



# FORESIGHT<sup>50</sup>

Canada's Most Investable Cleantech Ventures

2021 Pitchbook

# Introducing the Foresight 50

It is with great pleasure that I introduce the inaugural Foresight 50, recognizing Canada's most investable cleantech ventures of 2021. From across the country, spanning a range of sectors and solutions, these companies are developing climate innovations that will lead us on the path to net zero.

As Canada's cleantech accelerator, Foresight has worked with more than 750 cleantech ventures. We know that Canada punches above our weight when it comes to climate technologies and that many of these ventures are connecting to global markets and large industries. But these stories are not widely known.

With Foresight 50, we are shedding traditional Canadian modesty to shine a light on excellence and connect our innovators with investors, customers, and partners. The 50 ventures selected represent a collective that accelerated our path to meeting ambitious 2030 targets. We look forward to seeing this list evolve in the years to come.

On behalf of Foresight, I extend sincere thanks to our friends and partners who nominated companies and helped with judging. We value your input and expertise. Thank you to our partners - Clean50 and Gowling WLG - for your support.

Most of all, congratulations to the 2021 Foresight 50. You inspire us to continue working to protect our precious planet, and energize our economy. We can't wait to watch your businesses grow.

**Jeanette Jackson**

CEO, Foresight Canada

## ABOUT THE FORESIGHT 50

Foresight has selected the Foresight 50 after an extensive consultation process with partners across the country. An open call for nominations took place August 26 to October 6, attracting close to 250 nominations. After an expert review of nominated ventures by a panel of our Executives in Residence and mentors, 80 companies were chosen to proceed to judging.

Our 16 judges, representing investors and cleantech community partners, evaluated detailed profiles of the companies on criteria including investability, potential environmental and employment impact, and probability of success.

The Foresight 50 represent hope for our future. These ventures will be of interest to impact investors, funding organizations, potential industry customers, and talented Canadians seeking meaningful employment. We encourage you to connect with Foresight 50 companies to explore investment and partnership opportunities.

# Thank You to Our Partners

Gowling WLG is thrilled to be supporting Foresight 50, and we're even more pleased to extend heartfelt congratulations to the winners.

In Canada, the private sector is and will remain critical to solving looming environmental problems. We know just how important IP protection is to attracting and retaining investments so this work can continue unencumbered. We're honoured to already be assisting some of the world's premier cleantech players, many of whom are pushing bold new innovations from right here in our own backyard. These businesses are working on everything from developing vertical farms to advancing wastewater treatment, preventing pipeline leaks, implementing new solar energy technologies, and achieving unprecedented global emissions targets. Without a doubt, they are striving to create a better future for all of us.

When it comes to increasing profitability and protecting your clean technology, having the right IP counsel on hand can make all the difference. With IP professionals located across Canada and internationally, our firm has the experience and business acumen necessary for safeguarding your cleantech innovation, both at home and abroad.

Interested in learning more? Contact any member of our team to discuss how Gowling WLG can assist with your cleantech IP needs at every stage of the business lifecycle, including research and development, growth and scale-up, market expansion, and resource maturity.

Congratulations again to each and every one of this year's winners. Keep up the good work.

## **Roch Ripley**

Partner, Head of Vancouver IP Department  
Gowling WLG

As the CEO of Canada's first executive search firm to be focused exclusively on the low-carbon economy – and the founder of the Canada's Clean50 Awards, an eleven-year-old program that identifies, recognizes, and, most critically, connects leaders from every segment of the low-carbon economy, with the goal of accelerating cross sectoral collaboration and the adoption of clean tech and more sustainable business practices – few people are more keenly interested in the future of Canadian clean tech than I am.

It's often been said that "when you're in a hole, you should stop digging". It seems ever-so-simple – yet thus far, humanity has chosen to ignore that message.

As we are clobbered, day after day, with the long-forecast and long-ignored signs of a steadily growing climate emergency, it's increasingly clear that only clean tech can save us – and then, only if we enable it in time.

The Canada's Clean50 Awards have helped me find some hope. We've been able to identify and recognize incredibly smart people doing, first, the R&D and then the manufacturing, of transformational solutions that we believe have the capacity and potential impact to actually change the trajectory of climate change.

But that, of course, pre-supposes they can raise the money to build these solutions, and ensure their wide-spread adoption.

So I was delighted to see the work Foresight has done and is doing to accelerate the growth of these emerging organizations – both helping to grow their customer bases and to foster more investment. And equally delighted to serve as a "judge", and review some of these remarkable – and hopeful – solutions, and consider these organizations for their "investability". Their future – and that of their early investors – is bright!

## **Gavin Pitchford**

CEO, Delta Management Group Inc.



National Research  
Council Canada

Conseil national de  
recherches Canada

Foresight would also like to thank the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP) for providing funding support for its Cleantech Ventures program, part of which made this event possible.





# Judging Panel

The Foresight 50 were selected by a panel of industry experts and investors who reviewed detailed information provided by nominated ventures. Thank you to these judges for lending their time and expertise.



**Tara Amiri**

Partner, Gowling WLG



**Tom Boddez**

Senior Partner, Active  
Impact Investments



**Maxwell Brunette**

Partner, Employment &  
Labour Law Practice Group  
Leader (Calgary, Vancouver),  
Gowling WLG



**Cheri Corbett**

Managing Director, Cleantech  
Practice, BDC



**Olga Cruz**

Senior Associate, Good & Well



**Jonathan Kaida**

Ecosystems Lead, Sustainable  
Development Technology  
Canada (SDTC)



**Brian Lee**

Partner, Gowling WLG



**Darren Love**

Associate, Evok Innovations



**Nathaniel  
Lowbeer-Lewis**

VP, Canada of Spring  
Lane Capital



**Tim Lynn**

Co-Founder @ Startup TNT



**Elicia Maine**

PhD, W.J. VanDusen Professor of  
Innovation & Entrepreneurship  
and Academic Director,  
Invention to Innovation (i2i),  
Simon Fraser University



**Ehsan Mirdamadi**

CEO at NuBinary



**Simon Olivier**

Senior Partner Cycle Capital  
& Lead Bleulmpact Fund



**Gavin Pitchford**

Founder and CEO, Canada's  
Clean 50 and Delta  
Management Group



**Shirley Speakman**

Senior Associate, Cycle  
Capital Management



**Yifei Wang**

Lead Investment Analyst, Little  
Green Bamboo



**Andrew Wong**

Associate Director, TRIREC



**Kathryn Wortsman**

Managing Partner, Amplify  
Capital

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## Review Committee

The Foresight 50 were selected by a panel of industry experts. Our sincere thanks to Foresight Executives in Residence Sebastian Alamillo, Shannon Bard, James Chepyha, Jason Jones, Frank Leffelaar, Paul Paynter, Alexander Rink, Bruce Scatchard, and Floyd Simojns for their help reviewing the nominees and advising on the selection process.



# Meet the Foresight 50

[2S Water](#)

[Arolytics](#)

[Awesense](#)

[Bioform](#)

[Biome Renewables](#)

[BrainBox AI](#)

[Carbon Upcycling Technologies](#)

[CarboNet Technologies](#)

[CERT Systems Inc](#)

[Circular Rubber Technologies](#)

[Clean O2](#)

[Drishya AI Labs](#)

[e-Zinc](#)

[Eavor Technologies](#)

[Ekona Power Inc.](#)

[Evoco Limited](#)

[Flash Forest](#)

[FREDsense Technologies](#)

[Future Fields](#)

[G2V Optics](#)

[GHGSat](#)

[GRT \(Global Remediation Technology\)](#)

[Graphite Innovation & Technologies](#)

[HTEC](#)

[Hydra Energy](#)

[Ionomr Innovations Inc](#)

[Katal Energy Inc](#)

[Manifest Climate](#)

[Novamera Inc](#)

[Oneka Technologies](#)

[Open Ocean Robotics](#)

[Peak Power Inc](#)

[Planetary Hydrogen](#)

[Portable Electric](#)

[Properate](#)

[Proton Technologies](#)

[RecycleSmart](#)

[Rotoliptic Technologies](#)

[SensorUp Inc](#)

[Solaires Enterprises](#)

[Summit Nanotech](#)

[Svante](#)

[Swirltex Inc](#)

[SWTCH Energy](#)

[Technologies Ecofixe](#)

[Total Containment Inc](#)

[Verdi Expeditions](#)

[Westgen Technologies](#)

[ZILA Works](#)

[ZS2 Technologies](#)



# 2S Water Incorporated

Real time metal detection and quantification in water.

Water quality is highly problematic for many large, worldwide industries, including among others food and beverage production. High levels of metal contamination in water can cause increased costs (including machinery damage and increased fuel usage), environmental penalties and fines, lost revenue opportunities, and health issues. The only current alternative for most detection is laboratory services, a delayed, expensive and error prone process which provides only intermittent, nonintegrated data, even when located on site. 2S Water's proprietary technology provides an automated, real-time, cost-effective solution to these problems which is essential for process optimization, regulatory compliance and early issue identification. The company can detect up to 40 metals in water in real-time, providing the data directly to the operator's SCADA system where it is needed. The company's solution connects directly to the pipe so customers/operators can see the problem as it occurs and can take immediate action to prevent these problems.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

With strong market pull, 2S Water is poised to make a major impact on the water footprint of the mining industry. We have a strong team of previous entrepreneurs and technical experts. Our first pre-sold units are in the process of deployment to two mining majors and one oil and gas major now. From there, we have many additional industries that consume and output water. With our strong business skill set, and technically viable product, we have an impressive growth path ahead of us.

## COMPANY PROFILE

### Target Markets:

- Water
- Natural Resource Extraction (Mining, Forestry, Oil & Gas)

### Leadership:

[Anthea Sargeant, CEO](#)

**Number of full time employee equivalents:**  
3.5 - Edmonton, AB

### Acceleration Programs:

- Foresight
- Imagine H2O
- Creative Destruction Labs

### Awards and Recognition:

Clean50 2021 Research and Development

### Non-dilutive Grant Funding:

- IRAP
- SRED
- Alberta Innovates

**Grant Funding Raised (\$CAD):**  
\$570,000

**Seed, Angel and/or VC Equity Investment:**  
Yes

**Most Recent Equity Capital Raise completed:**  
Pre-seed (Up to \$500k)

**Dilutive Equity Funding Raised (\$CAD):**  
\$525,000

**Projected Revenues for 2021 (\$CAD):**  
\$150,000

**Planned Equity Raise:**  
Currently raising \$1M USD.

[Pitch Video](#)

[Website](#)

[in](#)

BOOK A MEETING





# Arolytics

## Data-Driven Emissions Management.

Energy companies are facing rapidly increasing pressure to cut methane emissions, which are 80x more powerful at warming than CO2. Oil and gas emissions management is a fundamental and urgent issue for the energy sector.

Arolytics is an emissions analytics and software company that leverages data to enable lower emissions energy production for the oil and gas sector. With proprietary algorithms and emissions modelling, Arolytics has developed a SaaS platform that optimizes how the oil and gas sector tracks, manages, and forecasts greenhouse gas emissions for compliance and ESG purposes, saving companies significantly on their emissions measurement costs through the design of intelligent emissions programs. Aligning with a company's regulatory and ESG objectives, Arolytics' software platform aggregates and manages emissions data from any sensor in a verifiable platform to provide reliability, scalability, and insights for strategic emission reductions. Arolytics has worked with some of North America's largest oil and gas companies on the design, management, and regulatory approval of the first-ever emissions programs that incorporate innovative sensor technologies.

The founding team met while working together in one of the largest academic emissions research groups in North America. Prior to forming Arolytics, the co-founders published over a dozen peer-reviewed publications on the topic of energy sector emissions and visited >10,000 oil and gas facilities to conduct research, collaborating closely with industry to understand their relevant pain points. The Arolytics team has more than doubled in the past year and are well positioned to tackle emissions reduction opportunities through scalable data solutions.

### **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Arolytics is sensor agnostic. Our solutions uniquely integrate data inputs from any measurement technology, source, and region, making emissions management from one central platform effective on a global scale, while equipping everyone from the field to the board with verifiable and traceable emissions insights. Our north star is to become a global leader for Scope 1 and 2 emission solutions, providing trusted insights and forecasting for optimized carbon emissions management. Because emissions regulations are generally new (2 years old in Canada for example), this is a rapidly emerging market and Arolytics is working to scale accordingly. The U.S. EPA plans to finalize federal-wide methane regulations in the coming months which will fuel further market pull. As a result, Arolytics is actively entering the U.S. market.

## **COMPANY PROFILE**

### **Target Markets:**

Natural Resource Extraction  
(Mining, Forestry, Oil & Gas)

### **Leadership:**

Liz O'Connell

### **Number of full time**

### **employee equivalents:**

13 - Calgary, AB

### **Acceleration Programs:**

- Creative Destruction Lab  
Rockies Energy Stream
- Houston-based RICE Alliance  
Clean Energy Accelerator
- Halifax-based Innovacorp  
Accelerate Cohort

### **Non-dilutive Grant Funding:**

- IRAP
- SDTC
- ACOA (NS Government)
- Innovacorp

### **Seed, Angel and/or**

### **VC Equity Investment:**

- Metiquity Ventures
- M-Tech Innovations
- Startup TNT
- Volta Investments

### **Most Recent Equity Capital**

### **Raise completed:**

Seed (\$500k-\$2M)

### **Dilutive Equity Funding**

### **Raised (\$CAD):**

\$710,000

### **Planned Equity Raise:**

We are planning to raise next financing round Q1 2022.

[Pitch Video](#)

[Website](#)



[BOOK A MEETING](#)





# Awesense

## The Digital Energy Platform

Awesense powers the Digital Energy Platform. We enable the decarbonization and decentralization of the energy system through data. Awesense works with utilities, large industrials and service providers to virtualize, analyze and understand their systems, and help them modernize and power the energy grid of tomorrow.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Awesense is building the most comprehensive and advanced partner ecosystem, compiled to enable and accelerate rapid decarbonization of the energy grid. This ecosystem is comprised of software, hardware and service provider vendors who are working with leading energy companies in their transition to a decentralized, green system.

### COMPANY PROFILE

**Target Markets:**

Grid/Power/Utilities

**Number of full time**

**employee equivalents:**

20 – Vancouver, BC

**Awards and Recognition:**

- Global Cleantech 100
- Deloitte Fast 50
- Gartner Vendor to Watch

**Non-dilutive Grant Funding:**

SRED

**Grant Funding Raised (\$CAD):**

\$400,000

**Projected Revenues for 2021 (\$CAD):**

\$2,000,000

**Planned Equity Raise:**

Not currently preparing for a round. Interested in strategic partnerships.

[Website](#)

BOOK A MEETING



# Bioform Technologies

Bioform is a forward thinking company focused on building products and solutions that advance a more sustainable future.

Over 300 million tons of plastic waste is generated each year and the demand is set to increase by an additional 300% before 2050. Recycling centres have tried to keep up with the evolving petroleum plastic market; however, they manage to successfully recycle only 4% of plastics globally.

Bioform has developed a seeds-to-solution manufacturing platform to replace single-use plastics with high performance compostable bioproducts. Our broad intellectual property is a modification to conventional paper-making and addresses an immediate critical need by converting non-food biomass into bioproducts at a cost parity to petroleum plastics. Our platform uses specialized blends of various kelp species and wood pulp fibre found worldwide to match performance specifications of petroleum plastics. Our go-to-market product is an agricultural mulch film that can be tilled into the soil after the growing season, enhancing soil fertility and saving farmers thousands in labour and disposal fees each year.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Bioform's goal is to provide a seeds-to-solution manufacturing platform to create high valued bioproducts. Our objective is to fully integrate a front-end facility to create source chemicals from locally sourced seaweeds and wood pulp fibre to reduce environmental risks and optimize product performance. Each element of our strategy is designed to enhance the Bioform brand and build a customer base focused on sustainability. We are in the final stages of securing early stage partnerships to advance our go-to-market products in North America and start eliminating unwanted plastic waste.

## COMPANY PROFILE

**Target Markets:**  
Agrifood

**Leadership:**  
[Jordan MacKenzie, CEO](#)

**Number of full time employee equivalents:**  
8

**Acceleration Programs:**  
- e@UBC  
- Creative Destruction Labs

**Seed, Angel and/or VC Equity Investment:**  
Yes

**Most Recent Equity Capital Raise completed:**  
Series A (\$2M-\$20M)

**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$2,225,000

**Projected Revenues for 2021 (\$CAD):**  
\$0

**Planned Equity Raise:**  
We will be opening our seed financing round to secure \$10M (CAD) for the installation of a medium scale production facility at a partner site.

[Pitch Video](#)

[Website](#)

[in](#)

BOOK A MEETING

# Biome Renewables

## Evolved Design

Biome Renewables is a Canadian CleanTech company that leverages the intelligence of evolution to create a sustainable future. Our mission is to develop and commercialize the critical energy technologies that enable the Global Energy Transition and play a key role in how the world generates power in the 21st century.

Our patented flagship PowerCone® technology is an aerodynamic enhancement device that bolts onto the hub of a wind turbine, improving annual performance by more than 10%. The result is not just more power, but power from a place that no bigger blade or smarter software can find it. The PowerCone® addresses the aerodynamic problem of root leakage, the largest contributor to aerodynamic loss in the wind industry, and is applicable to all wind turbines globally.

By leveraging the power of Evolved Design, Biome is rewriting more than 100 years of aerodynamic theory and redefining expectations in renewable energy, with the potential to reduce GHG emissions by 4+ Gton globally. With more than 40 top power producers signalling interest and LOIs totalling half a billion dollars, Biome is poised for explosive growth in the coming years.

### Why our venture should be considered one of Canada's 50 most investable cleantech companies:

With the significant efforts and investments made across Canada by all levels of government to promote our artificial intelligence capabilities, we are proud to be an example of a company that was able to invent/develop an autonomous AI solution that delivers on the need to address climate change globally. Our cloud-based solution can be installed in buildings anywhere on the planet – by way of example, we are not only able to install in developed world countries like European nations, Australia and the US, but we are now installing in developing nations such as Pakistan, a recent customer win for us.

