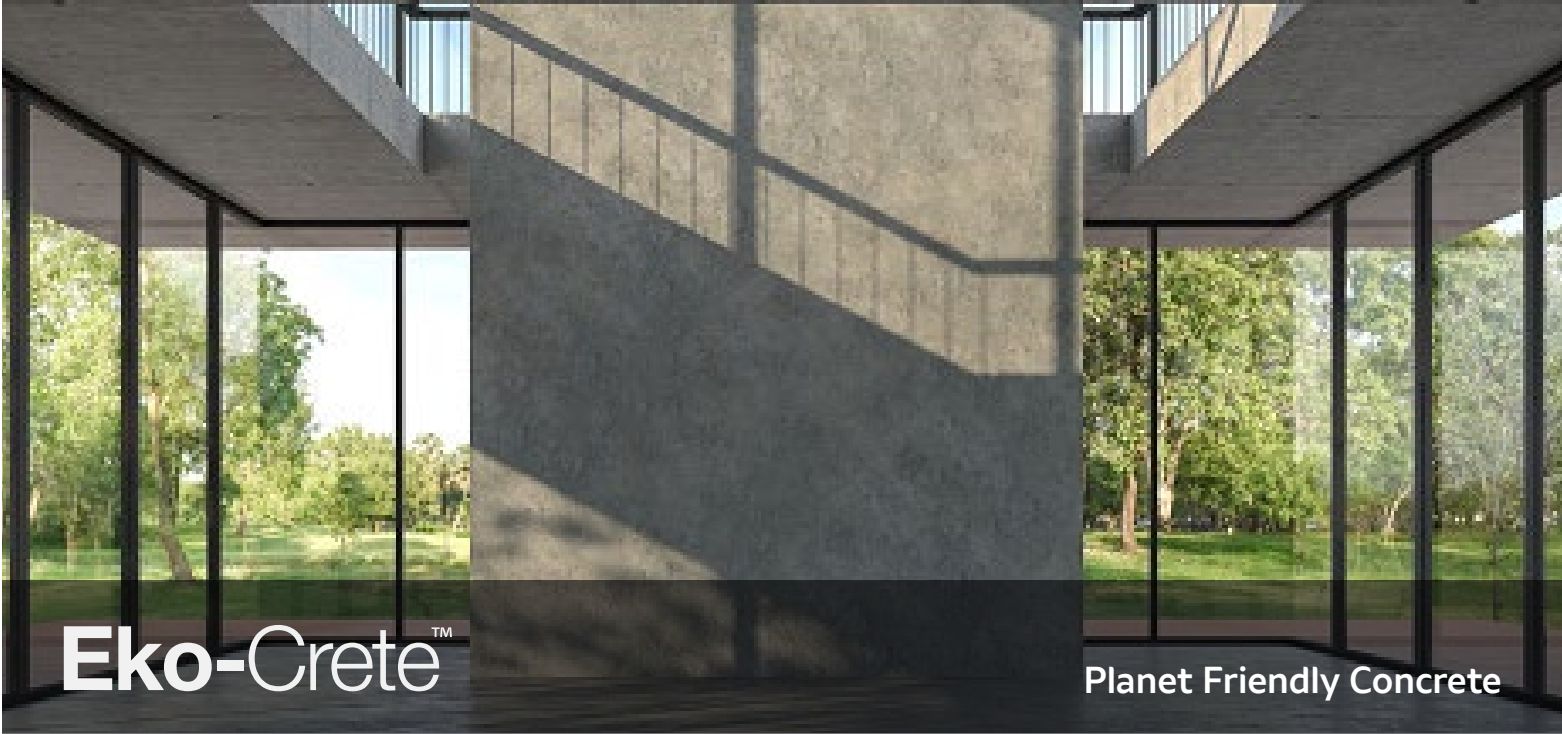




Eko-Crete™

Planet Friendly Concrete

Reduce the CO₂ Footprint of Concrete Construction without Compromise

Concrete remains the most sustainable, accessible, and budget-friendly building product on the market and now, with Eko-Crete™, it is also one of the most ecological options.

Eko-Crete™ ready-mix concrete mixes make it an even greater sustainable and ecologically friendly choice by targeting the production of cement – both a key ingredient in concrete and the key contributor to its CO₂ footprint (85-90%). Eko-Crete™ mixes are optimized to reduce traditional Portland cement contents and maximize SCM's (Supplementary Cementitious Materials).

This process significantly reduces the amount of virgin materials required, helping you meet LEED criteria and achieve your sustainability targets.

Slag cement not only makes for a more eco-friendly building material, it is also lighter in colour, makes concrete more durable and easier to finish than Portland cement alone. It can also attain higher compressive strengths with the same amount of cementitious materials in a given mix and lower permeability.

Just one more way CBM is working with you to build a sustainable future without compromising quality, workability and profitability.



ENVIRONMENTAL LEADERSHIP

Votorantim Cimentos, St Marys Cement and CBM have been industry leaders in reducing the environmental impact of the production of cement and concrete since 1990, with ambitious targets in place to create a cleaner, stronger, and even more sustainable product.

