

# 2022/2023 SUSTAINABILITY REPORT

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The way we build leaves a lasting impact.



# HOW WE ARE TRACKING CARBON

Since 2019, our team has been tracking our emissions in accordance to GHG Protocol. This is an international standard of reporting and has been adopted globally. As we see movement in this sector towards decarbonization, our team is also on a journey of continuous improvement and development towards our emission reductions goal.

## Historical GHG inventories

As we learn about the GHG protocol, we are also learning about how we can collect key data information and get more accurate in our tracking. 2022 represents the baseline year, where we reviewed all project financial records and expense charts. We improved our factoring and utilized revenue data to help account for projects with limited information on emissions.

Year	Scope 1	Scope 2	Scope 3	TOTAL	Intensity Kg CO2e/ \$1,000 revenue
	MT CO2e	MT CO2e	MT CO2e	MT CO2e	
2022**	6,627.2	687.06	7,033.62	14,347.88	22.71
2021*	3,145.32	1,068.73	7,630.81	11,844.86	24.16
2020*	2,142.37	1,617.9	2,075.59	5,835.86	n/a
2019*	1,505.88	1,773.33	2,322.21	5,601.42	n/a
2017*	139.17	466.58	538.34	1,144.09	n/a

Notes:

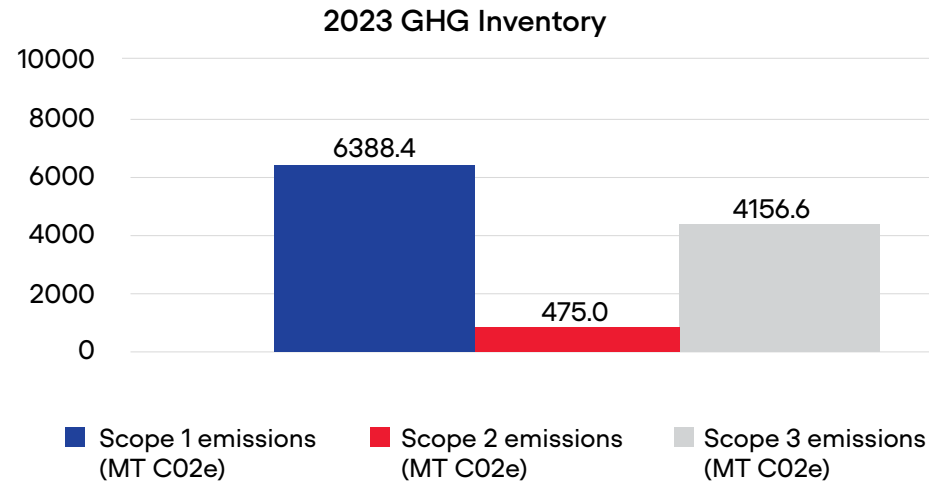
\*\*baseline year, \*limited data, development of methodology

3rd party verification by: BMO Radicle- Climate Smart

**What was not included in Scope 3:** Downstream emissions from subtrades, embodied carbon in purchased materials.

## 2023 Operational Emissions

11,019.96 MT CO2e total emissions, with nominated breakdown into scope below.



### What we track:

All data tracked is also measured against regional data – and the varying emissions factoring to provincial statistics.

Scope 1	Scope 2	Scope 3
<b>Combustion Fuels:</b>	<b>Externally produced Energy:</b>	<b>Downstream emissions:</b>
Diesel, Propane, Natural Gas, Gasoline (fleet vehicles), Gasoline purchased.	Electricity Thermal heat*	Flights, Hotels Taxi / transport Commuting, Waste Heating & Electricity paid for by owner**
*Thermal heat is not commonly purchased in our operations. ** These emissions are estimated and factored due to lack of data		

## 2023 Project Sustainability

We still see projects opting for LEED certification and many asking for LEED performance items like Low VOC material screening, waste tracking, erosion and sediment control, as well as Indoor Air Quality measures without actually pursuing LEED.

We also saw a rise in projects requesting commissioning and verification testing along with new client environment, social, and government (ESG) requirements. Our team has partnered to help on project side deliverables to meet the needs of these requests while also reviewing new sustainability grants or funding.

