

# Advancing Circularity: Investment Opportunities in the Circular Economy

An investment lookbook from COIL



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Circular Opportunity Innovation Launchpad (COIL) has worked with over 160 enterprises across southern Ontario who have proven the necessity, viability, and resiliency of circularity. This lookbook showcases the variety and potential of some of these enterprises, and demonstrates the need and opportunity for circular investment across Canada.

The Ellen MacArthur Foundation states that 55% of global emissions can be addressed through the transition to renewable energy sources – and that 45% is reliant on a drastic change in global management and production of land, food and goods. Capital investment in leading circular enterprises – along with policy change and infrastructure development – will help set and achieve private and public net–zero and climate–smart targets. Capital is critical in supporting collaboration, innovation, secondary markets, and associated infrastructure.

The market for circular products, services and innovation has demonstrated consistent growth over the years and indicates a booming future. Global Market Insights reports that the "Upcycled Food Products" market size was valued at USD \$54.5 billion in 2022 and is set to reach over 5.7% CAGR between 2023 and 2032. JP Morgan reports that circularity across industries would add \$4.5 trillion in additional economic output by 2030, and \$25 trillion by 2050. The World Economic Forum estimates that by 2025 recycling, reuse, and remanufacturing could help the economy unlock \$1 trillion a year untapped resource savings.

Circularity also presents a paradigm shift away from the economic and financial systems that contributed to our social and climate catastrophes in the first place. As William McDonough, the founder of Cradle to Cradle has stated, the world doesn't have a "waste issue", it has a "design issue."

A circular economy can shorten supply chains, reduce emissions and bolster resilience to economic, political and environmental turbulence. It re-orients our value of natural "capital" alongside financial capital. It enables decoupling away from a resource-based economy, to the possibilities of degrowth. While innovation plays a critical role here, so too does a celebration and investment in Indigenous communities that fight to manage our land and resources, as well as those

communities facing scarcity and marginalization, who practice reuse, repair and other circular practices out of necessity. It bolsters local economic development, as COIL enterprises have seen exciting results in job creation, revenue generation, and business growth through investment and exports.

The potency of a circular economy lies in its intersectionality: humans seeing themselves (and by extension, the economy) as a part of the larger ecological system; competitors sharing infrastructure and resources; prioritizing value-added production, etc. It will take consistent intersectional approaches to invest in the infrastructure, processes, procurement, and policy that will catalyze the circular economy as a viable alternative to the dominant linear economy. We're not just investing in a circular economy – we're building a circular society.

#### How to Read this Document

Case Studies: Following the Introduction are three "Case Studies". These demonstrate the unlocked potential of circularity through innovation and collaboration, across verticals within the same business, and across industries.

**Enterprise Profiles:** This lookbook features some of COIL's most exciting investor-ready enterprises leading the charge on circularity. It is first organized into four sector categories: Agri-Food; Construction, Renovation & Demolition; Plastics, Packaging & Re-Use and; Technology & Al. Within each sector, enterprises are organized by development stage (from pre-seed to Series B).

**COIL Directory:** This lookbook captures just some of the 160+ enterprises that COIL has supported with circular funding, mentorship, resources and networks. For additional COIL enterprises, see the directory of fantastic circular and regenerative agriculture leaders across southern Ontario.

Questions about COIL, the lookbook, or any of the featured enterprises? Get in touch!

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<sup>&</sup>lt;sup>1</sup> COIL is a circular business accelerator and network funded by the Government of Canada through the Federal Economic Development Agency for Southern Ontario. COIL programs are delivered as a collaboration between the City of Guelph, County of Wellington, Innovation Guelph, 10 Carden and Guelph Chamber of Commerce. Read more at coil.eco.

<sup>&</sup>lt;sup>2</sup> Global Market Insights. "<u>Upcycled Food Products Market Size, by Type</u>". July 2023.

<sup>&</sup>lt;sup>3</sup> Goldman Sachs. "GS Sustain: The evolution towards a Circular Economy". May 2022.

**Case Studies** 

### **CASE STUDY 1**

# Unlocking Costs Savings and Revenue Generation through Circular Innovation



The upcycled food products market was valued at \$54.5B USD in 2022 and is on its way to hitting 5.7% compound annual growth rate over the next decade.¹ Upcycling in the food and beverage industry is both led by consumers looking for brands committed to sustainability, and by brands that see it as a consumer education tool to further market demand for upcycled products.

Sunrise Soya, the largest tofu processor in Canada, was looking for a solution to high volumes of their okara, the unavoidable and natural byproduct of the tofu-making process. Okara is a nutrient-dense product that is high in protein. Additional processing, such as fermentation, helps unlock additional benefits such as edible fibre, and vitamins B12 and B2.

Sunrise worked with COIL collaborators <u>Anthesis Provision</u> and a consortium of partners on the COIL-funded Re(PURPOSE) Incubator program to divert the okara from landfill, save on waste management costs, and explore revenue-generating alternatives.

According to Anthesis Provision, an estimated 68% of food waste comes from unavoidable by-products, much of which could be "upcycled" – integrated into another food process, or used in agricultural, manufacturing, cosmetic or medical applications.

The Re(PURPOSE) program connected Sunrise Soya with Abokichi and Nature's Flair, based out of Toronto and Georgetown, Ontario respectively. <u>Abokichi</u> is a Japan-inspired food brand founded in 2013, with a mission to provide healthy, clean foods that are versatile and convenient, such as their wildly popular OKAZU chili oils.

<u>Nature's Flair (Vision Food Innovations)</u> produces plant-based and vegan baked goods with superfoods like oats, turmeric and fava beans.

Tapping into their unique market niches, both SMEs were successful in upcycling Sunrise Soya's okara product. Abokichi created an entirely upcycled ramen noodle kit. The noodles themselves were made from the okara, and the rest of the kit was made up of "ugly" tofu bits and vegetables, and a miso created from a by-product of sake fermentation. This Upcycled Certified ABO Miso Soup generated six jobs and is now available in 200 stores including Costco.

Vision Bakeries led an innovative R&D dehydration process that created a dry okara flour to enrich baked goods. This optimization created an entirely new line of upcycled muffins and cupcakes for the brand. Vision is now producing over 600,000 muffins per month, supplying to Metro, Sobeys and Whole Foods.

This project captures the importance of steady investment to support SME-led early stage R&D and innovation, and the intermediaries and infrastructure required to bring collaborators together.

<sup>1</sup>Global Market Insights (July 2023). "<u>Upcycled Food Products Market Size, By Type.</u>"





### **CASE STUDY 2**

# Going Circular Across Verticals



Upcycling and circular innovation are not just the territory of product development or packaging in Consumer Packaged Goods (CPG). In fact, circularity can be considered across verticals, and enterprises like <u>Greenhouse Juice</u> are demonstrating how.

COIL first supported Greenhouse Juice in the fall of 2021 with a grant as part of the Circulate CoLab program.

The team, made up of Greenhouse Juice, <u>Herbert Labs</u>, and <u>SAINA+</u> <u>Consulting</u> demonstrated an innovative dehydration solution to turn Greenhouse's juice pulp waste stream into both a new revenue source, and a new product line. Through the process they worked with food innovation mentors from <u>Innovation Guelph</u> and <u>Anthesis Provision</u> along with their teammates and circular economy entrepreneurs who supported their drying R&D and opened up additional experiments with fermentation.

Since this optimization phase, the team has seen incredible success across product development, certification, collaboration, secondary markets and packaging:

**Commercialization:** As a direct result of the dehydration prototype, the team was able to use the ginger pulp from previous juicing efforts as an ingredient in a Ginger Beer, launched onto the market in Fall 2022, less than a year after the initial prototyping began. Quickly becoming a fan favourite with over \$80,000 in sales in 12 months, it is now available at retailers across Canada and through their online shop.

