

2022 Provincial Policy Recommendations



Ontario Clean Technology
Industry Association

ABOUT OCTIA

OCTIA was founded in 2019 to become **the voice of the Ontario cleantech sector**, serving a broad range of companies and industries as well as different levels of government.

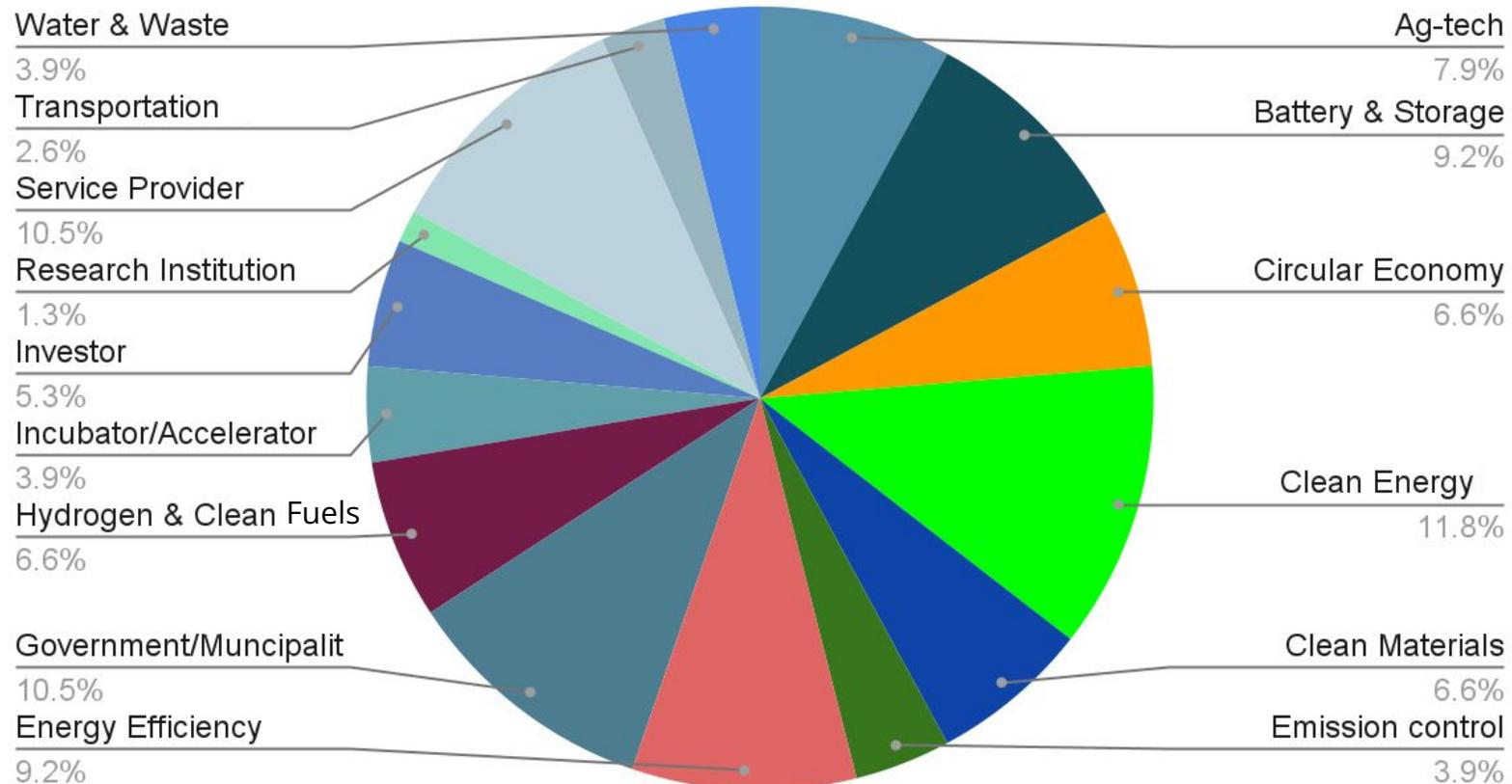
Through its **advocacy and education** work, by **connecting people, organizations, solutions** and **showcasing clean, innovative technologies**, OCTIA is advancing the cleantech sector and shaping a **prosperous economy** that is good for the people and the planet.

