



**ACEC–Ontario is the provincial voice of consulting engineering in Ontario. Our members have a direct influence on the economic, social, and environmental quality of life in Ontario.**

**ACEC–Ontario encourages its members to act as trusted advisors to clients, governments, regulators, researchers, and the general public on climate change issues.**

## CLIMATE CHANGE FACTS

- ✓ Earth’s climate has been constantly changing long before humans came into the picture. However, scientists have observed statistically significant changes in the past 100 years of historical records.
- ✓ There is strong scientific evidence that human activities are contributing to global climate change.
- ✓ Climate change impacts the natural environment as well as constructed infrastructure.
- ✓ A range of regional climate impacts are predicted including changes in precipitation patterns—particularly the intensity, duration, and frequency of events as well as increase in average temperatures. Increased risks are expected because of these changes including: risks related to flooding, forest fires, air-pollution events, and supply of fresh water.
- ✓ All these risks have significant socio-economic impacts.

## WHEN DOING WORK, CONSULTING ENGINEERING FIRMS:

- ✓ Consider the impact of the climate on our work (adaptation) and consider the impact of our work on the climate (mitigation).
- ✓ Balance social, economic, and environmental factors in the public need.
- ✓ Recommend and support the more sustainable and more resilient alternative whenever feasible.
- ✓ Incorporate sustainable practices into design, as appropriate.
- ✓ Evaluate the risk of changing climate and extreme weather events on design.
- ✓ Assess the vulnerability of infrastructure to climate change and extreme weather events.
- ✓ Strive to develop leading edge solutions that can reduce human induced climate change impacts through research and development of new innovative technologies.
- ✓ Recognize and support collaboration with Indigenous Rights holders to ensure traditional knowledge, values, and beliefs are respected and included in our approach to assessing and understanding the environmental impacts of our work.
- ✓ Advocate to provincial and municipal governments the need to consider climate change when reviewing existing programs, codes, standards, etc., and developing new ones. Advise and provide leadership to clients, governments, regulators, academic institutions, researchers, and the public on innovative adaptation and mitigation measures.



## ADDITIONAL CONSIDERATIONS

- Climate change is real and the Earth's climate is changing at an unprecedented rate.
- The work of our member firms is critically important to developing a sustainable world.
- ACEC-Ontario members are leaders in climate change adaptation and mitigation. It is our responsibility to be stewards of sustainable and resilient design.
- Adapting to climate change and reducing greenhouse gas emissions are two distinct but interconnected components of taking climate action. Our members focus on both.
- The consulting engineering industry considers sustainability, resiliency, and the environment as vital components of relevant projects, and in the context of current societal needs.
- Speak publicly from a position of knowledge about what is possible and what is being done across Ontario, Canada, and the world.

**The consulting engineering industry develops and implements solutions to address the challenges posed by climate change. As the provincial body representing consulting engineering in Ontario, we as supporting member firms strive to:**

1. Reduce emissions related to our own operations across the industry.
2. Reduce embedded and operational carbon emissions in the projects on which we consult, design, and deliver.
3. Support climate change adaptation through design of resilient assets.
4. Advocate to include resilience and sustainability in government policy.