



## Planning Through the Lens of “Climate Change”

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### WHY IS CLIMATE ACTION PLANNING SO IMPORTANT?

Municipalities in Ontario, across Canada and around the world are actively planning for climate change. Why, because it’s here, it’s not going away, it’s our new reality.

*“Sound fiscal management is often high on the list of priorities for a municipal government. A strong business case for climate protection activities addresses that responsibility by clearly demonstrating how to reduce costs, improve service delivery, create jobs and support local industries, all while protecting human health and the environment.” (Federation of Canadian Municipalities)*

### Climate planning for a sustainable future

Now, more than ever, there is a compelling case for climate action. Our climate has already changed, more quickly than expected, and it will continue to change for many decades to come. These changes will impact all aspects of our lives. That is why so many communities are already planning for these changes; some have been doing this for years. It is now 2020 and time we all started planning for a safe and sustainable future, especially for the generations to follow. Understanding climate change and how it will impact our communities allows us focus all of our planning – Official Plans, Strategic Plans, Asset Management Plans, Economic Development Plans – through the lens of climate change.

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*“Effectively addressing and responding to climate change goes beyond reducing emissions. It’s about affordability. It’s about jobs. It’s about our health and wellness. It’s about protecting wildlife, ecosystems and our drinking water. It’s about preserving the places and things Canadians value today, and the aspects of life in Canada we want to be able to pass on to our kids and grandkids”. (Canadian Institute for Climate Choices)*

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*To properly plan for the new climate-driven reality facing Canadians we need to better understand the challenges.*

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The face of our changing climate is all around us. Our communities are increasingly vulnerable to risks such as flooding, heatwaves, infectious disease and mental wellbeing. Climate refugees increasingly arrive from other countries. In the decades to come they will also arrive from within Canada as sea levels rise and western regions dry out.



*“The poor state of Canada’s aging infrastructure leaves all levels of government, especially municipalities, particularly vulnerable to the impacts of extreme weather events.”* (Federation of Canadian Municipalities)

### **Understanding the challenges**

To properly plan for the new climate-driven reality facing Canadians we need to better understand the challenges. This will require understanding climate change, how it will and already is impacting people and their communities, and, where we are most vulnerable and at risk.

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*Traditional economic accounting does not always accurately reflect the true costs of climate change.*

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*“The challenges range from information limitations to guide adequate planning and land use management decisions, to physical conditions such as aging infrastructure and lack of infrastructure maintenance.”* (Intact Centre on Climate Adaptation)

### **Benefits**

Many aspects of existing strategic and official plans incorporate social and environmental components. However, these components are not incorporated directly into the total economic costs as they do not factor in the “externalities” of greenhouse gas emissions (GHG). Our economic system has allowed the pollution from the burning of fossil fuels to be free. Only now, are we experiencing the costs of polluting our atmosphere and oceans. Building these costs into our planning process is now necessary due to climate change and there are many benefits to doing so.

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*Developing a plan for a safe and sustainable future in our changing climate requires a vision.*

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- Economic Benefits
  - Energy and operating cost savings
  - Physical Asset Renewal
  - Improved municipal service delivery
- Health Benefits
  - Reduced fossil fuel pollutants – fewer cardio-respiratory illnesses
  - Lost productivity due to illness
  - Increased employee and public morale
- Additional Benefits
  - Local job creation
  - Support for local businesses
  - Increased community investment

