

CARBONLIMIT.COM

CONTACT: TIM@CARBONLIMIT.COM



CARBON LIMIT CO.

A FLORIDA CORPORATION



EXECUTIVE SUMMARY

COMPANY OVERVIEW

Carbon Limit Co. is a development stage climate tech company creating the most effective & profitable solutions to global CO2 pollution. We believe we have created the right solution for the concrete industry, which is responsible for 10% of this global problem.

A solution that is effective, easily adoptable and scalable to make a massive impact.

OUR SOLUTION

a carbon negative cement additive, a simple drop in solution for concrete production that reduces 20% of the Portland Cement requirement.



OUR SOLUTION

a carbon negative cement additive, a simple drop in solution for concrete production that reduces 20% of the Portland Cement requirement.

OUR FORMULA

natural pozzolanic materials + waste material

when micronized:

- increase the pozzolanic properties
- mitigates the additional water requirement
- balances the densities of the other materials in our formula

OUR UNIQUE SELLING PROPOSITION (USP)

Concrete made with our technology:

- actively attract, capture, & store CO2 pollution (turning carbon projects to CCS solutions)
- better compressive strength & performance overtime as it captures & stores atmospheric CO2.
- Price comparative (less: processing, energy, expenses, carbon footprint)
- Easily adoptable
- helps satisfy ESG standards
- Can qualify for LEED V4 credits
- Allows contractors, cement & concrete companies to provide a lower carbon footprint concrete option to win more bids for the increasing customer driven demand for more sustainable & reduced carbon footprint projects.
- can be recycled and reused at the end of its lifecycle, allowing for additional CO2 capture & storage.
- Q45 Tax credit for our customers

PROVISIONAL PATENT

Using natural pozzolans, negative emission nanotechnology & a waste material to replace Portland Cement in concrete manufacturing to reduce the carbon footprint during the manufacturing process, as well as its ability to actively capture & store atmospheric CO2 directly into the concrete.

BUSINESS MODEL

Our business model focuses in Business to Business sales

- (A) As a Green Ready-Mix concrete
- (B) As a Green Cement additive/replacement
- (C) Licensing to scale globally
- (D) Selling Carbon Credit into voluntary & mandatory markets



MARKET SIZE

Worldwide cement market exceeds \$313 Billion with demand vastly exceeding supply. Our Product allows existing infrastructure to produce 10-20% more concrete, with reduced emissions. In the US alone, this presents the opportunity to grow revenue by \$10 Billion.

CUSTOMERS

Concrete contractors, cement & concrete companies, Government institutions and municipalities.



PRE/POST CURE PROCESS AND FIGURES:

Post-cure process works the same as the standard concrete manufacturing process.

Differentiator: once concrete is cured and dried it starts actively attracting, capturing & storing atmospheric CO₂ directly into the concrete at an expedited rate (expediting + adding)

- ✦ Initially: we replace 20% of Portland cement with our carbon negative cement, reducing about 16% of the carbon footprint of the manufacturing process
(current requirement is 10%, which we could meet at a better price point)
- ✦ post-cure: it actively attracts & captures physically & chemically 62% more CO₂ than standard concrete, through mineralization via carbonization turning the CO₂ into precipitated calcium carbonate while increasing the compressive strength of the concrete.
- ✦ We are currently testing & modeling how much CO₂ will mineralize via carbonization, how fast, and for how long to get the full quantifiable amount of CO₂ storage per ton of concrete made with our technology.

PRE/POST CURE PROCESS AND FIGURES:

Post-cure process works the same as the standard concrete manufacturing process.

Differentiator: once concrete is cured and dried it starts actively attracting, capturing & storing atmospheric CO₂ directly into the concrete at an expedited rate (expediting + adding)

- ✦ Initially: we replace 20% of Portland cement with our carbon negative cement, reducing about 16% of the carbon footprint of the manufacturing process
 (current requirement is 10%, which we could meet at a better price point)
- ✦ post-cure: it actively attracts & captures physically & chemically 62% more CO₂ than standard concrete, through mineralization via carbonization turning the CO₂ into precipitated calcium carbonate while increasing the compressive strength of the concrete.
- ✦ We are currently testing & modeling how much CO₂ will mineralize via carbonization, how fast, and for how long to get the full quantifiable amount of CO₂ storage per ton of concrete made with our technology.

CAPACITY & RATE OF MINERALIZATION

Our proprietary formula and enhancement process increases the rate of carbonation & storage capacities of concrete by a factor of 2 or more based on initial tests & empirical data on lifecycle carbonation into concrete.

(As we gain mass market adoption we will start replacing more OPC with our cement tech to make an even bigger impact. We understand that currently the market is very price sensitive and we want to stay competitive)

COMPETITIVE FACTORS:

A) Cost effective:

- 1) We do not need to calcinate the materials in our formula = saving money on energy and additional processing + minimizing the carbon footprint created.
- 2) We get our materials through low impact mining & micronize them to a specific size enhancing pozzolanic properties & the adsorption surface areas.

B) Does not require a third party feedstock of CO₂

(no transportation fees and associated carbon footprint)

Our solution uses active natural enhanced minerals that give concrete the ability to actively attract, capture, & store atmospheric CO₂ into the concrete permanently.

C) CO₂ is not injected into concrete

a nature based CCS solution that is integrated directly into the concrete.

Mitigating :

- risk of leaking or releasing into back into the atmosphere
- uncertainty of how much CO₂ is actually being captured
- liability for concrete companies & contractors.

EXISTING LAB/TESTS:

28 day test:

- 20% reduction of Portland cement
- better compressive strength (13% stronger than standard concrete on day 28), and will continue to become stronger over time as it captures & stores CO₂ in the form of calcium carbonate via carbonation
- other performance metrics are very similar to those of standard concrete

CO₂ mineralization test:

- Initial baseline results indicate that concrete made with our technology reduces up to 170% more CO₂ reduction than standard concrete.

AS OF FEB 2022

- ✦ RFP form Microsoft Climate Innovation Fund for our high quality carbon credits
- ✦ Won FAU Tech Runway launch competition
- ✦ Participated in Websummit 2021/ Lisbon (pitched on stage + had a impact startup booth)
- ✦ Completed our Techstars accelerator program in december 2021
- ✦ Worked with Milestone's R&D team to optimize and verify our technology's performance in concrete
- ✦ Our research lab partner HRG verifying efficacy for CO2 removal compared to standard OPC concrete.
- ✦ World of concrete 2022/Vegas (established relations with prospective clients & partners, ex. Sika)

MILESTONES FOR 2022

Q1:

- Secure pilot programs (Holcim, Sika, Milestone, cities & municipalities)
- Secure LOIs (Sitebiotics)
- Secure POs (..in the works)
- Complete pre-seed funding round (up to \$1.5M currently committed, subscriptions being drafted)
- Conduct lab tests with Purdue University (XRD CO2 storage & capacity test + performance tests)
- Apply for Xprize (completed)
- Apply for DOE grant (completed)
- Conduct ASTM tests

Q1:

- Set up location and supply chain
- Launch to market
- Conduct LCA
- Start carbon credits verification process

Q3:

- Complete Holcim pilot program and take next steps
- Secure 12 large commercial customers
- Quantify 35 thousand tons of CO2 removal/reduction

Q4 and into 2023:

- Scaling and Expanding through licensing our technology
- 100 thousand tons of CO2 removal/reduction
- Obtain 45Q credit verification

CONNECT WITH US

CONTACT@CARBONLIMIT.COM

TIM@CARBONLIMIT.COM

