

Ontario Environment Industry Association (ONEIA) 2024 Federal Pre-Budget Submission

On behalf of Ontario's more than 3,000 environment and cleantech firms the Ontario Environment Industry Association (ONEIA) asks the Government of Canada to consider the following recommendations as it develops the 2024 Federal Budget.

- Make Canada and Ontario attractive for cleantech and environment sector investment.
- Expand eligible use of captured carbon in draft legislation.
- Enable decarbonizing of electricity grids through significant investment in capital, materials and labour including support for the growth of developing and existing Ontario companies, and optimizing and implementing technologies and solutions.
- Collaborate on a practical approach to mitigate environmental and human health impacts of PFAS.
- Further address the housing crisis by enabling the building of more homes on brownfields through the development of brownfield grant programs to assist in the assessment, clean up and redevelopment of brownfield sites.
- Invest in infrastructure to enable smart, sustainable growth while building a resilient future.
- Prioritize the use of Circular Economy Principles in government activities such as investments, grants, tax measures, procurement, policy and regulatory development.
- Spearhead efforts across government and non-government organizations to modernize regulations, policy, by-laws, etc. to remove or minimize roadblocks and make them enablers. In addition, the government and related agencies should consider increasing resources in order to reduce the time and cost for implementing sustainable projects.

About ONEIA

Ontario is home to Canada's largest group of environment and cleantech companies and 40 percent of Canada's green workforce are employed in Ontario. The most recent statistics from the federal government show that Ontario's environment sector employs more than 226,000 people across a range of sub-sectors. This includes firms working in such diverse areas as materials collection and transfer, resource recovery, composting and recycling solutions, alternative energy systems, environmental consulting, brownfield remediation, water treatment and artificial intelligence – to name just a few. These companies contribute more than \$25 billion to the provincial economy, with approximately \$5.8 billion of this amount coming from export earnings. The industry is growing and has potential opportunity for continued growth. ONEIA members are committed to engaging with governments as they develop policies and regulations that are consistent with our principles of sound science, a sound environment, and a sound economy.

Ontario's Environment and Cleantech Sector

- **The Business of the Environment:** Ontario's environment and cleantech industry is a diverse range of companies whose primary business is producing, providing, and developing environmental products, services and technology that protect the environment.
- **Good Environmental Stewardship is Good for Ontario's Economy:** There are more than 3,000 companies in Ontario's environment and cleantech sector employing more than 226,000 people. These companies contribute more than \$25 billion annually to Canada's economy including \$5.8 billion in exports. This is a growing sector that is expected to grow by at least nine percent by 2029.
- **We are an Enabling Industry Focused on Solutions:** ONEIA members are in the business of providing environmental solutions. These businesses purify our water, create new products from waste, reduce pollution and carbon emissions, remediate brownfields, provide environmental consulting and work in a range of other fields. They also help municipal, industrial and commercial sectors transform into leaders in the circular economy.

RECOMMENDATIONS

Recommendation: Make Canada and Ontario attractive for cleantech and environment sector investment.

- Work with us to ensure that Canada and Ontario continue to be jurisdictions where environment and cleantech companies want to invest and grow their businesses.
- Global competition for investment is intense especially with the US Inflation Reduction Act (IRA) and other similar green transition programs around the world. We do not want Canada to miss out or fall behind this significant global shift in economies and societies.
- Continue to monitor and adopt competitive measures to the American Inflation Reduction Act's provisions for clean alternative energy producers to make sure Canada can meet its decarbonization objectives and is not "left behind". Canada needs a strong cleantech sector to compete in a net-zero economy.
- While the Canadian government's tax credit program is intended to help level the playing field, more needs to be done to maintain and attract private sector investment. This includes not being overly restrictive of qualifying technologies (i.e., picking winners and losers) in order to have a broad window for potential solutions and lower risk. Also, the tax credits and legislative efforts need to be focused on science-based solutions and not solely on business interests.
- There are a number of specific areas where we can work together to design and support initiatives for clean energy and conservation that attract cleantech investment and jobs. Such initiatives will also lower energy costs for Canadian consumers while broadening the ability of consumers, businesses, and farmers to participate in the energy economy.
- More needs to be done to reduce the time and cost required to develop and construct the necessary critical infrastructure in the waste management, water treatment, and renewable energy sectors. For example, this could include reducing roadblocks and increasing resources to shorten the approvals timeline (which reduces time, risk and ultimately project costs).

Recommendation: Expand eligible use of captured carbon in draft legislation.

- Canada should consider the implications of the IRA in the United States and strive to implement its CCUS program to avoid losing out on project activity. The amount of resources available to drive CCUS activity are limited, both in terms of capital investment and human capital. In particular, the IRA's increased tax credit values for 45Q Credit for Carbon Oxide Sequestration will drive further CCUS activity in the United States.