**Product Development:** Two other products are currently in development. A pre-made to-go smoothie using upcycling green pulp is expected to come to market by Spring 2023, and an upcycled turmeric powder is currently in its optimization phase, which could be sold as a stand-alone powder, or used as an ingredient in both warm and refrigerated drinks.

Upcycled Certification: The Ginger Beer is one of the first COIL-associated products to receive official Upcycled Certification Standard from the Upcycled Food Association. Strong preliminary sales validate the growing market interest in upcycled (food) products across North America.

**Collaboration:** Following a COIL networking event, the team connected with a Guelph-based fermentation laboratory, <a href="Escarpment Labs">Escarpment Labs</a>. Combining diverted organic waste materials with fermentation expertise, they are now pursuing another product launch of a beet and ginger kombucha.

**Secondary Markets:** Most by-products have multiple opportunities, so long as buyers and markets are established. Additional juice pulp is generating additional revenue in secondary markets with local producers for compost and other food processors like <u>Green Bowl Foods</u> in their Upcycled Certified ready-to-eat meals.

This project has connected SMEs from across the province in their value-alignment, and has been successful in the diversity to which it is implementing circularity. Keep an eye out for this team as they explore circular packaging (upcycled labels to complement their glass jar recycling program) and material streams, such as hemp.

### **CASE STUDY 3**

# Circularity Touches All Industries



The insurance industry may not come to mind when thinking about the circular economy, but insurers like <u>Co-operators</u> – a leading Canadian financial services co-operative, offering multi-line insurance and investment products, services, and personalized advice – are proving why it should.

There is of course, a strong connection between the industry and climate change. At present, it struggles to keep pace and adapt with the increase in severity and frequency of climate-related

extreme weather events. Amidst this increase in risk, insurance rates must remain affordable. As Karen Flamand, Associate Vice President of Claims Shared Services at Co-operators states, "The insurance gap is growing".

The circularity connection is both up and downstream. Ever wondered where the soggy contents of a flooded basement wind up? Transporting the waste from property insurance claims to landfills is the responsibility of insurers. For example, Co-operators

reported that it disposes of 116,000 tonnes of waste annually from property claims. They have a vested interest in reducing those costs and diverting that waste for both company and customer alike.

Upstream circular impact requires more of a systemic paradigm shift. Most standard insurance policies in Canada do not pay for repairs and replacements with sustainable or resilient materials in the event of a loss. This is mostly due to the increased cost – between 15–25% – for sustainable material and building standard upgrades. While there are endorsements that would give Canadians the option to replace or repair with sustainable materials, they aren't widely adopted by most people due to lack of awareness. Flamand states, "Unintentionally, Co-operators is contributing to a linear economy through its products and claims services, increasing carbon emissions leading to the increased climate risk."

Understanding this impact, Co-operators set out to connect with insurers in Europe and South America to find different insurance products and services that align with a sustainable and resilient future. With this knowledge, Co-operators implemented two sustainable claims methods on property claims – drying in place and cleaning of soft contents – that reduce loss costs, reduce waste to landfill, and reduce carbon emissions. In fact, with these sustainable methods, it is anticipated to save \$12 to \$16 million annually, with a reduction of approximately 1200 MTCO2e in carbon emissions on a yearly basis. The positive climate impact is equivalent to reducing the carbon emissions from charging 155 million cell phones for one year.

To address waste diversion further, Co-operators partnered with COIL and the City of Guelph to form the Zero Waste Economic Transformation Lab (ZWETL). The circular economy is a large ecosystem, and ZWETL is focused on how to grow the ecosystem for diversion of construction debris and waste. Through this partnership, Co-operators is gaining an understanding of how businesses, organizations, and governments can work together to create circular economies in a place-based setting. This will certainly help in dealing with the climate risk that communities are facing.

Co-operators leadership in advancing their own circular initiatives and supporting the CRD sector shows how other organizations and corporations – across all industries – can see their impact and commit to climate action.

**COIL Enterprise Profiles** 

Agri-Food

### EcoWool Canada Inc.





Location: Ayton, Ontario

#### Where to find them:







**Circular Practices:** Greenhouse Gas Reduction, Material Diversion/ Recapture, Regenerative Agriculture, Short Supply Chains, Waste Reduction, Water Conservation

Year Founded: 2023

Size: Start-Up

**Geographic Focus: Provincial** 

Development Stage: Start-Up

**Investment Opportunity: Pre-Seed Funding** 

Canada produces over 1.7M KG of wool annually. Most of that wool is dumped, landfilled or burned. EcoWool is taking that wool and transforming it into a regenerative, circular soil amendment using minimal procedures to relocalize soil fertility. Wool has more nitrogen than manure, can conserve over 500 litres a kilogram when used in gardening, and being 50% carbon, can return carbon to the soil. EcoWool has successfully tested and commercialized this peat-alternative product and is currently optimizing its manufacturing process to scale production.

#### Market:

1st tier customer: Home gardeners

2nd tier post research customers: Greenhouses and soil producers 3rd tier post expansion and research customer: Field crop farmers

#### **Collaborators/Clients:**

- Local sheep farmers and wool producers
- · Ivey Business School, Western University
- Conestoga College
- Brock University
- Niagara College

#### **Previous/Current Investment**

- \$2,500 Harvest Impact Impact Loan Grants:
- \$20,000 Desjardins
- \$80,000 COIL

#### Leadership:



**Jennifer Osborn,** Founder



Tim Fisher, Research

#### **Industry Focus:**



Textiles

# **GR365N Limited**





Location: Puslinch, Ontario

Where to find them:





**Circular Practices:** Decent Work Practices, Energy Conservation, Greenhouse Gas Reduction, Short Supply Chains, Social Impact, Waste Reduction, Water Conservation

Year Founded: 2020

Size: Start-Up

Geographic Focus: Global

Development Stage: Start-Up

**Investment Opportunity: Pre-Seed Funding** 

GR365N enables fresh produce to be enjoyed through all four seasons with indoor farming practices. Our growing systems produce hyperfresh, hyperlocal food in homes and workplaces. Our systems use 95% less water than traditional farming methods and yield 10x more per square foot. We use organic water soluble nutrients in our water and recycle this water in our systems.

#### Market:

Individual consumers (homeowners, apartment dwellers), food banks, retirement homes, restaurants, and anywhere people eat fresh leafy greens.

#### Collaborators/Clients: Previous/Current Investment

• Connestoga Smart Innovation Centre

Self-funded and government grants

#### **Industry Focus:**



#### Leadership:



Dan Atkinson, Imagineer

# Tileyi Brands





Location: Kitchener, Ontario

Where to find them:





Circular Practices: Material Diversion/Recapture, Waste Reduction

Year Founded: 2023

Size: Start-Up

**Geographic Focus:** National

**Development Stage: Start-Up** 

**Investment Opportunity: Pre-Seed Funding** 

Over 2.8 tonnes of cowhide is wasted in Canada, costing processing plants over \$9M in disposal and transportation annually. Canada is also home to over 4.2M people of Asian, African and Caribbean descent for whom animal skin is an important cultural food. Tileyi Brands is combining ancestral principles and scientific research to upcycle unwanted hide into a premium product called Ponmo, and other edible hide products. Ponmo will be the first approved edible hide product in Canada. entering a product category worth \$62.5M CAD annually.

