Introduction

Climate change is a major, defining, challenge for Canadians and the rest of the world in the 21st century. A changing climate has the potential to alter global economic patterns negatively, reduce economic growth, expose humanity to new health and security threats and spark mass migrations throughout the world. While Canada's overall greenhouse gas (GHG) emissions are small (2%) relative to the global total and Ontario's are 40% of the nation's, citizens have demanded that Canada and Ontario must do what it can to reduce emissions and adapt to those climatic affects that cannot be reversed. This is as much for international leadership as it is a deep sense of civic and moral duty many Canadians feel toward making our environment for our children and grandchildren.

It is known that Canadians' emissions per capita are higher than per capita emissions in many other countries in the world. This is a reflection of the technology available to Canadians and Canada's advanced economy. It also is a strong reflection of economic productivity and ultimately the quality of life it underpins. Our quality of life is something that most Canadians are justifiably proud of and for which all governments must play a part in supporting. The economic, social and cultural benefits that come with climate action are good, practical reasons for Canadian federal, provincial and municipal governments to lead in climate action.

As municipal governments, AMO's members offer front line services each day and everyday that make the lives of Ontario's residents better. Municipal roads and bridges, water and wastewater, transit, social housing, libraries, community centres and waste, amongst many others, support residents and businesses, help to keep people healthy and safe, create cultural and social opportunities, help them learn, support the most vulnerable in our communities and keep our physical environments clean. Municipal governments offer all of this to our residents as affordably as possible while being responsible to our residents' needs and wants, on only nine cents of each household tax dollar. AMO believes strongly that investment in municipal services can increase economic growth, health and social outcomes while increasing environmental quality at a cost that is affordable to Ontarians.

In recent years, many municipal governments have shown climate leadership, adjusting our services to be more responsive to the effects of climate change to preserve our services and protect our communities. Our residents have asked us to do our part to make sure we reduce greenhouse gas emissions from our operations and in our communities. Municipal governments have responded with climate change action plans, strategies, emergency service planning and communications as well as investments that have made our services better. Climate change mitigation (reducing GHGs) and adaptation (increasing resilience to climate effects that cannot be reversed) are often thought of separately, but they are in fact two sides of the same coin. As a result, municipal governments have increased investments in services that reduce emissions in municipal operations and in the community as well as making improvements in the services that increase resilience in our services and for our residents and businesses. Services such as transit, heat and gas capture in wastewater treatment plants, reducing waste and demand for disposal sites while capturing landfill methane and converting organic waste into renewable natural gas have increasingly seen municipal investment.

This has been carried out while municipal governments have also made improvements in roads, bridges, drainage and stormwater management and treatment to increase the resilience of communities in the face of more intense and frequent storms. These improvements also help to
ensure that our emergency services can respond to the needs of our people as quickly and effectively as possible during these weather events. Together these investments lead to greater economic continuity and social resilience when major storms happen. The point is simple: **investments in climate change for municipal governments are also investments in the services that people want for social, cultural, economic and environmental purposes.** To continue to serve the needs of Ontario’s people, municipal, provincial and federal governments need to have an integrated plan to continue to make these investments and make them wisely to preserve and enhance our economic, social and cultural advantages. Not investing in climate action is quite simply not an option. But, a changing climate has changed the rules of the game mid-way and governments and citizens need to respond effectively.

**How Municipal Services Contribute to Climate Action, As Well As Economic, Social and Cultural Goals**

**Core Infrastructure Services – Water, Wastewater, Stormwater, Roads and Bridges**

Municipal infrastructure supports local economies and the environmental and social quality of people’s lives. Stormwater systems move rainwater and other precipitation from areas where it can pool and damage property and threaten lives and health to ponds for treatment before release back into the natural system. These systems have been built for major storms of previous decades and climate change has increased the capacity needed now to deal with current and future weather events.

Investments in roads and bridges help to reduce future service issues that result from degraded materials, freeze and thaw cycles and erosion under the roadbed can result in sinkholes that take months, and significant dollars, to restore. Finally, continued investment in sewer systems ensures their integrity during storms, safeguards environmental quality in lakes, rivers, streams and other water bodies as well as resident properties should storms cause a back up in the system. **Investment to increase the capacity of municipal core infrastructure such as roads, bridges, water, wastewater and stormwater systems can help ensure residents are safe, their homes and businesses are secure and economic activity can continue in the face of more severe weather patterns.** It also ensures that emergency services are able to do their jobs when our residents need them most. Improved natural assets make our communities great places to live, work and invest.

