education programs:

- Energy conservation campaigns to increase staff awareness about energy savings
- Water & wastewater

## Reported community measures

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### Existing buildings:

- Incentive programs, loans, or rebates for residential and/or commercial building retrofits (e.g., local improvement charges to finance retrofits)

### Policies, bylaws or standards for new construction:

- Bylaws that require new buildings to meet high performance building standards (e.g., to meet the BC Energy Step Code)
- Financial incentives to encourage energy efficient new buildings and developments
  - Tax exemptions or expedited permitting process for developers who meet sustainability criteria

### Outreach and education programs:

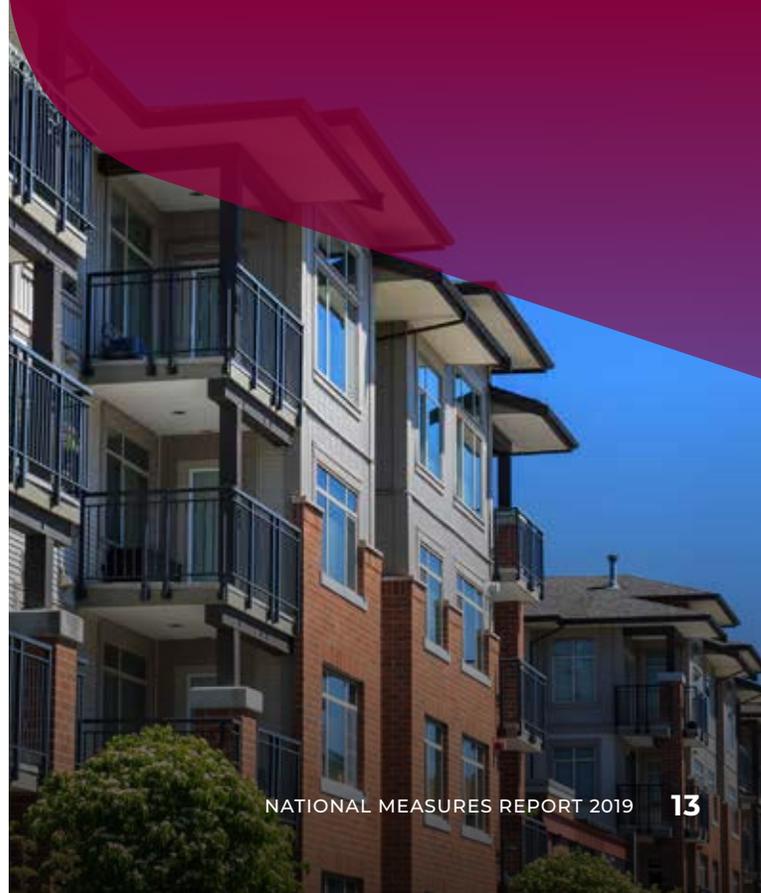
- Free home assessments by an energy advisor
- Peer-to-peer learning programs to increase energy efficiency literacy (e.g., public workshops, events)

### “Other” category:

- Energy benchmarking and/or labelling programs for residential and/or commercial buildings

## Town of Halton Hills green development standards: Planning a green future

The Town of Halton Hills (ON) promoted energy efficient development by integrating its Green Development Standards into its official plan. The Green Development Standards are a point system for developers building low-, mid- and high-rise residential and non-residential buildings. All developers complete a checklist for each new building as part of the site plan application. The checklist is broken down by the type of development, the different sectors, and areas for energy and water conservation, waste management, and more. Each green initiative has a corresponding point attached to it, and a minimum number of points are required for developments to be approved. More than 600 residential units and 150,000 square meters of non-residential gross floor area were built following adoption of the Standards in 2014.