#### Market:

The target market includes:

- Canadians of African, Asian and Caribbean heritage who currently don't have a regional option for this culturally-important food (local consumption)
- Diasporic people of African, Asian and Caribbean heritage living around the globe (export market)
- Consumers in Africa, Asia and Caribbeans seeking better food quality, where local regulations are lacking (export market)
- · Canadians looking for specialized diet options, including Keto & Paleo

#### **Collaborators/Clients:**

- Conestoga College
- · University of Guelph
- Mallot Creek

#### **Previous/Current Investment**

Self-funded

Grants:

\$80,000 COIL

#### Leadership:



Aramide Taiwo,

#### **Industry Focus:**

Agri-Food

Manufacturing & Processing

# Happy Era





Location: Guelph, Ontario

#### Where to find them:







**Circular Practices:** Material Diversion/Recapture, Short Supply Chains, Social Impact, Waste Reduction

Year Founded: 2021

Size: Corporation

**Geographic Focus: National** 

**Development Stage:** Expansion

**Investment Opportunity: Pre-Seed Funding** 

We address the growing demand for convenient, protein-rich food in today's fast-paced lifestyle. Many struggle to meet daily protein needs, craving nutrition and familiar flavors. Traditional high-protein foods often lack taste and accessibility. Our innovation uses dairy-free proteins from upcycled spent grain, reducing waste while delivering a tasty, protein-packed solution for nutrition and nostalgia.

#### Market:

Our target market: health-conscious moms seeking nutritious family options. We stand out with 2x protein and 1/3 less sugar compared to competitors, upcycled ingredients, and eye-catching packaging. High-protein baked goods market, Compound Annual Growth Rate 7.3% to 2027, +30% growth. We're primed for mainstream high-protein trends.

#### **Collaborators/Clients:**

- WeTech Alliance
- Guelph Small Business Centre Mentorship
- WETech Alliance Mentorship
- YSpace York University Mentorship

#### **Previous/Current Investment**

#### Grants:

- \$30,000 COIL
- \$20,000 The Bridge Pitch Competition
- \$5,000 University of Guelph Project Soy Winner
- \$3,000 Starter Company Plus

#### Leadership:



Domenique Mastronardi, Founder & President



**Tanya Ortwein,**Operations Manager

#### **Industry Focus:**



# Bruized

# BRUIZEDS



**Location:** Toronto, Ontario

#### Where to find them:









**Circular Practices:** Greenhouse Gas Reduction, Material Diversion/ Recapture, Short Supply Chains, Waste Reduction

Year Founded: 2019

Size: Start-Up

**Geographic Focus:** Local

Development Stage: Start-Up

**Investment Opportunity: Pre-Seed Funding** 

Around 35.5M tonnes of food is lost or wasted annually in Canada due to a lack of infrastructure, awareness, and stigma against natural imperfections. With rising food prices, the climate crisis' devastating impact on crop yields and nearly 60M tonnes of CO2 emissions generated annually by food waste, this is an issue we can't ignore. Bruized is a women-owned business on a mission to fight food waste by rescuing and upcycling good food commonly wasted across the supply chain, into plant-based snacks.

#### Market:

We target health conscious individuals within the age of 29–57 living in the GTA. They prefer vegan, gluten-free, local foods and are interested in reducing waste. We see a growing desire for healthy products that taste good, use ethical + local ingredients and are sustainable. Bruized is unique by being women-owned, having small batch production, using imperfect/surplus ingredients and sourcing local.

#### **Collaborators/Clients:**

- ChocoSol Traders
- Village Juicery
- · Leaff Circular Gifting

#### **Previous/Current Investment**

#### Grants:

- \$30,000 COIL
- \$15,000 Earth's Own Plant Project
- \$5,000 CEC Youth Innovation Challenge
- \$5,000 Agri-Food E-business Grant
- \$5,000 Vaughan Starter Company Plus

#### Leadership:



Monique Chan, Founder/Owner + Operator



Justice Walz, Owner + Creative Director

#### **Industry Focus:**



Manufacturing & Processing

Retail

# **Crisper Kits**





Location: Toronto, Ontario

#### Where to find them:







**Circular Practices:** Data and Tech Transformation, Decent Work Practices, Greenhouse Gas Reduction, Reverse Logistics/Reusables, Waste Reduction

Year Founded: 2020

Size: Start-Up

**Geographic Focus:** Local

Development Stage: Start-Up

**Investment Opportunity: Pre-Seed Funding** 

At Crisper, we're trying to address the problem of plastic waste in the food industry by building a circular model for grocery delivery with our zero waste meal kit service.

Meal kits services are an innovative solution for eating healthy, home-cooked meals, but the industry uses wasteful practices to produce and deliver its products. Crisper is working to eliminate single-use plastic from the food industry by demonstrating the viability of sustainable models of production.

#### Market:

Crisper's target market is environmentally conscious Ontarians who want to cook healthy plant-based meals at home and encourage positive environmental change with their consumer choices. We distinguish ourselves as the only zero waste meal kit service in the province with a circular model and one of few that offers plant-based meals.

#### **Collaborators/Clients:**

- Pfennings Farms
- · Spent Goods
- Nrbi
- Alternative Grounds

#### **Previous/Current Investment**

Self-funded

### Industry Focus:



#### Leadership:



**Kieran Alkerton,** Founder



**Bee Spanis,** Kitchen Production Manager

# **New Earth Solutions**





Location: Guelph, Ontario

Where to find them:







**Circular Practices:** Energy Conservation, Greenhouse Gas Reduction

Year Founded: 2018

Size: SME

Geographic Focus: Global

**Development Stage: Start-Up** 

**Investment Opportunity: Seed Funding** 

Real Estate is undeniably one of the largest contributors to GHG emissions. Ventilation is the largest energy contributor at 30% of a building's total energy consumption. Our company provides a biological filter that produces fresh air from within the building, allowing building operations the ability to decrease ventilation, saving energy, money and reducing emissions

#### Market:

We aid REITS in their efforts to decrease GHGs across their portfolio using a technology more visually striking and apparent than incumbent technology. Growth initiatives we're executing are extending the service contacts we have with clients from one to five years, in addition to selling additional solutions to our existing client portfolios aiding them in ESG efforts.

#### Collaborators/Clients:

- RioCan Properties
- Allied Properties
- Starlight Properties
- · Adidas Canada
- Shiplake Properties
- NWH

#### **Previous/Current Investment**

• \$1M Seed Round (angel investment)

#### Leadership:



**Dylan Robertson,** Co-Founder, CEO



Mitchell Cowburn, Co-Founder, CPO

#### **Industry Focus:**



### Be One to Give Inc.





Location: Toronto, Ontario

#### Where to find them:











**Circular Practices:** Greenhouse Gas Reduction, Material Diversion/ Recapture, Reverse Logistics/Reusables, Social Impact, Waste Reduction

Year Founded: 2019

Size: Start-Up

**Geographic Focus: National** 

**Development Stage:** Start-Up

**Investment Opportunity: Pre-Seed Funding** 

Our circular technology addresses the issue of both food waste and food insecurity.

Be One to Give is an on-demand delivery app for food business operators with surplus food along the supply chain. We operate like UberEats however we leverage technology and logistics to redistribute surplus food to food insecure communities within two hours of receipt. Through two easy steps we help our customers surpass their food waste reduction goals by eliminating 100% of surplus food from their daily operations.

#### Market:

Our target market is Canada's food supply chain and our target customer is the retail/hotel sector. For market growth we have established partnerships with customers who have locations nationwide. Our service is unique in that we are the only food recovery app in Canada to provide packaging and on-demand logistics to guarantee 100% of our clients' surplus food gets redistributed the same day.