With the world's nations committing to decarbonization goals, and the natural tensions building up between developed nations and rapidly growing developing nations, we are excited to deliver a solution that is low cost, high ROI, and scalable globally that can be deployed just as easily in developing nations as in developed ones. A core belief of the Brainbox AI team when it comes to fighting climate change is that "Speed and Impact Matter", which means getting innovations out of the lab and applied in the real world globally is an absolute must, otherwise we won't win the climate fight. Our next innovation will be around creating much needed flexibility for the world's energy distribution grids as we bring online more renewable power. Many of the energy crisis events we are seeing now in the world will only get worse – our technology will be a key solution for this challenge.

[Website](#)

in

BOOK A MEETING

## COMPANY PROFILE

### Target Markets:

Grid/Power/Utilities

### Leadership:

[Ryan Church, CEO](#)

### Number of full time

### employee equivalents:

15 – Toronto, On

### Acceleration Programs:

- MaRS Cleantech
- CDL-Toronto-Prime
- NextCanada

### Awards and Recognition:

- Global Cleantech Top 100
- Solar Impulse

### Non-dilutive Grant Funding:

- IRAP
- SRED
- NRCan BESC
- LCIF-Ontario

### Grant Funding Raised (\$CAD):

\$4,500,000

### Seed, Angel and/or

### VC Equity Investment:

\$6M in equity from Capstone Power (B.C.) Corp, UPC Capital, Fraser Kearney Capital and HNW investors including Monty Robbins, Bachir Rabbat, Michael Bernstein and Dr. Ron Dembo.

### Most Recent Equity Capital

### Raise completed:

Seed (\$500k-\$2M)

### Dilutive Equity Funding

### Raised (\$CAD):

\$6,000,000

### Projected Revenues for 2021

### (\$CAD):

\$0

### Planned Equity Raise:

Series A: \$20M, round currently open.

## BrainBox AI

Optimizing the built environment globally via the application of autonomous AI to commercial HVAC systems.

Buildings account for ~40% of greenhouse gas emissions globally and is one of the top 5 challenges that we need to tackle globally in order to address climate change - others include transportation, agriculture, energy production and large industrials (cement, steel, etc). BrainBox AI is at the forefront of the green building revolution with its unique technology combining artificial intelligence and cloud computing to create the world's first fully autonomous commercial HVAC solution.

Brainbox AI overlays deep learning algorithms on existing HVAC functionality to automate the modulation of each component, reducing a building's total energy spend by up to 25% and carbon emissions by 20-40%. The solution leverages AI to predict building energy consumption at a very granular level and enables our autonomous HVAC system to operate the building preemptively versus the current reactive approach of existing HVAC control systems that generate significant waste.

BrainBox AI's solution is quick to install, non-intrusive, and generates savings within 5 months of install with minimal upfront capital investment. Adoption of our technology in the last 2 years since launch has been rapid and global, despite all the challenges faced under COVID restrictions. We are installed in over 18 countries today. We were recently selected as 1 of 10 start ups by the Tech for our Planet challenge organized by COP26, and will be presenting in Glasgow during the COP26 event (November 11th).

We are raising additional dilutive capital (equity) in the next 18 months. We have just launched a fund raise, which will be announced in the coming days. As such our next fund raise will likely be over 18 months out.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

With the significant efforts and investments made across Canada by all levels of government to promote our artificial intelligence capabilities, we are proud to be an example of a company that was able to invent/develop an autonomous AI solution that delivers on the need to address climate change globally. Our cloud-based solution can be installed in buildings anywhere on the planet - by way of example, we are not only able to install in developed world countries like European nations, Australia and the US, but we are now installing in developing nations such as Pakistan, a recent customer win for us.

With the world's nations committing to decarbonization goals, and the natural tensions building up between developed nations and rapidly growing developing nations, we are excited to deliver a solution that is low cost, high ROI, and scalable globally that can be deployed just as easily in developing nations as in developed ones. A core belief of the Brainbox AI team when it comes to fighting climate change is that "Speed and Impact Matter", which means getting innovations out of the lab and applied in the real world globally is an absolute must, otherwise we won't win the climate fight. Our next innovation will be around creating much needed flexibility for the world's energy distribution grids as we bring online more renewable power. Many of the energy crisis events we are seeing now in the world will only get worse - our technology will be a key solution for this challenge.

### COMPANY PROFILE

#### Target Markets:

- Grid/Power/Utilities
- Built Environment

#### Leadership:

[Sam Ramadori, CEO](#)

#### Number of full time employee equivalents:

128 - Montreal, QC

#### Acceleration Programs:

- MaRS Momentum
- Mission from MaRS

#### Awards and Recognition:

- Time Magazine Top 100 Inventions of 2020
- Tech for our Planet challenge of COP26 Glasgow
- Solar Impulse
- Top AI start-ups from CB Insights

#### Non-dilutive Grant Funding:

- SRED
- IRAP

#### Grant Funding Raised (\$CAD):

\$1,300,000.00

#### Dilutive Seed, Angel and/or VC Equity Investment:

- Desjardins Capitale
- Esplanade Ventures
- Other large corporate and individuals.

#### Most Recent Equity Capital Raise completed:

Series B+ (\$20M+)

#### Dilutive Equity Funding Raised to Date (\$CAD):

\$50,000,000

#### Projected Revenues for 2021 (\$CAD):

\$1,000,000

#### Planned Equity Raise:

We have just launched a fund raise, which will be announced in the coming days. As such our next fund raise will likely be over 18 months out.

[Pitch Video](#)

[Website](#)

[Twitter](#) [Facebook](#) [Instagram](#) [LinkedIn](#)

BOOK A MEETING





# Carbon Upcycling Technologies

Using the waste of today to build a better tomorrow.

Carbon Upcycling Technologies (CUT) uses the waste of today to build a better tomorrow by converting CO<sub>2</sub> gas into solid products. CUT sells advanced solid products derived from greenhouse emissions and cheaply available solids. Since 2014, CUT has scaled its ability to convert CO<sub>2</sub> emissions into value-add end materials by over a million times and has since been confirmed as one of the top CO<sub>2</sub> utilization companies in the world as a winner of the X-Factor Award in the NRG COSIA Carbon XPRIZE. Through its portfolio of CO<sub>2</sub>-derived solid nanoparticles, CUT has technically validated its solutions for use in concrete, plastics, and consumer products.

CUT commercialized a corrosion-resistant coating, utilizing its nanoparticles, in 2017, becoming the youngest CO<sub>2</sub> utilization company to generate commercial revenue (<2.5 years since inception). CUT has been named as a Solar Impulse Efficient Solution label recipient, a funding recipient of Fundación Repsol Entrepreneurs Fund, and a winner of the 2019 76West Clean Technology Competition.

CUT's most advanced product is its CO<sub>2</sub>-embedded concrete additive. In 2018, CUT graduated from the LafargeHolcim Accelerator in France and has continued conversations and testing with the company since then. CUT is also partnered with Burnco and Cemex. CUT's commercial demonstration at the Alberta Carbon Conversion Technology Centre produces over 20 tonnes of concrete additives in a day. The product reduces the carbon footprint of concrete manufacturing by up to 25% while increasing the compressive strength of concrete by up to 40%.

## **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Over the past 5 years, Carbon Upcycling has scaled its single step, low energy carbon utilization process by 10 million times and has the goal of being the world's most impactful carbontech company of this decade. Carbon Upcycling is targeting 600 megatonnes of carbon reduction by 2030.

## **COMPANY PROFILE**

### **Target Markets:**

- Built Environment
- Heavy Industry (Cement, Steel, Aluminum, Chemicals, Pulp & Paper)
- Retail Consumers

### **Leadership:**

[Apoorv Sinha, CEO](#)

### **Number of full time employee equivalents:**

10 - Calgary, AB

### **Acceleration Programs:**

- Fundación Repsol
- CDL Rockies
- 76West

### **Awards and Recognition:**

- Clean50
- Solar Impulse
- NRG COSIA Carbon XPRIZE
- 76West

### **Non-dilutive Grant Funding:**

- IRAP
- NRCan
- ERA

### **Grant Funding Raised (\$CAD):**

\$11,000,000

### **Planned Equity Raise:**

Currently in the process of closing a \$5M bridge round with a Series A coming in early 2022.

[Pitch Video](#)

[Website](#)



[BOOK A MEETING](#)

# CarboNet

Creating a new class of chemistry to accelerate the transition to water recycling.

As global water scarcity forces industry and governments to address widespread social and economic crises, water recycling is increasingly turned to as the foremost solution. Founded in 2016, CarboNet™ is a specialty chemicals company that is transforming how chemicals are developed and used to treat and recycle water across industries. By utilizing drug delivery methods in a unique formulation, CarboNet's™ NanoNet platform can design a broad suite of products that target specific constituents in wastewater – solving a vast range of emerging industry problems while benefiting the greater good.

Since commercializing in 2020 in unconventional Oil & Gas – our beachhead market – we've established a dominant presence in the Texas Permian Basin, enabling Exploration & Production (E&P) operators, water treatment and midstream companies to more efficiently and effectively recycle produced water. The ability of the NanoNet™ platform to target and control molecules within wastewater delivers a new class of chemistry that is a quantum leap in efficacy over commodity chemicals.

Built on the backbone of the NanoNet platform, CarboNet's product suite of Flocculants and Coagulants can replace, or work with, incumbent water treatment chemicals to boost their efficiency. Our radical approach produces unprecedented results that not only drive lower OpEx, but also help to reduce chemical footprint, produce less sludge, and rapidly improve water clarity like never before. The combined focus on simplicity and performance, with economics and other business drivers, continues to drive more water recycling across industries.

## [Product Demo](#)

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Beyond produced water reuse, CarboNet has also proven applications in Mining and Industrial Water treatment and is engaged with several global chemical companies as potential distributor partners. In a market that has seen little innovation in over 50 years, CarboNet brings an unconventional approach that not only makes our chemicals cleaner and simpler to deploy, but also makes a meaningful impact when it comes to solving water recycling at scale.

## **COMPANY PROFILE**

### **Target Markets:**

- Water
- Natural Resource Extraction (Mining, Forestry, Oil & Gas)
- Heavy Industry (Cement, Steel, Aluminum, Chemicals, Pulp & Paper...)
- Agrifood

### **Leadership:**

[Barry Yates, CEO](#)

**Number of full time employee equivalents:**  
34 – Vancouver, BC

**Acceleration Programs:**  
e@UBC

**CarboNet continues to amplify the impact of water recycling in helping to address water scarcity:**

- Currently treating >1.7M barrels of water daily
- Forecasted to treat 500M barrels of water by end of 2021
- Treating >25 sites in the Permian Basin

**Seed, Angel and/or VC Equity Investment:**  
Yes

**Most Recent Equity Capital Raise completed:**  
Seed (\$500k-\$2M)

**Projected Revenues for 2021 (\$CAD):**  
\$5,800,000

**Planned Equity Raise:**  
We are raising additional dilutive capital (equity) in the next 18 months.



# CERT Systems Inc

Transforming CO2 emissions into valuable chemicals.

CERT is a carbon-tech company that converts carbon dioxide into chemicals. CERT has developed a proprietary electrochemical process that operates at mild conditions (using only electricity and water) to convert captured CO2 into basic chemicals. Using CERT's technology has the potential to avoid over 1 GT of annual GHG emissions.

CERT's technology is called electrochemical CO2 conversion, which uses a device called a CO2 electrolyzer. This device uses electricity and water to 'split' the CO2 molecule and reform it into various chemical products such as ethylene (a plastic precursor) or ethanol (a renewable fuel). At the core of the CO2 electrolyzer is the active component known as the membrane electrode assembly, which controls the flow of reactants within the device and converts the CO2 on a proprietary catalyst surface. CERT has developed a CO2 electrolyzer that achieves the highest performance for CO2 to ethylene conversion. Annual ethylene consumption is approximately 200 million tonnes with a \$200B market size and growing.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

CERT is a recent finalist in the NRG COSIA Carbon XPRIZE competition, where they demonstrated the world's largest CO2 electrolyzer. In 2021, CERT was part of a number of prestigious climatetech accelerators and is preparing for a Seed round in 2022.

## COMPANY PROFILE

### Target Markets:

- Heavy Industry (Cement, Steel, Aluminum, Chemicals, Pulp & Paper...)
- Natural Resource Extraction (Mining, Forestry, Oil & Gas)
- Grid/Power/Utilities

### Leadership:

[Alexander Ip, CEO](#)

### Number of full time employee equivalents:

4 - Toronto, On

### Acceleration Programs:

- Carbon to Value Initiative
- Canadian Technology Accelerator (Climatetech USA)
- UTEST
- EarthTech - Climate Ventures
- Creative Destruction Lab (Vancouver-Climate)
- Breakthrough Energy Solutions Canada

### Awards and Recognition:

- NRG COSIA Carbon XPRIZE Finalist
- Co-founder Christine Gabardo is a 2021 Clean50 Emerging Leader

**Non-dilutive Grant Funding:**  
NRCan - Breakthrough Energy Solutions Canada

**Grant Funding Raised to Date (\$CAD):**  
\$1,372,000

### Planned Equity Raise:

We anticipate a Seed round in early 2022. Based on company needs and comparables, we expect this to be approximately \$5M.

[Pitch Video](#)

[Website](#)

in

BOOK A MEETING



# Circular Rubber Technologies Inc

Bringing the smart to circular and turning the world's waste streams into value.

20 million ton of virgin rubber is produced every year to make new tires. Circular Rubber Technologies converts the rubber in end of life industrial tires into a rubber reclaim that substitutes virgin rubber material. We provide tire manufacturers a high quality alternative to virgin rubber at significantly lower CO2 emissions and stable cost levels. CRT's proprietary process is clean and produces a rubber reclaim with physical properties suitable for the use in tires with significantly higher properties than the competition.

Our team combines decades of experience in rubber recycling, capital project management and venture backed scaleups. We have proven our concept and produced around 1,000 KG of rubber reclaim. We raised 0.5M USD earlier this year, which will be used to produce reclaim at commercial scale during the fall of 2021 and fully de-risk our technology. A significant portion of the production is pre-sold to several tire manufacturers.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

CRT's solution eliminates a waste stream that is for the vast majority not (yet) regulated in Canada removes a significant liability of the Natural Resource Extraction industry while making a significant positive impact to tire manufacturing companies in achieving carbon neutrality. The securitization of both feedstock supply, rubber reclaim offtake and fully technical de-risked solution tested and proven at commercial scale makes CRT a highly investable cleantech company in a billion dollar market with anticipated double digit growth.

## COMPANY PROFILE

### Target Markets:

- Natural Resource Extraction (Mining, Forestry, Oil & Gas)
- Providing a lean circular solution to the Natural Resource Extraction industry through the elimination of a waste liability problem & offering a clean alternative solution to virgin rubber to "Other" rubber compounding industry including tire manufacturing.

### Leadership:

[Maartje van der Sande, CEO](#)

### Number of full time employee equivalents:

3 - Vancouver, BC

### Acceleration Programs:

Foresight

### Non-dilutive Grant Funding:

Mitacs

### Grant Funding Raised to Date (\$CAD):

\$25,000

### Seed, Angel and/or VC Equity Investment:

\$0.65M

### Most Recent Equity Capital Raise completed:

Pre-seed (up to \$500k)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$750,000

### Projected Revenues for 2021 (\$CAD):

\$20,000

### Planned Equity Raise:

We are raising additional dilutive capital (equity) in the next 18 months. CRT is preparing for our next financing round, which we expect to close in the next 4-6 months. The proceeds of this round will be used to set up and deploy our first plant, which will be strategically located in Western Canada.

[Website](#)

in

BOOK A MEETING





# CleanO2 Carbon Capture Technologies Inc.

CleanO2 sequesters carbon emissions within environmentally products, accelerating the transition to a circular lifestyle.

CleanO2's patented CarbinX™ technology is the first and only commercialized micro-scale carbon capture solution for natural gas HVAC systems. Its innovation is in the achievement of a functional, economical technology that mitigates CO2 emissions (20% for current version 3, 50% for upcoming version 4) combined with a business model that leverages the captured carbon into upcycled goods for sale (soaps & detergents, fertilizer).

There are approx. 480,000 commercial and institutional buildings in Canada (NRCan) and 5.6 million in the US. (CBECS), with over half using natural gas as the primary energy source for space and water heating. We estimate our addressable market amounts to about 25% of commercial buildings in Canada, or 120,000, based on CleanO2 observed data and HVAC industry feedback. Assume a 10% market capture rate, or 12,000 buildings. At \$35,000 per unit for version 4, this would amount to \$420 million in market size (serviceable obtainable market). This should be realizable within 5-10 years.

The technology has been operating in the field for 4 years, with 17 units deployed in several jurisdictions including BC, Alberta, Minnesota and Japan. We plan to deploy units more broadly in North America and overseas, maintaining our focus on multi-residential, commercial/institutional buildings with natural gas heating systems.

Both the soaps and detergents and fertilizers markets are highly competitive. Yet, we have a unique story and value proposition that has received very positive feedback from retailer and customers. In addition, both are multi-billion dollar markets.

## **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

The CarbinX™ technology helps support energy companies and building owners with the transition to low-carbon fuels by providing a proven, safe and economical solution to address carbon emissions from natural gas combustion. It is part of a solution to not only reduce environmental impacts, but to appease investors, customers and other stakeholders demanding better environmental performance without impacting service. The technology will allow for the continued use of Canadian produced natural gas in heating appliances in a significantly more environmental fashion, with an ultimate goal of zero-emissions from this source of natural gas combustion while still using natural gas as a base fuel source. Electrification of larger boilers is simply not yet feasible, requiring massive upgrades to the grid and buildings, let alone available electric boiler technologies.