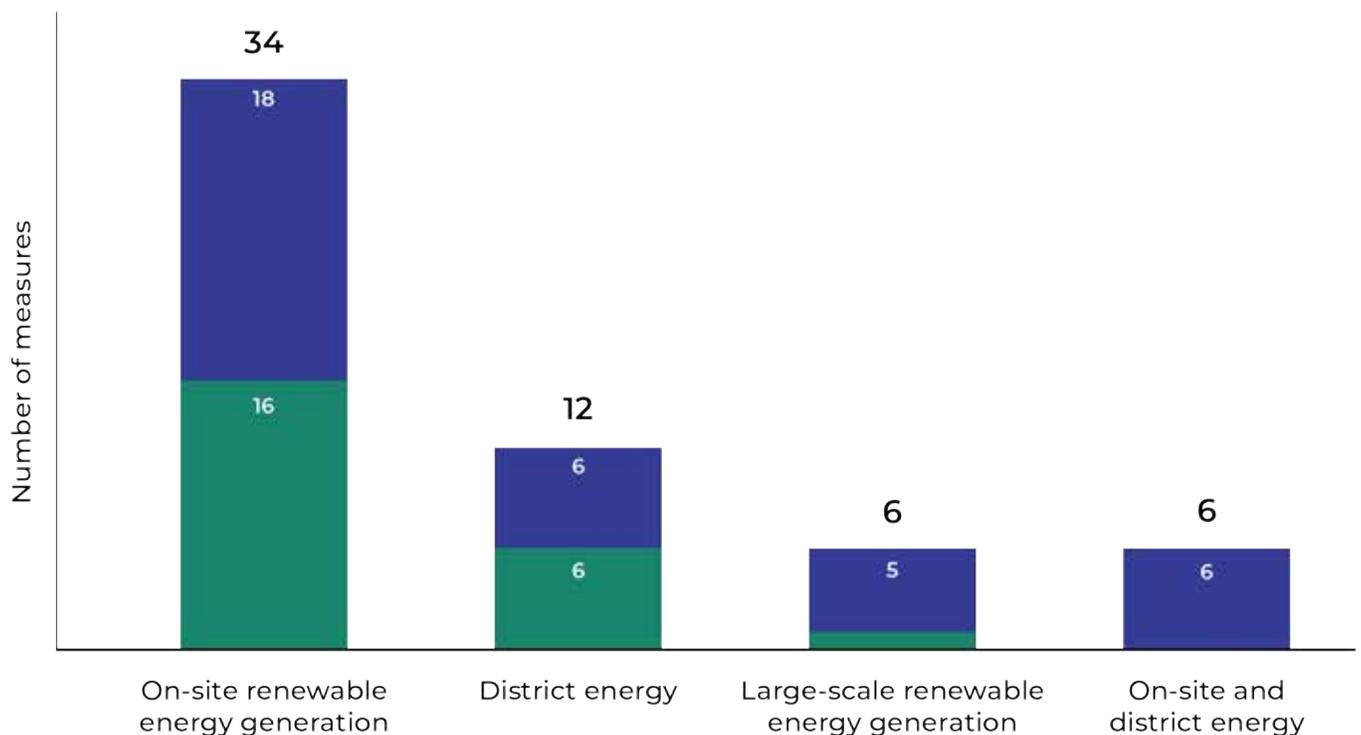


## ENERGY SYSTEMS

From small-scale solar generation to large-scale wind farms, renewable energy is becoming more commonplace in Canadian communities. Some municipalities now require all new municipal buildings to be solar-ready; others use local or natural resources to generate low-carbon electricity.

Types of energy system measures

● Corporate ● Community



### 34% of actions in this category have performance targets

#### Target examples

- Renewable energy features meet green building standards (e.g., LEED)
- Offset 50% of energy consumption with renewable sources for a single building
- Establish a community-wide renewable energy target, e.g., 100% of building and transit energy use to be fueled by renewable sources by 2050

## Reported corporate measures

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### On-site renewable energy generation:

- Installation of renewable energy to heat or power municipal buildings (e.g., geothermal, solar, biomass heating systems, etc.)
- Renewable energy in combination with cogeneration of heat and power; recovering heat from electricity generation to a facility and/or local grid

### District energy:

- District energy projects using wood waste, landfill gas, and other sources, and serving residential neighbourhoods or industrial parks

### Large-scale renewable energy generation:

- Feasibility studies for large-scale renewables like wind farms

## Reported community measures

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### On-site renewable energy generation:

- Financial incentives for developers to incorporate renewable energy into buildings
- Rebates for homeowners and building owners to incorporate renewables (e.g., solar heat pumps, rooftop solar panels)
- Bylaw requiring new residential buildings to be solar-ready

### District energy:

- Bylaw requiring new buildings in a certain area to be connected to the local district energy system

### Large-scale renewable energy generation:

- Planning for community-wide renewable energy power and storage
- Bylaws regulating or allowing for large-scale renewables like wind, tidal, etc.

## District of Clearwater: Small town goes big for biomass energy

The District of Clearwater — a small BC community of 2,000 residents—uses a local resource to fuel its bioenergy plant<sup>8</sup>. With support from the provincial WoodWaste2 Rural Heat Project, the District switched its old heating system for a new wood-waste fueled biomass system that supplies heat to the community centre, Thompson Rivers University, the town hall, and many other buildings. Annual savings of \$20,000 gives this project a payback of between five to eight years and its success gave the District the confidence to plan for a second one<sup>9</sup>. The next project is expected to cost about a half million dollars and cut propane costs by 70 per cent, for a payback period of only four to five years.

8 <http://www.sibacs.com/wp-content/uploads/2009/02/Dutch-Lake-Community-Centre-Biomass-Heating-System-2015.pdf>.  
9 *Sportsplex to get biomass heater*. The Clear Water Times, January 1, 2018. <https://www.clearwatertimes.com/news/sportsplex-to-get-biomass-heater/>.

