## CIRCULAR ECONOMY ACCELERATOR PROGRAM

## FINAL REPORT

**Summer 2022 – Summer 2023** 

PREPARED BY:

SYNERGY FOUNDATION

#### PROGRAM DELIVERED BY





#### PROGRAM PARTNERS

Thank you for supporting circularity in your communities!

















## WHAT IS THE CIRCULAR ECONOMY?

Our current linear "take-make-waste" economy is resource intensive and puts pressure on Earth's natural ecosystems.

As an alternative, the circular economy eliminates pollution and waste by decoupling economic growth from resource extraction.

#### A circular economy helps to:



Fliminate waste



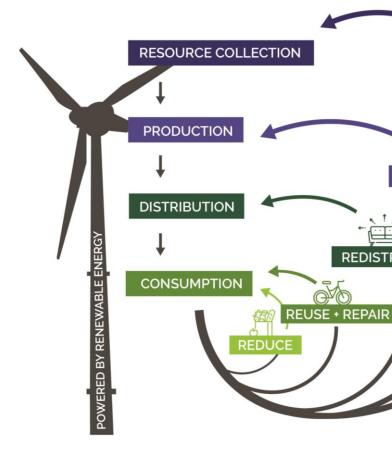
Reduce emissions



Cut virgin resource consumption











**RECONDITION** 

REDISTRIBUTE

### CIRCULAR ECONOMY ACCELERATOR PROGRAM

Provided support to Vancouver Island and Coast businesses that seek to adopt circular principles, reduce waste and emissions, and develop innovative practices

#### **PARTICIPANTS RECEIVED:**

- Hands-on support from a circular advisor
- Opportunities assessment
- Action plan and metrics



## PROGRAM COMPONENTS:

Site visits with business participants

2 Webinar series

Circular economy business guide

### **ASSESSED AREAS OF CIRCULARITY**

We collected baseline data for waste, water, energy, and fuel use, and assessed each business' performance in eight areas of circularity:



Eliminate & Reduce



Diversion



Reuse Internal



Leadership & Training



Reuse External



Redesign & Innovation



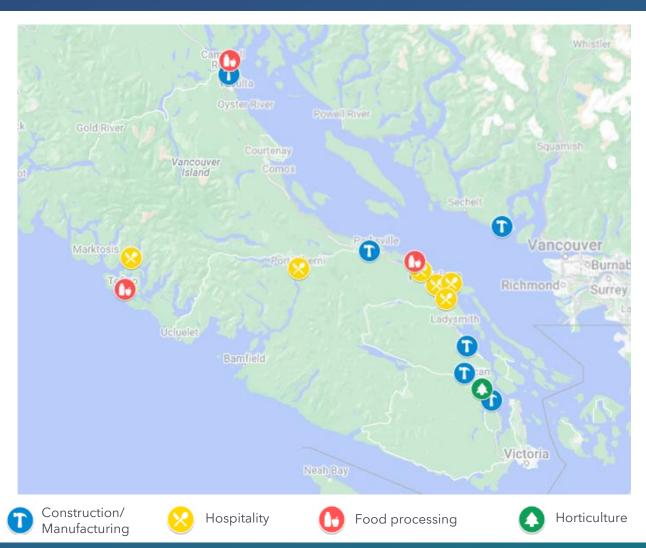
Procurement



Water & Energy



## BUSINESS PARTICIPANTS



- Black Rabbit Kitchen
- Cermaq Canada
- Coast Bastion Hotel
- Coastal Craft Yachts
- Dairy products processor
- DBL Disposal Services
- Dinter Nursery
- Dog Mountain Brewing
- Duncan Paving Company
- Ground Up Café & Catering
- Longwood Brew Pub & Restaurant
- Naas Foods
- Nexus Modular Solutions
- Supermod
- Tofino Wilderness Resort
- West Coast Pre Fab



#### IDENTIFIED OPPORTUNITIES

Circular opportunities identified and percentage circularity were calculated from cumulative data gathered during each site assessment for the 16 participating businesses.

Total Circular Opportunities Identified

**Average % Circularity** 





712

**52%** 

Businesses were **strongest** in the areas of:



Reuse Internal



Reuse External

Most prominent **opportunity areas** were in:



Water & Energy



Procurement



#### PROGRAM IMPACT

The suggested actions for the 16 business participants can result in **substantial cumulative reductions** to their environmental impact.





## WEBINAR SERIES

The Circular Economy Webinar Series was comprised of four webinars aimed at the tourism and hospitality, construction, and food and beverage processing sectors and local government.







Map: Global distribution of webinar registrants.

# WEBINAR INISGHTS

Based on poll results from each sector-specific webinar,

#### The most problematic waste streams are:



Single-use items



Soft plastics

#### The tools needed to address waste are:



Education



Alternative products or services



Recycling infrastructure



### STATE OF CIRCULARITY ON VANCOUVER ISLAND

Through this program, we identified several barriers to circularity on Vancouver Island:



Limited infrastructure posed barriers to businesses attempting to divert waste from landfill. Rural, remote, and low-population regions faced increased barriers.