- The Draft Canadian Legislation has defined a narrow scope for eligible use of captured carbon. It limits the use of that to which is stored in, or otherwise used for (a) dedicated geological storage; or (b) producing concrete using a qualified concrete storage process. With respect to utilization, ONEIA finds this to be an unnecessarily specific and narrow scope.
- The utilization of carbon to be permanently stored in concrete is only one of many possible beneficial uses. Furthermore, the potential to permanently store carbon in concrete is not significant. Even with 100% concrete market penetration, the amount of carbon stored would be less than 50,000 tonnes per year. Therefore determining ‘producing concrete’ as the only eligible use outside of geological storage is a massive limitation on the incentive to capture carbon.
- There are many potential beneficial uses for captured carbon in applications where it is very difficult to achieve decarbonization through electrification. One example is the conversion of carbon to fuels such as sustainable aviation fuel (SAF); this fuel would offset the use of fossil fuels, thereby creating a net reduction in GHG emissions. Other innovative utilization pathways, particularly non-burning end-uses, are critical to decarbonization and are being explored and should be supported. These include conversion to carbonate rocks, fertilizer and plastics. Excluding these uses from the legislation is too restrictive and leaves no incentive to pursue new solutions and/or aim for additional technology development and innovations, to achieve more aggressive decarbonization.
- ONEIA recommends that the Department of Finance Canada consider expanding the Eligible Use of Capture Carbon to include all uses that result in a net reduction of carbon emissions, while prioritizing non-fuel and hard to electrify sectors/solutions.
- The 45Q Credit for Carbon Oxide Sequestration in the United States offers a good example of a broad scope for eligible use of captured carbon in a CCUS Incentive Program. This more open definition allows for more carbon utilization activities to be incentivized while also allowing the program to grow and include innovations in the future.
- The 45Q Tax Credit includes a broad scope of utilization methods for carbon oxides [US IRC Section 45Q(f)(5)]:

(A) In general

For purposes of this section, utilization of qualified carbon oxide means:

- i. the fixation of such qualified Carbon Oxide through photosynthesis or chemosynthesis, such as through the growing of algae or bacteria,
- ii. the chemical conversion of such qualified carbon oxide to a material or chemical compound in which such qualified carbon oxide is securely stored, or
- iii. the use of such qualified carbon oxide for any other purpose for which a commercial market exists (with the exception of use as a tertiary injectant in a qualified enhanced oil or natural gas recovery project), as determined by the Secretary.

(It should also be noted that US IRC Section 45Q(f)(5) goes on to link eligibility for the credit to lifecycle greenhouse gas emissions, including permanent isolation and displacement)

***Recommendation:* Enable decarbonizing of electricity grids through significant investment in capital, materials and labour for design, construction and operations of new facilities, including support for the development and commercialization of new technologies.**

- The recent Ontario “Pathways to Decarbonization report” found that attaining a decarbonized electricity sector by 2050, alongside aggressive electrification, would require the Ontario electricity system to more than double the size it is today at an estimated cost of around \$400 billion, while another recent study estimated that the current labour force working on electricity infrastructure projects of about 14,000 could need to increase by a factor of six.
- The Ontario report also commented that while many of the technologies needed to decarbonize are already known and commercialized, many others are still in development and that it will be important for Ontario and Canada to continue to invest in these, and other, innovations. For example, an expedient solution to the halt in SDTC funding needs to be implemented as soon as possible.
- We look forward to receiving updates and participating where appropriate on the regional energy resource tables that the federal government has convened with the provinces to strategize ways to achieve shared net-zero goals.

***Recommendation:* Collaborate on a practical approach to mitigate environmental and human health impacts of PFAS.**

- The Government of Canada has issued federal guidelines and screening levels for certain PFAS in the environment. Canada is an active party to the Stockholm Convention for the phase out of some of these compounds and is currently considering activities that address PFAS as a class rather than as individual substances.
- A programmatic regulatory approach, based on a solid cost-benefit analysis, has been found to be the most effective approach to managing PFAS based on what we have seen in other jurisdictions in the past decade. Work with us to develop sound, financially sustainable, science-based policy for the management and phase out of PFAS at contaminated sites, as waste, within the organics/food stream, in drinking water and in products such as firefighting foams, consumer goods and personal care products.
- Our membership has deep knowledge of the issues and options for managing PFAS and can bring the Government of Canada innovative and sustainable approaches that will ultimately support the development of economically sound and health-protective policy.

***Recommendation:* Further address the housing crisis by enabling the building of more homes on brownfields through the development of brownfield grant programs to assist in the assessment, clean up and redevelopment of brownfield sites.**

- Brownfields, vacant and underutilized sites where past uses may have left contamination, are a valuable land resource that we need to work together to maximize.
- Financial incentives and programs encourage investment in sites where contamination has rendered the property vacant, under-utilized, unsafe, unproductive or abandoned. Redevelopment of these properties will provide jobs, housing and infrastructure as well as ongoing tax revenues.
- Several provinces, municipalities and cities currently provide grant programs to assist with incentivizing the remediation of eligible brownfield sites, however there is no province-wide or federal brownfield incentive or grant program.
- Recommendations include tax incentives, tax exemptions, grants, loans and removal of arrears or liens and changes to CMHC funding structures.