While we ultimately envision transition to hydrogen for heating, clean burning natural gas will move toward zero emission natural gas with the continued development of CleanO2's technology portfolio. One of the unique aspects of our business model is the moderate entrance cost for building owners and the fact that their payout is fast and leads to an ongoing value stream. Our model turns what has historically been a capital intensive ongoing cost centre (for large scale carbon capture) to a capital moderate profit centre for users. This will evolve into a moderate capital, ongoing cost neutral or profit centre as CleanO2 develops its industrial scale technologies and utilizes the same upcycling and value add monetization model.

## **COMPANY PROFILE**

### **Target Markets:**

- Built Environment
- Retail Consumers

### **Number of full time employee equivalents:**

14 - Calgary, AB

### **Acceleration Programs:**

Creative Destruction Labs Rockies

### **Awards and Recognition:**

- GPS Awards
- Energy Excellence Awards

### **Non-dilutive Grant Funding:**

- SDTC
- NSERC

### **Grant Funding Raised (\$CAD):**

\$350,000

### **Dilutive Seed, Angel and/or VC Equity Investment:**

Regeneration.vc

### **Most Recent Equity Capital Raise completed:**

Seed (\$500k-\$2M)

### **Dilutive Equity Funding Raised to Date (\$CAD):**

\$1,750,000

### **Projected Revenues for 2021 (\$CAD):**

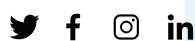
\$900,000

### **Planned Equity Raise:**

We are raising additional dilutive capital (equity) in the next 18 months. We are planning a Series A round for 2022 in the range of \$8-\$10 million CAD

[Pitch Video](#)

[Website](#)



[BOOK A MEETING](#)



# Drishya AI Labs Inc.

Making Energy Intelligent & Clean through AI for the Digital Oil Field.

AI alone can help reduce ten to twenty percent of GHGs by monitoring, predicting and reducing emissions.

15% of energy sector's total GHG emissions come from Oil & Gas operations and this is what Drishya targets.

Drishya uses AI to help Oil and Gas companies meet their ESG goals while making their operations energy efficient and cost effective. Our solutions encompass Engineering Digitalisation and AI/ML enablement.

As we make energy intelligent, we make it clean. For a gas processing plant, we can prevent tonnes of CO2 emissions by AI based stabilisation of controls which prevent flaring. Our AI solutions help increase energy efficiency and reduce toxic waste in Oil Sand operations by optimising evaporator operations.

We have trained AI to see, read and understand drawings like piping & Instrument diagrams the way an engineer does. Our system reduces the time to do tasks like fugitive emissions studies from 50 to 60 hours to minutes, leading to 10% reduction in engineering costs or over 20 billion dollars of impact in Canada alone.

Our SaaS based technology coupled with GTM partnerships with EPCs, Data automation companies and industry consortia is allowing us to gain faster traction.

While our beachhead market is Canadian oil and gas industry, our AI solutions can be deployed in can be deployed in Pulp & Paper, Petrochemical, Pharmaceutical, Food Processing & Waste Water industries.

Think Intelligent Energy, Think Drishya, that's our motto.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

- A) While Drishya is only a year and a half old, we have achieved CAD 700K of sales YTD.
- B) We have achieved these sales on an investment of CAD 620K from which we have a 6 month runway available.
- C) Our largest investor is our customer.
- D) We have a pipeline of over \$2.5M & expect to achieve \$3M sales by the end of 2022.
- E) We marry the engineering talent of Calgary with the fast frugal software ecosystem of Bangalore. Hence, we are able to use our funds better & make the dollar go longer.
- F) Our management team brings over 88 years of experience in building and managing global technology organizations with 40 years spent in Goldman Sachs.
- G) Our advisors are experts in Oil & Gas, AI, Cleantech & share the leadership's entrepreneurial passion & strategic vision. Rest of the team ranging from interns to PhDs are from Oil & Gas, Power & other industries with expertise in Data Science, Engineering, Software Dev., Finance and Marketing.
- H) We are supported by AWS, NVidia & AutoDesk. Our solutions are now in the process of being listed on their market places.

## COMPANY PROFILE

### Target Markets:

Natural Resource Extraction  
(Mining, Forestry, Oil & Gas)

### Number of full time

### employee equivalents:

24 - Calgary, AB

### Acceleration Programs:

- Foresight Launch & Deliver
- Participating in CDL Rockies- Energy Stream

### Awards and Recognition:

- Selected for Innovation Zone at World Petroleum Congress
- AccelerateAB
- Profiled by Daily Oil Bulletin

### Seed, Angel and/or

### VC Equity Investment:

Angel : Scovan Engineering, DH Investments, Mr. T J Grewal

### Most Recent Equity Capital Raise completed:

Pre-seed (Up to \$500k)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$620,000

### Projected Revenues for 2021 (\$CAD):

\$1,000,000

### Planned Equity Raise:

Q1 2022, Seed, \$ 3M

[Pitch Video](#)

[Website](#)



BOOK A MEETING



# e-Zinc

Providing long-duration energy storage to enable access to affordable, clean and reliable energy for all.

As the global energy grid moves to higher penetration levels of renewable energy, there will be an exponential increase in demand for low-cost, long-duration energy storage. This is the market targeted by e-Zinc, the first company in the world to “metalize” electricity. The company’s zinc-based energy storage system can be up to 80 per cent less expensive than comparable lithium-ion systems for long-duration applications. Importantly, its energy storage system can cycle without degradation in capacity. It is also fire resistant, made of fully recyclable materials, does not rely on precious metals, and has fast response time.

e-Zinc is targeting the remote and resiliency markets, with a focus on non-wire alternatives (NWA), mining operations, telecommunications, military bases, data centres, remote communities, island nations, EV charging stations, and more.

**Why our venture should be considered one of Canada’s 50 most investable cleantech companies:**

We are about to deploy our first in-field commercial system, and we have 3 projects totalling \$2.3M secured for 2022.

[Website](#)

in

BOOK A MEETING

## COMPANY PROFILE

**Target Markets:**  
Grid/Power/Utilities

**Leadership:**  
[James Larsen, CEO](#)

**Number of full time employee equivalents:**  
33 - Toronto, ON

**Acceleration Programs:**

- MaRS
- Scale for ClimateTech
- AWS Clean Energy Accelerator

**Awards and Recognition:**

- Winner of Breakthrough Energy Solutions Canada
- Charging the Future Finalist (winner still TBD)
- Shell Gamechanger winner
- Cleantech Group Top 50 to Watch

**Non-dilutive Grant Funding:**

- IRAP
- SRED
- SDTC
- NRCan Breakthrough Energy Solutions Canada
- NRCan Charging the Future
- NGEN
- OCE

**Grant Funding Raised (\$CAD):**  
\$7,500,000

**Seed, Angel and/or VC Equity Investment:**

- Energy Foundry
- BDC
- MaRS IAF
- BioIndustrial Innovation Canada

**Most Recent Equity Capital Raise completed:**  
Series A (\$2M-\$20M)

**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$7,000,000

**Projected Revenues for 2021 (\$CAD):**  
\$100,000

**Planned Equity Raise:**  
We are raising a USD \$23M round right now (term sheet signed) and we anticipate closing in December 2021.



# Eavor Technologies Inc.

#EnergyForEavor

Eavor (pronounced "Ever") is a technology-based Energy company led by a team dedicated to creating a clean, reliable and affordable energy future on a global scale. Eavor's solution (Eavor-Loop™) represents the world's first truly scalable form of clean dispatchable power. Eavor achieves this by mitigating or eliminating many of the issues that have traditionally hindered geothermal energy. Eavor instead circulates a benign working fluid that is completely isolated from the environment in a closed-loop, through a massive subsurface radiator. This "radiator" simply collects heat from the natural geothermal gradient of the Earth via conduction, at geologically common and drilling accessible rock temperatures.

Eavor is the energy solution the world has been waiting for, satisfying all sides by not only addressing climate change, but also creating jobs and creating a new export industry for Canada.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

[Global energy majors lead pivot to Eavor's geothermal solution with \\$USD40 million investment](#)

## COMPANY PROFILE

**Target Markets:**  
Grid/Power/Utilities

**Number of full time employee equivalents:**  
60 – Calgary, AB

**Acceleration Programs:**  
Creative Destruction Lab

**Awards and Recognition:**

- HexGn Top 100 Sustainability & Renewable Energy Startups
- Equal Ocean's 20 Most Valuable Green Tech Companies All Over the World
- Endorsed nominee for the Ruggero Bertani European Geothermal Innovation Award
- Narwhal List
- Young Women in Energy
- Emerging Clean Technologies Award – Global Energy Show

**Grant Funding Raised (\$CAD):**  
\$10,000,000

**Dilutive Seed, Angel and/or VC Equity Investment:**

- bp Ventures
- Chevron Technology Ventures
- Temasek
- BDC Capital
- Eversource
- Vickers Venture Partners

**Most Recent Equity Capital Raise completed:**  
Series B+ (\$20M+)

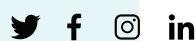
**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$100,000,000

**Projected Revenues for 2021 (\$CAD):**  
\$0

**Planned Equity Raise:**  
We are raising additional dilutive capital (equity) in the next 18 months.

[Pitch Video](#)

[Website](#)



BOOK A MEETING





# EKONA POWER INC

Ekona is unlocking the power of clean hydrogen.

Industrial hydrogen (H<sub>2</sub>) markets are dominated by upgrading, petroleum refining and ammonia production. Steam methane reforming (SMR) is the current industry standard and lowest cost option for large-scale H<sub>2</sub> production. SMR, however, generates substantial greenhouse gas (GHG) emissions, which are costly to mitigate using carbon capture and sequestration (CCS). By contrast, green H<sub>2</sub> solutions using electrolysis from renewable electricity are attractive for their ultra-low emissions, but they are energy intensive and expensive. New solutions are needed that can meet the growing demand for low carbon intensity fuels and decarbonized industrial feedstocks without adding cost.

Ekona's novel pulsed methane pyrolysis (PMP) solution converts NG into H<sub>2</sub> and solid carbon, virtually eliminating CO<sub>2</sub> emissions. The pyrolysis reactor uses the principles of pulsed combustion and high-speed gas dynamics to dissociate feedstock methane. This unique solution is low-cost, scalable and solves carbon fouling issues that plague other pyrolysis platforms. The PMP reactor can be integrated with industry-standard balance of plant for H<sub>2</sub> purification and carbon separation, simplifying industrial process integration. Since the PMP produces solid carbon, siting is not reliant on CCS infrastructure. Moreover, since water is not a required feedstock, the PMP can be located wherever NG infrastructure exists. Ekona's PMP produces industrial H<sub>2</sub> at costs comparable to incumbent SMRs, while reducing GHG emissions by 90%.

## COMPANY PROFILE

### Target Markets:

Heavy Industry (Cement, Steel, Aluminum, Chemicals, Pulp & Paper...)

### Leadership:

[Chris Reid, CEO](#)

### Number of full time

### employee equivalents:

15 - Burnaby, BC

### Most Recent Equity Capital

### Raise completed:

Seed (\$500k-\$2M)

### Equity Funding

### Raised to Date (\$CAD):

\$5,000,000

### Projected Revenues for

### 2021 (\$CAD):

\$0

### Planned Equity Raise:

Ekona is presently working to close a Series A round in Q4 2021.

Ekona has been supported by numerous partners, including the BC Innovative Clean Energy (ICE) Fund, National Research Council (NRC), NRC Industrial Research Assistance Program (IRAP), Natural Resources Canada (NRCan) Breakthrough Energy Solutions Canada (BESC) program, Emissions Reduction Alberta.

Ekona's current investors are Evok Innovations (Evok) and Innovate Breakthrough Solutions Canada (IBET). In addition, Ekona entered into a Convertible Debenture with BDC Capital in 2021 valued at \$3.0 million.

[Website](#)

in



# Evoco Limited

Powered by Nature

Evoco is a cleantech innovation company developing plant-based, natural products and green chemistry to replace petrochemicals and harmful materials. Evoco has leveraged its patented innovations for applications in a variety of industries and consumer goods.

Headlining Evoco's portfolio are two carbon-reducing technologies: Cleansport NXT™, an all-natural odour control product that can be applied to most materials and FATEST™, a high-performing, plant derived eco-foam currently used for athletic goods and insole and midsoles in footwear.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Evoco is a privately held, disruptive biochemical technology company that invests heavily in R&D. Evoco is headquartered in Toronto, Canada and is a proudly Canadian enterprise. Evoco is one of the first intrinsically non-medically focussed companies to be accepted into the prestigious MaRS Discovery District program.

Evoco is a cutting-edge materials technology company with three patents and five at pending status for its disruptive bio-based material changing the petroleum-dependent foam industry. Evoco is the first to achieve 3rd party certification for over 70% bio-based material. While Evoco is well-positioned to "green" many foam-dependent industries, it has established a sales and revenue stream in footwear. Petroleum-based foam is an essential material to many industries; Evoco's bio-based foam innovation is the ideal alternative as it performs equally or better and significantly reduces the impact on the environment during its lifespan. While currently we are focused on the footwear industry, our patents and technology can be used for multiple consumer goods, from furniture, car seats, toys. The sky is the limit, as they say. Evoco's material comes from plants, is carefully crafted for enduring performance to prolong the material's lifespan, and then at the end of its life, the inert material goes back to the ground and becomes the ground. Plants will grow from this ground and the cycle repeats. This circular biodegradability is true sustainability.

## COMPANY PROFILE

**Target Markets:**  
Retail Consumers

**Leadership:**  
[Jason Robinson, CEO](#)

**Number of full time employee equivalents:**  
28 – Toronto, ON

**Acceleration Programs:**  
MaRS

**Awards and Recognition:**  
Drapers Footwear Awards  
2021 – Shortlist

**Non-dilutive Grant Funding:**  
– SHRED  
– IRAP  
– ECO  
– NSERC engage with UofT,  
MITACS with UofT

**Grant Funding Raised (\$CAD):**  
\$450,000

**Seed, Angel and/or VC Equity Investment:**  
– Forage Capital

**Most Recent Equity Capital Raise completed:**  
Series A (\$2M-\$20M)

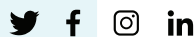
**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$5,000,000

**Projected Revenues for 2021 (\$CAD):**  
\$3,000,000

**Planned Equity Raise:**  
We are raising additional dilutive capital (equity) in the next 18 months.

[Pitch Video](#)

[Website](#)



BOOK A MEETING



# Flash Forest

Automating reforestation to save our environment.

**Problem:** Current approaches to reforestation are confined to planting by shovel, a method lacking advancements since inception. While this method produces reliable survival rates, it falls short to the rising demands of tree planting. Over 15B trees are cut down/lost to natural disturbances annually, with some studies speculating this number to be 3X this due to an estimated 67M Ha of forests lost annually to wildfires.

**Enabling Tech/Differentiators:** Compared to existing technologies, Flash Forest's rapid drone reforestation technology addresses this gap by exceeding the speed of human tree planting by 10X, while also bypassing safety risks by automating the entirety of physical planting. We've built our technology upon four pillars: UAV robotics, plant science, pod production automation systems, and GIS mapping software. Drone reforestation is not a novel concept and is being developed by four other groups today; what makes our technology unique is our three IP areas that make our method of drone reforestation a world first.

**Growth potential:** Based on a mature tree (40 years old) pulling 48lbs of CO2 per year on average, 1B trees planted will pull an estimated 21.7M tonnes of CO2 per year from the atmosphere or approximately 22% of Canada's annual CO2 surplus. We're working towards this goal by 2028, by which we aim to exceed 1 billion trees annual. With these calculations, when Flash Forest continues beyond this and plants 4.6B trees, this should sequester 100M tonnes annually once the trees reach maturity, effectively making Canada carbon neutral, given emissions remain the same.

## COMPANY PROFILE

### Target Markets:

Renewables & Environment

### Leadership:

[Bryce Jones, CEO](#)

**Number of full time employee equivalents:**  
20 - Brampton, ON

### Grant Funding Raised (\$CAD):

\$4,300,000

Flash Forest has received grant funding from Sustainable Development Technology Canada, Emissions Reduction Alberta, IRAP, SRED, ECO Canada, InnovateBC, UNAC, DS4Y, and Science Horizons.

### Equity Funding Raised to Date (\$CAD):

\$1,500,000

### Most Recent Round Completed:

Seed (\$500K-\$2M)

### Projected Revenues for 2021 (\$CAD):

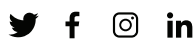
\$1,200,000

### Planned Equity Raise:

In 2022, Flash Forest will be launching a Series A Round, with details currently being discussed. The round will begin in Jan 2022.

Flash Forest has received funding support from technology growth equity investor, Circular Investments along with additional funding from MFS, Lemvi Strategies, and The Good Fund.

[Website](#)



BOOK A MEETING



# FREDsense Technologies

## Building Better Biosensors

FREDsense is building portable field kits to solve some of the most challenging water quality problems for utilities and industry. We bridge the gap between accurate results and timely information to drive real-time insights by disrupting how we think about water quality instrumentation. FREDsense uses genetically modified bacteria to detect emerging contaminants and hard to detect chemicals (arsenic, COVID-19, and many others) packaged into a user-friendly system that anyone can use. Our customers range from water utilities to large mining organizations. We can help drive real-time insights into treatment systems without the slow and costly lab. Together we believe we can live in a world where everyone knows what is in their water.

### **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

FREDsense has been successful in building novel solutions for various industries with both Arsenic and COVID-19 solutions adopted into industrials in North America and abroad. Our biosensor development platform has been selected by several large agencies as a way of developing novel biotechnology solutions for the water industry and we have built sustainable and large platforms to service growing opportunities in the biotechnology space. Our arsenic solution has been field piloted and adopted by numerous organizations such as USGS, City of Phoenix, and other prominent utility partners. FREDsense has won numerous awards including grants from agencies such as NRC-iRAP, Singularity University, and Imagine H2O.