#### Leadership:



Tony Colley, Founder/CEO

#### **Industry Focus:**



CleanTech

Social Innovation

### Collaborators/Clients:

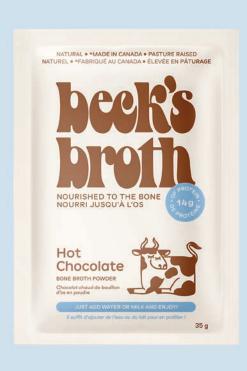
- Fairmont Royal York
- Toronto
   Metropolitan
   University
- Sheridan
   Conference Centre
- Oliver & Bonacini
- The Carlu
- Arcadian Court
- Malaparte
- The Village Loft
- · The Board of Trade
- Citco Fund Services
- Pricewaterhouse
   Coopers
- Bain & Company
- Lenczner Slaght
- Highline Beta

# Previous/Current Investment

\$196,000
 non-dilutive

### Beck's Broth





Location: Kitchener, Ontario

Where to find them:







Circular Practices: Regenerative Agriculture, Waste Reduction

Year Founded: 2021

Size: SME

Geographic Focus: National

**Development Stage:** Expansion

**Investment Opportunity:** Seed Funding

Beck's Broth reimagines bone broth for everyday drinks like hot chocolate and cold brew coffee. Our organic bone broth has a neutral flavour, allowing sustainably sourced chocolate and coffee to shine without compromising nutrition. As circular business pioneers, we're committed to a sustainable community, using organic ingredients, innovative waste reduction, and local ethical sourcing.

#### Market:

Our ideal consumer is a health-conscious mom seeking clean, nutritious, and tasty options for her family. Beck's Broth meets her needs with bone-broth drinks — high protein, organic, and sustainably sourced. Our powder blend offers easy, flavourful preparation, promoting family well-being.

#### **Collaborators/Clients:**

- Rootree
- Wonderkind Co.
- Aldeen Consulting

#### **Previous/Current Investment**

- \$5,000 Starter Company +
- \$30,000 Ontario GROW initiative

#### Grants:

• \$25,000 (COIL)

#### Leadership:



Rebecca Prime, Founder

#### **Industry Focus:**



### **Green Bowl Foods**





Location: Barrie, Ontario

Where to find them:





**Circular Practices:** Energy Conservation, Greenhouse Gas Reduction, Social Impact, Waste Reduction, Water Conservation

Year Founded: 2022

Size: Start-Up

Geographic Focus: Global

**Development Stage:** Start-Up

**Investment Opportunity: Series A** 

The problem we are addressing is the significant food waste generated by the food industry, which has both economic and environmental implications. Our work tackles this issue by upcycling food byproducts into nutritious Ready-to-Eat (RTE) meals, reducing waste, lowering greenhouse gas emissions, and offering consumers sustainable, convenient, and locally sourced food options.

#### Market:

Our target market comprises environmentally conscious consumers seeking convenient, sustainable RTE meals. Market growth opportunities include increased consumer awareness of food waste and sustainability. We distinguish ourselves by offering unique, upcycled products, emphasizing local sourcing, and promoting a circular economy approach, setting us apart from competitors in the RTE meal market.

#### **Collaborators/Clients:**

- Greenhouse Juice
- Quinta Quinoa

#### **Previous/Current Investment**

- \$500,000 Desjardins (Financial Group)
- \$450,000 Shareholders
- \$25,000 Northumberland Business Development Assistance Corporation (NCDFC)

#### Grants:

\$100,000 (COIL)

#### **Industry Focus:**



#### Leadership:



Max Jamshidian



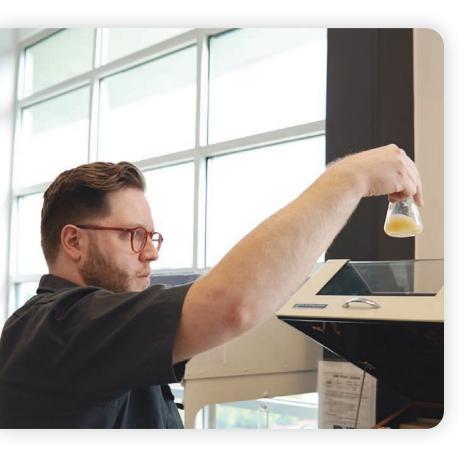
Behnoush Maherani



Meisam Akbarizare

# **Escarpment Laboratories**





Location: Guelph, Ontario

Where to find them:











**Circular Practices:** Data and Tech Transformation, Energy Conservation, Greenhouse Gas Reduction, Material Diversion/Recapture, Short Supply Chains, Waste Reduction

Year Founded: 2015

Size: SME

Geographic Focus: Global

**Development Stage:** Established

**Investment Opportunity: Series A** 

There are major knowledge and capability gaps in the beer fermentation industry where efficiency and flavour are becoming more critical. With Escarpment Labs as their partner, brewers can master their craft like never before. Our unrivaled yeast strains, expert knowledge, and commitment to their success will take their brewing game to unprecedented heights.

#### Market:

Our curent market includes primarily professional brewers and home brewers. Our capabilities allow us to branch out into wine, distilling, and cellular agriculture in the future.

#### Leadership:



Richard Preiss, Director

#### **Collaborators/Clients:**

University of Guelph

#### **Previous/Current Investment**

Self-Funded

• Grants: \$26,000+ (COIL)

#### **Industry Focus:**



# Remix Snacks





Location: Markham, Ontario

#### Where to find them:











**Circular Practices:** Greenhouse Gas Reduction, Social Impact, Waste Reduction, Water Conservation

Year Founded: 2018

Size: Start-Up

**Geographic Focus: National** 

**Development Stage:** Established

**Investment Opportunity: Series A** 

We work towards the UNs' SDGs #3, good health and well-being; and SDG #12, responsible consumption and production. All our snacks are bean-based, and use upcycled ingredients to reduce food waste. As dietitians, it is our priority to create snacks high in protein, fibre and iron. At the same time, we source environmentally sustainable ingredients, like beans and upcycled ingredients, to work towards a positive impact on our environment.

#### Market:

Our target market consists of young couples and families who are looking for healthier snack options for their children and families. All our snacks are bean-based and use upcycled ingredients to reduce food waste. Compared to our competitors, we are nutritionally dense, environmentally sustainable, and support diversity through local, young, female, BIPOC entrepreneurs.

## Leadership:



**Isabelle Lam,** Co-founder, Registered Dietitian



**Jeremy Moorhouse,** Regional Brand Manager

## Collaborators/Clients:

- Loblaws
- Metro
- Sobevs
- Whole Foods
- Healthy Planet
- Choices
- Nature's Fare

# Previous/Current Investment

#### Loans:

- \$140,000 Farm Credit Canada
- \$30,000 Regional Relief
   & Recovery Fund
- \$100,000 Business
  Development Bank of
  Canada (BDC)

#### Grants:

- \$20,000 FAREOSO
   (The Assistance and
   Recovery Fund for
   Francophone Businesses
   and Organizations in
   Southern Ontario)
- \$10,000 American Express Business Blueprint
- \$10,000 BMO (Bank of Montreal) for Women
- \$10,000 Visa She's Next
- \$15,000 Spring Impact Food Challenge winner
- \$20,000 COIL Activate Circular Accelerator
- \$30,000 i.d.e.a. Fund
- \$120,000 OMAFRA Sustainable Canadian Agricultural Partnership Subsidy