A HISTORY OF DOING WHAT'S RIGHT FOR OUR PLANET

We have reduced our CO₂ emissions per ton of cementitious product by 23% between 1990 and 2019. Key to this reduction was our leadership in replacing traditional GU (General Use) Cement with the more eco-friendly GUL (Portland-Limestone) Cement, at a 1:1 ratio.

CO₂ EMISSIONS REDUCTION

In 2023, We reduced our net CO₂ emissions by 4%, from 579 kg of CO₂/tonne of cementitious material in 2022 to 556 kg of CO₂/tonne of cementitious material in 2023. This achievement resulted from a combination of factors, particularly the increase in the co-processing of different types of wastes and the reduction of our clinker factor within our operations.

To guide our climate transition strategy, we developed a decarbonization roadmap based on four priority pillars as illustrated below.

As part of Votorantim Cimentos, we have aggressive global targets for 2030 and 2050 to reduce the carbon footprint resulting from the materials development of the ConcreteSolutions™. This will allow you to hit your own carbon targets and requirements for years to come.

We are committed to leading the push towards making our industry as planet friendly and sustainable as possible.

2030 CORPORATE TARGETS

- 1. Achieve 475 kg of net CO₂ emission per ton of cementitious product**
- 2. Achieve 45% renewable electricity**
- 3. Evolve in the implementation of our water and biodiversity management plans in sensitive areas**

GETTING TO 2050 WILL BE MORE AMBITIOUS.

VC FORESEEABLE PATH 2050

763 1990 Gross Emissions (kgCO₂/t of cement)

-283

CCS/CCU

-148

Current Emission

-141

Clinker

-72

Cement

-60

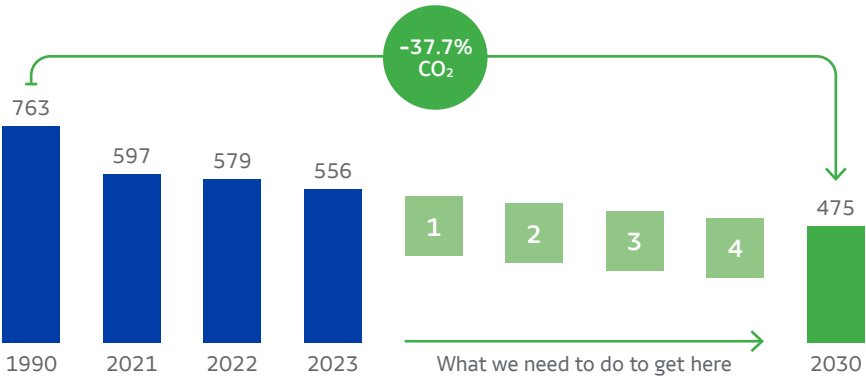
Concrete

-59

Carbonation

0 2050 Gross Emissions (kgCO₂/t of cement down the value chain)

CO₂ NET EMISSIONS (kg CO₂/tonne of cementitious product)



- 1. CEMENTITIOUS PRODUCTS:** Substitution of clinker with byproducts from other industries (e.g. blast-furnace slag and flyash) and other cementitious materials (e.g. calcined clay and natural pozzolans).
- 2. CO-PROCESSING:** Substitution of fossil fuels used in cement kilns with other materials, especially biomass and various types of waste and by-products.
- 3. ENERGY EFFICIENCY:** Optimization of the production process, use of renewable energy sources and investment in equipment technology.
- 4. NEW TECHNOLOGIES:** Use of innovative processes and new materials, dematerialization of the value chain, carbon capture, and storage, and partnerships with various entities.

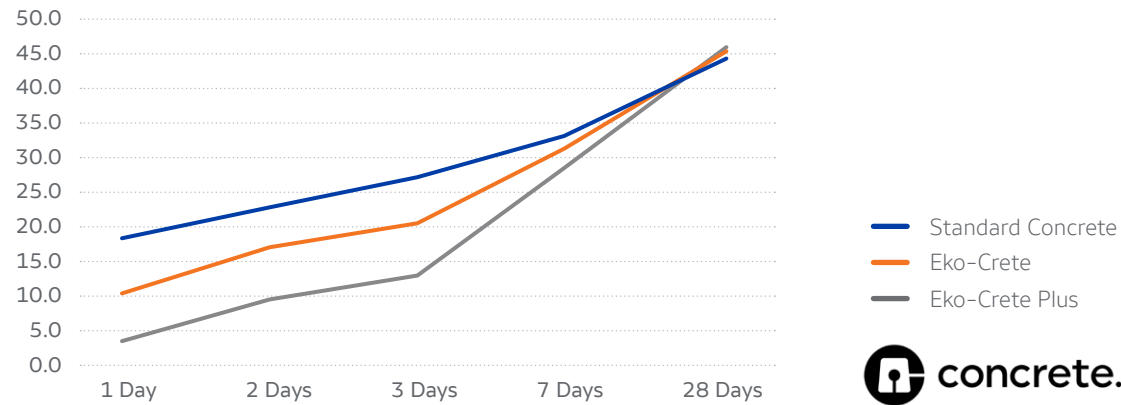
BENCHMARKS MATTER When comparing products, make sure that you are comparing apples to apples. At CBM, we compare our products with the **2022 Industry Average** (as defined by Concrete Ontario Member Industry-Wide EPD For Ready-Mixed Concrete) as opposed to significantly less carbon friendly averages from previous years. We don't include carbon credits or offsets in our claims, our numbers are based on the product itself compared with the 2022 Industry Standards.