### **WHAT CAN WE DO?**

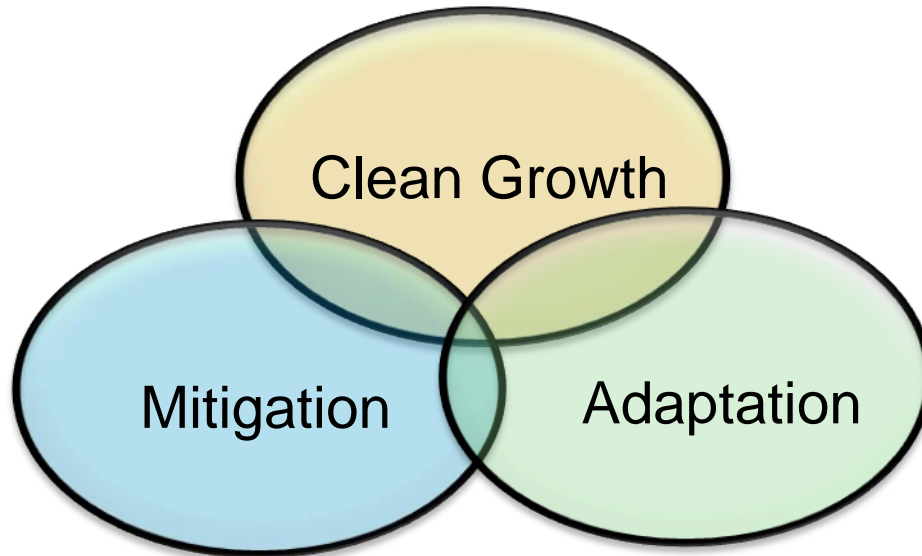
There are many guidelines for moving forward; we do not have to invent them we simply have to integrate lessons already learned into our planning processes. The Federation of Canadian Municipalities’ Partnership for Climate Protection is a good place to start. This program has been around since 1994 and has been adopted by over 350 communities in Ontario and across Canada. The newly formed Canadian Institute for Climate Choices has developed a comprehensive framework for addressing the climate challenges that lie before us. Additionally, there are other programs and



resources to help the transition to a safe and resilient future, including programs for innovation, risk assessment, flood management and so on; the list is endless.

### Three Overlapping Initiatives

Developing a plan for a safe and sustainable future in our changing climate requires a vision. This vision is an integration of **mitigating** greenhouse gas emissions, **adapting** to the new realities of climate impacts and building a new **clean growth** strategy.



### Mitigating

Traditional economic accounting does not always accurately reflect the true costs of climate change. A more relevant planning framework incorporates the Triple Bottom Line approach to accounting for climate change impacts.

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*“Around the world, municipal governments are creating these road maps by using whole cost, or triple bottom line accounting. This practice considers all of the economic, environmental, and social factors of any given project or group of projects, recognizing that what affects one area often has repercussions in others”. (Federation of Canadian Municipalities)*

The Triple Bottom Line approach incorporates social, economic and environmental costs. The business case is based on six elements:

- Leadership advantage
- Economic performance
- Asset management
- Defense against climate change
- Economic and social development
- Resilience to social, economic and environmental change



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### **Adapting**

There is a strong business case for implementing specific measures to help communities adapt to climate change and reduce disaster risk.

*“Research indicates that the benefits of investing in community adaptation and resilience outweigh the cost of such investments by a ratio of 6 to 1.”*  
(Federation of Canadian Municipalities)

Recently, the Federation of Canadian Municipalities released a report titled, “The Cost of Climate Adaptation at the Local Level”, outlining the costs and opportunities for adapting to climate change. This detailed report provides yet another clear roadmap for moving forward.

### **Clean Growth**

Transitioning to low carbon economies is now underway in Canada and throughout the world. The emerging economies reflect the realities of the era of big data, clean technologies, bio-technology. The new economies also acknowledge and respect the safe operating boundaries of planet Earth. Our societies are experiencing increasing chronic stresses and acute shocks from climate change. Building resilience capacity into our lives and into our communities is considered essential to adapting and thriving. Transitioning to renewable energy, improving energy efficiencies, shortening supply chains, and building local business resources as are examples of the new economy. Building resilience into our communities to ensure a safe and sustainable future is a cornerstone of municipalities already engaged in climate action.

*“The World Bank estimates that climate commitments in emerging economies alone will create \$23 trillion in investment opportunities between 2016 and 2030.”* (Canadian Institute for Climate Choices)

Implementation of new, distributed energy systems powered by renewable sources is now underway as these costs have dropped below most traditional fossil fuel sources. The transition to the new economy will touch all aspects of modern life, from food production to transportation and beyond. Opportunities arise when development of new technologies spurs innovation.

