

# INSIGHTS BRIEFING

## DRAFT RECOMMENDATIONS FOR RECOVERY OF COVID-19 PANDEMIC ON CLEANTECH

4th Edition

Prepared for Canadian Provincial and Federal Governments

April 24, 2020

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### Recommendations Leads



### Partners

Foresight



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## DRAFT RECOMMENDATIONS FOR COVID-19 RECOVERY FOR CLEANTECH

During April 2020, the Canada Cleantech Alliance Board of Directors connected with various stakeholders to collate and prioritise actionable recovery recommendations from the network. Results are below.

Recommendations were ranked using an allocation of 20 points per Director. The 22 other member associations in the network were then asked to rank the top 5 recommendations, with the following result:

TOP 5 RECOMMENDATIONS	MEMBER RANKING
<b>De-risk cleantech investment</b> by providing tax-deductions to corporate, institutional and individual investors. Use mechanisms such as flow-through shares, angel investor tax credits, or capital gains exemptions.	<b>1</b>
<b>Implement green public procurement</b> programs through integration of life-cycle assessment methodologies that fast-track piloting and deployment of cleantech and SME technologies. % earmark to SMEs modelled on US SBIR.	<b>2</b>
<b>Expand the 100% accelerated capital cost allowance</b> beyond clean energy generation and energy conservation equipment to all cleantech investments.	<b>3</b>
Provide a <b>federal loan guarantees program</b> for cleantech projects tied to deploying novel Canadian innovation.	<b>4</b>
<b>Update and simplify existing granting programs</b> including SRED, IRAP and SDTC. Expand programs to include marketing expenses. Centralize programs under a single platform or business/start-up ID "i.e. a Green NEXUS".	<b>5</b>
ADDITIONAL RECOMMENDATIONS	MEMBER RANKING
<b>Support early stage entrepreneurs</b> by setting up a federal SAFE note equity investment program and implement through existing channels, including BDC and/or EDC.	<b>6</b>
<b>Offer 100% federal match to provinces</b> for cleantech and low carbon stimulus project investment (eg. CleanBC Innovation Fund, Alberta Technology Innovation and Emissions Reduction Fund, Quebec Plan d'action pour la croissance et les technologies propres 2018-2023, etc.).	<b>7</b>
<b>Expand Federal ISC Challenge program</b> to provide matching funding to private sector coalitions investing in cleantech infrastructure.	<b>8</b>
<b>Create a recovery granting program</b> that offers grants to milestone, training and rehiring support for fast-recovering companies.	<b>9</b>
<b>Ensure GHG target commitments</b> made for all industry recovery packages.	<b>10</b>
<b>Replicate the Department of National Defence (DND) Industrial and Technology Benefits (ITB) program</b> for energy transition investment.	<b>11</b>
<b>Launch Green Growth Hub led review</b> of federal and provincial regulatory barriers to clean growth.	<b>12</b>

# IMPACT OF COVID-19 PANDEMIC ON CLEANTECH COMPANIES

April 24, 2020

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## EXECUTIVE SUMMARY

The public health emergency caused by the Covid-19 pandemic is causing a liquidity crisis in the Canadian clean technology sector. This is being experienced as a loss of deal-flow, access to private sector debt and availability of equity capital. This is translating into layoff and shutdowns for cleantech companies from the start-up phase to commercial and scale-up stages across the country. This leads to a significant short-term economic risk that will have long-lasting effects into the future of Canada's cleantech sector, which leading into COVID-19 was becoming a tier-1 industry for our country.

This report is the 3rd Insights Briefing for federal and provincial government agencies that require robust information and feedback to best navigate short-term emergency support and long-term recovery packages for the sector. This 3rd briefing is based on a 2nd of 2 surveys which adjusted questions to collect quantitative data on key metrics around jobs, investment, debt and revenue.

## GENERAL STATISTICS

- Statistics Canada estimates that 282,045 jobs were attributable to environmental and clean technology activity in 2017 (1.6% of jobs in Canada).
- As part of Canada's Economic Strategy Tables Innovation, Science and Economic Development (ISED) Canada stated that its goal is to make cleantech one of Canada's top five exporting industries with a targeted value of \$20 billion annually.
- A collapse in Canadian cleantech would put Canada's climate commitments and prospects for an accelerated energy transition at risk. In nominal terms, the value of environmental and clean technology activities totalled \$61.9 billion in 2017, and accounted for 3.1% of Canadian GDP.
- The global market for clean technology is expected to reach \$2.5 trillion by 2025.