**Limited accepted materials** 



**Lack of commercial pickup services** 



**Residential volumes only** 



Costly tipping fees - more expensive than landfill disposal

## (2) HIGH CAPITAL COSTS

Energy efficient upgrades and retrofits required significant upfront costs, disincentivizing changes.

(3) BEHAVIOURAL CHANGE

Businesses faced challenges encouraging staff and customers to change habits & participate in sustainability practices.

4 TIME INVESTMENT

Significant time investment to research applicable circular solutions.

### **OVERCOMING BARRIERS**

We propose the following strategies for successfully overcoming these barriers:



Creating a waste diversion cluster strategy will advance the circular economy by:



Diverting waste to circular processes



Increasing light industrial space for venture growth



**Enabling co-location of circular** businesses

# 2 CIRCULAR ECONOMY INNOVATION FUND

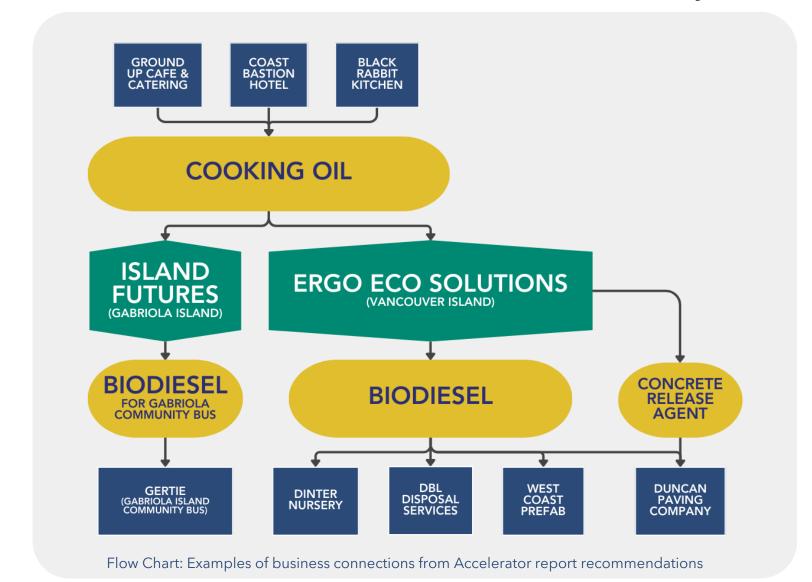
Establishing a circular economy innovation fund will support businesses in transitioning their operations

# 3 EXPAND ACCELERATOR PROGRAM

Expanding the Accelerator program will engage more businesses across more of the VI-Coast region, creating a circular ecosystem

## BUSINESS CONNECTIONS

Vancouver Island hosts a **growing network of circular businesses** that create economic value from waste streams and boost the local economy.





## BUSINESS CONNECTIONS

#### **Food Waste**



Ground Up Café & Catering and Dog Mountain Brewing donate coffee grounds and spent grain to local farmers

#### **Takeout Containers**



Ground Up Café & Catering has partnered with The Nulla Project to implement a reusable cup and container service

#### Lumber



Coastal Craft Yachts is looking at sourcing 100% reclaimed lumber from deconstructed buildings for yacht cabinets, furniture, and flooring

#### **Marine Plastic**

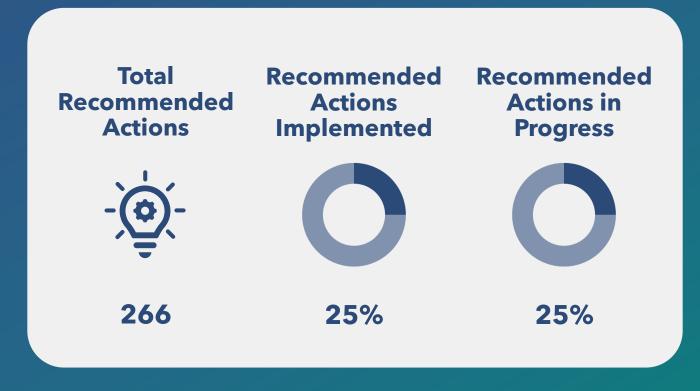


Cermaq Canada has recycled 6,500 kg of rope and 6 tons of other material including HDPE pipes and fishing and bird nets through Ocean Legacy's Ocean Plastic Depots



#### WHERE ARE THEY NOW?

Follow-up calls with five business participants who completed site assessments between September and December 2022 shed light on their progress towards circularity so far.