WHAT IS CLEANTECH?

Clean technology, or cleantech, includes **novel services, processes, products, and activities that improve economic performance and significantly reduce environmental impact**. This includes, but is not limited to, better solutions for energy use, water management, food production, and transportation.

~ 80 MEMBERS: STARTUPS, SMES & BIG CORPORATES

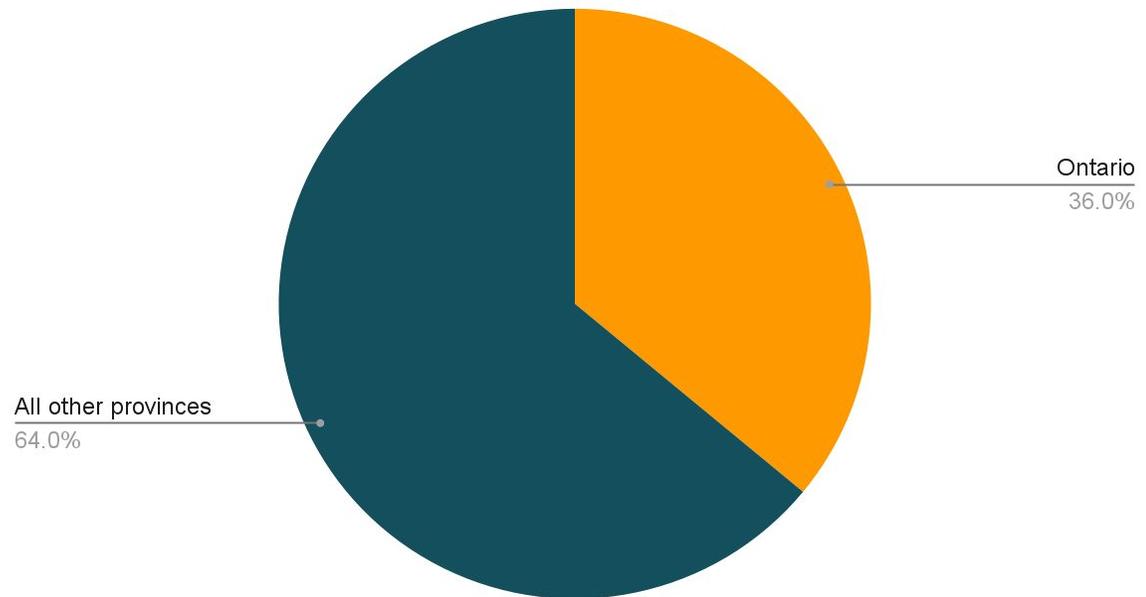
OCTIA Membership Distribution



THE ONTARIO CLEANTECH SECTOR

- Ontario has 117,000 + employees in the cleantech and environment sector
- Cleantech jobs are high paying jobs with an average compensation of \$96k