## **Industry Focus:**

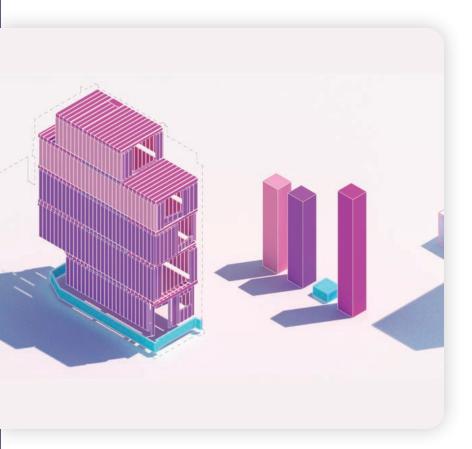


**Manufacturing & Processing** 

Construction, Renovation & Demolition (CRD)

# Ha/f Climate Design

# ha/f



Location: Toronto, Ontario

Where to find them:







**Circular Practices:** Energy Conservation, Greenhouse Gas Reduction, Material Diversion/Recapture, Short Supply Chains, Waste Reduction

Year Founded: 2022

Size: Start-Up

**Geographic Focus: Provincial** 

Development Stage: Start-Up

**Investment Opportunity:** Not Applicable (not currently fundraising)

Ha/f Climate Design was founded to help halve the emissions of the built environment this decade. To address this, we provide whole building life-cycle assessments for buildings and landscapes, support circular building practices through pre-deconstruction audits and material reuse strategy, and lead research, education, and policy development across different jurisdictions. Through this work, we contribute to high-performance, low-carbon buildings from concept to completion.

## Market:

Our target market includes designers, developers, and policy makers. There is growth potential for services related to deconstruction/material reuse, readily-renewable and healthy material specifications, and life-cycle assessment. We craft innovative circularity solutions that rely on our ties to local trades and craftspeople. Our strategies are effectively and creatively communicated.

## **Collaborators/Clients:**

- Ouroboros Deconstruction
- Haley Anderson Consulting
- · The Atmospheric Fund
- City of Toronto
- Mantle Developments
- TAS Impact, among others

## **Previous/Current Investment**

Self-funded

## **Industry Focus:**

Construction, Renovation & Demolition (CRD)

## Leadership:



Kelly Alvarez Doran, CEO



Juliette Cook,



Ryan Bruer,

# Ouroboros Deconstruction Corporation

# **OUROBOROS**DECONSTRUCTION



Location: Toronto, Ontario

Where to find them:





**Circular Practices:** Decent Work Practices, Material Diversion/ Recapture, Waste Reduction

Year Founded: 2022

Size: Start-Up

**Geographic Focus:** Local

Development Stage: Start-Up

**Investment Opportunity: Seed Funding** 

Construction and demolition waste account for more than 40% of today's landfills and experts estimate Ontario will exceed capacity by 2032. A deconstruction project diverts over 45 tonnes of reusable materials from the landfill. We salvage valuable building materials, saving them from the landfill. Our goal is to make deconstruction cost-effective and accessible. We aim to change the way demolition is conducted so that materials are salvaged and available as a resource within the community.

## Market:

We target homeowners and developers in need of demolition services. We provide a sustainable alternative to demolition and are currently the only practitioner in Ontario. With other cities already requiring deconstruction many estimate a by-law will be passed in Ontario in the next three years, giving Ouroboros a great runway to be the industry leader once these services are required.

## Collaborators/Clients:

- · Cathy Richards
- Ha/f Climate Design
- Angel Contracting
- Evolve Builders
- Habitat for Humanity

## **Previous/Current Investment**

Self-funded

# **Industry Focus:**

Construction, Renovation & Demolition (CRD)

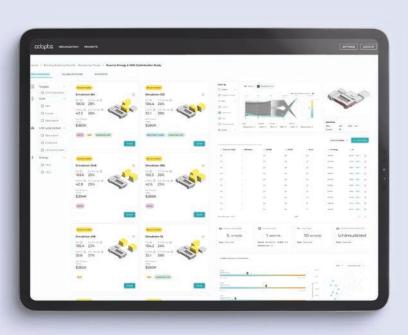
## Leadership:



**Meredith Moore,** Founder

# Adaptis Technologies Inc.





Location: Toronto, Ontario

Where to find them:





**Circular Practices:** Data and Tech Transformation, Material Diversion/ Recapture, Waste Reduction

Year Founded: 2022

Size: Start-Up

Geographic Focus: Global

Development Stage: Start-Up

**Investment Opportunity: Seed Funding** 

The construction industry is a significant cause of global resource consumption, GHG emissions, and waste generation, consuming 50% of raw materials, emits 40% of GHGs, and generates 60% of global waste. Carbon emission reduction, construction and demolition waste mitigation are possible through intelligent building adaptation and material reuse planning. Adaptis's proprietary methodologies and datasets can optimize decarbonization and circularity planning through different stages of a building.

## Market:

Existing Buildings: Buildings experiencing failures in performance and need to be retrofitted or buildings being adapted to residential from another use.

**Demolition Waste Optimization:** Optimize waste mitigation from landfills, through reuse and recycling assessment.

Adaptis's competitors are mainly consultants in carbon management, waste and circularity assessment, and environmental analysis.

## **Collaborators/Clients:**

- METAFOR
- Triovest
- Avenue Living
- Minto

## **Previous/Current Investment**

- \$2M Pre-Seed: 2048 Ventures (New York)
- Blue Vision Capital (Quebec)
- Powerhouse Ventures (California)

## Leadership:



Sheida Shahi, CEO, PhD, OAA



Aida Mollaei, CTO, PhD(c)

# **Industry Focus:**

Construction, Renovation & Demolition (CRD)

# Circular Partners / Viking Recycling





Location: Toronto, Ontario

Where to find them:







**Circular Practices:** Greenhouse Gas Reduction, Material Diversion/ Recapture, Reverse Logistics/Reusables, Waste Reduction

Year Founded: 2014

Size: SME

**Geographic Focus: National** 

Development Stage: Established

**Investment Opportunity: Series B** 

At Viking Recycling / Circular Partners, our mission is centered around addressing the critical issue of Construction, Renovation, and Demolition (CRD) waste, as well as other durable materials, being defaulted to landfills. Our approach seeks to disrupt this cycle of wastefulness by offering comprehensive circular economy solutions. Through innovative recycling, repurposing, and regenerative processes, we aim to transform these discarded resources into valuable assets..

### Market:

Our target market encompasses designers, builders, property managers, government agencies, institutions and product manufacturers. As the demand for circular economy solutions is expected to rise, we work with our partners to understand their challenges and tailor solutions that align with their specific needs as well as with our Highest and Best Use principle.

## **Collaborators/Clients:**

- Air Canada
- RBC
- All major carpet manufacturers
- Over 400 customers

# **Previous/Current Investment**

Grants: \$75K+

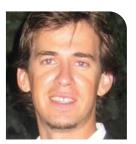
# Industry Focus:

Construction, Renovation & Demolition (CRD)

Plastics

Textiles

## Leadership:



Kelly McCaig, Leader



**Lilly Le,** Research Analyst

Plastics, Packaging, and Re-Use

# Arrrise





Location: Toronto, Ontario

Where to find them:





Circular Practices: Data and Tech Transformation, Decent Work
Practices, Energy Conservation, Greenhouse Gas Reduction,
Material Diversion/Recapture, Reverse Logistics/Reusables,
Short Supply Chains, Social Impact, Waste Reduction, Water Conservation,
Product Refurbishment

Year Founded: 2023

Size: Start-Up

Geographic Focus: National

**Development Stage: Start-Up** 

**Investment Opportunity: Pre-Seed Funding** 

In response to the plastic pollution crisis, various levels of governments are banning and/or legislating single-use reduction targets, for example mandatory reuse-refill targets of at least 50% for grocery chains throughout Canada.

