

# Program Overview

A pilot program to repurpose plastic waste from construction sites in BC





Our Mission is to advance regenerative and circular practices in the built environment that nurture ecological and human health. That means designing buildings and communities that reduce and reuse building materials, waste, and carbon emissions.



# **The CPI Team**

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**Adrian Lopera Valle** 

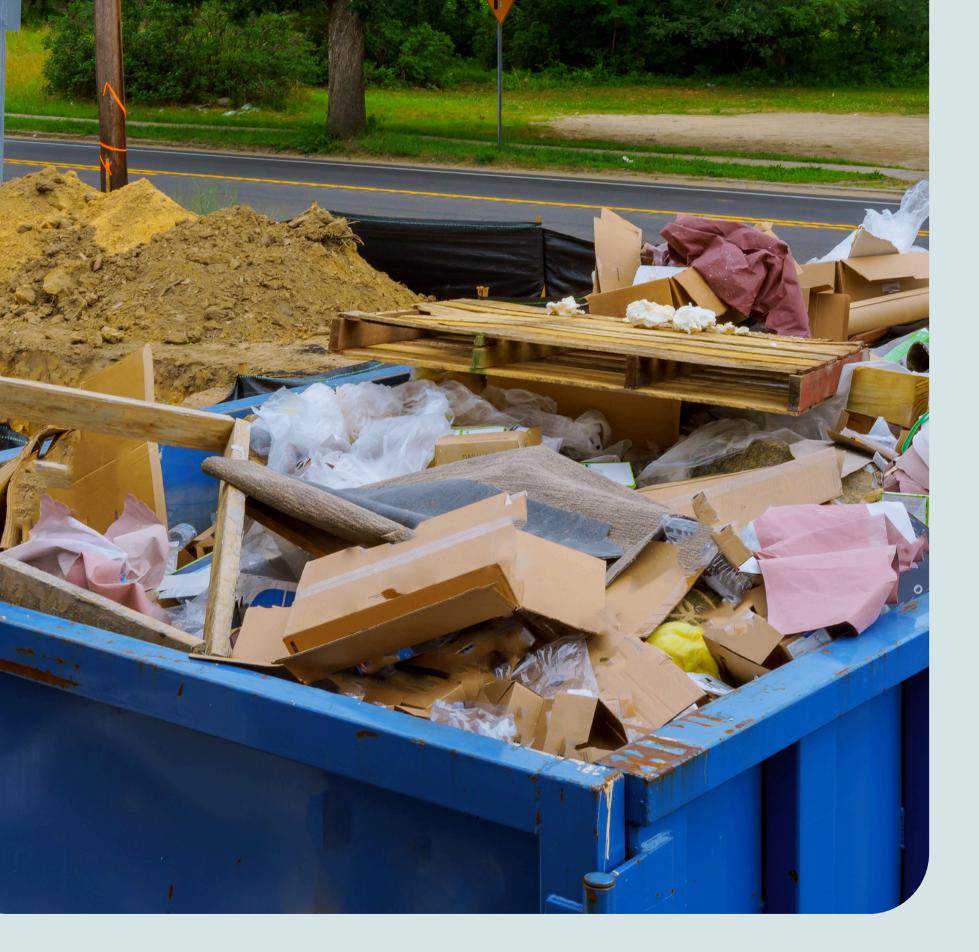
**Circular Innovation Lead** 



**Gil Yaron** Managing Director

## **Garron Dalby**

Site Monitor



**THE CHALLENGE Approximately 10%** of all materials used in construction are wasted.

# The Challenge





Plastic pollution is a global concern

Canada has set a target of zero plastic waste by 2030



The federal Plastics Registry will require all producers to report out on construction-related plastics after 2026.

# PLASTICS MANAGEMENT ON CONSTRUCTION SITES

- We do not know how much plastic is generated by construction projects.
- Studies from Europe estimate almost 80% of the plastic waste from on-site construction activities is clean packaging and can be easily diverted.
- Currently, virtually all plastic generated on construction sites in Canada goes to landfill or is buried on site.



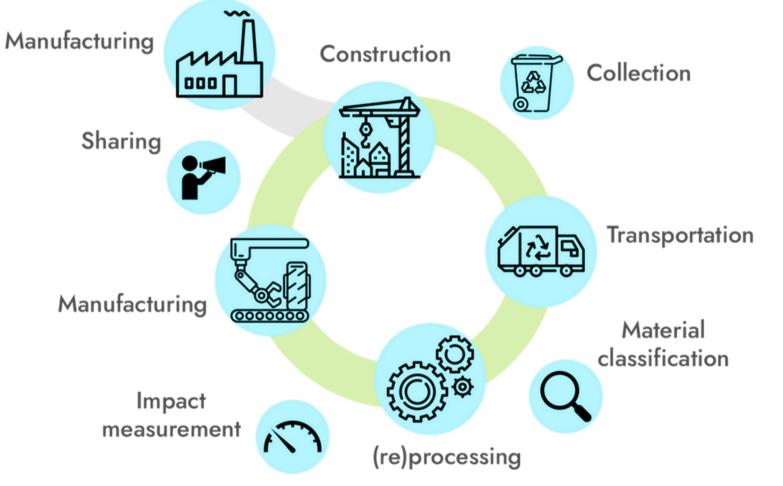
# CONSTRUCTION PLASTICS INITIATIVE: PURPOSE

- To reduce, divert and repurpose plastic in construction.
- Demonstrate the feasibility of circular economics in construction.
- Showcase the importance of local industry to support circularity in construction and the economic potential.



# **CONSTRUCTION PLASTICS INITIATIVE: FRAMEWORK**

- The pilot runs for 18 months (Sep 2024 Feb 2026) with possible extension to 2028
- Plastics are collected separately on-site
- Collected plastics are sent to a processor and recycled into a reusable plastic pellet
- Local plastics manufacturers integrate the recycled pellet into a range of innovative, locally manufactured building products.



# **TAKING IT CIRCULAR**

Project partners have the opportunity to integrate products manufactured from the recycled plastics into their building projects to reduce virgin material use, loads and meet municipal embodied carbon reduction requirements.

**Right:** Infinatec's VoidDeck -- a patented network of egg-shaped spheres designed as a void for concrete slabs in multi-unit residential buildings.



# **HOW IT WORKS**

This pilot provides a qualified site monitor to each participating construction project. The site monitor works with the general contractor and site supervisor to:

Identify the types of plastics to be collected

## 2.

Schedule collections based on the construction timeline

### 3.

Provide sizeappropriate collection bins

4.

Train site crews on proper source separation practices

5. Monitor bins for contaminati on

## 6.

Assist with the delivery and removal of collection bins

# CONSTRUCTION PLASTICS INITIATIVE: CONTRACTOR COSTS

- CPI presumes that a self-sustaining economic model exists for plastic recycling.
- Participating contractors are required to cover the costs of the collection bins and transportation as with any site waste management.
- CPI provides the option to use a dedicated hauler who will aim to match the build's hauling costs, keeping waste management costs unchanged.
- CPI maintains a small reserve to offset any unforeseen costs to contractors associated with participating.

# CONSTRUCTION PLASTICS INITIATIVE: PARTNER BENEFITS

- Visibility and recognition as industry leaders in all project reports, media releases conference presentations, webinars and other outreach activities
- Alignment with your corporate and client ESG and sustainability goals
- Oata about the type and volume of plastics generated and diverted
- Full cost accounting of costs incurred and savings realized through diversion practices
- Section Of site staff on best practices in plastics management
- Access to project tools and resources
- Future proofing in the face of emerging plastics policy
- Preferential access to products made with construction plastics.

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