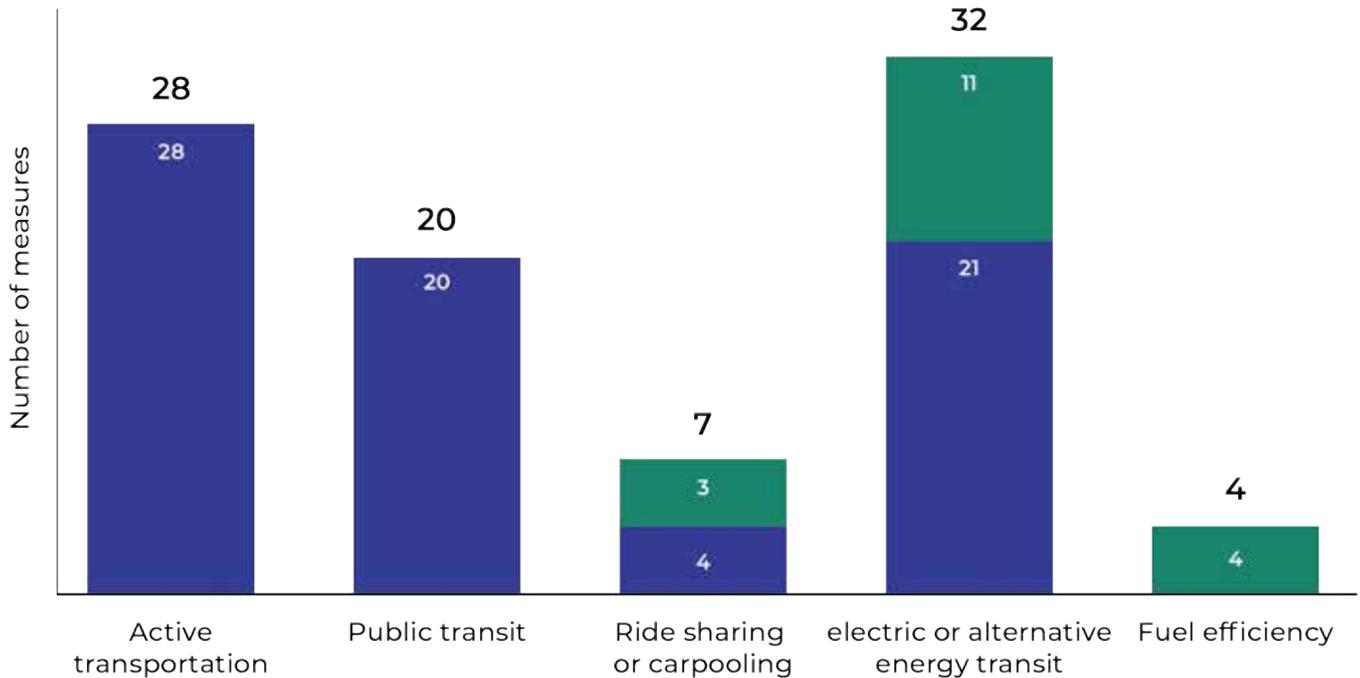


# TRANSPORTATION

Municipalities can encourage residents and municipal employees to replace trips in private vehicles with active transportation, public transit or the use of shared vehicles. They can also encourage fuel switching from fossil fuels to renewable and low-carbon energy sources.

Types of transportation measures

● Corporate ● Community



## 30% of actions in this category have performance targets

### Target examples

- Number of people, and/or percentage of population using and making trips by public or active transportation
- Number of electric charging stations or facilities equipped with stations
- Number of new electric vehicles purchased
- Gross litres or percentage of fuel reduced by municipal fleets

## Reported corporate measures

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### **Ride-sharing or carpooling:**

- Carpooling or electric vehicle sharing programs targeting municipal employee commute trips

### **Electric or alternative energy vehicles measures:**

- Installing charging stations for municipal vehicles
- Implementing corporate green fleet strategies, including initiatives to replace conventional vehicles with electric models

### **Fuel efficiency:**

- Monitoring corporate fleet vehicle mileage and fuel consumption

## Reported community measures

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### **Active transportation:**

- Enhancing walking and cycling infrastructure, e.g., sidewalks, multi-purpose trails, bike lanes, paved road shoulders
- Adopting bylaws requiring bike parking facilities and/or minimum car parking requirements at new developments
- Providing or supporting educational programs that promote active transportation

### **Ride-sharing or carpooling:**

- Working or partnering with car sharing companies
- Working or partnering with major employers on transportation demand management initiatives (e.g., carpooling, teleworking, flex hours)

### **Public transit:**

- Expanding public transit infrastructure and/or improving service levels
- Replacing conventional buses with electric-powered buses

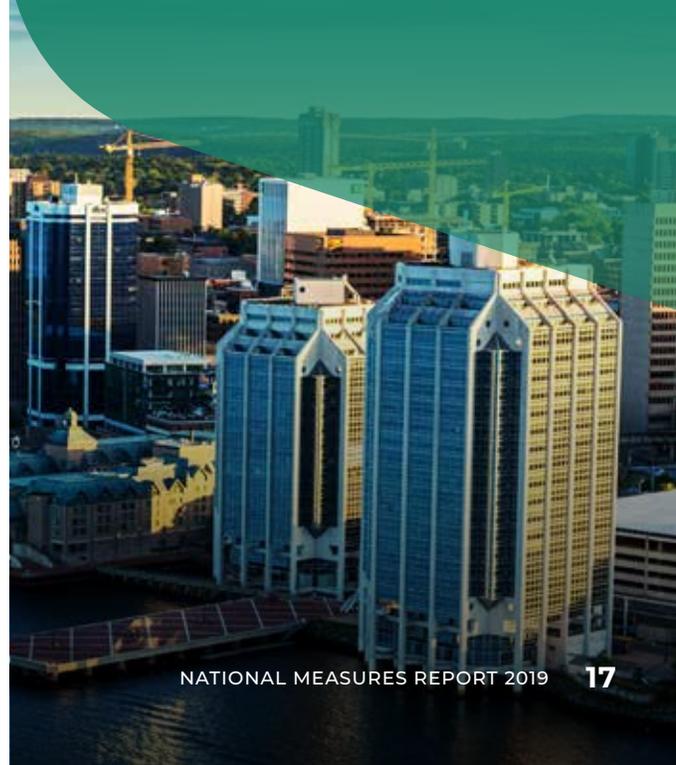
### **Electric or alternative energy vehicles:**

- Installing electric vehicle charging stations for public use
- Adopting bylaws requiring, or programs to incentivize, EV charging infrastructure at new residential and commercial buildings