Total Employment, ECT



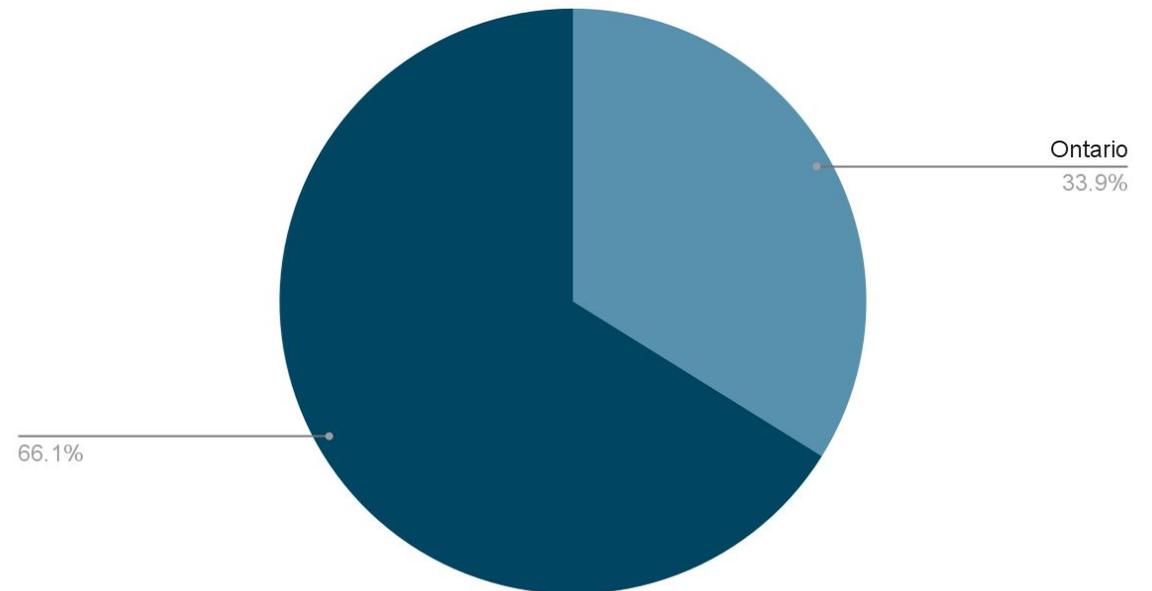
Source: Statistics Canada. Table 36-10-0632-01 Environmental and Clean Technology Products Economic Account
<https://doi.org/10.25318/3610063201-eng>

Source: The Daily — Environmental and Clean Technology Products Economic Account, 2020 (statcan.gc.ca)

THE ONTARIO CLEANTECH SECTOR

- In 2020, Ontario accounted for over one-third (34% or \$23.1B) of Canada's total GDP (\$67.4 B) value of ECT products
- ECT products contributed \$25.4B to Ontario's economy in 2019