## **COMPANY PROFILE**

**Target Markets:**  
Water

**Number of full time employee equivalents:**  
20 - Calgary, AB

**Acceleration Programs:**

- MaRS
- Foresight
- Singularity University
- Creative Destruction Labs
- ImagineH2O

**Awards and Recognition:**

- Singularity University Global Impact Challenge
- ImagineH2O Finalist
- Water H2O Winner Ciudad del Saber

**Non-dilutive Grant Funding:**

- IRAP
- AI
- NRC
- BCIP
- EcoCanada

**Grant Funding Raised (\$CAD):**  
\$2,000,000

**Seed, Angel and/or VC Equity Investment:**

- Accelerate Fund
- Singularity University
- Elemental Excelsior
- Family Offices
- CDL Angels

**Most Recent Equity Capital Raise completed:**  
Seed (\$500k-\$2M)

**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$3,000,000

**Projected Revenues for 2021 (\$CAD):**  
\$500,000

**Planned Equity Raise:**  
FREDsense is raising a \$5,000,000 round of which BDC Clean Tech has committed \$2.5 million.

[Pitch Video](#)

[Website](#)



[BOOK A MEETING](#)





# Future Fields

Future Fields makes the most sustainable recombinant proteins on the planet.

Future Fields is unleashing the full potential of cellular agriculture by producing the most sustainable and cost effective proteins on the planet.

We face an uncertain future and how we create food today will not keep up. Cellular agriculture provides us a pathway to create food while using less water and land, while reducing the impact of food production on climate change.

A challenge for the cellular agriculture industry has been the sheer scale and cost of the inputs the industry needs to scale. Specifically, growth factors, which are a key ingredient for the growth of cells which turn into consumer products.

Future Fields has developed a novel recombinant protein production platform to reduce the cost of growth factors to a level that will get consumer products onto shelves at a price they can afford. Our inputs make the difference between a \$300 chicken nugget and a 3 cent chicken nugget.

We are shipping out globally already, to both startups and more established firms from countries like the U.S., U.K., Australia, South Korea, Netherlands, Israel, Singapore, and more.

The potential impact of cellular agriculture includes a reduced risk of contamination, eliminating antibiotic use, and better supplying animal products to an increasing world population. In addition, when compared to traditional farming, cellular agriculture utilizes 80% less land and 94% less water overall, emits 76% less greenhouse gas emissions on average, and gets rid of the need for pesticides and herbicides in many cases.

## **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Cellular agriculture has the potential to disrupt every industry that utilizes animal products. It is not just food. This also includes things like creating human equivalent baby formulas, milks, materials such as leather, fats, and more. While there is still a long arc for the industry to be fully mature, the potential impact on both the environment and the economy is massive.

## **COMPANY PROFILE**

### **Target Markets:**

- Agrifood
- Biotech

**Number of full time employee equivalents:**  
20 - Edmonton, AB

### **Acceleration Programs:**

- GROW
- YCombinator
- Trade Accelerator Program

### **Awards and Recognition:**

- SXSW 2021 Finalist

### **Non-dilutive Grant Funding:**

- IRAP
- SDTC
- MITACS
- Alberta Innovates
- GreenSTEM

### **Seed, Angel and/or VC Equity Investment:**

- YCombinator
- GROW
- StartupTNT
- Bee Partners
- Narrtive Fund
- Pioneer Fund

**Most Recent Equity Capital Raise completed:**  
Seed (\$500k-\$2M)

**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$2,800,000

**Planned Equity Raise:**  
Series A early 2021

[Website](#)



BOOK A MEETING



# G2V Optics

Smart light for solar, aerospace, and indoor farming.

Sunlight is essential for humanity, as the future's primary source of energy, key contributor to degradation of the built world, and most important input to agricultural food production. G2V captures the full complexity of sunlight into a reliable, repeatable lighting system to develop, test, and optimize the most important sun-dependent applications for a sustainable future.

G2V Optics is an emerging global leader in smart lighting and is committed to creating enabling technologies to power and feed the world of tomorrow. G2V currently provides technology solutions to world-leading researchers, Fortune 500 technology firms, and aerospace companies in over 30 countries, including NASA & NREL. Our customers are the real heroes, using G2V's photons to make the next generation of solar cell technologies, test advanced materials for building and aerospace, and vastly improve the nutritional efficiency of indoor agriculture.

G2V's core business is delivering smart lighting solutions as a combination of hardware & software to applications where precision and control are paramount. Our Engineered Sunlight™ platform is the world's leading sunlight replication lighting technology - protected by multiple patent applications and trade secrets - addressing the US\$6B+ precision lighting market. G2V's approach is a true multiplier approach to a sustainable future, where G2V's light sources accelerate the design, validation, and manufacture of new solar technologies which further reduce GHG emissions.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Thanks for asking! I'd like you to have three main takeaways: opportunity, team, and execution. Opportunity: G2V's market space isn't often on the front pages of CleanTech media. We make the world's most precise lights for the most important applications, which also means some of the world's most high-profile customers. Consider every product and energy technology that interacts with sunlight - photovoltaics, solar fuels, building materials, wearables, and food crops - these markets are growing at astounding rates and these are the markets we serve with incredible competitive advantage. We take a "picks & shovels" approach, where our impact is multiplied through the developments of our customers.

Team: We've built a team of doers with experience from places like Philips, Accenture, Baker Hughes, Walmart, Pandora, and Alibaba. We've staked out digital marketing territory in our market space with 10x the visibility of the incumbents. We've built sales and customer success frameworks that are disrupting the status quo of our industry, and we've attracted engineering and quality professionals with deep experience to build the stability required for scaling.

Execution: We get it done. G2V bootstrapped to our first \$1M in sales before raising any capital. We spend time with our customers to really understand what matters. We've proven our ability to build, to sell, to market, to raise capital, and deliver to satisfied customers. Our investors go to bat for us and we're executing on milestones to transition our software to a cloud subscription model before going to raise scaling capital.

## COMPANY PROFILE

### Target Markets:

Solar Energy & Sustainable  
Materials Development

### Leadership:

[Ryan Tucker, CEO](#)

### Number of full time employee equivalents:

25 - Edmonton, AB

### Acceleration Programs:

- Creative Destruction Lab
- Canadian Technology Accelerator
- Canada-NREL CTA

### Awards and Recognition:

- Start Alberta Fast Growth Award
- Creative Destruction Lab Graduate

### Non-dilutive Grant Funding:

- IRAP
- SR&ED
- SDTC
- NSERC
- Alberta Innovates

### Grant Funding Raised (\$CAD):

\$2,000,000

### Seed, Angel and/or VC Equity Investment:

- Accelerate Fund II (Yaletown Partners/A100)
- Radar Endeavour Group
- ThresholdImpact

### Most Recent Equity Capital Raise completed:

Seed (\$500k-\$2M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$1,875,000

### Projected Revenues for 2021 (\$CAD):

\$3,000,000

### Planned Equity Raise:

We are preparing for a US\$5M+ Series A round in late 2022.

[Pitch Video](#)

[Website](#)



BOOK A MEETING



# GHGSat Inc.

We use our own satellites to monitor greenhouse gas emissions from industrial facilities worldwide.

There is an urgent need to better measure, report and verify greenhouse gas emissions from industrial sources worldwide. A complex range of existing technologies is used inconsistently within and across jurisdictions to serve this need.

GHGSat aims to solve this problem by pioneering the use of satellites-as-a-service to provide consistent, persistent and ubiquitous measurements of facility-level greenhouse gas emissions. Services are provided using proprietary analytics applied to unique emissions data, collected by GHGSat's patented satellite and aircraft sensors. GHGSat combines its emissions data with third-party data in a global datastore of emissions sources to generate valuable operational, environmental, health & safety, and regulatory insights. Services are sold to industry (focusing on oil & gas, power, waste, mining, and agriculture), governments, and financial markets.

GHGSat currently has three satellites in orbit, and is fully financed to launch a constellation of 10 satellites by the end of 2023.

GHGSat's measurements provide objective and reliable data to all stakeholders to better understand, control, and ultimately reduce facility-level greenhouse gas emissions.

## COMPANY PROFILE

### Target Markets:

- Heavy Industry
- Natural Resource Extraction

### Leadership:

[Stephane Germaine, President](#)

**Number of full time employee equivalents:**  
100 - Montreal, QC

**Equity Funding Raised to Date (\$CAD):**  
\$75,000,000

**Most Recent Round Completed:**  
Series B+ (\$20M+)

GHGSat Inc. has received support from Schlumberger, OGCI, BDC, Investissement Quebec, Space Capital

**Planned Equity Raise:**  
Series C

**Grant Funding Raised to Date (\$CAD):**  
\$15,000,000

GHGSat would not exist without the support of SDTC. In addition, GHGSat has received non-dilutive funding from IRAP, SRED, NRCan, Canadian Space Agency and provincial funding bodies.

**Projected Revenues for 2021 (\$CAD):**  
\$8,000,000

[Website](#)



BOOK A MEETING



# GRT Holdings Ltd.

GRT is a BC-based resource regeneration company focused on creating useful construction aggregates from unwanted excess soil and dredgeate.

GRT is a BC-based resource regeneration company focused on creating useful construction aggregates from unwanted excess soil and dredgeate.

In 2021, after successful consultation with the Snuneymuxw First Nation, GRT opened Canada's first land-based Resource Regeneration Plant in Duke Point, Nanaimo. This plant diverts contaminated soils from increasingly scarce landfills, reduces transportation costs and pollution by processing the soils closer to market, and produces clean aggregate products for local reuse.

Our facility uses soil washing technology to sort and classify excess soils and dredge, separating them by size and material type. All wash water is then treated and recirculated in a closed-loop system. The resulting outputs include clean oversized rock; a road base rock product; pea gravel; sand; organics; and clay.

We have processed 20,000 tonnes of soil over the past four months with 18,000 tonnes being reused, leaving only 2,000 tonnes requiring disposal. This verified the commercial viability of the project (30% return at demonstration phase). With the process improvements identified, the facility will process over 200,000 tonnes per year. GRT is currently finalizing the design of a Resource Regeneration Facility for Metro Vancouver that will process over 1,000,000 tonnes per year with Seattle in the preliminary planning phase..

GRT provides a much-needed solution to the demand for excess soil disposal. Our innovative waste-reduction process also addresses the increasing demand for ESG-focused solutions that meet the requirements of lending institutions, federal specifications, and shareholders, as well as supporting Envision and LEED certification.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

GRT's pursuit of innovative solutions reaches all corners of our business. We have challenged the status quo of how waste soil must be dealt with, turning it into a useful resource that also reduces the demand for virgin materials. We also drive innovation in our approach to collaboration with our Indigenous partners. After the Snuneymuxw First Nation expressed interest in sourcing our regenerated output materials for a Nation-run gravel mart, we began exploring ways to challenge the regulatory landscape, driving the push towards a future that sees beneficial reuse as a default objective instead of a 'nice-to-have', while also promoting economic reconciliation with our Indigenous neighbours.

GRT has spent the last year conducting a comprehensive Environmental Assessment of our Nanaimo Facility. This sets the bar for future facilities. During this process, GRT has been reaching out to stakeholders. Since receiving the approval, GRT has embarked on a successful marketing campaign, filling the plant's capacity. Finally, in addition to taking a waste stream and turning it into a commodity, the GHG savings in reduced transportation/mining activities are estimated at over 350 ktCO<sub>2</sub>e with a planned three plants in 2030.

## COMPANY PROFILE

### Target Markets:

- Water
- Built Environment

### Leadership:

[Peter Reid, CEO](#)

### Number of full time employee equivalents:

31 - Victoria, BC

### Acceleration Programs:

Foresight

### Non-dilutive Grant Funding:

- SRED
- IRAP

### Grant Funding Raised (\$CAD):

\$300,000

### Seed, Angel and/or VC Equity Investment:

Yes

### Most Recent Equity Capital Raise completed:

Seed (\$500k-\$2M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$8,100,000

### Projected Revenues for 2021 (\$CAD):

\$7,000,000

### Planned Equity Raise:

We are preparing for Series A financing to allow us to build our next plant in Metro Vancouver. It will be later 2021 or early 2022 in excess of \$20 million.

[Website](#)



BOOK A MEETING



# Graphite Innovation and Technologies (GIT)

Developing the world's most sustainable marine coatings to help reduce fuel consumption and GHG emissions for the maritime transportation sector.

GIT is a leading Canadian materials science company developing the world's most sustainable marine coatings for the maritime transportation sector. Right now, the largest shipping lines are consuming up to 30% more fuel to overcome marine growth on their ship hulls. GIT's patented, green marine coatings are effective at preventing marine growth without having to use harmful chemicals or toxins that leach into the ocean environment. Our first product, XGIT-Fuel, has been documented by Lloyd's Register to save upwards of 20% on fuel costs and can help improve the vessel performance across a wide range of parameters. GIT unlocks hidden fuel savings for shipping lines and leaves a positive environmental impact for the planet.

## **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Our innovative solutions and patented technologies are designed to position our world for a more sustainable future through offsetting the carbon footprint of shipping lines and reducing harm to our oceans. We help the environment in two massive ways. First, by reducing marine growth and drag on vessels, leading to reduced fuel consumption. Secondly, because our products are certified and type approved by Lloyd's Register to be free of harmful chemicals, our products displace competing offers in the market that need to leach harmful chemicals and toxins to be effective against marine growth. That means a better aquatic environment for sea life and no negative impacts from leaching materials. For ship owners, that's peace of mind knowing that they are not increasing negative impacts to ocean environments.

The commercial readiness of GIT's products makes this the optimal time to invest and see the company's immediate acceleration toward becoming a global leader in the massive marine coatings market. Our team of materials science experts have leapfrogged R&D efforts of competing, multinational marine coatings firms and we have positioned GIT to be a long-term leader in innovative, new marine coatings for the maritime transportation sector.

## **COMPANY PROFILE**

### **Target Markets:**

- Transportation & Mobility
- Water
- Defence/Military

### **Leadership:**

[Mo AlGermoz, CEO](#)

**Number of full time employee equivalents:**  
11.5 - Dartmouth, NS

### **Acceleration Programs:**

- Innovacorp
- Creative Destruction Labs
- Dal Launchpad
- Emera IdeaHUB

### **Awards and Recognition:**

- Halifax Chamber of Commerce Innovative Business
- ISANS Innovative Business of the Year Award

### **Non-dilutive Grant Funding:**

- IRAP
- Ocean Supercluster
- ACOA
- Innovacorp
- SDTC

**Grant Funding Raised (\$CAD):**  
\$250,000

**Dilutive Seed, Angel and/or VC Equity Investment:**  
Yes

**Most Recent Equity Capital Raise completed:**  
Seed (\$500k-\$2M)

**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$1,625,000

**Projected Revenues for 2021 (\$CAD):**  
\$1,000,000

**Planned Equity Raise:**  
Series A round to scale up manufacturing in Canada and license tech worldwide.

[Website](#)





# HTEC

## Fueling the Drive to Hydrogen.

HTEC is unlocking the potential of hydrogen to reduce air pollution and the impacts of climate change by designing and building hydrogen energy solutions to support the decarbonization of difficult to abate sectors such as transportation, industrial heating, and industry feedstock.

As a leading developer and provider of hydrogen solutions, we work across the entire hydrogen value chain from production and processing through to distribution and vehicle fueling. Partnering with governments, industrial gas companies, key equipment suppliers, automotive suppliers, and energy companies, HTEC delivers safe, reliable, convenient, sustainable and cost-competitive hydrogen to ensure our customers get hydrogen how, when, and where they need it.

### **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

HTEC's complimentary business platforms – Infrastructure and Technology Solutions – have allowed us to grow into a trusted resource for developing hydrogen infrastructure and customized solutions. Under the HTEC Infrastructure Platform we build, own and operate hydrogen production facilities, distribution systems and fueling stations throughout North America.

We started our business in the first-mover markets of British Columbia, Quebec and California, where we have been able to take advantage of early-market funding opportunities while continuing to develop the expertise, relationships, track record, intellectual property, and technologies needed for global expansion. Among our key infrastructure projects is our first hydrogen refueling station, located in Woodside, California designed to support the fueling of over 25 light-duty FCEVs and includes an on-site electrolyzer.

## **COMPANY PROFILE**

### **Target Markets:**

Transportation & Mobility

### **Number of full time**

### **employee equivalents:**

46 – North Vancouver, BC

### **Acceleration Programs:**

Foresight Acceleration Program

### **Awards and Recognition:**

- Clean50 Top Project
- North Van Business Excellence Award
- Landed on BC's 2020 Ready to Rocket list

### **Non-dilutive Grant Funding:**

- NRCan
- BC Government
- Quebec Government

### **Planned Equity Raise:**

Though we are not currently interested in corporate investment, HTEC is very interested in raising funding for project investment.



# Hydra Energy Canada Corp

## Real Hydrogen Now

Hydra Energy (Hydra) is the world's first Hydrogen-as-a-Service (HaaS™) provider for commercial fleets looking to reduce emissions and costs today with limited risk and no up-front investment.

Hydra Energy plays a role in all 4 areas of the hydrogen value chain in transportation, we produce green hydrogen by recovering it from the waste, we store and deliver hydrogen via pipeline, and tube trailers that supply a refueling station, finally we also provide the technology to utilize hydrogen on post-sale heavy duty vehicles that are converted from single diesel operation into co-combustion of hydrogen and diesel.

Hydra sources low-carbon hydrogen from leading chemical partners and provides clean fuel to fleets whose vehicles have been retrofitted using Hydra's proprietary Hydrogen Engine technology. Fleets pay diesel-equivalent (or lower) prices for hydrogen enabling an immediate and affordable transition to cleaner trucking.

The OEM warranty of retrofitted vehicles is not impacted. Hydra uses a removable Hydrogen system that does not modify the engine block and can be transferred into a different vehicle.

Hydra's first regional operation in Prince George BC (including a hydrogen capture plant and the largest Canada's refueling station) is under construction and expected to initiate operations in early/mid 2023.