With limited reuse infrastructure in place Arrrise was created to fulfill this need with two services: regional representation of reuse systems and wash and logistics solutions.

### Market:

Arrrise offers the grocery and food services sector flexible reuse infrastructure services including collecting, washing and redistributing reusable service ware, and representing regional and national brands. Arrrise leverages horizontal integration to service the logistical needs of its clients, thus offering a cost-effective shift towards sustainable reusable packaging.

# **Collaborators/Clients:**

#### Core Collaborators:

• Evergreen Canada

#### Core Clients:

- Muuse Ltd. (Town of Banff, 80+ Clients)
- Cupko Ltd. (Live Nation, 10+ Regional Clients)
- Community (Bacardi, Grey Goose, etc.)
- 10+ additional wash clients

# Leadership:



Scott J Morrison,

## **Previous/Current Investment**

Self-funded

# **Industry Focus:**

Technology & Al

Food Service

**Grocery Retail** 

Packaging

# Circulr





Location: Kitchener / Toronto / Guelph, Ontario

### Where to find them:









**Circular Practices:** Data and Tech Transformation, Material Diversion/ Recapture, Reverse Logistics/Reusables, Short Supply Chains, Waste Reduction

Year Founded: 2021

Size: Start-Up

Geographic Focus: Provincial

Development Stage: Start-Up

**Investment Opportunity: Pre-Seed Funding** 

Enormous amounts of waste are created from the packaging we consume whenever we grocery shop. Circulr provides a platform for Consumer Packaged Goods producers to reuse their packaging via:

- Physical Reuse: We source reusable packaging and operate the collection, washing and sanitization system.
- Deposit Management: We distribute deposits to customers through our mobile app.
- Data Insights: Circulr creates reports about material flows, consumer behaviors, and reuse system effectiveness.

#### Market:

We operate in the \$10 billion Canadian Grocery Packaging Market and target Fast Moving Consumer Goods (FMCG) producers. With recent legislation changes, reusable packaging, and the models that support it, have grown in popularity. Circulr separates itself by focusing on the grocery space and on creating data insights for FMCG brands and retail private labels through our reuse platform.

## Leadership:



Charles Binks-Collier, CEO



Tyler De Sousa,

## **Industry Focus:**

Technology & Al

Packaging

Retail Waste

Management

# Collaborators/Clients:

### Key clients include:

- Filsinger's Organics
- Alchemy Pickle Company
- Pluck Teas
- Ma's best
- Flour Barrel Guelph
- The Stone Store
- Zerocery
- Stratus Vineyards (wine bottle reuse program)

## **Key Collection Sites:**

- Fiesta Farms
- Vincenzo's
- Karma Co-op
- Top Market Family Farms
- Urban Bulk & Refill

# Previous/Current Investment

N/A

# Suppli





Location: Toronto, Ontario

### Where to find them:













Circular Practices: Data and Tech Transformation, Reverse Logistics/ Reusables, Short Supply Chains, Waste Reduction

Year Founded: 2020

Size: Start-Up

Geographic Focus: Global

**Development Stage: Start-Up** 

**Investment Opportunity: Pre-Seed Funding** 

Regulations are being implemented to ban a number of single-use packaging items in takeout. The only alternative restaurants have is to buy containers dubbed recyclable/eco-friendly, which are expensive and still end up in the landfill with harmful environmental consequences.

Suppli is a circular supply chain platform for reusable food containers. Our software connects restaurants, food apps, and consumers to enable full-circle reusable food packaging.

### Market:

- High-volume takeout restaurants, caterers
- · Enviro-conscious consumers living busy lives that order takeout frequently
- Suppli is the only reusables company that seamlessly captures order data at the time of a purchase without requiring customers to download another app

## **Collaborators/Clients:**

- Uber Eats
- hungerhub
- ZipLunch
- Deliverect

## **Previous/Current Investment**

- \$450,000 Cash investment
- \$150,000 Grants

# **Industry Focus:**



## Leadership:



Megan Takeda-Tully, CFA, Founder & CEO



Elizabeth Senra, Director of Product & Operations



Paul Gibson, Systems Architect & Advisor

# The Aggressive Good





Location: Ottawa, Ontario

Where to find them:







**Circular Practices:** Data and Tech Transformation, Greenhouse Gas Reduction, Material Diversion/Recapture, Short Supply Chains, Social Impact, Waste Reduction

Year Founded: 2018

Size: Start-Up

Geographic Focus: Global

**Development Stage: Start-Up** 

**Investment Opportunity: Seed Funding** 

Single-use packaging in the dry food industry is a global problem. With billions of discarded packages polluting the ecosystem governments, corporations, and citizens are highly invested in their elimination. TAG's innovative zero-waste supply chain solution is gaining global praise. Our user-friendly, circular bulk food management system is an ideal vending option for anywhere food is sold; creating massive efficiency gains for supply chains while offering an easy, safe food buying experience.

### Market:

TAG's unique system is adaptable to many verticals. After testing markets, TAG is targeting office spaces and the hotel industry for entry as demand in these spaces allow for fast adoption and immediate revenue. With opportunity in industries such as offices, hotel, travel hubs, condos, stadiums, cinema, universities, C-stores, pet food, and grocery retail TAG's billion-dollar opportunity is vast.

## **Collaborators/Clients:**

- Paid pilot project with Google currently in Google Head Offices – San Francisco, Seattle, Dublin, London
- UK Distribution Partnership Martek Zero Waste

# **Previous/Current Investment**

• \$700,000+ Pre-seed round (private investors, government programs)

#### Grants:

 \$20,000+ (COIL, Sustainable Development Technology Canada (SDTC))

# **Industry Focus:**

Agri-Food

Government

Manufacturing & Processing

Packaging

Retail

Technology & Al

## Leadership:



Jennifer Look-Hong, Chief Executive Officer, Founder



**Geoffrey Mackay,** Chief Creative Office, Founder



Chris Falconi, Chief Technical Officer, Founder

# OMNIA Packaging Inc.





Location: Guelph, Ontario

Where to find them:





**Circular Practices:** Energy Conservation, Material Diversion/Recapture, Waste Reduction

Year Founded: 2022

Size: SME

Geographic Focus: Global

Development Stage: Established

**Investment Opportunity:** Not Applicable (not currently fundraising)

Omnia Packaging is your one stop solutions provider for sustainable and innovative food packaging in Canada. We offer packaging solutions in paper and plastic formats. We acquired exclusivity for Mustang Machinery – designed and patented in Italy- for production and distribution of Mustang Paper Trays in Canada. Our paper products are fully recyclable and contain no glue, and our plastic products are recyclable pure polypropalene (PP).

### Market:

We serve local growers with acres and greenhouses in the US and Mexico as well. Our paper products are geared towards produce like cucumbers, cherry tomatoes and berries. Our plastics products are popular with dairy producers, and soup and sauce processors.

# **Collaborators/Clients:**

- Intesa Sanpaolo
- Plastic Legno (Parent Company)
- Gruppo Sunino

## **Previous/Current Investment**

- \$3,788,750 FedDev Ontario
- \$4,148,000 USD Bank Intesa Sanpaolo

# **Industry Focus:**

Agri-Food

Manufacturing & Processing

Packaging

Retail

## Leadership:



Andrea Ceri,



**Federico Brera,** Director of Finance, HR and IT



Monica Viazzo,
Director of Business
Development and
Marketing

# Friendlier





Location: Guelph, Ontario

Where to find them:











**Circular Practices:** Data and Tech Transformation, Greenhouse Gas Reduction, Material Diversion/Recapture, Reverse Logistics/Reusables, Short Supply Chains, Social Impact, Waste Reduction, Water Conservation

Year Founded: 2019

Size: Start-Up

Geographic Focus: National

**Development Stage:** Established

**Investment Opportunity: Series A** 

Brands globally are committing to transition away from single-use packaging in the next 10 years due to supply chain issues (rising costs), government and consumer driven demands, and rising waste handling costs. However, they have been struggling significantly due to the difficulties associated with reuse/refill models.