TOTAL ECT GDP



ONTARIO IS DRIVING CLEANTECH EXPORTS

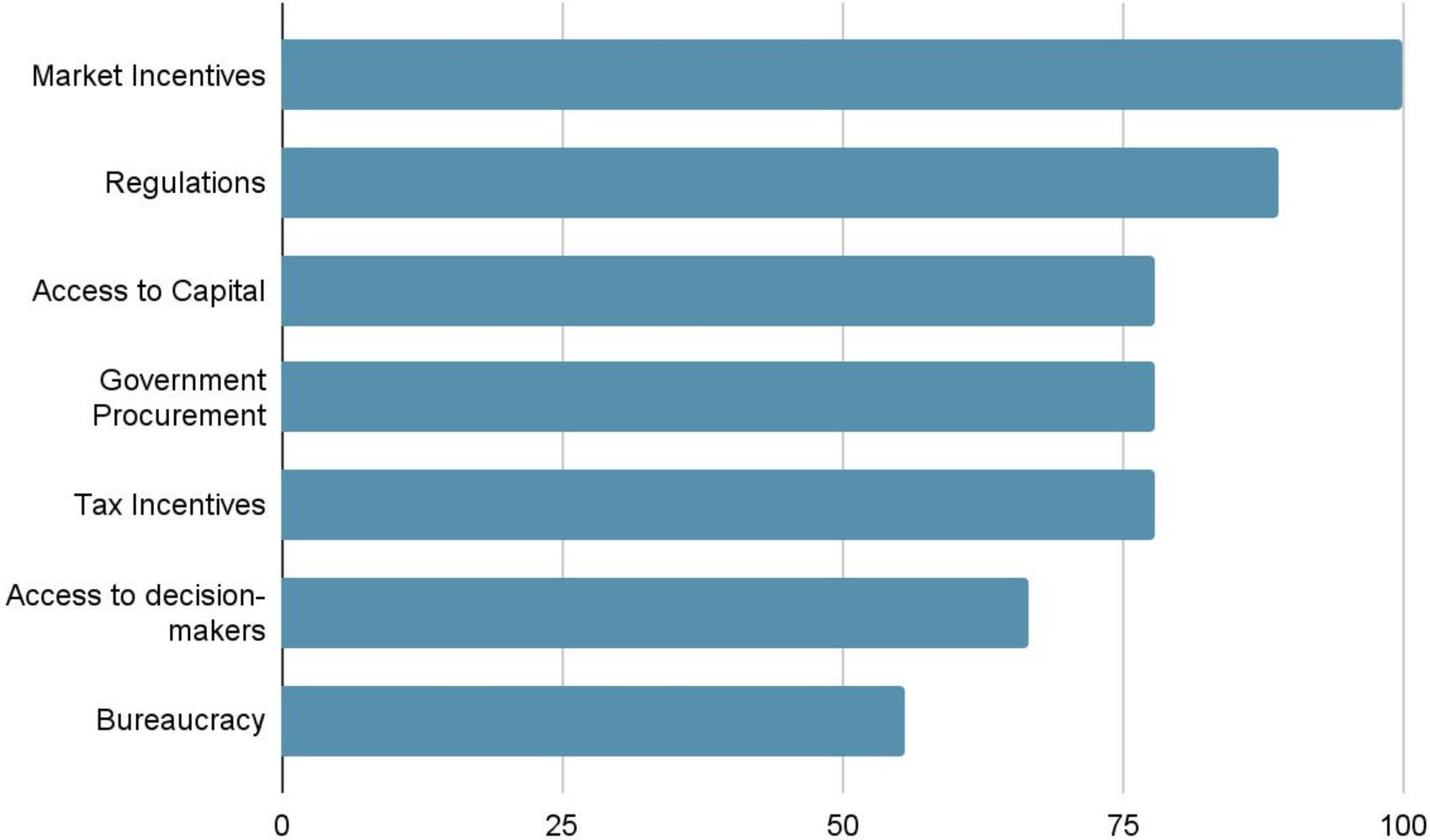
- Export revenue of Ontario cleantech sector: \$6.6 B
- Ontario exported 51% of Canada's cleantech and environmental exports
- The majority of Ontario's ECT exports were cleantech products (92%)



TOP EXPORT DESTINATIONS

- United States
- UK
- EU
- Japan
- China
- India

TOP THEMES AND CONSIDERATIONS



TOP RECOMMENDATIONS

- **Implement a provincial Loan Guarantee Program**
- **Include Life Cycle Assessments (LCA) in public procurement**
- **Mandate Zero Emission Vehicle (ZEV) production and offer consumer purchase rebates**
- **Raise the building code/standard for new developments**
- **Improve and expand PACE programs**

MARKET INCENTIVES I

- Mandate ZEV production quota and offer ZEV purchase incentives (eg. BC, QC, 10 US states, China, several EU countries)
- Mandate and incentivise the adoption of hydrogen powered class 8 trucks
- Raise the building code/standard for new developments (eg. BC Energy Step Program - sets performance targets, set to become mandatory)
- Provide rebates for energy-efficiency upgrades (ie. heat pumps) and high-performance new build

MARKET INCENTIVES II

- Fast track approvals for new developments that achieve a higher level of sustainable building code/standard
- Improve and expand PACE programs in consultation with municipalities and other stakeholders
- Incent non-revenue grade submetering with embedded analytics
- Require critical load submetering in all facilities with non-revenue grade submetering.