Hydra has executed a 10-year (extendable for 20 additional years) definitive agreement for the rights to capture by-product hydrogen from Chemtrade Logistics operation in Prince George BC and depending on the success of this project, Hydra has also secured ROFR to capture H2 from 3 other sites in Canada.

### **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

There are 3 main reasons: 1) Hydra's technology is now commercial, after 4 years of testing and demonstrating our Hydrogen Internal Combustion Engine technology on 3 different vehicles and over 200,000 km. Last October 20th, Hydra announced the delivery of our first hydrogen converted truck to a paid customer in Prince George BC (<https://www.youtube.com/watch?v=GQ3XtxCYN3U&t=9s>). 2) Hydra has secured definitive agreements for hydrogen supply with Chemtrade (10 years extendable for 20 additional years) and also for hydrogen demand for the first 12 trucks with Lodgewood Enterprises which has also committed to support Hydra in securing 53 additional trucks with local partner fleets. Hydra also intends to supply hydrogen as renewable natural gas (RNG) and has signed a LOI with FortisBC for injection of Hydrogen into their Natural Gas grid in Prince George B.C. 3) Besides equity investment, Hydra has also signed a LOI for \$150M in debt funding

## **COMPANY PROFILE**

### **Target Markets:**

Transportation & Mobility

### **Number of full time**

### **employee equivalents:**

15 - Delta, BC

### **Acceleration Programs:**

Foresight

### **Awards and Recognition:**

Clean50

### **Non-dilutive Grant Funding:**

- IRAP
- SDTC
- ECCC
- BC LCFS Part 3 agreement
- Innovate BC
- SRED

### **Grant Funding Raised (\$CAD):**

\$5,000,000

### **Seed, Angel and/or VC Equity Investment:**

Yes

### **Most Recent Equity Capital Raise completed:**

Series A (\$2M-\$20M)

### **Dilutive Equity Funding Raised to Date (\$CAD):**

\$22,000,000

### **Projected Revenues for 2021 (\$CAD):**

\$1,686,700

### **Planned Equity Raise:**

Hydra is raising additional \$20M to complete the capital cost of their Prince George operation. Hydra's preference is for debt funding and 30 organizations have expressed interest from which 15 options have been filtered. After completing a definitive agreement with a lender, the company is also planning to raise additional dilutive capital for their expansion across Canada. Currently Hydra has secured ROFRs with Chemtrade for 3 additional sites in Canada. The amount for additional equity funding is not yet defined, but ranges between \$30-50M, divided in 3 rounds.

[Pitch Video](#)

[Website](#)



[BOOK A MEETING](#)

# Ionomr Innovations Inc.

## The Source For Ion-Exchange Solutions

Ionomr designs and manufactures breakthrough advanced ion-exchange materials to enable the hydrogen economy. Our membranes and polymers enable a step-change in efficiency and scalability of electrochemical systems and provide a major impact to the economics of key systems required to fight climate change. Our technology has been validated by government entities (eg. NRC in Canada and NREL in the US) and a large number of multinational companies who believe the Ionomr's products are the state of the art technology for their future systems.

### Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Ionomr's mission is to decarbonize the planet by providing breakthrough advanced ion-exchange materials to enable the hydrogen economy as well as a profitable carbon capture, storage and utilization (CCUS) process. Compared to our competition, our products are non-toxic (replacing PFAS, toxic "forever chemicals"), provide a 2x in performance and a 10x in chemical durability validated by US Department of Energy's AST protocols.

## COMPANY PROFILE

### Target Markets:

- Defence/Military
- Heavy Industry
- Grid/Power/Utilities
- Transportation & Mobility

### Leadership:

[Bill Haberlin, CEO](#)

### Number of full time employee equivalents:

33 - Vancouver, BC

### Acceleration Programs:

- Foresight
- MaRS
- Canadian Technology Accelerator
- Shell NREL's GameChanger Accelerator
- AWS Energy Accelerator
- Currently participating in SoCal Express.

### Awards and Recognition:

- World Energy Council "Startup Energy Transition Award for Low-Carbon Energy"
- World Economic Forum "Technology Pioneer"
- FCVC "Most Promising Corporation"
- Nouryon's Imagine Chemistry
- Energy Tech Summit's "Top Hydrogen Start-up"
- F-Cell's Products & Markets "Breakthrough product for FCEV's"

### Non-dilutive Grant Funding:

- \$4.7M Government grant - SDTC + BC-ICE
- BCIC Ignite, \$200,000
- NRC IRAP 2+2 Program, \$300,000

### Grant Funding Raised (\$CAD):

\$5,300,000

### Seed, Angel and/or VC Equity Investment:

Yes

### Most Recent Equity Capital Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$7,000,000

### Projected Revenues for 2021 (\$CAD):

\$400,000

### Planned Equity Raise:

\$15M USD targeting to close end of Q1 2022.

[Website](#)

in

BOOK A MEETING



# Katal Energy Inc.

## A Path to Cleaner Air

Society owes a deep gratitude to diesel fuel for helping to create and sustain our quality of life. The world ships millions of goods each day using this fuel. Diesel is a very efficient and energy dense fuel, the problem is that it generates a staggering amount of harmful emissions worldwide. KATAL has set out to immediately reduce emissions from diesel-fuelled engines without the displacement of existing assets or infrastructure. As the majority of the world focuses on climate change and carbon reduction, local air pollutants are also causing health issues where fuels are being burned.

The solution is Katal Green Fuel (KGF) – a low-carbon nano-emulsion fuel that reduces CO2 emissions by 12% and particulate matter and NOx by a minimum of 50%. KATAL offers a low-cost, drop-in fuel that can instantly improve the air quality within the communities where our customers operate.

### **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Reaching net-zero will require low-emission fuels where energy needs cannot easily or economically be met by electricity or other market alternatives in industrial applications such as marine, trucking, rail, mining, and stationary power generation. With the use of Katal Green Fuel (KGF) organizations can achieve emissions reductions greater than 2030 GHG policy targets today. Immediate and material advancements on GHG reductions will help stakeholders, regulators, and customers to meet their GHG initiatives through the generation of verifiable emissions reductions data. The world's carbon-based energy system is the most extensive and most expensive investment undertaken by our civilization. KGF can help companies to leverage this existing infrastructure which would otherwise be difficult, costly and carbon intensive to displace. In addition, KGF provides a seamless transition into zero-carbon energy sources. For example, as the world strives to move away from fossil fuels and towards large-scale adoption of clean energy technologies there will be a significant increase in demand for mining. According to the International Energy Agency (IEA) "Net Zero by 2050" report, the energy transition requires substantial quantities of critical minerals, and their supply emerges are significant growth areas. It is estimated that the global copper demand from 2020 levels could more than double by 2030. Investing in low carbon, drop-in-fuels such as KGF will not only help sustainably meet the present energy needs but also meet needs required to transition to a zero-carbon future.

## **COMPANY PROFILE**

### **Target Markets:**

- Natural Resource Extraction (Mining, Forestry, Oil & Gas)
- Grid/Power/Utilities
- Transportation & Mobility
- Defence/Military
- Heavy Industry (Cement, Steel, Aluminum, Chemicals, Pulp & Paper...)

### **Leadership:**

[Craig Latimer, CEO](#)

### **Number of full time employee equivalents:**

10 – Calgary, AB

### **Acceleration Programs:**

Accelerated Ocean Solutions Program (AOSP)

### **Awards and Recognition:**

Global Energy Show – Suzanne West, Environmental Excellence Award

### **Non-dilutive Grant Funding:**

- Oceans Supercluster
- NRCan
- Alberta Innovates

### **Grant Funding Raised (\$CAD):**

\$3,000,000

### **Seed, Angel and/or VC Equity Investment:**

Valent Low Carbon Technologies (John Risley, Hartley Richardson)

### **Most Recent Equity Capital Raise completed:**

Series A (\$2M-\$20M)

### **Dilutive Equity Funding Raised to Date (\$CAD):**

\$11,000,000

### **Projected Revenues for 2021 (\$CAD):**

\$0

### **Planned Equity Raise:**

Katal is raising \$15-20 million in summer of 2022 for commercialization and expansion.

[Website](#)





# Manifest Climate

Manifest Climate Inc.'s SaaS (software as a service) platform brings clarity, efficiency and knowledge to organizations.

Climate change poses both risks and transformative opportunities for businesses, capital markets and society. Stakeholders are asking for greater consideration of these issues and transparency around climate-smart business plans. Many know this is important but don't know where to start. Manifest Climate's mission is to close this information and action gap on climate. We aim to help capital markets expand and build growth strategies, risk management and operational toolkits that are fit for a rapidly shifting and climate-defined economic landscape.

Manifest Climate connects AI with climate expertise to deliver solutions and empower organizations to rapidly:

- Identify climate risks and opportunities.
- Organize and communicate climate-related information to drive investment decisions.
- Improve climate-related financial disclosures.
- Track relevant climate related trends in a business context.
- Educate and empower teams to improve decision-making.
- Improve internal planning and compare against peers.

Manifest Climate offers TCFD Alignment, Market Intelligence and Climate Education, among other services.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Our software was shortlisted for the prestigious G20 Innovations League (clean tech) start-up pitch contest. CEO & Co-Founder, Laura Zizzo, presented the climate solutions platform to a slate of global VC funds, experts and corporate leaders in Italy on October 9-10. The highly selective private sector led event is the G20 Italian Presidency's legacy event. The clean tech category featured the world's top 20 clean tech start-ups. Manifest Climate was Canada's official nominee. Our platform's impact at this marquee event builds on a successful seed round at the start of the year & increasing international uptake of the platform by banks, utilities, manufacturers & other business lines since a soft-launch in Fall 2020. Manifest Climate's \$6.5M seed round was backed by an exceptional syndicate of leading technology investors, including Klass Capital, Golden Ventures, OMERS Ventures, Bryker Capital, Garage Capital, Active Impact Investments & several high net worth investors including Mark Jaime, former CEO of Intellex. Manifest Climate's value also attracted support from Silicon Valley Bank under a substantial financing facility. As a leader in organizing climate-related information aligned with the TCFD recommendations, the emerging global language for reporting, the Manifest Climate product is the right fit for the moment. The TCFD is now endorsed by the G20, which accounts for 85% of global GDP, and every major global financial institution, including European Central Bank, World Bank, & International Monetary Fund. Every major stock exchange has agreed to better comparability of climate-related financial information—that's every public company (over 41,000) globally.

## COMPANY PROFILE

### Target Markets:

- Retail Consumers
- Grid/Power/Utilities
- Transportation & Mobility
- Financial services

### Leadership:

[Laura Zizzo, CEO & Co-founder](#)

### Number of full time employee equivalents:

49 - Toronto, ON

### Awards and Recognition:

- Fast Company's 2021 World Changing Ideas Awards (Experimental Category)
- G20 Innovations League Nominee (Clean Tech, 2021)
- Great Place to Work Technology (2021) certified

### Non-dilutive Grant Funding:

- IRAP
- SRED
- CEWS/CERS (Canadian Government Subsidy Program)

### Grant Funding Raised (\$CAD):

\$6,500,000

### Seed, Angel and/or VC Equity Investment:

\$6.5M CAD from OMERS Ventures, Klass Capital and Golden Ventures

### Most Recent Equity Capital Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$6,500,000

### Projected Revenues for 2021 (\$CAD):

\$1,500,000

### Planned Equity Raise:

We are experiencing sooner-than-expected investor interest in a next round of financing.

[Website](#)



BOOK A MEETING



## Novamera Inc.

### Precise, Innovative, Sustainable Mining Technology – Sustainable Mining by Drilling

Novamera is developing Sustainable Mining by Drilling (“SMD”), an innovative clean technology and process that will be able to mine the numerous small-scale narrow vein mineral deposits found worldwide more safely, economically and sustainably using unique downhole sensors, machine learning algorithms and industry proven drilling technology.

With a never-ending need for mineral resources and increasing demand for battery metals, Novamera’s technology will minimize environmental impact by only extracting ore and leaving waste in the ground. Mining operations will, therefore, have a smaller footprint, particularly with respect to tailings facilities, while doing so using less energy and emitting 50% less greenhouse gases compared to conventional selective mining techniques. Mining companies will also benefit by being able to develop known mineral deposits or zones that may not be economic today and extend existing mines beyond their current engineering limits, leveraging existing infrastructure.

Novamera expects its technology to have a lasting positive impact on safety, the environment and the economic well being of mining companies and the communities in which they operate.

#### **Why our venture should be considered one of Canada’s 50 most investable cleantech companies:**

Novamera has assembled the right team with a wide range in backgrounds to impact change within a traditional industry such as mining. Our skills are key to our success to date. With the increasing lense of environmental, social and governance within the mining sector the time is right for Novamera. Novamera provides an option with a smaller footprint, reduced noise, recycled water and overall lower environmental impact than conventional mining methods. We are commodity agnostic and could provide options for numerous deposit types, including future looking metals.

## COMPANY PROFILE

### **Target Markets:**

Natural Resource Extraction  
(Mining, Forestry, Oil & Gas)

### **Leadership:**

[Dustin Angelo, CEO & President](#)

### **Number of full time employee equivalents:**

10 – Oakville, ON

### **Acceleration Programs:**

Prospect Studio

### **Awards and Recognition:**

2019 Finalist Goldcorp Challenge

### **Non-dilutive Grant Funding:**

- Oceans Supercluster
- NRCan
- Alberta Innovates

### **Grant Funding Raised (\$CAD):**

\$3,000,000

### **Seed, Angel and/or VC Equity Investment:**

Valent Low Carbon Technologies  
(John Risley, Hartley Richardson)

### **Most Recent Equity Capital Raise completed:**

Series A (\$2M-\$20M)

### **Dilutive Equity Funding Raised to Date (\$CAD):**

\$1,100,000

### **Projected Revenues for 2021 (\$CAD):**

\$0

### **Planned Equity Raise:**

We have just launched a fund raise, which will be announced in the coming days. As such our next fund raise will likely be over 18 months out.



# Oneka Technologies

## Wave-powered Sustainable Desalination

Fresh water scarcity is one of the greatest challenges of the 21st century. As the natural water resources are being depleted, a growing proportion of the population is turning toward the ocean as their primary water source, now supplying 1% of the world's water through desalination. Ironically, traditional desalination essentially consists in turning fuel to water, which is costly and compromises even further access to water by generating 0.5% of the world's CO2 emissions. To make the oceans a sustainable, accessible and affordable source of freshwater, Oneka turns waves to freshwater by combining the ocean with its own wave-energy. The purely mechanical technology eliminates the majority of components, gas to operate and energy conversions found in conventional desalination, allowing Oneka to offer a low-cost and sustainable solution. Oneka offers "Water-as-a-service" to coastal communities, municipalities, industries, resorts among others :

- At a lower cost
- Emitting zero GHG
- Requiring no land
- Without capital investment costs
- Releasing responsible brine

The initial markets are remote Caribbean and Chilean communities, industries and resorts, where the water cost is high and required volumes are small. The current sales pipeline within that beachhead market is over \$10M/year. Simultaneously, Oneka is getting a growing interest from larger municipalities and industries as LADWP and mining companies in Chile with potential contracts of over \$100 M/yr/project. Oneka will be able to service those clients with greater water needs at a lower price than any other desalination solutions as the company grows and scales its product.

### Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Oneka addresses both climate change and water scarcity with a single solution. By 2050, the desalination market is projected to tenfold, representing a \$200B/yr at today's costs & CO2 emissions, which means desalination environmental impact would increase from 0.5% to 5% of today's global CO2 emissions. Thus, this current approach can't be scaled to the point that the ocean becomes a significant source of freshwater: sustainable alternative solutions need to be valued. Oneka has a significant technical track record of product development: seven generations of buoys have been developed over the years. The team overcame challenges that stopped countless marine product developers. The technology is fully functional, available for demo in Florida with two commercial projects currently being under commissioning in Florida and Chile. Oneka's systems have a positive environmental impact on multiple fronts: Limiting climate changes by saving 2 tons of CO2/year for each m3/day provided Potential artificial reefs No land space required, so no deforestation The buoys are made of recycled PET, representing about 1,500,000 recycled bottles for a typical project Oneka is mobilizing world-class advisors and investors. The active involvement of desalination and cleantech veterans as Mark Lambert, Shawn Meyer-Steele, Pierre Côté and Peter Tyszewicz and investments of over \$10M from investors including BFV, Mann+Hummel & Innovacorp is a testament to the novelty of our endeavors. The outreach of Foresight would help us find the right partners to keep building momentum toward our next growth phase and start fulfilling needs of utility markets in the near future.

[Website](#)



BOOK A MEETING

## COMPANY PROFILE

### Target Markets:

- Water
- Grid/Power/Utilities

### Leadership:

[Dragan Tutic, CEO & Co-founder](#)

### Number of full time employee equivalents:

20 - Sherbrooke, QC

### Acceleration Programs:

- Imagine H2O (San Francisco)

### Awards and Recognition:

- DOE Wave to Water Prize
- Solar Impulse Labelled

### Non-dilutive Grant Funding:

- IRAP
- SRED
- SDTC
- MEI (QC Provential)
- DOE (USA)

### Grant Funding Raised (\$CAD):

\$6,300,000

### Seed, Angel and/or VC Equity Investment:

- Innovacorp (Nova Scotia),
- Baruch Future Ventures (San Francisco)
- Mann+Hummel (Germany)
- AQCcapital, Anges Québec
- REDE (Chile)

### Most Recent Equity Capital Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$4,500,000

### Projected Revenues for 2021 (\$CAD):

\$0

### Planned Equity Raise:

Our next round will be for scaling and entering utility scale markets

# Open Ocean Robotics

## Understanding Oceans, Sustainably

At Open Ocean Robotics we make it cheaper, easier, and safer to understand our oceans using our proprietary solar powered autonomous boats for real-time ocean data analytics. Our solutions for persistent monitoring provide better solutions for illegal fishing enforcement, marine mammal monitoring, and defence.

