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Pisgryph

**Joanna Vince**  
Willms & Shier  
Environmental Lawyers

**Grant Walsom**  
XCG Consulting Ltd.

**Derek Webb**  
BIOREM Technologies

**Agnes Wiertzynski**  
QM Environmental

**ONEIA**  
192 Spadina Avenue  
Suite 300  
Toronto, ON M5T 2C2

Executive Director  
**Michelle Noble**

Operations Manager  
**Caitlin Young**

Tel: (416) 531-7884  
info@oneia.ca  
[www.oneia.ca](http://www.oneia.ca)

February 10, 2023

The Honourable Chrystia Freeland  
Department of Finance Canada  
90 Elgin Street  
Ottawa, Ontario K1A 0G5  
Re: 2023 Federal Budget

Submitted via email to: [chrystia.freeland@parl.gc.ca](mailto:chrystia.freeland@parl.gc.ca) and to [ccus-cusc@fin.gc.ca](mailto:ccus-cusc@fin.gc.ca)

**RE: Federal Budget 2023**

Dear Minister Freeland,

Please accept this submission from the Ontario Environment Industry Association (ONEIA) for consideration in development of the Federal 2023 budget.

For more than 30 years, ONEIA has represented the interests of Ontario's environment and cleantech sector, an important and growing part of the Ontario and Canadian economy. We are a non-partisan industry association whose members actively engage with government to encourage policies and regulations that are consistent with our principles of sound science, sound environment and a sound economy.

Our submission was developed through extensive consultation with our member companies whose primary business is the production, provision or development of environmental products, services, or technologies.

Yours truly,



Michelle Noble,  
Executive Director, ONEIA

c.c.

The Hon. Steven Guilbeault, Minister of Environment and Climate Change  
The Hon. Jonathan Wilkinson, Minister of Natural Resources  
The Hon. Seamus O'Regan, Minister of Labour

## **Ontario Environment Industry Association (ONEIA) 2023 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 2023 Federal Budget.**

**Recommendation 1:** Make Canada and Ontario attractive for cleantech and environment sector investment.

**Recommendation 2:** Expand eligible use of captured carbon in draft legislation.

**Recommendation 3:** 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 competitive cleantech sector to compete in a net-zero economy.

**Recommendation 4:** Work with the environment and cleantech sector to identify and address current and projected skills gaps and to help our sector get ahead of growing labour market challenges.

**Recommendation 5:** Decarbonizing electricity grids will require significant investments in capital, materials and labour including support for the development and commercialization of new technologies.

**Recommendation 6:** Invest in infrastructure to enable smart sustainable growth while building a resilient future.

**Recommendation 7:** Collaborate on a practical approach to mitigate environmental and human health impacts of PFAS.

**Recommendation 8:** Spearhead efforts across government and non-government organizations to modernize regulations, policy, by-laws, etc. to remove or minimize roadblocks and make them enablers.

**Recommendation 9:** Fund a brownfield grant program to assist in the assessment, clean up and redevelopment of brownfield sites.

## 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 Industry 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. These companies apply innovation and science to environmental challenges and create solutions that generate good jobs, world-beating exports and a better environment.
- **We are an Industry Focused on Solutions:** ONEIA members are in the business of providing environmental solutions. These entrepreneurs and businesses purify our water, repurpose what we used to call waste, reduce pollution and carbon emissions, improve climate resilience, remediate brownfields, provide environmental consulting and work in a range of other fields. Our members are in the solution business.
- **Good Environmental Stewardship is a Business:** Providing environmental solutions is a great and growing business. There are more than 3,000 companies in Ontario's environment and cleantech sector and they contribute more than \$25 billion to Ontario's economy including \$5.8 billion in exports. This growing sector is a vital part of Ontario's and Canada's environmental and economic fabric.
- **As our Diverse Industry Grows, it Generates Jobs:** Already more than 226,000 people are employed in our sector in a wide range of roles from environmental

engineers and scientists to material handlers, equipment handlers and skilled trades people, and our sector is growing. By 2029, our industry is expected to grow by at least nine percent.

- **Realising that Growth Requires Smart Regulation:** Our sector needs practical government policies and regulations to grow. We do not believe in regulation for the sake of regulation, we believe in smart and practical measures that protect the environment and the public AND provide the opportunity for businesses to develop solutions for the Ontario, Canadian and world market.

## Recommendations

**Recommendation 1:** Make Canada and Ontario attractive for cleantech and environment sector investment.

- We need to work together 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 especially intense due to the recent passing of the Inflation Reduction Act (IRA) in the US. The Act contains a suite of climate change investments that is anticipated to pull investment away from Canada.
- The Canadian government recently announced a tax credit program to level the playing field, but needs to do more to maintain and attract private sector investment.
- There are a number of specific areas where we can work together to design and support initiatives for clean energy and conservation that attract clean tech investment and jobs (keeping domestic and attracting international firms), and that will lower energy costs for consumers – now (at a time of high inflation and energy prices) and in the future.
- More needs to be done to reduce the red tape processes, and the related time and cost, required to develop and construct the necessary critical infrastructure in the waste management and waste water treatment sectors.