## PROGRESS HIGHLIGHTS

#### **Dog Mountain Brewing**



Collaborated with Timber Tiles to install, zero waste wood tiles made from offcut wood waste in bathrooms



Will install rainwater capture at new property

#### **Cermaq Canada Ltd.**



Diverted 150 tons of concrete anchor blocks from landfill by donating to local forestry company for reuse



Will implement diesel/battery energy management system on remote farms, reducing diesel consumption by 60%

#### **Longwood Brewpub**

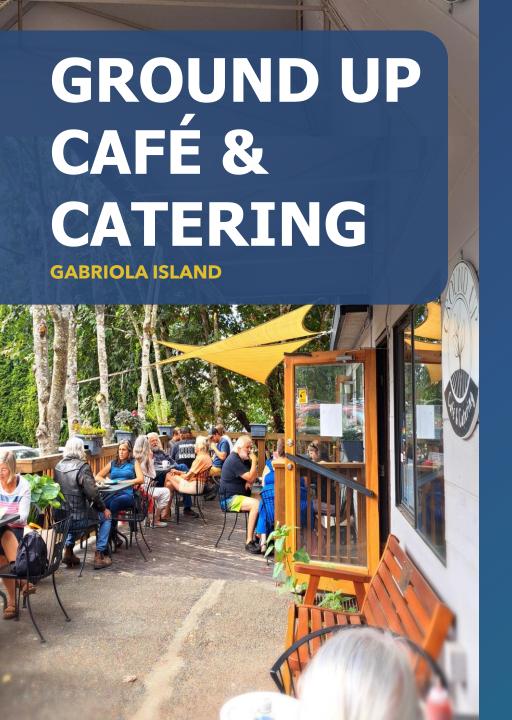


Incorporated waste diversion training into staff onboarding

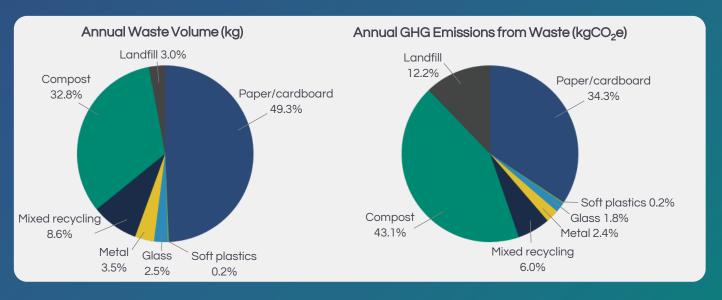


Will appoint a Zero Waste Champion in charge of implementing circular recommendations from report and tracking progress





Ground Up Café serves over 40,000 customers a year. Their location on a small island has driven innovative waste diversion practices that have helped them achieve a **97% waste** diversion rate from landfill.



#### **HIGHLIGHTS**

- Source ingredients from **local producers** when possible
- Return coffee bean bags to supplier for reuse
- Have comprehensive waste diversion station in place



Nexus designs and manufactures modular buildings in their 16,000 sq. ft facility using an innovative construction process that is faster and produces less waste than conventional construction.



#### **HIGHLIGHTS**

- Prioritize suppliers within a 50km radius
- Requires subcontractors and employees to sign agreements to adhere to waste reduction practices

The process of pulling together all of our inputs has been extremely helpful. We work in the renewable forestry industry which is poised to become one of BC's best tools in combatting climate change. Our circularity assessment now gives us **baselines and recommendations** to start somewhere. We now know **where we are** and want to **be part of the change** in industry that is gaining momentum.

- Mark Brackett,
Project Team Lead, West Coast Pre Fab



Witnessing the power of collaboration and effective partnerships has been truly inspiring. The businesses openly embraced circularity, and EDOs from across Vancouver Island came together to support one another in fostering a vibrant circular ecosystem. The program's ripple effect extends beyond the participants, inspiring others to embrace the transformative power of circularity.

Georgia Lavender,
Director of Program Operations, Synergy Foundation



## PROGRAM TAKEAWAYS



The circular economy has **significant untapped value** and is a space worth investing in



Vancouver Island is a **unique place** to advance the circular economy



Businesses are receptive to circular opportunities and are actively making changes



and partnerships are vital in facilitating the transition

**Collaboration** 



## **MOVING FORWARD**

Based on the results of this program, we propose the following strategies for overcoming barriers to transitioning to a circular economy on Vancouver Island:

#### **BARRIERS**

- Lack of waste diversion strategies or infrastructure for businesses
- Lack of light industrial zoned space for entrepreneurs with circular businesses
- Lack of implementation funding to support a transition to the circular economy
- Lack of capacity to explore circular opportunities and enact changes

#### **RECOMMENDATIONS**

- Develop a waste diversion cluster strategy to advance the circular economy by diverting waste to circular processes and creating space for venture growth and co-location
- Create a circular economy innovation fund to support businesses transitioning their operations
- Expand the Accelerator program to engage more businesses across the VI-Coast region to create a circular ecosystem

## FURTHER READING



Check out our new publication, A Business' **Guide to the Circular Economy**, for guidance on integrating circular concepts into business operations, innovative examples and case studies, and further resources.



## WHAT'S NEXT?

Synergy Foundation will **continue to support** pilot program participants as they implement report recommendations.

VICEDA and Synergy Foundation are actively **exploring opportunities for Phase 2** of the Circular Economy Accelerator Program.

If you would like to participate in the program or bring the program to your region, **contact Amrit Manhas** at <u>amrit.manhas@nanaimo.ca</u>





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