Paying for water, wastewater and stormwater services can be difficult for communities and significant investments have been made. However, many more are needed. Municipal governments have made significant progress in putting water and wastewater on a rate base to cover the full cost of delivering them. Some municipal governments have moved towards stormwater rates as a way to support increased investment requirements. This would seem to be an easy answer for governments interested in moving to sustainable investment in these municipal systems. However, it bears keeping in mind that their ratepayers are taxpayers and the government has pledged to make Ontario’s public services more cost effective. Smaller communities in particular, face special challenges in finding the right balance between an appropriate rate base, efficient service area and local decision-making for investments and development. **Encouraging communities towards full cost recovery through provincial investments in better technology and updated local services can go a long way to helping make sustainable water, wastewater and stormwater services a reality.**
Waste Management and Recycling

Municipal solid waste management services represent a critical advancement in public health and environmental services. Today, emphasis is on improving management of an expanding waste stream and reducing the amount going to landfill. Moving to full producer responsibility for waste programs, including the Blue Box Program, will put a price on pollution and help to create an incentive to reduce waste and recycle what can be recovered. This price also can help to spur economic development of a secondary recovery industry that can create jobs and technology. Finally, working to capture, clean and reuse landfill gas as well as through processing organic wastes generate renewable natural gas and significantly help to reduce Ontario's GHG emissions while expanding energy resources for our people. Jurisdictions such as California have shown that organics diversion activities have one of the best cost-per-tonne reductions. As many landfills are getting to capacity and most communities are not receptive to opening new landfills, setting a price on pollution and establishing full producer responsibility for Ontario's waste programs should be a provincial priority.

Transit and Active Transportation

Over the past decades, municipal, provincial and federal governments have expanded investment in transit services to help Ontarians get moving more efficiently. Public mass transit benefits the economy and the environment as well as helping people make and keep social connections. Car ownership is costly and congestion can negate its benefits. People need viable options. Transit and active transport infrastructure such as bicycle lanes helps to provide them to residents. They also reduce the absolute number of GHG emissions and the per capita intensity for Ontarians. As importantly, however, investing in transit and bike lanes improves access to work, school and services as well for Ontarians and municipal governments need continued support to expand and establish these services where they can make a real difference in residents' lives everyday.

Facilities and Social Housing

Previously, important investments were made in upgrading social housing stock for energy efficiency and alternative energy systems from cap and trade funds. Municipal housing provides a critical service for our most vulnerable residents. Housing provides a foundation for economic and social participation. Jobs without housing are hard to come by. Municipal government housing is in critical need of increased investment, upgrading and in some cases replacement and expansion. Energy efficiency improvements to municipal public housing makes these facilities better places to live, improves the lives of some of the most vulnerable people in Ontario and reduces emissions at the same time.

The same can be said of municipal community centres, arenas and sports facilities. These services are the platform on which protective social capital is built in our communities. Critical skills are learned here and economic and social connections are made. Arenas and community facilities are also amongst the largest energy consumers in municipalities and investment in these can improve people's lives in multiple ways.

Private Development

Private residential, commercial, industrial and institutional developments play an important role in our communities and our economies. The building industries offer good jobs to engineers,
architects, trades and others and once built developments affect the energy profile of our communities, as well as emissions from them, long term. **It is important that these new developments are built with the best energy conservation and demand management technologies to reduce their energy use and emissions for years to come.** As well, these developments should be done with the best technologies to manage water demand and stormwater run off at the lot level to manage demand for local services over their lives. Some municipal governments have been working to improve the sustainability of future developments through planning strategies. The Ontario Building Code provides an important base requirement for new developments and new technologies need to be taken into account while also streamlining requirements to get developments done faster, safely. Together with municipal transit and planning for complete communities, sustainable new development can help to significantly solve the challenge of future energy needs and environmental sustainability in our communities.

**Local Energy Systems**

Municipal governments have long played an important role in bringing affordable and reliable electrical power to our residents. This is important for our economies and residents and makes our communities good places to live. Many municipal governments have been looking to the future of local energy systems to meet the future needs of our communities and our economies. Future needs include re-localizing energy distribution and generation for clean and distributed sources. This can support community aspirations, development needs and jobs. Local energy storage is also an important part of this long-term plan. **Finding ways to incentivize and reducing barriers for these types of initiatives is important to create the sort of flexible and resilient energy system that will be needed to support the Ontario economy in the future.**

Also important will be the provincial government’s commitment to expansion of electric auto recharging stations in Ontario. This is something that can be pursued with the private sector and with Ontario's local electricity distributors and municipal governments. While subsidies for electric cars have been eliminated, **increasing the number of recharging stations available to the public can help to level the field for consumers interested in choosing electric vehicles in a fundamental way.** Ontario should make this a priority to lay the base for long-term sustainable change.