# Halifax Regional Municipality SmartTrip program: Building a transportation system that meets community needs

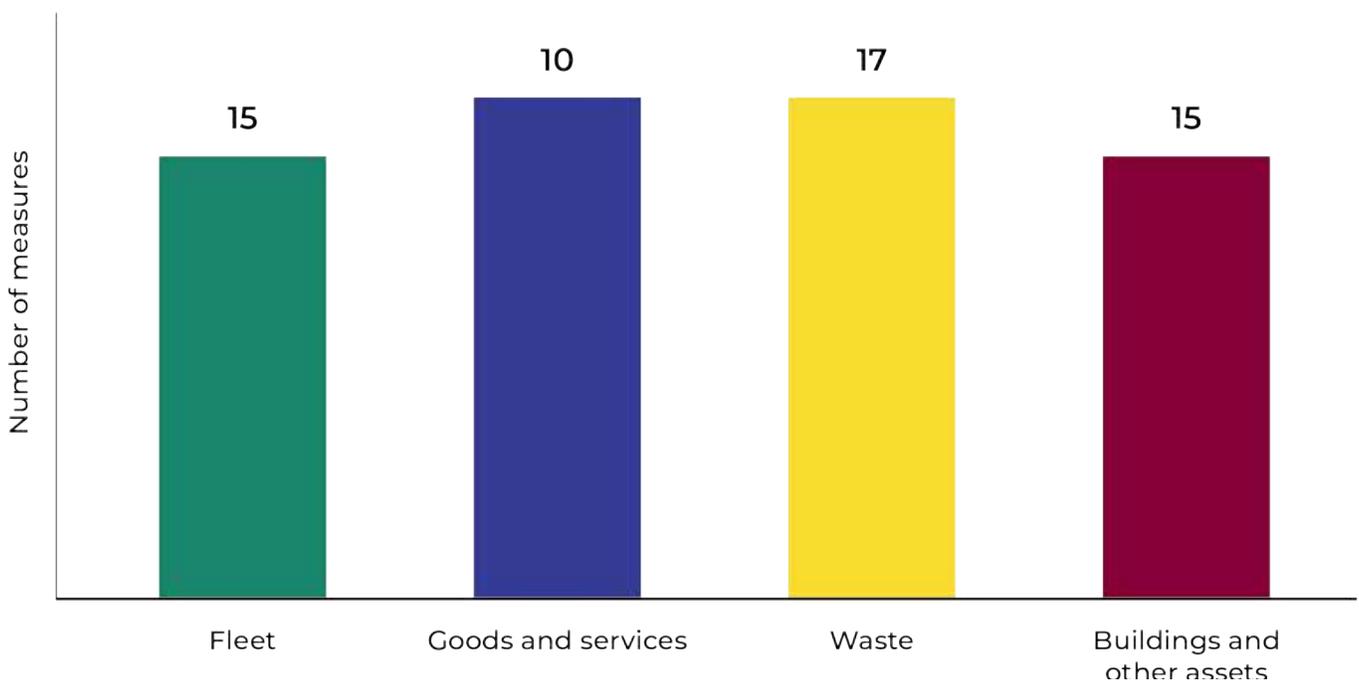
Halifax Regional Municipality (HRM) is reshaping the way its residents move through the city. The SmartTrip program, a key component of its Integrated Mobility Plan<sup>10</sup>, was created as a demand management initiative in 2013 to encourage commuters to explore more sustainable commuting options. In return for an annual fee, HRM works with local employers to provide programs and services for their employees, such as discounted transit passes, lunch and learn sessions, a guaranteed ride home program in case of emergencies, flex hours, and ride matching. HRM works with more than 20 local companies that employ almost 20,000 people.

<sup>10</sup> Halifax Integrated Mobility Plan, 2017. [https://www.halifax.ca/sites/default/files/documents/about-the-city/regional-community-planning/IMP\\_report\\_171220-WEB.pdf](https://www.halifax.ca/sites/default/files/documents/about-the-city/regional-community-planning/IMP_report_171220-WEB.pdf).



Sustainable corporate purchasing policies consider the full life-cycle impacts of goods and services. Buying more durable goods less often helps reduce emissions from the manufacture, distribution and disposal of those products<sup>11</sup>. Municipal purchases like electric fleet vehicles or ENERGY STAR™ certified appliances and building materials can directly contribute to energy and emissions savings. Promoting sustainable or “green” purchasing considerations also shows leadership and sends an important signal to other municipal staff as well as to the wider community<sup>12</sup>.

**Types of procurement measures**



**10% of actions in this category have performance targets**

Target examples

- A scoring system to evaluate sustainability purchases
- Percent improvement in fleet efficiency

<sup>11</sup> Sustainability Purchasing Network (SPN). (2007). Guide to the Business Case & Benefits of Sustainability Purchasing. Retrieved from: [https://www.buysmartbc.com/\\_Library/Resources/resource\\_bsn\\_business\\_case\\_to\\_sustainability\\_2008.pdf](https://www.buysmartbc.com/_Library/Resources/resource_bsn_business_case_to_sustainability_2008.pdf).

<sup>12</sup> For more information on the best practices of sustainable procurement policies in Canada, go to: <https://reeveconsulting.files.wordpress.com/2011/05/2012-state-of-munic-sust-proc-canada.pdf>.