### **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

We have innovative proprietary technology, a great team and customer traction with nearly \$1M in sales in 2021. We are a zero emission solution to ocean monitoring that supports sustainable ocean industries like offshore wind and protects marine mammal and fish populations, through our persistent monitoring.

We are raising additional dilutive capital (equity) in the next 18 months: 2022 raise of \$2-5M in a priced round.

## COMPANY PROFILE

### **Target Markets:**

- Information, Communications and Technology
- Defence/Military
- Ocean Industry
- Research

### **Leadership:**

[Julie Angus, CEO](#)

### **Number of full time employee equivalents:**

17 - Victoria, BC

### **Acceleration Programs:**

- Foresight
- MaRS
- CDL
- Alacrity
- Spring
- Greentown

### **Awards and Recognition:**

- Solar Impulse
- Clean50
- Foresight Cleantech Icon of the Year
- BC Business Innovator of the Year
- Ready to Rocket
- NACO's Startup of the Year

### **Non-dilutive Grant Funding:**

- SDTC
- Ocean Supercluster
- IRAP
- Natural Resources CND
- Western Diversification
- WIL
- SRED
- Innovate BC

### **Grant Funding Raised (\$CAD):**

\$5,200,000

### **Seed, Angel and/or VC Equity Investment:**

- Individual angel investors
- Rhiza Capital
- Women's Equity Lab
- Cindicates
- Campbell River Area Angel Group (CRAAG).

### **Most Recent Equity Capital Raise completed:**

Seed (\$500k-\$2M)

### **Dilutive Equity Funding Raised to Date (\$CAD):**

\$1,700,000

### **Projected Revenues for 2021 (\$CAD):**

\$875,000

[Website](#)



BOOK A MEETING

# Peak Power

Peak Power enables contributors to climate change to be part of the solution, and unlock value while doing so.

The energy sector, the transport sector, and building sector make up ~67% of global GHG emissions. Change within these disparate sectors can make a large impact on overall emissions. Peak Power connects these sectors with a focus on commercial buildings and industrial facilities. We develop energy management solutions to transform them into Distributed Energy Resources (DERs).

The DER tech sector is exploding. Navigant estimates that the global market for DER tech is \$563.3M in 2019, reaching \$5.7B by 2028. Investment in the sector is expected to continue to increase, with estimates of a compounded annual growth rate of 29.2% by 2028. This is being driven by the energy sector, governments globally, and the industrial/commercial sector.

Peak Power transforms buildings into DERs through electricity optimization, on-site batteries, and mobile batteries. For energy optimization, our sweet spot is older facilities without building automation systems. Our Peak Insight platform provides visibility of energy use and performance without expensive retrofits. The platform delivers actionable recommendations that save energy without sacrificing occupant comfort. Our Peak Synergy platform connects on-site batteries with the energy markets to charge and discharge them at the most profitable moments. Our Peak Drive pilot is demonstrating the capability for EV batteries to act as mobile grid resources.

Each solution provides value to the building owner and reduces strain on the electricity grid. They empower the building and electricity sector to make a positive environmental impact with existing infrastructure.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Peak Power is a made-in-Ontario climate technology company that is poised to scale globally and showcase the leadership of Ontario's energy technology ecosystem for what behind-the-meter assets can do, including behind-the-meter energy storage, grid-interactive buildings, and bi-directional electric vehicles (EVs). In the last year, Peak has more than doubled its size to over 60 employees and has accomplished several globally leading feats in the energy sector with distributed energy resources (DERs). Peak has been able to bring together stakeholders from the previously disparate sectors of real-estate, energy, and mobility. Through these collaborations, they have been able to develop solutions that enable contributors to climate change be part of the solution and unlock value while doing so.

## COMPANY PROFILE

### Target Markets:

- Grid/Power/Utilities
- Built Environment

### Leadership:

[Derek Lim Soo, CEO](#)

### Number of full time employee equivalents:

62 - Toronto, ON

### Acceleration Programs:

MaRS

### Awards and Recognition:

Ontario Energy Association  
Company of the Year 2021

### Non-dilutive Grant Funding:

- FedDev Ontario
- SDTC
- LCIP
- IRAP
- IESO Grid Innovation Fund

### Grant Funding Raised (\$CAD):

\$12,500,000

### Seed, Angel and/or VC Equity Investment:

- Osmington, Inc.
- MaRS Investment Accelerator Fund (IAF)
- Ontario Centres for Excellence (now OCI)
- Sensata Technologies
- Export Development Canada (EDC)
- BDC Capital

### Most Recent Equity Capital Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$18,500,000

### Projected Revenues for 2021 (\$CAD):

\$5,000,000

### Planned Equity Raise:

Peak will be opening our round in Jan 2022, with a target close of Q2/Q3. The target amount of the round will be a \$25M Series B raise.

# Planetary Hydrogen

Taking carbon out of the sky while producing clean fuel.

Industrial and transportation emissions will be the most challenging and expensive to eliminate – costing governments and companies trillions over the next several decades. Our solution does both by removing CO2 directly from air and sequestering it for 100,000 years while at the same time producing a clean fuel. We do this by converting mine waste into alkalinity using electrochemistry. This produces hydrogen as a byproduct. We use the alkalinity to make minor adjustments to the pH of ocean chemistry, enhancing its natural ability to take up and store excess CO2 from the atmosphere. In the process, we combat ocean acidification in a local area and clean up hazardous mine sites.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Trillion dollar CDR market by 2050, Highly experienced team, Track record of 1.5x non-dilutive to dilutive leverage, business economically combines all aspects of energy transition, combining waste remediation with atmospheric CO2 reduction and ocean restoration.

## COMPANY PROFILE

### Target Markets:

- Heavy Industry (Cement, Steel, Aluminum, Chemicals, Pulp & Paper...)
- Natural Resource Extraction (Mining, Forestry, Oil & Gas)

### Leadership:

[Mike Kelland, CEO](#)

### Number of full time employee equivalents:

15 – Dartmouth, NS

### Acceleration Programs:

- Plug and Play
- Canadian CTA
- Cycle Momentum
- C2V
- Unicorn Math
- Current: CDL-Atlantic, Ocean Startup Project

### Awards and Recognition:

- Oceanshot
- Greenbiz 30u30
- Cleantech Group 50 to Watch

### Non-dilutive Grant Funding:

- ERF via PRNL – \$2M
- UK BIES GGR – 250k GBP
- SDTC SEED – \$100k
- ACOA – \$50k
- IRAP – \$50k
- Others to be announced

### Grant Funding Raised (\$CAD):

\$6,000,000

### Seed, Angel and/or VC Equity Investment:

- Innovacorp
- Ramen.vc
- Capital Angel Network

### Most Recent Equity Capital Raise completed:

Seed (\$500k-\$2M)

### Planned Equity Raise:

Series A planned for Summer 2022.



# Portable Electric

## Electric Generators

Portable Electric is an energy pioneer and leader in the world of clean, portable energy and mobile “e-Generators”, replacing polluting gas and diesel generators with VOLTstack power and solar technology. Designed, engineered and manufactured by Portable Electric, over 700 VOLTstack portable e-Generators will be in the field by end of 2021, directly replacing fossil fuel generators, and abating a cumulative estimate of over 21 million kgs of CO2 over 2019/2020/2021. GHG abatement being one facet, Portable Electric’s contribution to advancing the adoption of electric generators and electrification in the film and entertainment industry has spurred on a global positive impact. In the last year, Portable Electric has provided life-saving backup power for medically vulnerable people including powering off-grid Covid triage areas, ventilators, and vaccine fridges, and partnered with Pacific Gas and Electric Company, one of the biggest utilities in America to supply power to communities affected by wildfire PSPS events. Currently, there are approximately 300 VOLTstack units being used in film and entertainment which are abating over 5 million kg of carbon dioxide annually. With the fast-growing EV, construction, and utility industries, Portable Electric continues to establish itself as the technology and power services leader in the portable and mobile clean power space. By 2025, over 250 million kgs of CO2 are projected to be abated cumulatively, as a result of VOLTstack e-Generators deployed into the world.

### Why our venture should be considered one of Canada’s 50 most investable cleantech companies:

Besides creating an emission-free alternative to fossil fuel generators, Portable Electric is also disrupting the world of e-mobility. Earlier this year, Portable Electric manufactured and deployed Canada’s largest mobile EV charger in partnership with Teck Resources and the Community Energy Association in the East Kootenay. The VOLTstack mobile EVCharger has helped spread awareness of green technology and its practicality in use across North America.

## COMPANY PROFILE

### Target Markets:

- Transportation & Mobility
- Grid/Power/Utilities

### Leadership:

[Mark Rabin, CEO](#)

### Number of full time employee equivalents:

25 - Vancouver, BC

### Acceleration Programs:

Foresight

### Non-dilutive Grant Funding:

- IRAP
- SRED
- COVID-related funding

### Grant Funding Raised (\$CAD):

\$999,000

### Seed, Angel and/or VC Equity Investment:

Yes

### Most Recent Equity Capital Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$5,480,000

### Projected Revenues for 2021 (\$CAD):

\$2,500,000

### Planned Equity Raise:

Series B, 20-30 million dollar raise. Q1 2022

[Website](#)



BOOK A MEETING



# Properate

## High performance homes on a budget

Properate utilizes AI to help homeowners and construction professionals build more energy efficient and high performance homes on a budget. By using Properate, homeowners are able to get personalized home energy reports that quickly identify the most cost optimized and energy efficient pathways for renovation. Properate Studio, our rapid energy modelling software as a service, is designed for construction professionals to efficiently help them strategize home renovations and create energy efficient and building code compliant building designs that would increase home value and reduce greenhouse gas emissions. With Properate's map tool for energy efficiency, municipalities and utility companies are able to make more informed decisions. Currently, Properate is being used by over 500 users in more than 40 cities. Properate's mission is to make our homes healthier, more efficient and comfortable.

### Why our venture should be considered one of Canada's 50 most investable cleantech companies:

The team has a wealth of knowledge and experience in the energy efficiency space. Arman Mottaghi, the CEO, has been recently awarded the 2021 Green Buildings Leader award by Canadian Green Building Council and he was featured among different news channels such as Solar Impulse, Google for Startups, BCSEA and VEC for his leadership and contribution in the space. Arman also has a master's degree in building science and he is a machine learning instructor. For Properate, our growth over the pandemic 2020-2021 has been over 200%. In terms of economic impact, we were able to save \$2.5M in total energy related build cost savings. With a technology readiness of 9, Properate's AI remains to have the highest accuracy in the market. Our technology was awarded Solar Impulse 1000 efficient label and earlier this year we were chosen among most impactful startups in Google for Startups SDG accelerator. With 60% or more of homeowners complaining about their home energy efficiency and with the increased work from home trend, we are working on making our homes greener on a budget.

## COMPANY PROFILE

### Target Markets:

- Built Environment
- Information, Communications and Technology Sectors

### Leadership:

[Arman Mottaghi, CEO](#)

### Number of full time employee equivalents:

4 - Vancouver, BC

### Acceleration Programs:

Foresight

### Awards and Recognition:

Solar Impulse

### Non-dilutive Grant Funding:

- IRAP
- Government grants

### Grant Funding Raised (\$CAD):

\$147,000

### Projected Revenues for 2021 (\$CAD):

\$500,000

### Planned Equity Raise:

We are post revenue raising seed funding of \$500,000

[Website](#)

in

BOOK A MEETING



# Proton Technologies Canada Inc.

Hydrogen. Lowest cost, below net zero, vast.

Proton can leverage existing energy assets and infrastructure to make hydrogen at a lower cost than natural gas. This enables baseload electricity and high temperature processes, or transportation to save money while getting clean. The addressable market is the entire carbon fuels market worldwide (several trillion \$'s per year).

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Proton plans to repurpose wells, roads, powerlines, pipelines, and people to make Canada a clean energy superpower.

## COMPANY PROFILE

### Target Markets:

Natural Resource Extraction  
(Mining, Forestry, Oil & Gas)

### Leadership:

[Grant Stern, Chair](#)

### Number of full time employee equivalents:

60 - Calgary, AB

### Acceleration Programs:

- Foresight
- Platform Calgary

### Awards and Recognition:

3rd prize in a pitch contest gave us \$10k.

### Non-dilutive Grant Funding:

SPII approved us for \$5 million in transferable royalty credits.

### Grant Funding Raised (\$CAD):

\$5,000,000

### Seed, Angel and/or VC Equity Investment:

We have about 300 angel investors. No VC or institutional at this point (October 27, 2021)

### Most Recent Equity Capital Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$20,000,000

### Projected Revenues for 2021 (\$CAD):

\$5,000,000

### Planned Equity Raise:

We are interested to explore new funding opportunities and customer offtake agreements. In the course of time this will require billions in new investment.

[Website](#)



BOOK A MEETING



# RecycleSmart

Powering Waste And Recycling Optimization Through Technology

RecycleSmart builds and deploys rugged, battery-powered, connected sensors that are installed in waste and recycling containers. The sensor provides real-time data on fill levels and images that show container contents. The result is that containers are collected when needed instead of on a static schedule. Collection costs and carbon (GHG) emissions are reduced, recycling services are improved with less unwanted items in recycling containers.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

The spin out of the connected sensor division (Pello) represents a highly derisked investment in the fast growing Smart Waste market. The experienced team that built RecycleSmart has the experience and expertise to quickly scale Pello and become a dominant player in the Smart Waste market which is predicted to grow rapidly (over 25% CAGR) in the next 5 years.

## COMPANY PROFILE

### Target Markets:

Waste Management/ Smart Cities

### Leadership:

[Colin Bell, CIO](#)

### Number of full time employee equivalents:

85 - Richmond, BC

### Awards and Recognition:

- Globe and Mail Top Growing Company In Canada
- Growth 500 Fastest Growing Company By Revenue

### Non-dilutive Grant Funding:

- IRAP
- SDTC
- BC ICE

### Grant Funding Raised (\$CAD):

\$1,800,000

### Seed, Angel and/or VC Equity Investment:

Have not raised dilutive investment to date, self-funded and bootstrapped.

### Projected Revenues for 2021 (\$CAD):

\$1,000,000

### Planned Equity Raise:

Q1 2022 - \$3-5 million

[Website](#)



BOOK A MEETING



# Rotoliptic Technologies Inc.

Reduce cost. Enhance efficiency. Extend life.

The industrial pumping industry accounts for ~20% of global electricity consumption and ~6% of global GHG emissions. The oil and gas (O&G) sector is the single biggest market segment for pumps, at 17% of the total pumping market, with Artificial Lift being a large contributor. RTI is introducing lower cost, higher efficiency pumps into O&G applications and has the potential to significantly reduce energy consumption and associated operating costs, as well as reduce GHG emissions for O&G operators.

Rotoliptic Technologies (RTI) has developed a proprietary new positive displacement rotary pump that represents the first true innovation in pump architecture in many decades. The RTI technology has the unique ability to deliver high flow rates and lift typically delivered by an ESP, but with the high efficiency, lower capital costs, and simplicity of deployment typically delivered by a surface driven Progressive Cavity Pump (PCP). Average efficiency over the range of operating conditions is proving to be significantly higher than incumbent centrifugal pump solutions, resulting in significant operating cost savings and GHG emission reduction for operators.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

While development continues in a variety of areas, the prospects for RTI technology are significant. Initial market penetration will come from a top drive solution developed for a wide range of conventional and thermal settings. Beyond this, RTI is well underway developing a solution that will address durability issues and address pain points for a wider range of potential markets to include challenging applications. Additionally, RTI is prototyping a direct drive configuration that will again open significant areas of the O&G space. With these combined solutions, RTI will be able to not only address the pain points of a significant portion of the market, it will also be able to make a meaningful impact on the GHG emissions of the upstream O&G industry.

## COMPANY PROFILE

### Target Markets:

Natural Resource Extraction  
(Mining, Forestry, Oil & Gas)

### Leadership:

[Robert Whyte, CEO](#)

### Number of full time

### employee equivalents:

14 – Squamish, BC

### Non-dilutive Grant Funding:

- SDTC
- Alberta Innovates
- IRAP

### Grant Funding Raised (\$CAD):

\$4,924,405

### Seed, Angel and/or

### VC Equity Investment:

- BDC
- Evok
- PacBridge Partners

### Most Recent Equity Capital

### Raise completed:

Series A (\$2M–\$20M)

### Dilutive Equity Funding

### Raised to Date (\$CAD):

\$10,344,562

### Projected Revenues for

### 2021 (\$CAD):

\$0

### Planned Equity Raise:

We are raising additional dilutive capital (equity) in the next 18 months.

[Website](#)

BOOK A MEETING





# SensorUp Inc.

Predictive digital nervous system for complex operations.

SensorUp is a NATO-award winning cloud-based operating system for the world's most complex physical operations. SensorUp optimizes and automates complex physical operations by aggregating disparate sensing and location tracking datastreams, extracting actionable insights with geospatial-AI, and dispatching resources with a workflow engine. SensorUp is currently automating pattern detection (e.g., close interactions), geo-event prediction (e.g., high risk area prediction), and resource allocations (e.g., automatic dispatching) to help essential workers react during the pandemic. Our customers run some of the world's most complex operations, such as the US Department of Homeland Security, NASA JPL, Energy companies, Mining companies, Rail companies, and more. For example, one of the largest midstream energy companies uses SensorUp to automate the operations of methane emissions detection, quantification, monitoring, reporting, repair, and prediction. SensorUp will be able to catch and predict emissions, and automatically dispatch repairs or preventive maintenance, so that the fugitive emissions are stopped earlier or even prevented before they happen.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

SensorUp's vision is to become every complex operations' digital nervous system that interconnects the disparate real-time operational data empowering the workforce of the future to apply intelligent automation and drive industrial productivity, safety, quality, and job satisfaction forward. We wrote several international standards for the United Nations' ITU-T and the Open Geospatial Consortium, and these standards have been used around the world. We are recognized by many international awards, including the NATO Defence Innovation Challenge Award. Our customers are organizations running some of the world's most mission critical operations, including US Dept. of Homeland Security, NASA JPL, Lockheed Martin, and more. Recently, we launched the SensorUp Integrated Emissions Management solution, that is sensor agnostic, AI-ready and future proof. Our solution is expected to directly reduce 6.36 ktCO<sub>2</sub>e in 2023, and a total reduction of 7,138.69 ktCO<sub>2</sub>e from 2021 to 2033.