## KEY METRIC SNAPSHOT

Below is a summary of high-level impacts on four key metrics for the sector:

- 50%+ projected layoffs for the sector
- Pre-COVID revenue projected + \$1 billion
- 57%+ projected decline in 2020 revenue (\$450 million adjustment)
- Pre-COVID equity capital planned was over \$2 billion
- 22%+ projected decline in 2020 equity capital plan (down to \$1.55 billion)
- Pre-COVID debt plan estimated at \$432 million
- 24%+ decline in 2020 debt capital plan
- \$294 million in lost equity details since March 15, 2020

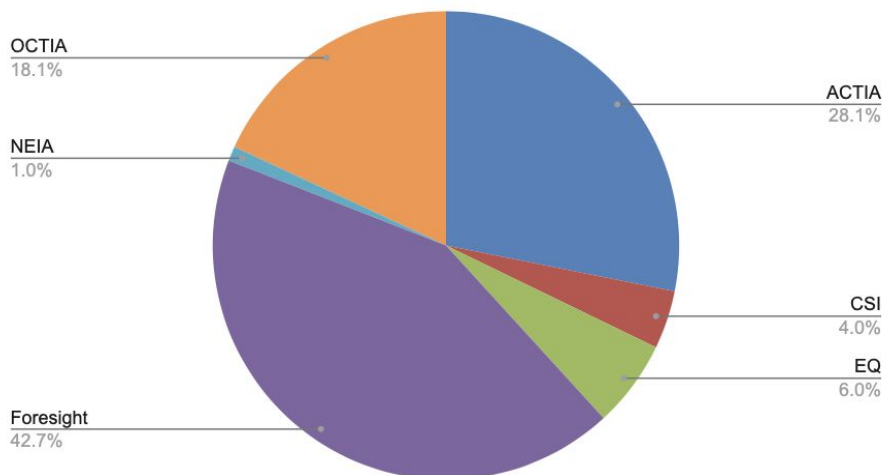
## SURVEY FINDINGS

Below is a summary of key findings from survey 2 responses:

### DEMOGRAPHICS

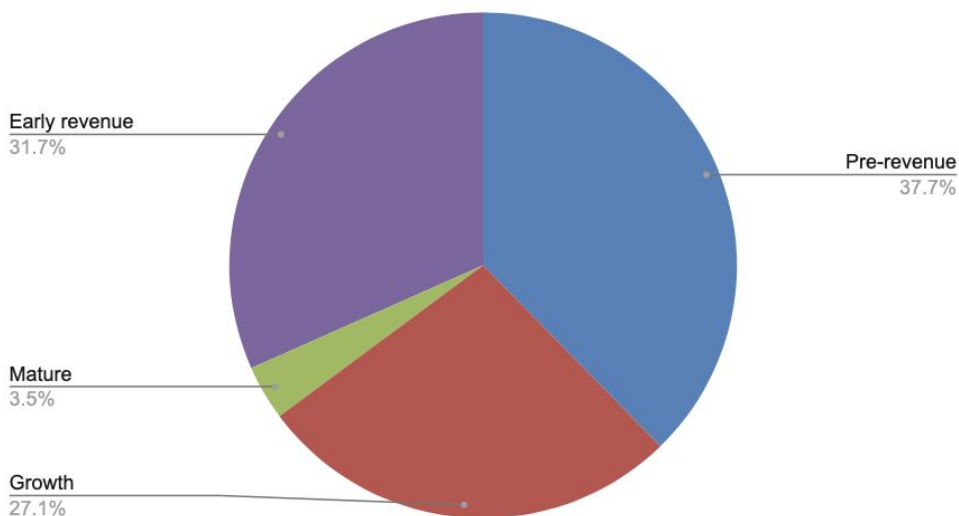
Over 200 cleantech companies participated in the survey:

#### Country Representation



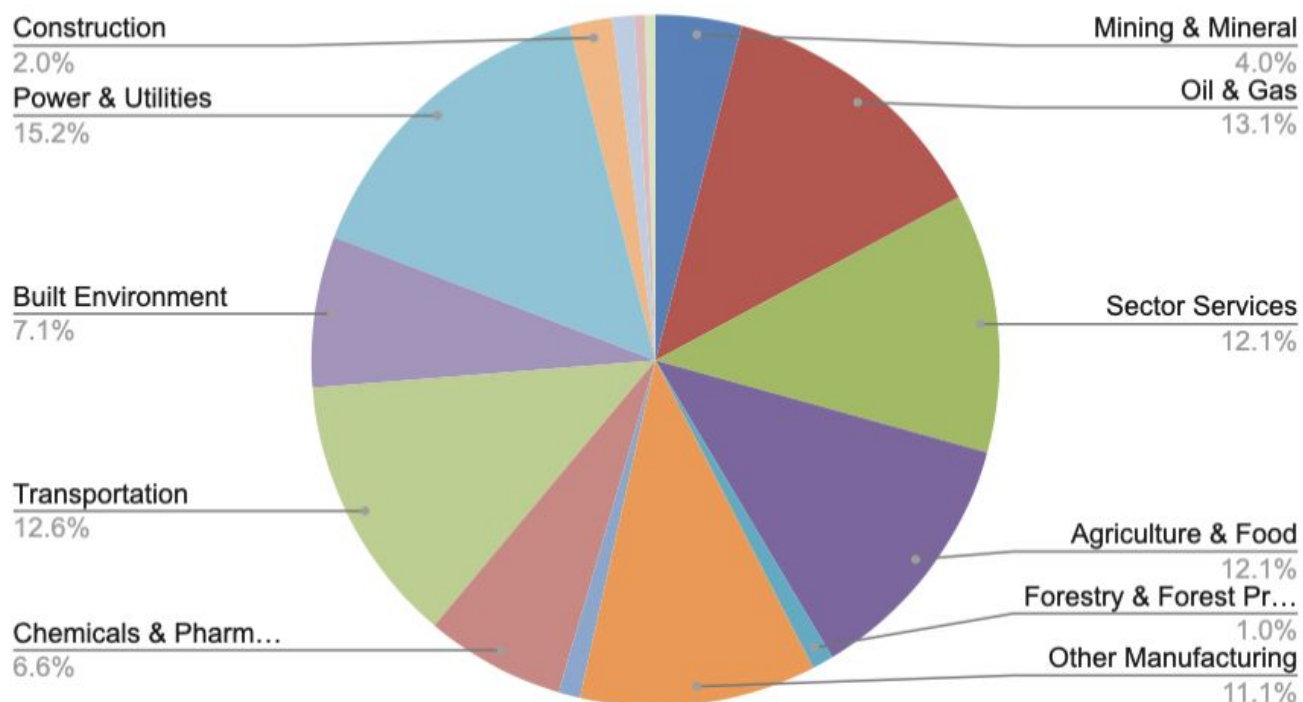
Of these companies, just under 40% identified as pre-revenue and the rest as early revenue, growth and mature. This suggests that the survey respondents range across maturity and technology readiness levels (TRLs). **This is also a strong indicator that Canada's cleantech sector is maturing.**

#### Count of Company Growth Stage



Responses were representative of prominent cleantech industries and markets:

### Count of Primary Target Vertical Market (Industry Sector)



### DETAILED RESULTS

Below are breakdowns of response details for each section:

#### RESPONSE COUNTS

REGION	PRE-COVID
CANADA	201
BC	87
AB	56
ON	44
QC	12
NS	2

## JOB COUNTS

REGION	PRE-COVID	POST-COVID	PERCENTAGE
CANADA	3,517	1,822	51%
BC	1,783	1,172	65%
AB	582	277	47%
ON	945	323	34%
QC	138	50	34%
NS	68	-	-

- Pre-COVID FTE Counts
  - Median = 8 FTE
  - Average = 18 FTE
- Notes
  - Risk of not being able to recover same team members increases need for delayed onboarding and training of new staff (slows the ramp up and recovery process for the sector)