## Reported corporate measures

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### Procurement policies or guidelines with environmental specifications, such as:

- Achieving certain energy standards (e.g., ENERGY STAR™ certified products)
- Prioritizing electric vehicles
- Prioritizing eco-friendly cleaning products
- Coordinating e-waste recycling

## City of Edmonton's sustainable purchasing policy: A supply chain approach

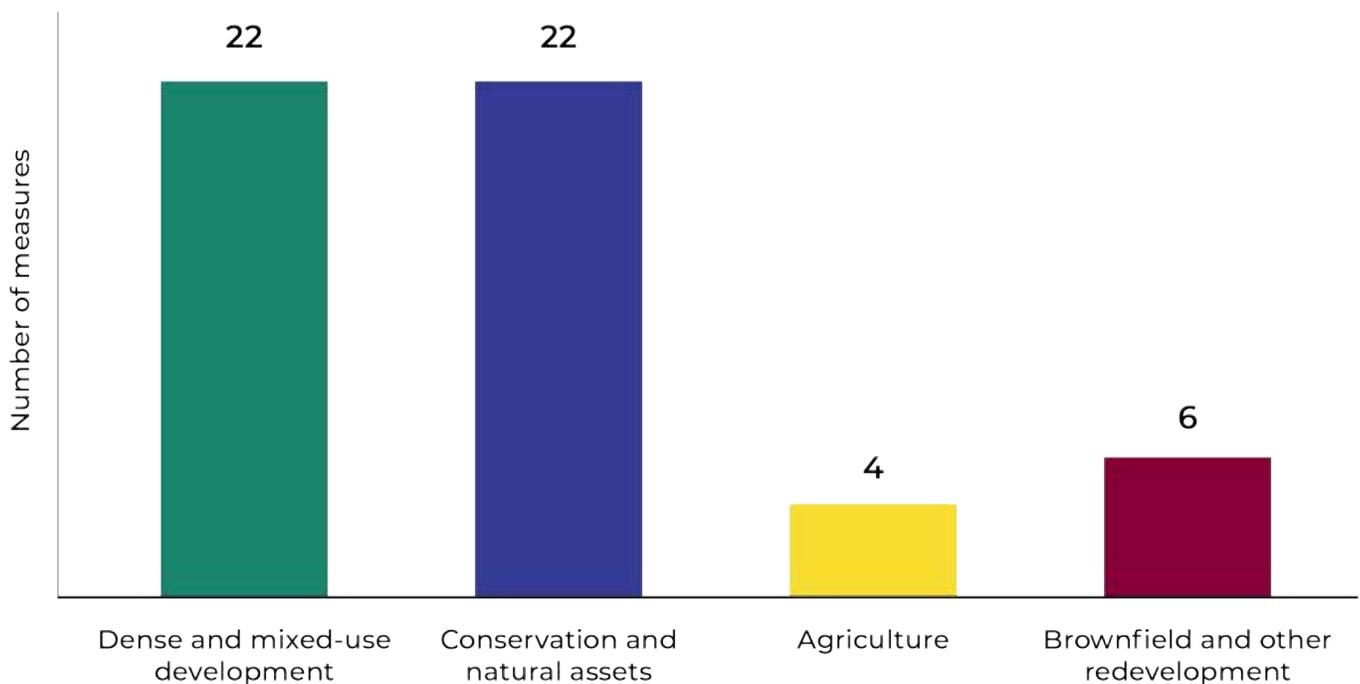
The City of Edmonton's Sustainable Purchasing Policy<sup>13</sup> outlines how decisions around municipal procurement are made. It considers the environmental standards for goods and services, such as water and energy efficiency, recyclability, and packaging. Buying more durable, longer-lasting appliances, for example, reduces replacement costs and lifecycle energy consumption. The city organized drop-in training sessions for more than 400 city staff to learn about the policy, and produced information brochures to spread the word among its supply chain of vendors. The city also dedicated enough staff and resources to oversee the program and to update council.

<sup>13</sup> Sustainable Purchasing Policy. 2010. [https://www.edmonton.ca/business\\_economy/selling\\_to\\_the\\_city/sustainable-purchasing-policy.aspx](https://www.edmonton.ca/business_economy/selling_to_the_city/sustainable-purchasing-policy.aspx).

Land-use decisions can have a dramatic impact on the demand for transportation and energy in urban areas. Focusing new development around existing or planned transit corridors can promote the use of public transit and active transportation. Municipalities can also require or encourage mixed-use development and higher density buildings that use less energy per unit area.

In rural areas, municipalities can work with farmers to promote sustainable agricultural practices that preserve natural assets. Forests and wetlands are important carbon sinks; one hectare of forest can absorb 6.4 tonnes of carbon annually<sup>14</sup>.

### Types of land use measures



### 9% of actions in this category have performance targets

#### Target examples

- Share of new developments that meet intensification requirements or green standards
- Share of brownfield lands redeveloped or restored
- Percentage of tree canopy coverage

<sup>14</sup> Canadian Council of Forest Ministers. Fact Sheet: Canada's Forests: CO<sub>2</sub> Sink or Source? Retrieved from: [https://www.sfmcanada.org/images/Publications/EN/CO2\\_Sink\\_EN.pdf](https://www.sfmcanada.org/images/Publications/EN/CO2_Sink_EN.pdf).