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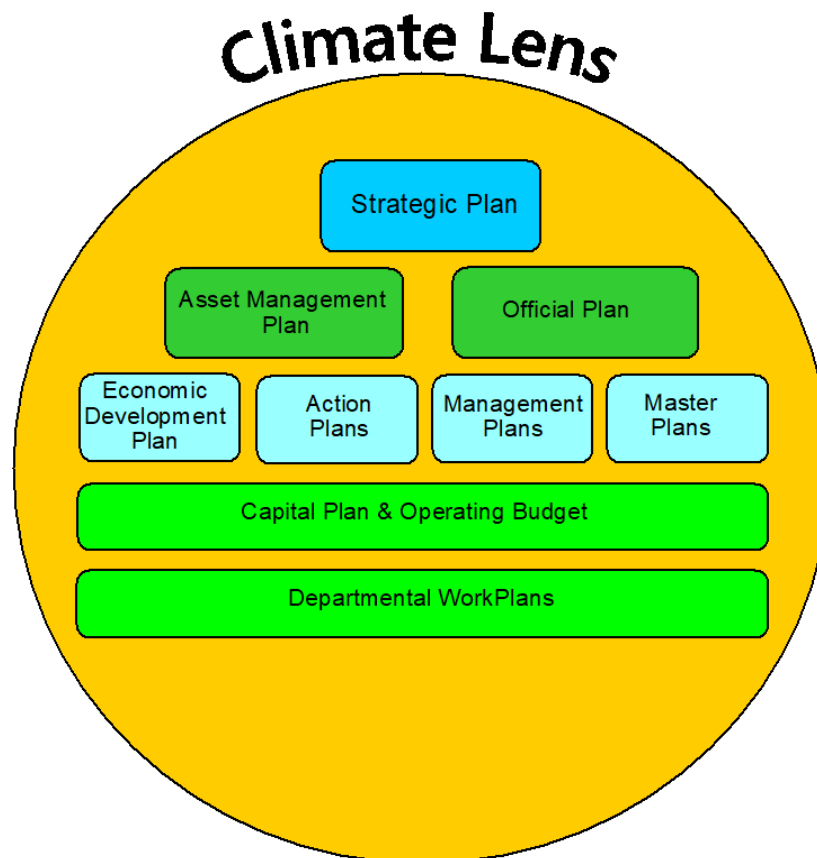
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## WHAT DOES A CLIMATE ACTION PLAN LOOK LIKE?

Many municipalities in Ontario already have comprehensive climate action plans in place and while they differ in their details they have many common themes. Among them is to ensure a climate change lens is applied to all planning initiatives to promote the use of best climate mitigation and adaptation practices. In this way, all other municipal planning initiatives are done through the lens of climate change (see figure). Six themes that typically emerge from Climate Action Plans (CAP) are infrastructure, transportation, natural environments, partnerships, food and water security, and education.



### Infrastructure

The plans ensure building infrastructure is resistant to threats such as flooding and extreme wind stress. They also plan to increase the number of new and existing high performance state-of-the-art buildings to improve energy efficiency and to adapt to a changing climate.

### Transportation

The plans promote active and sustainable travel so that more trips are taken by multiple occupancy modes than by single use occupancy. All plans move towards increasing use of renewable energy sources.



### **Natural environments**

Protecting and restoring natural environments is a cornerstone of these plans in order to reduce GHG emissions, decrease flooding and improve the mental wellbeing of people. Of particular importance is maintaining and expanding our wetland resources.

### **Partnerships**

Working with local and regional health units and integrating climate change planning across the tiers of government is important to build resilience in efficient ways. By partnering with local councils the task of transforming our communities is so much easier.

### **Food and water security**

Food and water security are important and essential components of these plans. Both are considered fundamental human rights. Food security emphasizes local production, from public gardens to supporting local food cooperatives. Water security emphasizes public ownership and clean drinking water.

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### **Education**

Education is perhaps the most important component of any of these climate action plans. If people know what the problem is and how it will affect them then they will begin to understand the changes we need to make to address the many challenges of climate change. Scientists tell us the most important thing any of us can do is "...talk about climate change".

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