### Market:

Friendlier is currently focussed on the corporate food service space, which we estimate to be approximately \$5B in North America. This market segment includes university campuses, corporate offices, and institutions, where there are high volumes in dense metropolitan areas, with aggressive ESG targets and budgets allocated to reducing waste.

## **Collaborators/Clients:**

Friendlier has over 200 clients including the two largest contract food service companies in North America — the Compass Group and Aramark — and Canada's leading grocery retailer, Loblaw Companies.

## Previous/Current Investment

- \$750,000 Pre-Seed (Angels)
- \$2.5M CAD Seed Funding (Relay Ventures, Garage Capital, Angels)
- \$1.1M CAD Non-dilutive

# Leadership:



Kayli Dale, CEO



Jacqueline Hutchings, COO

# **Industry Focus:**

Packaging

Technology & Al

# Aideal Technology Inc.





Location: Oakville, Ontario

Where to find them:



Circular Practices: Data and Tech Transformation, Waste Reduction

Year Founded: 2018

Size: Start-Up

**Geographic Focus: Provincial** 

Development Stage: Start-Up

**Investment Opportunity: Pre-Seed Funding** 

We provide AI technology and computer vision-based solutions to help business improve their production process. We design and implement customized solutions to reduce waste and lower labour cost.

Our current project is to use AI and machine vision technologies to help our clients recycle their waste material from the automotive plastic parts manufacturing process. With our automated intelligent object recognition and sorting solution, the client will be able to separate metal from plastics and sort plastic waste materials into different categories with minimal human intervention. These materials then can be further processed for recycling or reuse. This solution reduces raw material use in the production, increases waste recycling rates, and lowers overall production cost. Our system can also collect, analyze and profile the waste material coming off the production lines, helping clients pinpoint where waste is generated, so that the production process can be improved.

## Market:

Our market is the auto parts manufacturing sector. Our clients have hundreds of stations that need to be equipped with AI solutions, and there are hundreds of such clients in the industry. We have more than five years experience with developed solid solutions. We can demonstrate our proposal to any relevant client within a couple of days to help them to understand how AI can help their business right away.

## **Collaborators/Clients:**

Axiom Group

Previous/Current Investment N/A

# **Industry Focus:**

Manufacturing & Processing

Technology & Al

## Leadership:



**Tao Tao,** Al Integration Expert/Business Founder



**Yan Wang,** Manufacture Engineer



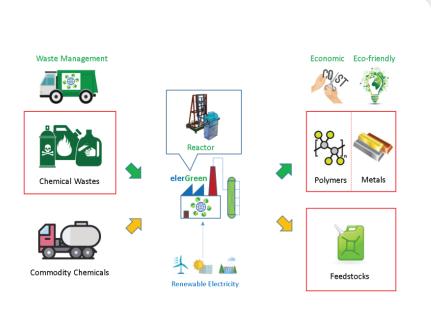
**Bruce Li,**Project Manager/
Automation Specialist



**Jason Liang,**Data Scientist

# elerGreen Industry Corporation





Location: Toronto, Ontario

### Where to find them:





Circular Practices: Data and Tech Transformation, Decent Work Practices, Energy Conservation, Greenhouse Gas Reduction, Material Diversion/Recapture, Reverse Logistics/Reusables, Short Supply Chains, Social Impact, Waste Reduction, Water Conservation, Collaboration and Innovation

Year Founded: 2018

Size: Start-Up

Geographic Focus: Global

Development Stage: Start-Up

**Investment Opportunity: Pre-Seed Funding** 

elerGreen Industry is a greentech startup utilizing its patented electrochemical reactor and process to produce valuable polymers, metals and chemicals from chemical wastes and renewable electricity, at significant cost and environmental footprint reduction. The core of the technology lies with the novel modular electrochemical reactor design that is easy to implement and scale.

### Market:

Business Customers: waste valorization includes producing valuable metals from tailings or in electrometallurgy.

Mass consumers: the products include compostable polymer packagings that are more competitive for lower price. As future potential, elerGreen patent captures 94% of global market spanning over 111 countries worldwide.

### Collaborators/Clients:

- St. Lawrence College
- Innovation Guelph
- Innovation Asset Collective
- Ontario Clean Technology Industry Association
- Circular Economy Leadership Canada

- Hub de Innovación Minera del Perú
- Science Discovery Zone
- Toronto Metropolitan University
- Parkdale Centre for Innovation

## **Previous/Current Investment**

- \$10,000 Friends & Family
- \$10,000 Strategic Partners
- \$35,000 Innovation Asset Collective
- \$40,000 Other
- \$56,000 Loans

# Leadership:



Hui Huang Hoe, President, Executive Director (Founder and Inventor)



Hui Ming Hoe, Managing Director (Co-founder and Co-inventor)

## **Industry Focus:**

Manufacturing & Processing

Technology & Al

CleanTech: Chemicals

Energy

Waste Management

# Nanocycle Tech Inc.





**Location:** Kingston, Ontario

Where to find them:





**Circular Practices:** Energy Conservation, Greenhouse Gas Reduction, Material Diversion/Recapture, Reverse Logistics/Reusables, Waste Reduction, Water Conservation

Year Founded: 2021

Size: Start-Up

**Geographic Focus:** Provincial

**Development Stage: Start-Up** 

**Investment Opportunity: Seed Funding** 

Nanocycle Tech Inc. is a Kingston-based corporation that is developing a commercial plant of its propriety, and patented, technology to recycle waste silicone papers and used coffee cups. These waste streams are currently being landfilled in Canada and exceed 900 tonnes per day of waste in Canada (500 tonnes per day of waste silicone paper, and 400 tonnes of used coffee cups thrown away by Canadian consumers).

## Market:

Potential market is enormous and includes three sectors:

- Municipalities (recycling waste)
- Waste-generating partners (food industry)
- Government of Canada (initiative reducing GHG emissions)

Commercialization of the technology can result in 74% reduction in GHG emissions in Canada, 80% savings in water consumption, 70% reduction of energy consumption, and can save 12–31 trees per tonne.

## **Collaborators/Clients:**

- Green Centre Canada
- Canada Royal Milk

## **Previous/Current Investment**

- \$45,000 Mitacs Accelerate
- \$80,000+ Grants

# Leadership:



**Ghazaleh Asemian,** CEO



Hesam Nejad, Director of R&D

# **Industry Focus:**

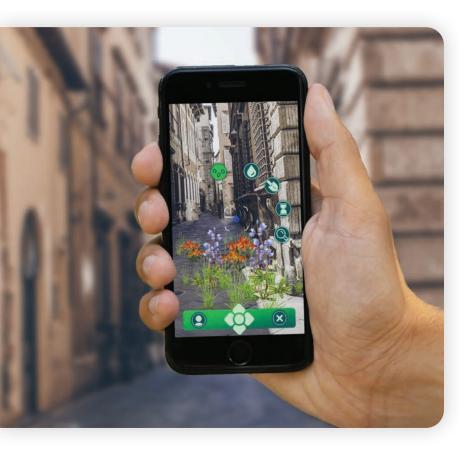
Agri-Food

Manufacturing & Processing

**Packaging** 

# **Turtle Riot Studios**





Location: City of Kawartha Lakes, Ontario

Where to find them:





Circular Practices: Data and Tech Transformation, Social Impact

Year Founded: 2022

Size: Start-Up

**Geographic Focus: National** 

Development Stage: Start-Up

**Investment Opportunity: Seed Funding** 

Facing the triple planetary crisis of climate change, air pollution and biodiversity loss, children and youth experience feelings of powerlessness and guilt, leading to widespread climate anxiety.