## Reported community measures

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### **Dense and mixed-use developments:**

- Zoning policies to promote infill development and mixed-use neighbourhoods
- Monetary incentives for builders to develop compact developments or residential infill in the downtown core

### **Conservation of forests and other natural assets that provide ecosystem services:**

- Tree planting projects
- Protecting biodiversity corridors
- Preserving wetlands and other ecosystem services

### **Sustainable agricultural practices:**

- Encouraging back yard small scale farming
- Supporting community farmers markets
- Developing local purchasing policies for agricultural products

### **Brownfield and other redevelopments<sup>15</sup>**

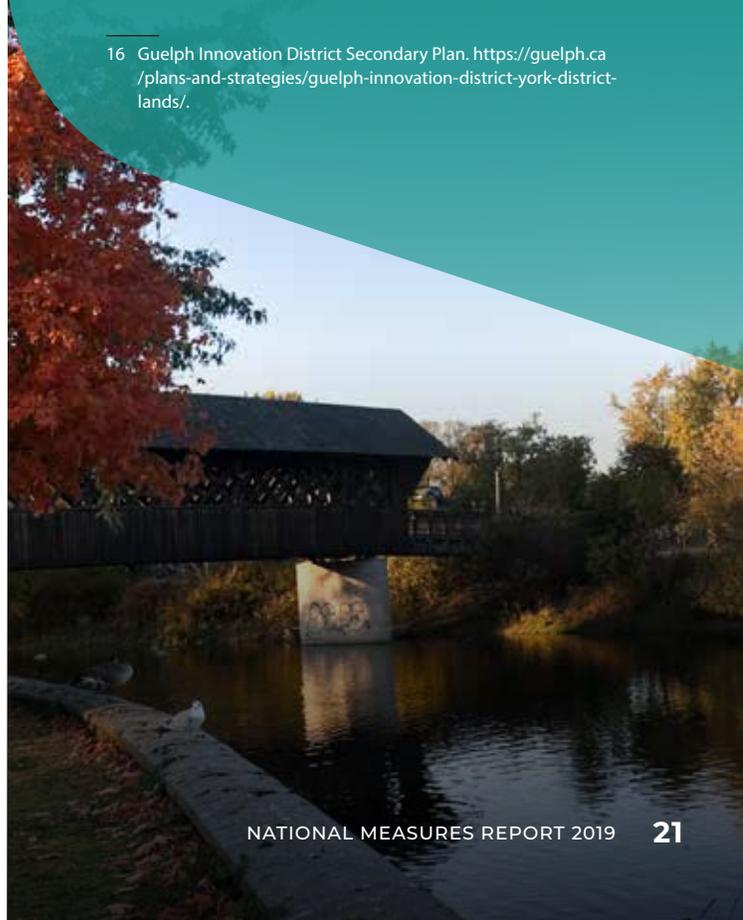
- Incentives for brownfield restoration and redevelopment (e.g., grants, tax exemptions, reduced development cost charges)
- Revitalization projects for contaminated sites

## City of Guelph innovation district secondary plan: A carbon-neutral new district

The City of Guelph (ON) is aiming to redevelop 400 hectares of former provincial lands into a carbon-neutral district by 2031. Approved in 2017, the new district's secondary plan<sup>16</sup> consists of land-use policies for compact development, green infrastructure and natural heritage preservation. High performance buildings will meet energy standards and include on-site renewable energy generation. Mixed-use neighborhoods will be designed to encourage active and sustainable transportation, and the new district will be surrounded by natural space that will use green infrastructure to minimize stormwater run-off. The development will eventually be home to 75,000 residents and will create 9,000 jobs in the environment and technology sectors.

<sup>16</sup> Guelph Innovation District Secondary Plan. <https://guelph.ca/plans-and-strategies/guelph-innovation-district-york-district-lands/>.

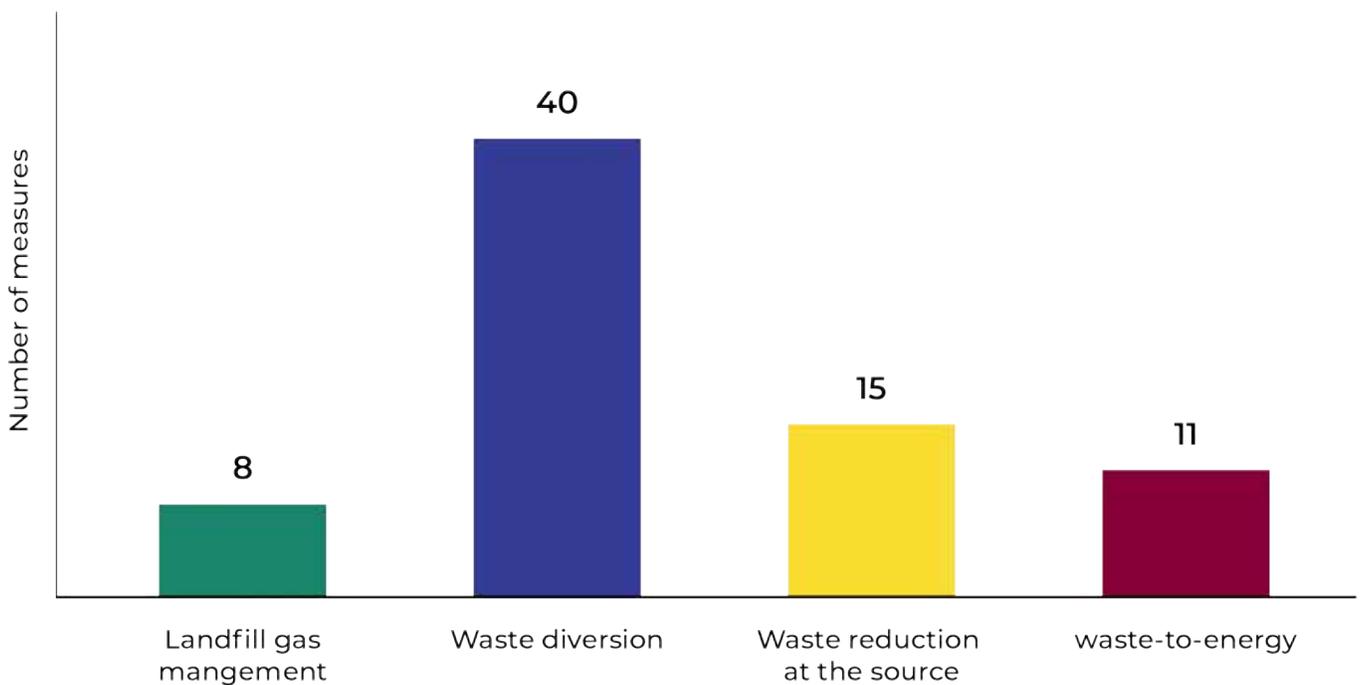
<sup>15</sup> Brownfield renewal guides and resources: <https://fcm.ca/en/programs/green-municipal-fund/leadership-in-brownfield-renewal-network>.