[Website](#)



BOOK A MEETING

## COMPANY PROFILE

### Target Markets:

- Information, Communications and Technology Sectors
- Defence/Military
- Natural Resource Extraction (Mining, Forestry, Oil & Gas)
- Built Environment
- Transportation & Mobility

### Leadership:

[Geoff Mair, CEO](#)

### Number of full time employee equivalents:

26 - Calgary, AB

### Acceleration Programs:

- Creative Destruction Lab
- Plug and Play
- 5G Open Innovation Lab

### Awards and Recognition:

- NATO Defence Innovation Award 2018
- ASTech Startup of the Year 2019
- Rice Alliance Energy Tech Venture Forum's 10 Most Promising Companies

### Non-dilutive Grant Funding:

- IRAP
- SRED
- NRCAN
- Alberta Innovates
- TecTerra

### Grant Funding Raised (\$CAD):

\$2,200,000

### Seed, Angel and/or VC Equity Investment:

- Vanedge Capital
- Evok Innovations
- EDC
- Intergen

### Most Recent Equity Capital Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$8,150,000

### Projected Revenues for 2021 (\$CAD):

\$1,100,000

### Planned Equity Raise:

We plan to raise our next round of financing in Q4 2022 or Q1 2023. As such our next fund raise will likely be over 18 months out.



# Solaires Enterprises Inc

Innovating photovoltaic technology for a cleaner world.

Solaires is revolutionizing the way the sun's energy is converted into electricity. First generation solar panels, the ones we're familiar with, are heavy and rigid. Our technology is a new generation. It's a film, not a panel. It's light and translucent, so it allows for many more applications like windows or vehicles. Unlike conventional solar panels, our patented solar film is easier to use, more efficient, and less expensive... Imagine a world where we can capture energy from any surface!

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Solaires is innovating photovoltaic technology for a cleaner world. Imagine if one day we can capture the sun's energy from everywhere. The innovative solar technology of Solaires will have significant environmental and social implications. Locally, this clean technology will help people by improving air quality, and also help to build Canada into a clean energy innovator. At the international scale, our products and services can help some of the most vulnerable communities affected by climate change and fossil fuel pollution. Solaires' relatively simple and cheaper manufacturing process will help impoverished nations to get easy access to the benefits of the technology, narrowing the energy divide in the world. Removing silicon from the photovoltaics supply chain also means reduction in the social issues surrounding its mining and sale. The prime advantage of our technology is its stability, high efficiency and low manufacturing cost. When you lower the cost of solar power, you can not only shift the cost paradigm away from cheaper, dirtier alternatives, but also increase the adaptability of solar as a technology in itself, providing a greater number of uses and affording access to a greater number of people. Shifting away from silicon and into cheaper and cleaner alternatives for photovoltaics is a necessary step in providing solar power to the masses. Solaires is doing this without sacrificing power conversion efficiency or stability. In short, Solaires is providing a safe, abundant and recyclable alternative at a more affordable price.

## COMPANY PROFILE

**Target Markets:**  
Retail Consumers

**Leadership:**  
[Fabian de la Fuente, CEO](#)

**Number of full time employee equivalents:**  
24 - Victoria, BC

**Acceleration Programs:**

- Foresight
- Funding Roundtables (Spring)
- Creative Destruction Lab
- Coast Capital Savings Innovation Centre
- VentureLabs Tech Undivided

**Awards and Recognition:**

- Canada's Clean50 Top project award
- Hello Tomorrow's Deep Tech Pioneer
- Top Pitch at Volition's Amplify Live Pitch
- Top 50 Startups in Cleantech

**Non-dilutive Grant Funding:**

- SR&ED
- Alliance
- MITACS
- RRRF
- Innovation Assistance Program
- Innovative Assets Alliance

**Grant Funding Raised (\$CAD):**  
\$1,900,000

**Seed, Angel and/or VC Equity Investment:**

- Inventu Research Inc.
- Individual Investors

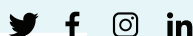
**Most Recent Equity Capital Raise completed:**  
Pre-seed (Up to \$500k)

**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$2,120,000

**Projected Revenues for 2021 (\$CAD):**  
\$10,000

**Planned Equity Raise:**  
Currently in pre-seed investment round, raising \$2.1M USD with \$9M USD valuation. \$220K raised to date in deposits and soft circled \$1M+. Four funds are conducting due diligence, after which we will proceed with term sheet negotiations. Planning a 2023 Seed Round for \$5M USD with \$25M USD valuation.

[Website](#)



BOOK A MEETING



# Summit Nanotech Corporation

Lithium for a clean energy future.

You know that cell phone in your hand? Did you know that it takes nearly 2 years to get the lithium from the ground to the battery that powers your phone and 60% of the lithium gets lost along the way? The lithium market is growing 500% in the next 5 years to keep up with the demand for electronics and EVs, but the extraction technology is archaic. Summit Nanotech fixes that. Our technology sustainably extracts over 80% of the lithium and gets it to market in one day. It's like a bullet train for lithium. We make lithium mining high yield and fast, improving economic margins and environmental impact to make energy storage better for future generations.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

EV demand is skyrocketing and the market for lithium is on fire. We have the most sustainable extraction technology in the world.

## COMPANY PROFILE

### Target Markets:

Natural Resource Extraction  
(Mining, Forestry, Oil & Gas)

### Leadership:

[Amanda Hall, CEO](#)

### Number of full time employee equivalents:

22 - Calgary, AB

### Acceleration Programs:

- Foresight CAC
- MaRS
- CTO
- D3

### Awards and Recognition:

- Clean50
- Solar Impulse

### Non-dilutive Grant Funding:

- IRAP
- SRED
- NRCan
- NRC

### Grant Funding Raised (\$CAD):

\$1,300,000.00

### Dilutive Seed, Angel and/or VC Equity Investment:

- Desjardins Capitale
- Esplanade Ventures
- Other large corporate and individuals.

### Most Recent Equity Capital Raise completed:

Seed (\$500k-\$2M)

### Equity Funding

### Raised to Date (\$CAD):

\$1,500,000

[Website](#)

in

BOOK A MEETING

## Svante Inc.

### Capturing Carbon Economically, Today

Carbon capture and removal is one of the most impactful solutions to address about 25% of our CO2 emissions problem equivalent to more than 10 Gigatons of CO2 annually. The carbon pulled from earth as fossil fuels needs to go back where it came from – into the earth in safe CO2 storage.

Svante focuses on cost-effective solutions to capture the carbon emissions produced by industries such as cement, limestone, and large-scale hydrogen production, either for safe storage or to be used for further industrial use in a closed loop. With the ability to capture CO2 directly from industrial sources, at less than half the capital cost of existing solutions, Svante makes industrial-scale carbon capture a reality

Svante's technology is currently being deployed in the field at pilot plant-scale by industry leaders in the energy and cement manufacturing sectors. The CO2MENT Pilot Plant Project – a partnership between Lafarge (Holcim) and TOTAL S.A. – is operating a 1 tonne per day (TPD) plant in Richmond, British Columbia, Canada that will re-inject captured CO2 into concrete, while the construction and commissioning of a 30 TPD demonstration plant was completed in 2019 at an industrial facility in Lloydminster, Saskatchewan, Canada. A 25 TPD demonstration plant is currently under design and construction at Chevron U.S.A. located near Bakersfield, California. In addition, several feasibility studies for commercial scale carbon capture projects ranging from 500 to 4,500 TPD are underway in North America and Europe.

#### Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Svante recently closed a Series D financing round of 100 M\$US plus 25M\$Can from the Canadian Government to set-up the first commercial plant in Canada to make our proprietary nano-filters. Our growth strategy is to be shovel-ready for several commercial size carbon capture plants by the end of 2023. We have three partnership platforms to scale our business model: strategic supply chain platform, channel to market platform and strategic account management with early adopters. These partnerships will allow us to focus our development effort in building a scalable supply chain for active capture materials. Svante is currently expanding its commercial filter manufacturing facility in Vancouver, Canada. By the end of 2023, the new facility will have an annual capacity to deliver filter modules capable of removing 3 million tonnes of carbon dioxide per year or the equivalent of project delivery of 3 world-scale carbon capture plants of 1 million tonnes per year.

## COMPANY PROFILE

### Target Markets:

- Heavy Industry
- Natural Resource Extraction

### Leadership:

[Claude Letourneau](#),  
President & CEO

**Number of full time employee equivalents:**  
140 – Vancouver, BC

### Awards and Recognition:

- Clean50
- Global Cleantech 100e

### Non-dilutive Grant Funding:

- IRAP
- NRCAN
- US DOE
- Net Zero Accelerator Initiative

**Grant Funding Raised (\$CAD):**  
\$60,000,000

### Seed, Angel and/or VC Equity Investment:

- Suncor
- Temasek
- Chart Industries
- Carbon Direct
- EDC
- OGCI Climate Investments
- BDC
- Cemovus
- Chevron
- Chrysalix Venture Capital
- The Roda Group
- Mitsui & Co

**Most Recent Equity Capital Raise completed:**  
Series B+ (\$20M+)

**Dilutive Equity Funding Raised to Date (\$CAD):**  
\$168,000,000

**Projected Revenues for 2021 (\$CAD):**  
\$0

### Planned Equity Raise:

We are raising additional dilutive capital (equity) in the next 18 months.



# Swirltex

## A New Form of Filtration

Swirltex has developed a revolutionary membrane technology that can significantly improve filtration efficiency and membrane lifetime. It has many applications including wastewater treatment and recycling, as well as food and beverage processing. Our unique technology opens tubular membrane applications to a broader market through significant improvements in flux (production) and energy efficiency compared to traditional operation methods. The design combines membrane filtration with buoyancy manipulation in a unique flow pattern, to greatly increase permeate production while reducing fouling, currently the greatest pain for the industry. Swirltex utilized a vortex generating device within the tubular membrane to center, less buoyant material (air and solids) toward the center of the tube, reducing solid interaction with the membrane surface. The technology can be implemented as an improvement to processes that currently employ tubular membranes and can also enable the use of tubular membranes where they were originally not viable.

### **Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Swirltex has developed a membrane process that can significantly improve filtration efficiency for high strength and oily wastewaters.. Our unique technology opens membrane utilization to a broader market through significant improvements in flux and energy efficiency. The design combines membrane filtration with buoyancy manipulation in a centrifugal flow pattern to greatly increase permeate production while reducing fouling, which unlocks the ability to treat complex wastewater qualities where membrane treatment would normally be uneconomical.

## **COMPANY PROFILE**

### **Target Markets:**

- Water
- Natural Resource Extraction (Mining, Forestry, Oil & Gas)

### **Number of full time employee equivalents:**

12 - Calgary, AB

### **Acceleration Programs:**

- Foresight
- MaRsS
- Creative Destruction Labs

### **Awards and Recognition:**

Cleantech 100

### **Non-dilutive Grant Funding:**

- IRAP
- SRED
- Alberta Innovates
- SDTC

### **Grant Funding Raised (\$CAD):**

\$265,400

### **Seed, Angel and/or VC Equity Investment:**

Mazarine Ventures

### **Most Recent Equity Capital Raise completed:**

Seed (\$500k-\$2M)

### **Dilutive Equity Funding Raised (\$CAD):**

\$3 million

### **Projected Revenues for 2021 (\$CAD):**

\$1,456,000

### **Planned Equity Raise:**

Swirltex will be building Canada's largest membrane produce water treatment plant in the 3rd quarter of 2022, with LOI's for two larger produce water plants in 2023.

[Website](#)



BOOK A MEETING



# SWTCH

## EV Charging Where You Need It Most

Increasingly, electric vehicle (EV) owners live in high-density urban settings, such as condominiums and apartments, where they don't have access to EV charging. By 2023, there will be over 5 million EV owners without regular access to home charging. At the same time, the entities that stand to benefit most from providing EV charging services—e.g., real estate developers, property management companies—don't have a solution to provide EV charging services cost-effectively. Moreover, building owners and utilities do not have the infrastructure or programs in place to manage the impact of greater energy demand from EV charging on buildings, distribution networks, and the grid.

SWTCH is focused on solving the challenges of deploying EV charging in multi-tenant buildings along with solving the challenge of increased energy demand from EV charging infrastructure. Our EV charging platform enables intelligent, customer-centric EV charging, while managing charging to reduce grid constraints, shift energy demand, and accurately track and price charging services. By maximizing the potential of limited EV charging infrastructure in high-density buildings, SWTCH is enabling building operators to provide an increasingly critical amenity to their tenants.

As transportation accounts for 24% of Canada's GHG emissions, improving EV charging accessibility in high-density buildings will be crucial to improving EV adoption and in turn, to the decarbonization of Canada's transportation system. Ultimately, as our society shifts further to renewable energy, our platform will help to optimize coordination between energy resources, including distributed energy resources to create more resilient grids and more sustainable cities.

### Why our venture should be considered one of Canada's 50 most investable cleantech companies:

SWTCH was founded in 2016 to address the challenges of urban electric vehicle ownership. Since then, we have grown SWTCH from an idea to a product, received global media coverage, raised over \$6M in diluted and non-diluted financing, and generated over \$6M in commercial revenue with over 950 deployments across North America. SWTCH's focus is on the development and deployment of innovative EV charging management solutions for high-density settings, such as condominiums, apartments, offices, and commercial buildings.

SWTCH has been awarded numerous awards for our technology. MaRS Discovery District named SWTCH as the 21 companies to watch in 2021. SWTCH was recognized by Alectra Utilities as a leader in electric mobility by winning the Activate!Vaughan Smart City technology challenge. SWTCH was recognized by the Government of Ontario by winning the Lieutenant Governor's Visionary Prize for Scientific and Technology Innovation. SWTCH's technology has also been recognized globally by winning the MIPIM New York Proptech Challenge and the Urban Future Lab competitions. SWTCH was recognized by Natural Resources Canada and Electric Mobility Canada as one of Canada's leading EV charging technology providers. SWTCH's technology has also been featured in many publications including the Globe and Mail, BetaKit, and Electric Autonomy.

## COMPANY PROFILE

### Target Markets:

- Grid/Power/Utilities
- Transportation & Mobility
- Built Environment

### Leadership:

[Carter Li, CEO](#)

**Number of full time employee equivalents:**  
26 - Toronto, ON

### Acceleration Programs:

- MaRS
- Greentown Labs
- New Energy Nexus
- Urban Future Lab

### Awards and Recognition:

- MaRS 21 to Watch for 2021
- Alectra Utilities Activate!Vaughan Smart Cities Challenge Winner
- NYC Proptech Challenge Winner

### Non-dilutive Grant Funding:

- NRC IRAP
- SRED
- NRCan
- OCI
- Government of Ontario

**Grant Funding Raised (\$CAD):**  
\$2,500,000

**Most Recent Equity Capital Raise completed:**  
Seed (\$500k-\$2M)

**Equity Funding Raised to Date (\$CAD):**  
\$4,250,000

**Projected Revenues for 2021 (\$CAD):**  
\$3,000,000

**Planned Equity Raise:**  
\$10M Series A in Q1 2022 to expand sales operations into the United States

[Website](#)



BOOK A MEETING





# Technologies Ecofixe Inc

The ECOFIXE and BIOFIXE are two high-performance, cost-effective and modular solutions designed to increase the capacity of wastewater treatment plants.

Technologies Ecofixe developed two biological wastewater treatment solutions. The ECOFIXE module for organic load removal and the BIOFIXE module for ammonia removal. The modules can be installed in existing or new wastewater treatment plants (WWTP). The ECOFIXE and BIOFIXE modules are high performance solutions to upgrade the treatment capacity of existing plants while reducing their energy consumption and GHG emissions.

The ECOFIXE and BIOFIXE modules can meet both municipal and industrial needs. Our municipal customers have wastewater treatment plants such as aerated lagoons or other activated sludge reactors. Their installations are aging and lack treatment capacity. In the industrial sector, our clients are in the food processing, pulp & paper, and landfill. They are slowed down in their growth if their WWTP is not updated. In all cases, our solutions can give a second life to their facilities. Our customers choose our solutions because they are economical, ecological, and energy efficient.

According to the EPA, these wastewater treatment plants are operating, on average, at 81% of their design capacity, while 15% have reached or exceeded it. Still per the EPA, in 2019, though the annual water infrastructure investment gap is \$81 billion, the sector has made progress to address current and future needs through resilience-related planning and innovations that produce profitable byproducts or cost savings from wastewater treatment.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Technologies Ecofixe is looking for a first investment that will be mainly used to grow the team and intensify marketing efforts, especially in North America. In addition, the company wishes to keep investing in R&D. It has renewed its partnership agreement with college and university research centers for the next three years. Technologies Ecofixe also wants to build its network of manufacturing agents to accelerate its growth. In addition, the company wants to carry on measuring its impacts, mainly by conducting a life cycle assessment of each of its projects. This will allow the company to determine specifically how much energy consumption and GHG emissions are reduced by these solutions. The ECOFIXE system is already installed full-scale and has proven its robust performance even in the coldest or most arid climates. The BIOFIXE is the subject of 3 new installations for 2022. We invite you to watch a [short video](#) of one of our installations. Finally, let's also mention that the company is BCorp certified since 2018 and that the ECOFIXE system is patented. The BIOFIXE system is patent pending.