**Responses to Provincial Consultation Questions**

*Creating an understanding of the effects that climate change is having on our households, businesses, communities and public infrastructure to better prepare and strengthen our resiliency.*

Putting a priority on climate resilience to more intense weather events in the provincial climate plan is a welcome development and greatly needed. AMO members are on the front lines of climate change in Ontario. We hear the needs, wants and frustrations of residents regularly. Our residents want effective, affordable and reliable services that preserve their safety, health, physical, economic and social environments. They want to protect their property investments as best as possible.

Effective stormwater systems protect homes, businesses and neighbourhoods from the more frequent and intense storms climate change brings. However, investment in these local services, and in other infrastructure, is required. Yesterday's 100-year storm, for which many systems were built, occurs much more frequently than it was planned for. Many residents have experienced more basement floods in recent years as these systems are overwhelmed. This means that the capacity of
our stormwater systems must increase to handle these storms better than they currently do; requiring sustained increased levels of investment.

Municipal governments will not be able to invest in increased stormwater capacity and infrastructure resilience all on our own. Municipal governments are dealing with an infrastructure gap even before the increased needs of climate change are accounted for. In addition, resilience also requires investments in other physical infrastructure as directed by local asset management plans, such as roads, bridges, sewer and water systems. Flooding events overwhelm combined sewers which leads to overflows and basement backups, which threaten people, property and water bodies. These are real and tangible examples of how climate change is affecting Ontarians.

To ensure affordability of our investments – and those made with federal and provincial government support – municipal governments need greater staff capacity and more specific local information on the anticipated impacts of a changing climate.

Previously, AMO has suggested updated mapping and useable data for policy makers is needed to guide investments in better infrastructure to manage climate change. We now renew this call. A climate adaptation services organization to provide consulting services to municipal governments, businesses and homeowners with detailed but understandable information on impacts would be a great place for the government to start focusing on building resilience. Capacity amongst Ontario municipal governments is uneven. Accessible, high quality localized information and recommendations would go a long way to making sure that all communities in Ontario have the ability to increase their resilience to climate change challenges.

Ensuring polluters are held accountable and creating dedicated measures that will efficiently reduce greenhouse gas emissions.

Municipal governments support holding polluters accountable for the pollution they create and damage it causes to the environment. To do this effectively, municipal governments believe that putting a price on pollution is the right thing to do. A price on pollution assigns an incentive to reduce it. This needs to be done for greenhouse gas emissions and it needs to be done for products and packaging that enter recycling and composting systems, landfills and disposal sites, wastewater treatment plants or as litter in our communities, parks and waterways.

Municipal governments are not major producers of GHGs. Those GHG emissions that municipalities do play a role in are generated as a throughput from our residents. Resident waste and managing wastewater services create methane gas that can escape into the atmosphere and add to Ontario’s GHG profile.

It is estimated that full producer responsibility for paper products and packaging in particular, can open up investment in secondary products markets and save up to 15 million tons of GHGs each year in Ontario diverting these products from landfills. In addition, methane capture at landfills and wastewater plants in conjunction with an organic waste strategy can lead to using more renewable natural gas in Ontario with attendant reductions in GHG emissions.

Improving Ontario’s business climate by unlocking the power of the private sector to finance and drive innovative climate solutions. This will include an emissions-reduction fund to invest in technology-based and other solutions to reduce emissions in Ontario.
AMO and municipal governments support private involvement where warranted in financing climate solutions. This can include activities such as methane capture and reuse from municipal landfill and wastewater sources as well as reductions for large industrial emitters; investment in electric vehicle recharging; lot level storm water management and grey water reuse for large commercial and industrial sites; and new building technology. The government should encourage investment and set incentives for each of these activities to ensure private sector finance is attracted to the economic potential in these activities.

*Finding a balanced solution that puts people first, makes life more affordable for families, and takes Ontario’s role in fighting climate change seriously.*

Front line, local, municipal services provide great value to Ontarians and make their lives better every day. From electricity, to clean water and public health, from roads and bridges to transit, municipal government provide affordable, high quality and safe services that define and underpin Ontario's high quality of life. While municipal governments strive to make these services the best they can be for their communities, much can be done to improve the services currently offered. Smart investments in municipal services can create real and positive outcomes for residents and improve environmental sustainability, reduce greenhouse gas emissions and increase climate resilience for our residents. To continue doing that affordably, municipal governments need real, reliable long-term partners in the federal and provincial governments to fund service improvements.

AMO and member municipal governments want to work with the provincial government on this present and increasing challenge as we look to build lasting solutions for our residents and our communities.