## WASTE

Emissions from waste can be reduced using landfill gas capture systems and waste-to-energy systems, and by providing services to the community that maximize waste reduction and diversion.

### Types of waste measures



### 31% of actions in this category have performance targets

#### Target examples

- Percentage of waste diverted or reduced
- Number of appliances or electronics collected
- Setting waste diversion goals, such as zero waste by 2040

## Reported corporate and community measures

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### Landfill gas management and waste-to-energy measures include:

- Installation of landfill gas capture systems to capture methane
- Converting captured gas into biogas or electricity

### Waste diversion measures include:

- Organics collection and compost programs
- Curbside recycling collection programs
- Clear garbage bag requirements (e.g. get one “privacy bag” and any others must be clear and can be rejected if they contain recyclable materials)
- Diversion programs for construction and demolition material

### Waste reduction at the source measures include:

- Garbage collection reduced to bi-weekly
- Prohibition of disposable food packaging by local businesses
- Encourage households to leave mowed grass on their lawns through an awareness raising program

## Rivière-du-Loup biogas fueling station: Fueling vehicles of the future

The biogas fueling station<sup>17</sup> in Rivière-du-Loup (QC) uses organic waste to produce renewable natural gas and cut GHG emissions. Organic materials are collected from residential customers and sent to the regional biogas plant where methane is recovered, purified, compressed and liquefied. The resulting renewable gas fuels the municipality’s heavy-duty vehicles and the heating equipment at corporate facilities. The plant produces 3.5 million diesel-equivalent litres of biomethane and reduces 8,000 tonnes of GHG emissions annually.

<sup>17</sup> *Rivière du Loup joins the Blue Road*. Energir, April 28, 2016. <https://www.energir.com/en/about/media/news/20160428/>.





# 25 YEARS OF GROWTH

Now in its 25th year, the PCP network continues to grow and, with three-quarters of all municipal actions reported this year complete or underway, PCP members, small and large, continue their commitment to climate action.

As is typical of the findings from other National Measures Reports, half of all reported actions focused on emissions from the building and transportation sectors. Survey trends also show increasing actions to purchase electric vehicles, invest in renewable energy, and adopt green procurement policies. More than ever before, municipalities are also designating specific staff and departments to climate change action projects, with 90 per cent reporting one or more full-time equivalent staff for energy or climate initiatives.

## Accelerating climate action

If Canada is to meet its national and international GHG reduction targets and avoid warming above 1.5° C, all levels of government will need to scale-up efforts and implement transformative mitigation actions across all sectors.

In 2015, Canada ratified the Paris Agreement and committed to reducing its annual GHG emissions by 30 per cent below 2005 levels by 2030. The federal government's Pan-Canadian Framework on Climate Growth and Climate Change (2016) identifies the key strategies for different sectors: buildings, electricity, transportation, industry, forestry, agriculture, and waste.

Environment and Climate Change Canada's 2019 progress report projected a 19 per cent reduction by 2030 as a result of the policies and measures implemented and under development<sup>18</sup>. Though the past few years have witnessed a surge of climate mitigation activities from all levels of governments, more drastic actions are required to meet Canada's GHG reduction target and avoid warming above 1.5° C.

<sup>18</sup> Environment and Climate Change Canada (2019). Canadian Environmental Sustainability Indicators: Progress towards Canada's greenhouse gas emissions reduction target. <https://www.canada.ca/content/dam/eccc/documents/pdf/cesindicators/progress-towards-canada-greenhouse-gas-reduction-target/2019/progress-towards-ghg-emissions-target-en.pdf>.

Hampering the pace of climate change action is cost. Financing climate-related projects is a driving factor and high up-front costs for certain actions can be prohibitive for any municipality.

However, based on research and projects in Canada and the U.S., many municipalities have adopted “low-hanging fruit” measures, actions that are often low-cost but can deliver big GHG reductions. Waste projects<sup>19</sup> such as encouraging home composting or organics programs reduce methane emissions from landfills. Building measures, like lighting retrofits, can be some of the easiest to implement, have good returns on investment<sup>20</sup>, and offer some of the greatest GHG reduction potential<sup>21</sup>. These studies and trends correspond with some of the most reported initiatives in 2019, such as retrofit programs, renewable energy financing programs, and organics collection programs.

**To meet Canada’s targets, all levels of government must take action. The list below shows some of the programs, policies, or other initiatives that could be taken:**

## Provincial/territorial and federal governments

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Develop new building codes that require high efficiency buildings and provide incentive programs to encourage developers to build low-carbon, low-impact (developers/ developments).

Provide programs and policies to encourage more retrofits of existing buildings for example, the Home Energy Program in Alberta provided rebates to encourage homeowner renovations<sup>22</sup>.

