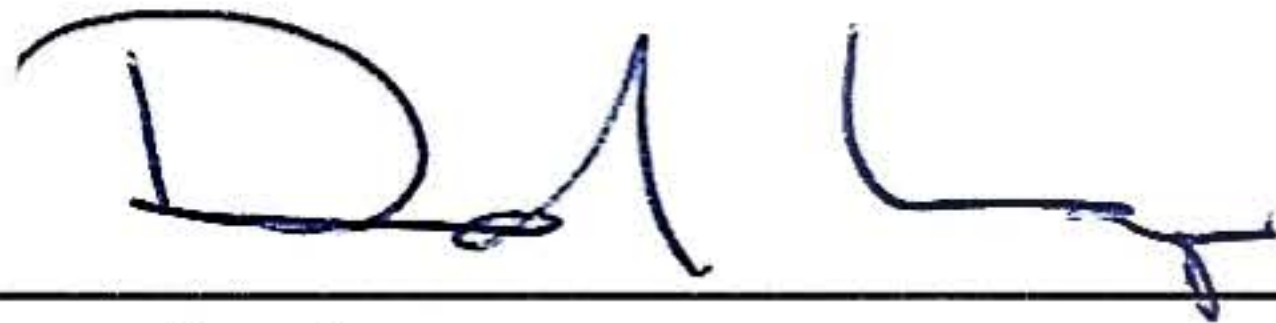


Member Submission

Title of Submission: Professional Engineers Ontario (PEO) Role to Address the Climate Crisis

Mover:


**David Lapp, FCAE FEC P.Eng
Ontario License Holder #25619503**



David Lapp signature

Secunder:

**James (Jim) Chisholm, P.Eng, M.Eng., FEC
Ontario License Holder #90544321
West Central Regional Councillor**



Jim Chisholm, P.Eng., Signature

Submitted: April 7, 2022

Background

One of the greatest contemporary public safety issues affecting Ontario is climate change. Our climate is changing at an unprecedented rate in Ontario, Canada and indeed worldwide. The frequency and intensity of extreme weather events continues to increase with devastating impacts on public safety, public health and the environment, as shown by recent catastrophic weather events including damage and failure of infrastructure and health effects from devastating floods, major ice storms, wildfires, droughts, tornadoes and more frequent heat waves.

This presents new and evolving challenges, risks and opportunities for engineering license holders to fulfill their professional responsibilities and obligations to address the causes and effects of changing climate in order to safeguard the public interest and welfare of Ontario.

By all measures, climate change is among the highest risks to the public interest that society, including engineers, must address now and in the decades to come. The engineering profession across Canada needs to adopt practices to help fight climate change and protect society against its impacts. The management of climate risk and supporting practitioner's responsibilities to address that risk are consistent with PEO's statutory role and responsibilities as a regulator.

Aside from infrequent and limited communication to license holders and the public, PEO has been silent on this issue and further, has offered no regulatory processes or support to its license holders that would reduce climate risks to the public in Ontario. Presently, PEO has no climate change policies that would provide guidance and mandate of our license holders to reduce the public risks of climate change. Many of the other engineering regulators in Canada are defining their regulatory role in addressing climate change and proceeding with concrete actions to fulfill their responsibilities.

It is time for PEO to step up. It is both an obligation and an opportunity for PEO to hear and proceed with this motion.

The PEOs mandate to protect the public interest cannot now or in the future be achieved without consideration of engineering guidelines that will address risks created by continuous climate change. PEO must ensure that engineering licence holders practice engineering competently and conduct themselves professionally in due consideration of climate change.

The first line in PEO's Code of Ethics notes "professional engineers have a clearly defined duty to society, which is to regard the duty to public welfare as paramount, above their duties to clients or employers". As such, guidance is required on how engineers should respond to projects by clients or employers which may harm public welfare in the form of neglecting engineering requirements to address the climate crisis or failing to adequately prepare for negative impacts. It is no longer enough to merely disclaim responsibility on the basis of disclosing to owners (our clients) the impacts of engineering limitations as dictated by project specification and allow decisions that compromise the engineer's duty to the public. A lack of, or inadequate climate consideration by license holders in engineering work for which they are responsible may lead to professional liability of the license holder, and potentially PEO as a regulator.