REGULATIONS

- Remove municipal bid bond requirements
- Align provincial Hydrogen and Renewable Natural Gas (RNG) regulations
- Incent and compensate the injection of Hydrogen into the Natural Gas system
- Implement streamlined high performance sustainable building standards for all levels of government

ACCESS TO CAPITAL / TAX INCENTIVES I

- Provide a provincial Loan Guarantee Program
- Provide a provincial Investment Tax Credit (e.g. Angel Investment Tax Credit - see BC, SK, 24 US States)
- Top up the Federal Capital Gains Deduction by providing a Small Business Venture Tax Credit of up to \$120,000 (e.g. BC)
- Provide a “Patent Box Tax Credit” (e.g. SK) to incentivize the deployment of corporate venture capital for cleantech innovations

ACCESS TO CAPITAL / TAX INCENTIVES II

- Match Ontario based venture capital fund investments in cleantech
- Provide a provincial refundable clean technology R&D tax credit in addition to, or augmenting, the Ontario R&D Tax Credit (ORDTC) and/or Ontario Innovation Tax Credit (OITC) of a minimum of 5%

PUBLIC PROCUREMENT

- Mandate more ambitious public procurement sustainability targets at all levels of government
- Include Life Cycle Assessment (LCA) as part of the public procurement process
- Make public procurement RFPs output based and less prescriptive
- Fund pilots for decentralized energy projects / combined power plants (E.g. German Kombikraft plants)

BUREAUCRACY / ACCESS TO DECISION-MAKERS

- Create a government agency that acts as a one-stop shop for all issues and guarantees prompt service (e.g. FranceConnect <https://franceconnect.gouv.fr/> for public services (the service for businesses is currently being piloted))

ADVANCING THE HYDROGEN ADOPTION

- Implement a mix of investment, market incentives, regulatory changes and public procurement (see previous slides)
- Install 3-4 hydrogen refuelling stations along the 401
- Incorporate an electrolyser into 2 of these refuelling stations to produce clean hydrogen
- Launch a hydrogen public awareness campaign

REFERENCES

- Zero Emission Vehicle Mandates: <https://cleanenergycanada.org/media-brief-what-is-a-zero-emission-vehicle-standard-and-why-does-canada-need-one/>
- Building Retrofits:
 - BC Energy Step Program which will become mandatory <https://energystepcode.ca/>
 - Clean BC Energy Retrofit and Sustainable New Construction Programs <https://news.gov.bc.ca/releases/2020EMLI0068-002140>
 - Property Assessed Clean Energy (PACE): PACE-enabling legislation has been passed in 36 states, with 49 active PACE programs and 10 in development. In Canada, only Alberta, Ontario, and Nova Scotia have explicit PACE-enabling legislation, but programs have not reached the scale or sophistication seen in the U.S. <https://www.pembina.org/pub/pace-financing-canada>

REFERENCES

- Tax Incentives:
 - Angel Investor tax credit: used to mobilize early stage investment in BC and Saskatchewan, as well as in over 24 US states including New York, Oklahoma and Georgia. Based on a review of over 46 mechanisms in 13 countries focused on mobilizing domestic venture capital, the UK's Seed Enterprise Investment Scheme (SEIS) is identified as the most-effective program in the OECD.
<https://www.startups.com/library/expert-advice/angel-investor-tax-credits>
 - Tax Incentives: also see Smart Prosperity's brief and related work at <https://institute.smartprosperity.ca/publications/taking-tax-system-to-task>
- Decentralized energy systems/ Kombikraft:
<https://www.unendlich-viel-energie.de/media-library/videos/the-combined-power-plant-provides-stable-power-from-renewable-energies>
- OCTIA's and Hydrogen Business Council joint proposal for Ontario's Hydrogen Transition
https://drive.google.com/file/d/1RZ_PCnAu0LwwqyTmZjMfRV-pRb0uVRuP/view?usp=sharing

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