

Green Infrastructure Ontario Coalition Feedback on the Province of Ontario's Climate Change Discussion Paper

Responses to discussion questions

2.2 What can the government better do to encourage industry to further increase rates of innovation that would lead to improved productivity of all capital, including natural capital, in order to reduce emissions?

Better promotion and utilization of green infrastructure and associated technologies can promote innovative approaches that offer a good return on investment and lower emissions.

Green infrastructure is a proven tool for providing ecological, economic and social benefits through natural solutions. It includes the natural capital, semi-natural areas, and vegetative technologies that are designed and managed to deliver a wide range of infrastructure functions to our urban regions. It helps reduce reliance on expensive grey infrastructure by providing solutions that can be cheaper and more durable. It can offer an alternative, or often be complementary, to standard grey solutions.¹

Green infrastructure assets reduce emissions by:

- Directly removing pollutants from the air.
- Reducing energy use, the urban heat island effect, and water treatment needs, therefore lowering emissions from regional electricity generation (and associated costs for consumers and businesses).
- Reducing the high temperatures that contribute to ground level ozone formation.

A large portion of our city's current and potential green infrastructure is under private control. The government should find ways to support companies in implementing and scaling these innovative approaches we know yield measurable benefits. As a tool for increasing productivity of natural capital, Ontario needs to grow the market for green infrastructure products by encouraging industry adoption. To do this, the government should consider the following:

- Integrate green infrastructure into provincial policy to ensure the support of green infrastructure projects through relevant funding mechanisms, licensing and approvals.
- Provide support and or funding to organizations who provide training to the public and private sector on green infrastructure best practices.

¹ COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Green Infrastructure (GI) — Enhancing Europe's Natural Capital

- Require financial planning that supports the full cost recovery of water, wastewater and stormwater infrastructure, considers the life-cycle cost of the infrastructure, and plans for the long-term.
- Invest in applied research and development to test and implement innovative green infrastructure solutions. The potential of green infrastructure to deliver cost-effective solutions can be multiplied by developing appropriate technology and processes, particularly in relation to transportation, energy, agriculture, the design and functioning of our cities, and boosting the bio-economy.
- Develop stronger asset understanding, governance and market parameters for natural capital. For example, assist municipalities in developing asset management plans for their green infrastructure assets, and integrate natural capital assets into carbon market mechanisms.
- Encourage businesses to employ a comprehensive economic and environmental footprint analysis to assess and compare green versus gray infrastructure and the co-benefits of green infrastructure solutions.
- Provide incentives to encourage the adoption of green infrastructure in greenfield and redevelopment projects.

2.4 What role can the agricultural and forestry sectors play in reducing emission and/or providing carbon sinks or offsets?

- Support for enhanced protection and planting of urban forests is an essential component of a climate change strategy. Ontario's urban forests have an important role to play in reducing emissions and providing carbon sinks. In fact, our urban forests are a unique tool equipped to address both emission reduction and climate change adaptation. Our urban trees help mitigate climate change by directly sequestering carbon and reducing energy use and its associated carbon emissions. They support climate change adaptation by providing the backbone of our cities green infrastructure that reduces flooding and moderates urban temperature, thereby further reducing energy use.
- The majority of lands suitable for new trees are privately owned, therefore the government should provide support for planting urban trees by funding programs that help homeowners and community groups plant more trees and forests.

2.6 Climate change will have an impact on Ontario's food supply. What role should this issue play in Ontario's climate strategy?

- Ontario's climate strategy should directly support local food production in urban and peri-urban centres, as both a climate change mitigation and adaptation strategy. Local food production will also help reduce the impact of climate change on Ontario's food supply, reduce emissions from the transportation of food to processing plants and markets, create local jobs, and improve the overall resilience our cities. Urban agriculture is an important component of our province's green infrastructure.

3.2 Building net zero communities and buildings are already possible from an engineering standpoint yet few have been constructed. In Ontario, what changes are needed to building codes and planning processes to ensure greater uptake with regard to geothermal, solar, wind, natural light, combined heat and power, community energy and other emerging technologies?

- Requiring the integrating green infrastructure considerations into the development planning and decision-making process would help with the development of complete communities in Ontario.
- Implement policy review of municipal stormwater management in light of climate change, including not only guidance but promotion, demonstration sites, support for research, capacity building, etc.

4.1 What market mechanism or mechanisms will best achieve the goals outlined in the Ontario Climate Change Discussion Paper?

- The use of a carbon tax would be the best market mechanism to support and encourage innovation in industry, and improve human, social and natural capital productivity. A benefit of using a carbon tax would be the generation of revenue that can go directly into climate change adaptation strategies. It is disappointing that adaptation did not get more attention and specific actions in this discussion paper, and guiding the revenue of the province's emissions reduction market mechanism would be a great opportunity to address it. For example, the revenue from a carbon pricing mechanism could be used to fund green infrastructure projects. An increase in green infrastructure in our communities would improve quality of life for tax payers, and increase our province's natural capital productivity.

For more information on the Green Infrastructure Ontario Coalition and the above comments, please contact Michelle Sawka, at msawka@greeninfrastructureontario.org or 647-287-6540.