## REVENUE

REGION	PRE-COVID	POST-COVID	PERCENTAGE
CANADA	\$1.03 billion	\$442 million	43%
BC	\$378 million	\$152 million	40%
AB	\$219 million	\$58 million	27%
ON	\$400 million	\$216 million	53%
QC	\$15 million	\$7.3 million	50%
NS	\$11 million	\$6 million	45%

- Pre-COVID
  - Median = \$2,000,000 Revenue Projected
  - Average = \$6,322,000 Revenue Projected
- Post-COVID
  - Median = \$832,000 Revenue Projected
  - Average = \$3,070,000 Revenue Projected
- Notes
  - Projected loss of over 55% in revenue projections 1 month after pandemic
  - Impact greater in BC and Alberta

## EQUITY FINANCING

REGION	PRE-COVID	POST-COVID	PERCENTAGE
CANADA	\$2.05 billion	\$1.6 billion	78%
<i>CANADA (-1 submission)</i>	<i>\$1.05 billion</i>	<i>\$600 million</i>	<i>60%</i>

- Pre-COVID
  - Median = \$2,000,000 Equity Raise Projected
  - Average = \$11,474,000 Equity Raise Projected
- *Post-COVID*
  - *Median = \$700,000 Equity Raise Projected*
  - *Average = \$10,000,000 Equity Raise Projected*
- *Pre-COVID (-1 submission)*
  - *Median = \$1,050,000 Equity Raise Projected*
  - *Average = \$5,920,000 Equity Raise Projected*
- *Post-COVID (-1 submission)*
  - *Median = \$600,000 Equity Raise Projected*
  - *Average = \$3,804,000 Equity Raise Projected*
- \$1.6 billion of equity raise pre-COVID reported by 18 companies
- (-1 submission) for 1 companies reporting \$1 billion equity raise
- Regional specific data available for discussion

## DEBT FINANCING

REGION	PRE-COVID	POST-COVID	PERCENTAGE
CANADA	\$432 million	\$328 million	75%

- Pre-COVID
  - Median = \$200,000 Debt Financing Projected
  - Average = \$2,800,000 Debt Financing Projected
- Post-COVID
  - Median = \$200,000 Debt Financing Projected
  - Average = \$2,000,000 Debt Financing Projected
- BC only region reporting 40%+ increase in debt financing post-COVID
- Regional specific data available for discussion

## POSITIVE FEEDBACK

- Thank you for updates to wage subsidy program
- Many comments requested programs including recent IRAP program announced

## SUBMISSION COMMENTARY

- Request for support on how to navigate and apply for support programs
- Feedback that low-interest debt facilities would be welcomed
- Comment on critical need to accelerate SRED payments
- Welcome grant opportunities to cover cash flow gaps

## RECOVERY COMMENTARY

- Programs need to consider longer term impacts of pandemic
  - Erosion of sales pipeline
  - Delayed technology and product development
  - Loss of key employees
- New financial instruments such as Flow Through Shares for cleantech
- Grant opportunities for companies can relieve economic impacts
- Consider getting universities and test facilities back up and running quickly
- Set recovery parameters for Canadian industries with GHG and technology adoption requirements
- Idea to have BDC convert debt into equity
- With some reports of billions of recovery for other sectors, hope for same for cleantech

## Next Steps

The cleantech industry is rapidly growing across Canada. There are hundreds of promising, innovative companies that are generating jobs, revenue, and attracting overseas investment. They all share the vision of a green future economy. With COVID-19 many companies are experiencing the devastating impacts from cancellations of major industry events, job losses, and withdrawal of deal flow and financing opportunities.

This is the [3rd edition](#) of a report showcasing the scale of challenges being faced by cleantech SMEs. Companies remain concerned about sales and cash flow, with additional concerns around losing key team members and unpredictability around recovery efforts. There is also industry wide feedback that sustainability and resilience should be prioritized for all recovery packages.

It is critical to continue to support and stabilize this sector, and not lose the opportunities these companies can bring in helping Canada transition to a sustainable economy in the long-term. In a separate report, partners outlined below will summarize some recommendations for post-COVID recovery of the sector.

## CONTACTS

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