## COMPANY PROFILE

### Target Markets:

Water

### Leadership:

[Marisol Labercque, President](#)

### Number of full time employee equivalents:

5 - Blainville, QC

### Acceleration Programs:

- Impact8-Montreal (MaRS), 2015
- Selected in 2021 by The Canadian Technology Accelerator for Climatetech (ongoing)

### Awards and Recognition:

Solar Impulse in 2021 for the ECOFIXE

### Non-dilutive Grant Funding:

- \$935,000 from the PCCI program (provincial grant for technology showcase), project done in Morocco.
- \$500,000 from the Innovation Solution Canada Program for the BIOFIXE.
- \$150,000 Applied Research and Development (ARD) grant from the College and Community Innovation (CCI) Program.
- Awarded by the Natural Sciences and Engineering Research Council of Canada (NSERC).
- \$120,000 from the SheEO.

### Projected Revenues for 2021 (\$CAD):

\$3,300,000

### Planned Equity Raise:

Technologies Ecofixe is looking for investors with a focus on the environment and impact. We are currently seeking to raise \$2.5M CAD. The ideal investor(s) would participate in the second round in less than five years (between \$5M and \$8M USD).

[Website](#)

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BOOK A MEETING

# Total Containment Inc.

The Envirolock System solves issues facing pipelines by mitigating the impact a pipeline can have on the environment.

The Envirolock Systems are the only patented combination of pipeline leak detection and leak containment systems available today. Envirolock drastically improves the industry's monitoring capabilities and reduces the (external) causes of releases in pipelines. With an Envirolock system in place, the pipeline is isolated from the environment and the environment is isolated from the contents of the pipeline. If, in the rare event, a pipeline release does occur, that release cannot escape the Envirolock containment system in the area where it is installed! From natural gas to oil, to CO2, to hydrogen pipelines, the Envirolock System can protect them all, especially in high consequence areas, like under and near rivers, near populated areas, environmentally sensitive areas, sacred indigenous land etc. Envirolock can be installed on new or existing pipelines, and in any weather including Canadian winters. The key to Envirolock is the material it's made from, a high tensile, high strength, abrasion, and chemical resistant material that has been used in the Oil and Gas industry for decades. We have developed a new and innovative way of deploying this rugged material to solve some of the critical problems facing pipelines today. We have also incorporated the re-use of previously considered single-use plastic in our design to make use of products that have limited applications after their original use and doing our part in helping to address another challenge facing our society today. The Envirolock Systems are patented in the USA and are patent pending in multiple countries across the world.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

Pipelines play an intricate role for the safe and efficient transportation of hydrocarbons on a worldwide basis. Envirolock can play a significant role in countries where illegal tapping (that lead to releases into the environment such as rivers) is a major issue. The Envirolock System makes it possible to detect when someone is trying to gain access to a pipeline, holds them off and notifies authorities of the attack, all while protecting the line from leaking. The System puts a physical barrier (as well as including a digital barrier) in place that can stop leaks from reaching the environment such as lakes, rivers and drinking water. The System will significantly reduce the cost of cleaning up a spill by containing and communicating a leak. Natural gas pipelines, when they leak, release massive amounts of GHG, the Envirolock System can capture those leaks, hold materials inside the containment system until they can be recovered safely. The Envirolock System can be used on various types of valves as well as pipelines. Valves are responsible for as much as 6% of the emissions released from industry. The Envirolock System can impact a multitude of ESG based concerns for O&G and other industries.

[Website](#)

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BOOK A MEETING

## COMPANY PROFILE

### Target Markets:

- Water
- Natural Resource Extraction (Mining, Forestry, Oil & Gas)
- Defence/Military

### Leadership:

[Larry Young, Founder and CEO](#)

### Number of full time employee equivalents:

4 - Edmonton, AB

### Non-dilutive Grant Funding:

- IRAP
- Alberta Innovates
- SRED

### Grant Funding Raised (\$CAD):

\$150,000

### Seed, Angel and/or VC Equity Investment:

Eric Thomsen

### Most Recent Equity Capital Raise completed:

Seed (\$500k-\$2M)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$850,000

### Projected Revenues for 2021 (\$CAD):

\$0

### Planned Equity Raise:

We are currently preparing and are in the process of Seed round funding for existing products and development of a 3rd patent pending product



# Verdi

Customize water and nutrient delivery for every plant.

Verdi is modernizing irrigation systems to help farmers customize water and nutrient delivery for every plant.

Agriculture is a \$10T industry that we all depend on. But without one single resource – water – it would all come to a grinding halt. And water is running out. In the US alone, over 200M acres of farmland are currently under drought. Even in Canada, farmers are starting to feel similar effects.

That's why at Verdi, we help farmers become resilient to drought by building intelligent swarms of irrigation devices to control exactly where water is going in the field. For the first time, farmers have the precision to save 2x more water than traditional management solutions, and reduce water usage by 10-25% per acre. That's more water for farms and communities, and less chemical leaching.

We also do more than just save water. In our first success, we helped Canada's largest wine company sell wine for 3x higher price by improving quality. We're also helping growers increase yield by up to 20%, and we have the potential to cut GHGs by 0.43 tons per acre by reducing water pumping.

We sold out for 2021 with 500 devices deployed to 7 customers. We have US\$25K ARR and a wait-list of over 200 acres. Our customers include the world's largest wine company, and top Canadian brands like Arterra and Mission Hill.

With 200M+ acres (\$35B TAM) of fruits and vegetables worldwide to expand into, we are excited to bring our impact to commercial scale.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

Our team brings experience from big tech like Samsung and Intel, and top Silicon Valley startups. Our passion for agriculture comes from our family backgrounds within it. We spun out of a research collaboration with Google's agriculture team, and we are now bringing our solution to industry with the help of world-class agribusiness experts with director-level experience at Fortune 1000 agriculture companies like DuPont and Trimble.

## COMPANY PROFILE

### Target Markets:

- Water
- Agrifood

### Leadership:

[Arthur Chen, Co-founder, CEO](#)

### Number of full time employee equivalents:

5 – Vancouver, BC

### Acceleration Programs:

- Alchemist Accelerator
- e@UBC HATCH

### Awards and Recognition:

- TechCrunch Disrupt Startup Battlefield 2021
- 101 Best Agriculture Companies in Canada
- 1st place at CrossoverAI 2020

### Non-dilutive Grant Funding:

- BC Agritech Innovation Grant
- SDTC Seed Fund

### Grant Funding Raised (\$CAD):

\$400,000

### Seed, Angel and/or VC Equity Investment:

- Alchemist Accelerator
- Startup Haven Fund
- Rarebreed Ventures
- Red Thread Ventures
- Baker Hall Capital
- Tom Urban
- Chen Fong
- Others

### Most Recent Equity Capital Raise completed:

Pre-seed (\$940k)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$940,000

### Projected Revenues for 2021 (\$CAD):

\$25,000

### Planned Equity Raise:

Opening seed round in Q1 2021 to fund milestones to reach commercial scale. Looking to raise US\$2-4M.

[Website](#)



BOOK A MEETING



# Westgen Technologies Inc

## Powering the Evolution to Zero-Emission Well Sites

Westgen is a leader in supporting the energy industry in their net zero ambitions. Westgen's EPOD is a solar-hybrid remote power generation system which provides an economic solution to eliminating methane venting from pneumatic devices, thereby reducing site emissions by up to 99.5%. Beyond emissions reductions, the patented and award winning EPOD reduces capital costs, reduces operating costs, improves reliability, and generates carbon credits for oil and gas producers. Since EPOD launched in 2019, over 80 units have been sold to 25+ oil and gas producers.

### Why our venture should be considered one of Canada's 50 most investable cleantech companies:

In early 2020, Westgen realized that their EPOD solution, designed for new wellsites, was only solving a very small part of the emissions problem, while most methane emissions were coming from old legacy wellsites. Westgen developed EPOD-Mini to be used on off-grid wellsites around the globe that vent gas from pneumatic devices. Westgen and others worked with the Government of Alberta to change the carbon credits protocols and enable 8 to 13 years of carbon credits for these methane elimination retrofits. They proceeded to develop a new business model in which EPOD-Minis are deployed to oil and gas producers at no cost to them, in exchange for a portion of the carbon credits. Westgen estimates that this solution could work on over 7,500 wellsites across Alberta, the initial target market, eliminating 4,000,000 tonnes of CO<sub>2</sub>e by 2030 while providing a new revenue stream to oil and gas producers in the form of carbon credits. There is significant global potential for EPOD-Mini. In Q1 2021 the State of Colorado announced new methane regulations and now requires that producers retrofit a portion of their wellsites to zero methane emissions devices. The first sales of EPOD-Mini to Colorado have already taken place. The new Colorado regulations, for example, will greatly accelerate the adoption of EPOD-Mini and foreshadow what is to come in other jurisdictions globally.

## COMPANY PROFILE

### Target Markets:

Natural Resource Extraction  
(Mining, Forestry, Oil & Gas)

### Leadership:

[Connor O'Shea, President](#)

### Number of full time employee equivalents:

15 – Calgary, AB

### Acceleration Programs:

Creative Destruction Lab 2021

### Awards and Recognition:

- Petroleum Technology Alliance of Canada Innovation Award 2019
- Global Energy Award – Emerging Cleantech 2020
- JWN Rising Star Award 2020
- Global Energy Award – Innovation in Technology 2021

### Non-dilutive Grant Funding:

- SDTC \$1.33 million
- Emissions Reduction Alberta \$1.33 million
- Alberta Innovates \$160k

### Grant Funding Raised (\$CAD):

\$4,300,000

### Projected Revenues for 2021 (\$CAD):

\$6,000,000

### Planned Equity Raise:

Seed round \$10,000,000; closing in Q1 2022.

[Website](#)



BOOK A MEETING



# ZILA Works

ZILA Works is developing a new industrial bio-plastic so that product manufacturers can lower their carbon footprint

Imagine a world where the plastic products we rely on everyday are made safely from plants that help fight climate change. At ZILA Works, we are developing a new industrial bio-plastic so that product manufacturers can lower their carbon footprint. There's an unfortunate paradox in the global race to net zero: many of the technologies designed to move our economy away from fossil fuels actually require fossil fuel-based products as part of their design. For example, the materials used to make wind turbines for clean energy production, composites used to make vehicles lighter, and coatings and finishes used to make buildings last longer all require epoxy resin as an important building block. But traditional epoxy resins are made from toxic petroleum feedstocks.

ZILA Works' bio-epoxy resin is a low carbon or carbon sequestering solution (we just launched a 3rd party LCA to validate our claims). ZILA Works is currently focused on our first paid pilot with Burton snowboards to formulate our resin, put it in products, and test in demanding real world environments. The outdoor industry is our beachhead market because it is a space that demands extremely high performance materials, yet has quick R&D cycles and minimal prototype costs, all while enabling us to generate revenue. We'll then be in a position to formulate for Vestas, who uses 100,000 tonnes of epoxy annually and recently selected ZILA Works as a winner of their call for technology challenge for their next generation of low carbon wind turbine blades.

## Why our venture should be considered one of Canada's 50 most investable cleantech companies:

ZILA Works utilizes hemp seed oil for its primary feedstock, and plans on collaborating with industrial hemp growers and processors in Alberta where hemp benefits from two decades of maturity. ZILA's patented technology is not limited to hemp seed oil; we can utilize any vegetable oil providing opportunities for sustainable crop rotation with producers. ZILA's patent portfolio includes four issued and three pending patents. ZILA Works recognizes the demand for its technology is in the US, Asia, and Europe where there is heavy manufacturing. ZILA has channels to the US market place through government procurement offices as a certified Minority-Owned Business Enterprise. Instead of exporting out of Canada raw hemp seed oil, ZILA Works is working to pilot the higher value added bio-epoxy resin production in Canada. This will allow ZILA Works to leverage high quality talent pools of chemists and chemical engineers from the oil & gas industry. This will compliment the strong, diverse team of industry professionals and advisors already supporting ZILA Works. ZILA Works has a clear pathway to scale up and commercialize our bio-epoxy resin platform technology. ZILA has strategic partners waiting for samples to test the resin and help achieve these goals. In 7 years ZILA Works anticipates being on its way to \$100M annual recurring revenue with ~100 new jobs created, supporting over 100,000 hectares of hemp cultivation each year, and sequestering over 5.8 megatonnes of CO2 per year.

[Website](#)



BOOK A MEETING

## COMPANY PROFILE

### Target Markets:

- Built Environment
- Transportation & Mobility
- Heavy Industry
- Outdoor Industry
- Equipment Manufacturers

### Leadership:

[Jason Puracal, CEO & Co-founder](#)

### Number of full time employee equivalents:

4.75 - Edmonton, AB

### Acceleration Programs:

- Foresight CAC
- CHIC-Fuse 42 Accelerator
- University of Washington Business Growth Collaborative
- Cascadia Cleantech Accelerator

### Awards and Recognition:

- Winner of Foresight SDG Connect Vestas Turbine Challenge
- Winner of the 2020 ISC3 Innovation Challenge (DE)
- 2019 Energy Globe National Award

### Non-dilutive Grant Funding:

- EPA
- Cleantech Alliance/Washington State University
- North Dakota State University
- One Mitacs Internship & two Mitacs Postdoc Fellowships with the University of Alberta

### Grant Funding Raised (\$CAD):

\$422,000

### Seed, Angel and/or VC Equity Investment:

Yes

### Most Recent Equity Capital Raise completed:

Pre-seed (Up to \$500k)

### Dilutive Equity Funding Raised to Date (\$CAD):

\$800,000

### Projected Revenues for 2021 (\$CAD):

\$0

### Planned Equity Raise:

We are currently raising our Seed round of \$1 Million US using a conventional convertible note. We have already closed on 47% of the round.

# ZS2 Technologies

Construction Solutions to Meet the Standards You Deserve  
with the Future in Mind

At ZS2 Technologies we believe the adoption of prefabricated construction technologies in combination with advances in material science presents a tremendous opportunity for the construction industry to close the productivity gap, improve building safety, significantly improve environmental performance, increase building operating efficiencies and generate significant economic returns.

ZS2 has developed strong market demand for a variety of innovative construction materials based on low-carbon magnesium cement technology which is highly fire resistant, anti-microbial, and resilient. These products include TechBoard™, a magnesium oxy-sulfate cement board, and TechPanels™, a structurally insulated panel for residential, commercial, industrial, and healthcare building applications.

First generation TechBoard™ is manufactured under exclusive partnership with ZS2's China based manufacturing partner. ZS2 has filed initial patents and secured required supply partners for the first ever Made-In-Canada magnesium-based products including second generation TechBoard™. Pilot plant manufacturing operations are expected to be commissioned in Q1 2022. Our strategic partnership with Baymag Inc., Canada's only MgO producer, has resulted in our ability to create proprietary Made-in-Canada cement formulations which are stronger, safer, and with a significantly reduced CO2 footprint vs. traditional cement.

Further related products such as TechClad™, TechGuard™ and TechSpray™ are in various levels of development to address market opportunities for building cladding, fire-resistant materials and improve existing construction product performance.

ZS2 is led by experienced cleantech, manufacturing, and construction team members with decades of experience building and growing highly successful Canadian companies including DIRT Environmental Solutions, Pure Technologies, Carbon Engineering, and IPB Systems.

**Why our venture should be considered one of Canada's 50 most investable cleantech companies:**

ZS2 Technologies is a high growth cleantech company founded by an experienced, knowledgeable, and complementary executive team. The tenacious entrepreneurial spirit of the founders has fostered a culture of action and resulted in the first made in Canada Magnesium cement board.

## COMPANY PROFILE

### Target Markets:

- Heavy Industry (Cement, Steel, Aluminum, Chemicals, Pulp & Paper...)
- Built Environment

### Leadership:

[Scott Jenkins, President and CEO](#)

### Number of full time

### employee equivalents:

30 - Calgary, AB

### Acceleration Programs:

- Avatar Innovates
- Foresight CAC
- Mayors Innovation Challenge

### Awards and Recognition:

- Mayors Innovation Challenge
- Solar Impulse

### Non-dilutive Grant Funding:

IRAP

### Grant Funding Raised (\$CAD):

\$110,000

### Seed, Angel and/or

### VC Equity Investment:

N/A

### Most Recent Equity Capital

### Raise completed:

Series A (\$2M-\$20M)

### Dilutive Equity Funding

### Raised to Date (\$CAD):

\$5,000,000

### Projected Revenues for

### 2021 (\$CAD):

\$872,748

### Planned Equity Raise:

Creating a made in Canada Magnesium board manufacturing plant.



# Cleantech Innovation Starts Here!

Foresight is Canada's cleantech accelerator. We bring together innovators, industry, investors, government, and academia to address today's most urgent climate issues and support a global transition to a green economy.



**FORESIGHT**  
CANADA

## OUR IMPACT

**750+**

ventures  
supported

**6,600**

jobs  
created

**\$800M**

in capital  
support

**\$300M**

in revenue  
generated

## ACCELERATION PROGRAMS

Foresight's flagship Acceleration programs provide cleantech innovators with unparalleled access to training, expert coaching, and connections. From startup to scaleup, from validating product-market fit to developing C-suite skills, Foresight's programs help climate solutions become thriving businesses.

## INDUSTRY CHALLENGES

Foresight's Challenge programs connect corporate leaders facing sustainability hurdles with cleantech innovators. As industry in Canada and around the world make changes to meet emissions targets and other environmental goals, we connect them with customer-ready cleantech ventures who are eager to expand their markets.

## SECTOR-SPECIFIC INITIATIVES

Our sector-based approach harnesses energy and innovation in certain cleantech areas to support the development of high impact solutions. We have created innovation hubs – agriNEXT, bioNEXT, carbonNEXT, energyNEXT, and waterNEXT – to accelerate the commercialization and adoption of climate solutions.

## INVESTORS

Foresight connects impact investors with innovative cleantech ventures that address climate change while meeting business imperatives and ESG priorities. Through webinar, matchmaking events, and venture showcases, we foster valuable connections. New in 2021- the Foresight 50 features Canada's 50 most investable cleantech ventures.

Join our Community of Innovators to stay connected with cleantech news, opportunities, and events.

**FORESIGHTCAC.COM**