As we move towards more stringent energy performance requirements on buildings, we are developing tools to help guide our teams and subtrades through this transition.

**54**

**Total LEED  
certified**

**8**

**Total LEED  
Shadow**

**8**

**Net Zero / GHG  
Reduction / ZCB  
projects**

## Embodied Carbon

Embodied carbon is a measure of emissions it took to build a building. It includes all aspects of the building process, from the building materials; where they come from, how they are made and are transported and installed, to how the building operates.

**4**

**Total projects tracking  
embodied carbon  
in materials**

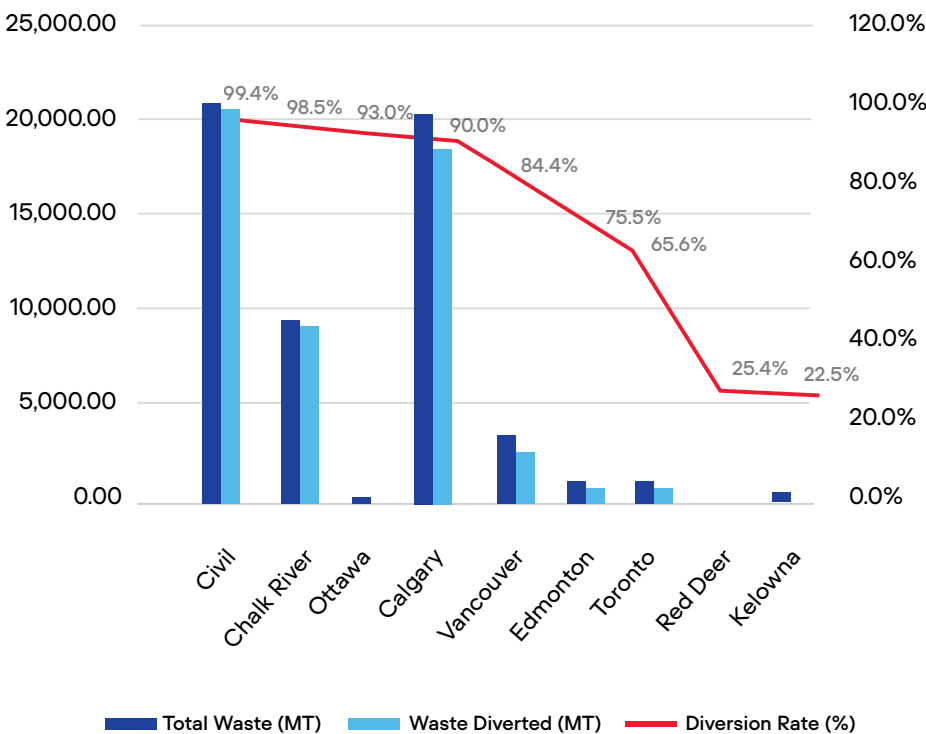


# WASTE DIVERSION

At Chandos, we have waste diversion policy across the organization:

- All sites with contract value of \$2M must report and divert waste with a target for a minimum 80 per cent diversion rate.
- Projects under \$2M are still encouraged to report waste and recycle or divert waste from landfills.

## Our Waste Diversion Performance for 2023 across our districts



Out of 111 projects reporting waste in 2023, **97** are actively diverting waste.

**111**  
Number of projects recording waste

**97**  
Number of projects diverting waste

**87%**  
Percentage of projects diverting waste

Material Stream by Weight- TOTAL 54,949.59 MT Waste, 92.7% Diversion rate



Landfill: 4,319 MT	Concrete: 50,311 MT
Wood: 1,342 MT	Metal: 2,146 MT
Drywall: 550 MT	Cardboard: 216 MT
LCEF: 50 MT	Glass: 0.9 MT
Plastic: 11 MT	



## 2023 Historical Waste Diversion performance

Year	Total waste	Diverted waste	% Waste diversion
2011	4,096	2,868	70%
2012	6,361	3,400	53%
2013	6,086	4,234	70%
2014	3,745	2,374	63%
2015	4,883	4,014	82%
2016	6,674	4,887	73%
2017	6,400	4,670	73%
2018	5,325	4,119	77%
2019	8,043	6,424	80%
2020	5,971	4,234	71%
2021	10,503	8,825	84%
2022	7,468	4,811	64%
2023	58,949	54,630	93%
<b>Total</b>	<b>134,504</b>	<b>109,490</b>	<b>81%</b>

The spike in numbers in 2023 represents key projects that recycled and re-purposed large amounts of steel and concrete. This includes SAIT Campus Centre Demolition, Blatchford Parkade Demolition, Coaldale WTP, Hawrelak Park, and Chalk River Project. All of which had over 95 per cent re-use or recycling.