STACKING-UP AGAINST THE INDUSTRY

Eko-Crete™ from CBM, with its industry leading formulation has been developed to help your industrial, commercial, or residential projects meet the most demanding industry specifications, while exceeding carbon reduction requirements.

Not only do all Eko-Crete™ standard mixes provide lower than industry average Carbon Footprint numbers, it provides comparable compressive strength results at 28 days, and exceeds the industry standards at 56 days. Available mix optimization powered by Concrete AI and CBM's ConcreteSolutions™ can speed-up the strength gain depending on your application needs. Here is comparison of strength gains for a 35MPa with Air concrete mix.

Strength Gains Comparison for a 35MPa with Air Concrete Mix



FirstUp™

Accelerated Strength

Save Time. Stay Productive.

With FirstUp, forms can be removed sooner and concrete can bear construction loads earlier than with traditional concrete, this will cut days off your construction schedule.

FirstUp ready-mixed concrete from CBM meets the most demanding specifications, whether it's an industrial, commercial or residential project.

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SPECIALTY PRODUCT INTEGRATIONS FOR REDUCED CO₂

Combine Eko-Crete™ with Specialty CBM ConcreteSolutions™ to Maximize Benefits.

Some of our ConcreteSolutions™ products such as FirstUp™ (for accelerated strength), and Get-Set™ (for quicker, more predictable cold weather set times), are by their nature more carbon intensive from a production standpoint than our standard mixes. By combining Eko-Crete™ with these products, you can offset that increased carbon footprint, making your project more ecologically sustainable while realizing the full potential and performance benefits of specialty mixes.

GetSet™

Fight Back Against the Cold

When it Gets Cold, Get Ready with GetSet

GetSet from CBM is the industry equalizer in the war against cold weather delays. Different formulations allow GetSet ready-mixed concrete to achieve quicker, more predictable set times even in the dead of winter.

With GetSet you can achieve excellent surface appearance and improved finishing characteristics while you speed up set time by up to 35%. This can often mean the difference between waiting an entire season and finishing a project ahead of schedule.

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EKO-CRETE™ SOLUTIONS FOR THE PLANET AND YOUR BUDGET

No matter what your project is, we have an Eko-Crete™ product for you. Our mixes can be adjusted to meet both the budgetary and environmental requirements

of your project. The table below illustrates how various Eko-Crete™ mix options could reduce the carbon footprint of a mid-size residential project.

Utilizing Self-Declared Eko-Crete™ Global Warming Potential (GWP) Values

Mix Description	2022 Ontario Industry Average EPD Baseline Mix	CBM CO ₂ Reduction from 2022 Baseline
35MPa 100% GUL	Table 9: Baseline 35 MPa concrete without air GU 15 SL	0%
35MPa Standard (15%SCM)	Table 9: Baseline 35 MPa concrete without air GU 15 SL	-10%
35MPa Eko-Crete (25%SCM)	Table 9: Baseline 35 MPa concrete without air GU 15 SL	-18%
35MPa Eko-Crete (50%SCM)	Table 9: Baseline 35 MPa concrete without air GU 15 SL	-34%
35MPa Eko-Crete (70%SCM)	Table 9: Baseline 35 MPa concrete without air GU 15 SL	-47%

Utilizing Self-Declared Eko-Crete™ Global Warming Potential (GWP) Values

Mix Description	m ³	Industry Baseline GWP (kg CO ₂ /m ³)	Budget CO ₂ Produced (Kg CO ₂)	Eko-Crete Plus GWP (kg CO ₂ /m ³)	Actual CO ₂ Produced (Kg CO ₂)
25MPa Class N	500	254.1	127025	172.5	86250
25MPa Class F-2	500	260.6	130320	181.3	90650
30MPa Class N	6000	264.4	1586280	181.7	1090200
30MPa Class F-1	1500	292.7	439080	189.9	284850
35MPa Class N	6000	295.5	1772760	198.2	1189200
35MPa Class F-1	500	334.5	167245	221.8	110900
35MPa Class C-1	5000	313.1	1565350	223.6	1118000
Total Project Volume:	20000	Total Carbon Budget:	5788060	Actual Carbon Produced:	3970050
% Carbon Reduction from Budget					-31.4%

CONTACT

Contact your CBM Sales Representative today to see how our Eko-Crete™ line of mixes can lower the carbon footprint on your projects without compromise.

FOR TECHNICAL QUESTIONS

Call St. Marys CBM Technical Service at 416-423-1300



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