Provincial governments can lower the legislation barrier of financing tools such as Local Improvement Charges to encourage retrofit investments.

Provinces can set mandatory waste diversion targets. The Nova Scotia government set a waste diversion target of 50% in 1996 and added the goal of 300 kg/person in 2006<sup>23</sup>.

Enable electric vehicle adoption and invest in low carbon transportation options. Clean Energy Vehicles for British Columbia provides financial incentives of up to \$3,000 for qualified clean energy vehicles<sup>24</sup>.

Develop funding programs at the provincial and federal levels for local climate actions.

## Municipal governments

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Partner with community groups, the private sector, non-profit organizations and institutions to leverage resources and help ensure successful implementation.

Establish a dedicated staff position to oversee sustainability initiatives.

Leverage internal and external support for climate actions by focusing on co-benefits, such as reduced operational or maintenance costs, improved safety, air quality and comfort.

Leverage project funds through various streams, including federal and provincial government programs, partnership and municipal budgets.

Require that a climate lens is applied to decision making across departments.



19 Minister’s Climate Change Action Plan progress report 2017. Retrieved from: <https://www.ontario.ca/page/ministers-climate-change-action-plan-progress-report-2017>.

20 EnviroEconomics. (2009). Act Locally The Municipal Role in Fighting Climate Change. Retrieved from : <https://fcm.ca/sites/default/files/documents/resources/report/act-locally-municipal-role-fighting-climate-change.pdf>

21 Emissions reduction potential depends on the local grid’s electricity carbon content; return on investment depends on energy prices in each region.

22 <https://efficiencyalberta.ca/residential>

23 <https://novascotia.ca/nse/waste/strategy.asp>

24 <https://www.cevforbc.ca/faq-june-22-2019-updates>

# Acknowledgements

Many thanks to the following participating municipalities who responded to the 2019 survey.

## Alberta

Town of Devon  
City of Edmonton  
City of Lethbridge  
City of St. Albert

## British Columbia

City of Burnaby  
City of Campbell River  
City of Castlegar  
Regional District of Central Kootenay  
District of Central Saanich  
District of Clearwater  
City of Coquitlam  
Cowichan Valley Regional District  
District of Elkford  
Township of Langley  
City of North Vancouver  
City of Port Moody  
City of Prince George  
Village of Salmo  
Village of Slocan  
Town of Smithers  
District of Summerland  
City of Surrey  
City of Vancouver

## Manitoba

City of Dauphin  
Town of Morris  
Rural Municipality of Sainte Anne

## New Brunswick

City of Bathurst  
City of Fredericton  
Town of Grand Bay-Westfield  
City of Saint John  
Ville de Saint-Quentin  
Town of Sussex

## Newfoundland and Labrador

Town of Baie Verte  
City of Mount Pearl

## Nova Scotia

Town of Bridgewater  
Municipality of the County of Colchester  
Municipality of the District of Digby  
Municipality of the District of Lunenburg  
Halifax Regional Municipality  
Town of Wolfville

## Ontario

Town of Ajax  
City of Brampton  
Township of Georgian Bay  
City of Guelph  
Town of Halton Hills  
Town of Midland  
Town of Penetanguishene  
Town of Perth  
City of Pickering  
Township of Severn  
City of St. Catharines  
City of Greater Sudbury  
Township of Tay  
City of Timmins  
Township of Tiny

## Quebec

Municipalité de Chelsea  
Ville de Laval  
Ville de Longueuil  
Arrondissement de Saint-Laurent – Ville de Montréal  
Ville de Nicolet  
Ville de Plessisville  
Ville de Rivière  
Ville de Sherbrooke

## Saskatchewan

City of Saskatoon

## Appendix I: Survey responses & data limitations

The PCP Secretariat collected data through a voluntary online survey over the winter of 2018–2019. Participating members submitted information on one or more projects they have implemented, are currently implementing, or are planning to implement, and responded to questions about the current status of their corporate and community climate action plans. Data was also extracted from Climate Action Revenue Incentive Program Reports (CARIP) for some communities in British Columbia. The reported projects were grouped into six sectors of activity:

- BUILDINGS AND FACILITIES
- ENERGY SYSTEMS
- TRANSPORTATION
- LAND USE
- SOLID WASTE
- GOVERNMENT PROCUREMENT

This year, 65 member municipalities reported 420 emission-reducing measures, with an average of six projects reported per municipality. The 2019 survey response rate was 17 per cent<sup>25</sup>, typical for voluntary online surveys, and is significantly greater than last year (43 municipalities reported 164 actions). This year's response rate could be due to numerous factors, including the time and effort required to complete the survey, or challenges in collecting information.

One concern of a low response rate is the representativeness of the data. The reporting municipalities had populations ranging from less than 5,000 to over 900,000 residents. The majority (52%) of PCP members are small municipalities of less than 10,000 people and, in this year's survey, made up 34 per cent of all respondents. The results generated from the survey may not be completely representative and applicable to all population groups of PCP members, therefore best efforts were made to draw in additional internal data from the PCP Secretariat and other sources to improve the analysis of the report findings.

<sup>25</sup> At the data collection stage, there were 376 PCP members.



## Join us

If you are not yet a PCP member, joining is fast and simple!

Learn about the benefits of becoming a member today at

[fcm.ca/en/programs/partners-climate-protection](https://fcm.ca/en/programs/partners-climate-protection).

Contact your PCP Regional Climate Advisor for support today on how to get started!