At Turtle Riot, our goal is to harness the power of video games to mobilize the next generation of gamers to shape a more sustainable future. We design and develop circular games and media that integrate social and environmental sustainability through a circular economy framework.

#### Market:

With three billion gamers, the global video game market was estimated at USD \$217 billion in 2022, with mobile and XR media in upward growth trends. Our target market includes young gamers and their parents with pro-environmental attitudes seeking mindful and educational experiences. Our UVP is in developing games and interactive experiences where one can play, learn, and take action in one platform.

## **Collaborators/Clients:**

N/A

# **Previous/Current Investment**

- \$15,000 Founders' Share Capital
- \$10,000 Harvest Impact Social Finance Loan
- \$55,000 Grants

## Leadership:



Maria Alejandrina Coates, Chief Executive Officer



**Brandon Bunnie,** Chief Technology Officer

# **Industry Focus:**

Education

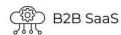
Technology & Al

# Bug Mars



# More bugs, more data, more profit

((10))) Real-time/Predictive





1.59 PM 2:06 PM 2:13 PM 2:20 PM 2:27 PM 2:34 PM 2:41 PM 2:48 PM 2:55 PM 3:02 PM 3:09 PM 3:16 PM 3:24 PM

Location: Havelock, Ontario

### Where to find them:













**Circular Practices:** Data and Tech Transformation, Energy Conservation, Greenhouse Gas Reduction, Regenerative Agriculture, Social Impact, Waste Reduction, Water Conservation

Year Founded: 2021

Size: Start-Up

Geographic Focus: Global

**Development Stage: Start-Up** 

**Investment Opportunity: Pre-Seed Funding** 

Insect farms encounter labour challenges similar to conventional farms. The high labour costs pose immense scaling difficulties, often rendering it unfeasible.

Our software, Hexapod, provides real-time notifications and alerts for immediate problem detection. Our Al models predict yield and disease. By measuring environmental and energy patterns, we optimize performance and prevent problems before they become catastrophes.

### Market:

We are the only SaaS only technology solution for insect farms. Others are also producers of insects meaning they have high capital overhead.

Our target markets are insect farmers and livestock farmers wanting to replace soy with insects and have on-site regenerative feed production.

## **Collaborators/Clients:**

- Full-stack devevelopment with USDA support
- 3 active pilot and a full waitlist
- Exclusive contract with 1 client: 15 farms in the next six months, and 60 farms by 2025
- US channel distribution partner

## **Previous/Current Investment**

- \$310,000 Non-dilutive
- \$135,000 Forum Ventures

## Leadership:



Natalie Duncan, CEO



Seth Hardy, CTO

# **Industry Focus:**



Technology & Al

AgTech

CleanTech

**Directory** 

# **COIL Circular Enterprise Directory**

This lookbook captures just some of the 160+ enterprises that COIL has supported with circular funding, mentorship, resources and networks. For additional COIL enterprises, see the directory of fantastic circular and regenerative agriculture leaders across southern Ontario. See more details at coil.eco.

1847 Stone Milling Inc.

**5REDO** 

A.R. Environmental Solutions

**Abbey Gardens Community Trust** 

Abokichi

**Adapt Media** 

Ag Business & Crop

Agápe Farms

**Agrobot** 

Aideal technology Inc.

**All Sorts Acres** 

Altrene

**Annex Distribution** 

**Apical Ethical Collective** 

Appleflats Inc.

<u>Avling</u>

AyA Kitchens and Baths Ltd.

Bake Vibes

Bartley Livestock Ltd.

Be One to Give (B12Give)

**Beck's Broth** 

Bluicity Inc.

Branching Out Support Services Inc.

Bruized

**Bug Mars** 

<u>Cafézia</u>

Cambium

**Carrot Ventures** 

Cavendish Farms

Circular Innovation Council

Circular Partners dba Viking Recycling

Circulr

<u>Colleaga</u>

**CommunityFEWD** 

<u>Crisper</u>

Curb the Rain Inc.

**Dream Zero** 

Earth Pup

EarthFresh Foods

Eat Local Huron

**EcoWool** 

Eight50 Coffee

elerGreen

**Escarpment Gardens** 

**Escarpment Labs** 

**Everything Recycling** 

Farlot Farm

Fill It Forward

FishTree Farm

Franken Farm

Fresh City Farms/Mama Earth Organics

Friendlier

gather + make

Global Measure Inc.

**GR365N Limited** 

<u>Green Bowl Foods</u>

Green Circle Dine Ware Ltd.

**Green City Aquaponics** 

Green Goddess Fromagerie

**Green Table Foods** 

<u>Greenhouse Juice</u>

Greenii Inc.

**Guelph Tool Library** 

Ha/f Climate

**Haley Anderson Consulting** 

**Heartbeet Farm** 

Heartwood Farm & Cidery

Herbert Labs
HiGarden Inc.

Homegrown Food Basket

Inwit Solutions Inc.

**Karbon Brewing Corporation** 

**London Brewing Company** 

**Lucky Bug Farm** 

Market Brewing Company Ltd.

Metagenom Bio Life Science

Nanocycle Tech Inc.

Nature's Harmony

New Earth Solutions Inc.

North York Harvest Food Bank

Northern Sustainable Farms

Nurture Growth Bio

OASIS Food Hub of the

St. James Town Community Co-op

Omnia Packaging Inc.

**Orbital Farm** 

**Ouroboros Deconstruction** 

**OUTER CHILD** 

**PaperSpree** 

Petersen Farms

Pom Pom

**Poptronic** 

Quinta Local Superfoods Inc.

Qwaves

Remix Snacks

**RÓUN Beauty** 

Saina+ Inc.

<u>Saponetti</u>

Saputo Dairy

Skilled Accents Inc.

Smartbin

Soups For Good

Spent Goods

St Joseph's Health Care London

Sunrise Soya Foods

Suntech Greenhouses

Suppli

**Taylor Newberry Consulting** 

Terra Bioindustries

The Aggressive Good

The Conscious Farm Kitchen

The Happy Era Ltd.

The Meeting Place Tobermory

**The Natural Food Pantry** 

The SEED, Guelph Community

Health Centre

Tileyi Brands

**Trent University** 

<u>True Course Communications</u>

**Turtle Riot** 

**UDesign Solutions** 

**University of Guelph Food** 

Science Department

Upcyc Foods Ltd.

<u>Veranda</u>

**VG Meats** 

**Viking Recycling** 

Vision Bakeries Ltd.

Windsor Industrial Development

Laboratory (WIDL)

Winterhill Farm and Garden

Wishing Well Services Ltd.

With Love Inc.



## **About COIL**

The <u>Circular Opportunity Innovation Launchpad</u> (COIL) is an innovation platform and activation network aimed at creating, proving and scaling transformative solutions that will move Canada toward a climate-smart circular economy. Through programs, funding, and the urban-rural testbed, COIL inspires and supports circular businesses, social enterprises and collaborations across sectors. COIL is a project delivered by the Smart Cities Office at the City of Guelph, <u>10C Shared Space</u> and <u>Innovation Guelph</u> and is funded by the Government of Canada through the Federal Economic Development Agency for Southern Ontario.











# Funded by Federal Economic Development Agency for Southern Ontario



Additional program funding generously provided by