The PEO and ourselves as licensed engineers, need to show leadership to help our country, province and communities to meet the challenge presented to us by the climate change emergency. We can no longer stand aside and be regarded as bystanders who did nothing to help in this time of need. Therefore, if we collectively do not act now, we may be viewed as contributors to the problem instead of as allies in the fight against Climate Change. Let us take a step forward in protecting the public as each of us has accepted the responsibility for doing so since our inception 100 years ago, as of June 15, 1922. Let us set that day as the day we demonstrate that we, as engineers, are important members of our communities that can lead in the face of a crisis like climate change. Let's demonstrate that commitment by showing that we have a plan to take action and give our members the direction that they seek and are asking for.

Whereas: The foregoing demonstrates that Professional Engineers Ontario has a regulatory responsibility to act on climate change.

Now therefore, be it resolved:

1. That PEO Council adopts the climate crisis as one of the pillars of the PEO 2023-2025 Strategic Plan and that PEO Council undertakes the following actions:
 - a. Adopts a formal public position on the changing climate in Ontario and its impact (or consequences) to public safety and welfare

- b. Develops and adopts policies or positions on climate change adaptation and mitigation that inform the public on the evolving roles and responsibilities, specifically of how our license holders will address current and future effects of climate change
- c. Provide strategic direction on how PEO will support its license holders in their daily professional practice of addressing climate change in order to assure public safety and welfare
- d. Take into consideration the suggested basic elements outlined in the Appendix A to this motion
- e. Authorize the necessary resources in the current and forthcoming annual budgets to enable the development and implementation of a multi-year comprehensive action plan to increase awareness among license holders on their obligation to practice engineering in consideration of directives that address the impacts of climate change within the engineer's role and duties
- g. Establish a Task Force called the "Climate Change Action Plan Taskforce" consisting of PEO members, support staff and any needed consulting services to develop a draft Climate Change Action Plan for the consideration of the PEO Council.
- f. Authorize activities that allow the PEO Council to respond to current and future climate change issues that impact the public interest proactively rather than reactively

Appendix A - Basic Elements of Proposed PEO Action by Council and Staff

Elements to be undertaken over the three-year period of 2023-2025 Strategic Plan could include:

1. Develop and approve PEO policies or positions on engineering and climate change identification, adaptation and mitigation. Adaptation for engineering that defines public risks and risk mitigations for consideration by license holders. Mitigation for engineers to be responsible for the implementation of engineering practices which will reduce the impacts of climate changes and ensuring that a reduction in GHGs is realized.
2. Provide practice guidance on adaptation and mitigation of climate specific risks to engineering license holders by the end of 2023
3. By the end of 2023 make practice guidance on adaptation and mitigation a compulsory part of its upcoming Continuing Professional Development program
4. Year 1 - Develop a two-year Climate Change Action Plan (PEO-CCAP)
5. Year 2 and 3 – Implement the PEO-CCAP and monitor/measure progress
6. Continue this pillar in the 2026-2028 PEO Strategic Plan. Include in the process a review and evaluation of the 2023-2025 CCAP followed by a second CCAP based on the review and regulatory needs at the time.

This effort does not require starting from scratch. It would build upon existing resources and documents developed by fellow engineering regulators and, it would be adopted to suit the regulatory needs in Ontario while ensuring there is coordination and collaboration among all engineering regulators in Canada.

Accelerated action by PEO on climate change can be enabled, but to be effectively addressed requires collaboration with engineering members, climate experts and by including government representatives. It will be very difficult to achieve positive change by any one entity, person, organization or plan, nor can it be solved in one geographical region alone. Relationships and collaboration with Ontario government ministries, municipal and regional level governments, the Federal Government, other engineering regulators, Engineers Canada, international partners, other professions addressing climate change and

climate data providers will be determinants of a Climate Change Action Plan developed and implemented as a component of the overall Strategic Plan as proposed in this submission.

It requires a multi-year, sustained commitment that goes beyond the period of the 2023-2025 Plan. The effort must continue and be incorporated into the 2026-2028 Strategic Plan and beyond.

Other Considerations

Effective execution of this pillar of the PEO 2023-2025 Strategic Plan will require dedicated and continuing staff support through its three-year life. It cannot be successfully executed by volunteers alone or with nominal staff support. One FTE is recommended as the baseline staff resource for 2023-2025. Additional FTEs for 2024-2025 and beyond to be determined during the development and approval of the Climate Change Action Plan developed and approved by the end of 2023.

The Climate Change Action Plan will also require sustained financial resources for its implementation that would extend into the period of the 2026-2028 Strategic Plan. Financial commitments to commence in FY 2024 to the level that would be specified in the approved Climate Change Action Plan.