**Recommendation 2:** 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. One example is the conversion of carbon to fuels such as methane, methanol, gasoline, diesel, and sustainable aviation fuel (SAF); these clean fuels would offset the use of fossil fuels, thereby creating a net reduction in GHG emissions. Other innovative utilization pathways are also being explored, including 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.
- 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.
- 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 3:** 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 competitive cleantech sector to compete in a net-zero economy.

- The IRA’s provisions are generous for clean alternative energy (such as Renewable Natural Gas, Green Hydrogen, Green Propane) in several ways.
  - i. First, producers of clean alternative energy made from renewable electricity qualify for both tax credits.
  - ii. In addition, the fuel tax credit is “direct pay” for the first five years of operation, meaning that clean fuel producers can claim a tax refund equal in value to their tax credits for five years.
  - iii. Furthermore, both renewable electricity and clean hydrogen producers can benefit from tax “transferability”—producers with no tax burden can sell their tax credits to a buyer who owes taxes.
- In the Fall Economic Statement, the Canadian Government proposed a significant tax credit for clean fuel production in Canada of at least 40% if all conditions are met including labour conditions (local wages, training & apprenticeship opportunities). While it is good to see Canada taking action to promote clean fuel production, the Investment Tax Credits (ITC) not competitive with the U.S. Inflation Reduction Act in areas that are critical to decarbonizing Canada’s economy. Canada should match the clean energy tax incentives that the US created as part of the IRA. While the proposed ITC is a good step, it still leaves Canada behind the United States for incentives, which will result in a bias in investment and project activity towards the U.S. jeopardizing Canada’s strategy for getting to net zero.
- We look forward to participating in the industry consultation that the government will launch on how best to implement measures for clean fuel producers, based on the lifecycle carbon intensity of the alternative.
- We also look forward to other government consultations on clean energies and transition to consider impacts and improve Canadian/Ontario competitiveness for solar and other clean energies considering the IRA and its Department of Energy/Loan Program Office provisions.

**Recommendation 4:** Work with the environment and cleantech sector to identify and address current and projected skills gaps and to help our sector get ahead of growing labour market challenges.

- Finding talented skilled workers for the new jobs in the green economy, is a big and worsening challenge in our sector. Given that this is a high growth industry

and that we are anticipating a significant portion of our workforce to retire in the next few years, our challenge has the potential to become a crisis.

- Let's work together to ensure that doesn't happen by undertaking research to identify the current and projected skills gap so that we can develop a plan to ensure we have the workers we need.
- We look forward to participating in the consultation on the new legislation announced by the federal government coming this year to help workers in carbon-intensive industries move into jobs such as building retrofitting, carbon capture, hydrogen, and the mining and processing of critical minerals used in green technology.

**Recommendation 5:** Decarbonizing electricity grids will require significant investments in capital, materials and labour 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, including low-carbon fuels and small modular reactors (SMRs), are still in development and that it will be important for Ontario and Canada to continue to invest in these, and other, innovations.
- 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 6:** Invest in infrastructure and buildings to enable smart sustainable growth while building a resilient future.

- As we build more needed housing, we need to work together 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 in addition to retrofitting existing homes. 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 can not 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. 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 derisk these technologies for municipalities to source for their environmental infrastructure.

**Recommendation 7:** Collaborate on a practical approach to mitigate environmental and human health impacts of PFAS.

- PFAS are “forever chemicals,” a family of thousands of synthetic chemicals that are extremely persistent in the environment and that are being found to have significant health impacts.
- Many international jurisdictions have established regulation and policy associated with the release, monitoring, and management of PFAS in the environment; however, such regulation and formal policy remains absent in Canada.
- Guidance on the handling and disposal of PFAS stock and PFAS-impacted materials is lacking, despite the international recognition that the use of PFAS-containing materials needs to be reduced and restricted. Additionally, funding to support the phase-out and destruction of PFAS stock is not being provided.
- Government research efforts have been targeted to understanding the extent of PFAS impacts in the environment in multiple media, as well as the potential for adverse effects; however, it is unclear if the data collection is sufficiently robust to support sound policy decisions.
- Let's work together to facilitate the development of sound and science-based policy for the management of PFAS at contaminated sites, as a waste, and within the organics/food stream. We can bring government innovative solutions that will support the development and implementation of policy that is economically sound, sustainable, and protective of human health and the environment.

**Recommendation 8:** Spearhead efforts across government and non-government organizations to modernize regulations, policy, by-laws, etc. to remove or minimize roadblocks and make them enablers.



- 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.

**Recommendation 9:** Fund a brownfield grant program to assist in the assessment, clean up and redevelopment of brownfield sites.

- 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 on-going tax revenues.
- Several provinces, municipalities and cities currently provide grant programs to assist incentivize 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.