## Material Circularity

Material Circularity looks to give materials a second life, instead of putting it in the landfill. This can be through re-using, re-purposing or creating something new from it.

At Chandos, we have a few different ways of utilizing our construction and demolition waste. In 2023, we started a partnership with Habitat for Humanity. We donate our unused excess construction materials, and any furniture or fixtures that need to be decanted and are in good condition. Our recorded donations was an estimated 355 kgs that was diverted from landfill. This also helps Habitat for Humanity raise money for their community program by re-selling material at lower prices at their RE-Store storefront and fund their programs.



## OUR ACCOMPLISHMENTS

### EcoVadis

At Chandos, sustainability is at the core of what we do. We earned a silver medal from **EcoVadis** with a score of **63/100**, placing us in the 83rd percentile of all rated companies.

This breakdown includes:

- Environment: **60/100**
- Labor & human rights: **70/100**
- Ethics: **60/100**
- Sustainable procurement: **50/100**



### B Corp

As a certified **B Corp** with a score of **158**, we're committed to making a positive impact on people and the planet. In Canada, we're the top among four organizations, and globally, we lead among 17 companies in this category.

This breakdown includes:

- Governance: **16.9**
- Workers: **57.1**
- Community: **29.7**
- Environment: **50.8**



### BMO Radicle

Chandos successfully completed the 2022 inventory with a higher fidelity of data than ever before.

We were commended by **BMO Radicle** on our detailed approach to our environmental accountability.



## INDUSTRY CONTRIBUTIONS AND ENGAGEMENT

Chandos is proud of the work we do and we want to share our research and stories with industry. Below is a list of how we are contributing to elevate industry awareness.

- **ENBIX** - executive committee
- **CCA Embodied Carbon Task Force**
- **CaGBC Decarbonization Accelerator**
- **U of Toronto** – CSBE Research Initiative on Embodied Carbon
- **U of Alberta** - Research partner on Embodied Carbon
- **Construction Specification Canada** - guest speaker NAIT events
- **Carbon 101.**
- **Material Circularity** – CSA
- **Building Transformations Conference** - Presenter
- **Buildex AB– with Carbon Leadership Forum** - Presenter
- **Guest Lectures** - Mount Royal, NAIT, Okanagan College, University of Calgary
- **Sustainable Labs Canada Conference** - Presenter
- **Biosphere Institute Sustainability Symposium** - Present
- **B Corp Net Zero Commitment B Hive** - Working Group

# OUR SUSTAINABILITY TEAM

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**Jen Hancock**

VP Collaborative Construction

Jen leads our sustainability policies and initiatives, focusing on climate-related risks and opportunities. She provides insights and recommendations for actions and investments to advance the organization's decarbonization efforts. Actively engaged in industry advocacy, she chairs both the Alberta and Edmonton Construction Associations and contributes to various forums aimed at promoting a sustainable future.



**Audrina Lim**

Director Carbon Transition

Audrina supports Jen in developing and executing the organization's decarbonization and sustainability strategies. With her architecture and project management expertise, she oversees project-level sustainability initiatives, manages certifications like ZCB, LEED, and WELL, and tracks waste management while providing education and training for our operations teams.



**Manjot Singh Brar**

Sustainability Coordinator

Manjot tracks waste management performance on-site and implements sustainable policies like erosion and sediment management and indoor air quality monitoring. He supports teams in pursuing LEED certification, ensures materials meet sustainability requirements, and advocates for career paths in sustainability by mentoring students and serving as an ambassador for Sustainability in Construction.