***Recommendation:* Invest in infrastructure and buildings to enable smart sustainable growth while building a resilient future.**

- As we build more needed housing, we need to ensure that what gets built is sustainable and minimizes the demand on existing and new infrastructure. New homes should be built to be as water and energy efficient as possible, and existing homes should be retrofitted. This will save homeowners money and could help de-escalate the urgent need for massive amounts of new infrastructure.
- Building more housing and addressing both housing supply and affordability cannot be resolved without expanding water and wastewater infrastructure. Many of these systems are already nearing capacity, aging and struggling to keep up with the impacts of climate change. The federal and provincial governments need to work with municipalities to establish a new balance that benefits both existing and future homeowners, while allowing for expansion and renewal of these vital infrastructure services.
- As Canada and Ontario plan and build infrastructure, we need to ensure that everything built is climate resilient and can withstand the demand of extreme weather such as heat and floods (e.g., climate-informed engineering design, building codes and other codes of practice). Investors and insurers are already employing climate-focused decision-making and climate-related disclosure is a quickly evolving space. Let's work together on climate friendly approaches to planning and development that create resilient infrastructure and communities, and encourage investment.
- One of the challenges in building resilient infrastructure is incenting innovative technologies. Part of the problem is governments promoting fixed price Design

Build Operate & Maintain procurements that encourage the lowest bid and distinct new and innovative technologies that include digitization and AI. ONEIA recommends the federal government promote collaborative contracting as well as investigate ways to de-risk these technologies for municipalities to source for their environmental infrastructure.

***Recommendation:* Prioritize the use of Circular Economy Principles in government activities such as investments, grants, tax measures, procurement, policy and regulatory development.**

- Prioritize circular economy strategies and actions to address the triple planetary crises (climate, natural/biodiversity loss, and pollution). Canada can lead in sustainable development by allocating funding to these initiatives, fostering responsible resource conservation and contributing to a cleaner, healthier future.
- Encourage Circular Procurement: Procurement practice and tools are actively driving demand for more circular products and services across Canada. When evaluating products, factor in their entire lifecycle, including the use of recovered materials, and assess their end-of-life management. In the case of services, allocate points to proponents who incorporate circular economy principles into their proposals.
- Provide grants to local communities and municipalities for implementing waste reduction and circular economy projects, encouraging localized efforts and community engagement.
- Work with us to spur demand for recovered products (e.g. post-consumer and post-industrial plastic resins, organic-based agricultural products such as compost, recovered building products, and alternative low carbon fuel from wood waste) by developing tax-based, regulatory, or other policy mechanisms, and ways to encourage diversion of waste from the industrial, commercial, and institutional sector.
- Support generation of renewable energy forms (and concurrent carbon emission reduction) from waste (such as anaerobic digestion, biomass conversion, landfill gas upgrading & utilization to electricity and renewable natural gas) by providing adequate Investment Tax Credits.
- Encourage the construction of new waste recovery facilities such as mixed waste processing, composting, anaerobic digestion, biomass conversion, and energy from waste facilities preferably at existing landfill sites, therefore reducing wait times associated with new site Environmental Compliance Approvals.
- Canada is currently tapping only about 14 percent of its easily available biogas energy potential (data from Canadian Biogas Association, 2023). This means the sector has the opportunity to bring more than eight times more biogas energy online. A supportive regulatory and financial framework are therefore essential to fully utilize that available biogas potential.

***Recommendation:* Spearhead efforts across government and non-government organizations to modernize regulations, policy, by-laws, etc. to remove or minimize roadblocks and make them enablers. In addition, the government and related agencies should consider increasing resources in order to reduce the time and cost for implementing sustainable projects.**

- There are new promising technologies and solutions underway in Ontario and across Canada that can make significant headway to meeting our climate and environmental goals. There are also numerous existing technologies that can assist in meeting our goals. However, none of these are useful if we cannot get them implemented – and in the short time necessary.
- Many organizations, requirements, and levels of approvals are involved to get new and existing technologies adopted. It takes resources (financial and human) to assess, approve and implement changes in these areas, as well as an overarching vision. The Government of Canada could assist with that vision, an assessment framework and examples (in a ‘guidebook’), advisory support, and provide resources to achieve these necessary changes.
- It may be possible to make use of the regional energy resource tables that have been created to make practical improvements to the adoption and implementation processes for various energy types. By prioritizing the energy pathways (for the specific regions and with the federal vision) the tables could start to assess, develop solutions, and take the necessary steps to get the improvements implemented.