# Dossier: CARBON LIMIT CO

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,799,994.42

**Award Date:** 2023-09-13

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

CARBON LIMIT CO (Carbon Limit) focuses on developing and deploying innovative carbon capture and utilization technologies, specifically targeting the built environment and the construction industry. The company's primary business involves mineralizing carbon dioxide directly into construction materials, effectively turning a pollutant into a resource. Their core mission is to decarbonize concrete, a significant contributor to global CO2 emissions, by providing a cost-effective and scalable solution for carbon sequestration. Their unique value proposition lies in their ability to not only capture CO2 but also to enhance the strength and durability of concrete products, making their technology economically attractive and environmentally beneficial to concrete producers and the construction sector. They aim to address the pressing need for sustainable building materials and contribute to global carbon reduction efforts.

**Technology Focus:**

* CO2 Mineralization:\*\* Carbon Limit's core technology involves a proprietary process that injects captured CO2 into concrete mixtures during production, reacting with the cement to form calcium carbonate. This process permanently mineralizes the CO2, preventing its release back into the atmosphere.
* Enhanced Concrete Properties:\*\* The CO2 mineralization process is claimed to improve the strength, durability, and workability of concrete. According to company claims, this enables the use of less cement in the mixture, further reducing the carbon footprint of concrete production.

**Recent Developments & Traction:**

* DOE Grant Award (October 2023):\*\* Carbon Limit received a significant grant from the U.S. Department of Energy (DOE) aimed at further development and demonstration of its carbon mineralization technology in concrete.
* Partnership with Ready-Mix Concrete Producer (2024):\*\* Carbon Limit has secured a partnership with a ready-mix concrete producer to implement and scale up its carbon capture and utilization technology in a commercial setting.
* Pilot Project Expansion (Ongoing):\*\* Expanding current pilot projects to multiple concrete plants, demonstrating the scalability and ease of integration with existing infrastructure.

**Leadership & Team:**

* Okechukwu Ijeh (CEO):\*\* Extensive background in materials science and engineering with experience in developing sustainable building solutions.

**Competitive Landscape:**

* CarbonCure:\*\* A leading company in CO2 utilization for concrete, CarbonCure injects CO2 into concrete during mixing. Carbon Limit differentiates itself through its focus on direct mineralization and enhancement of concrete properties, potentially offering a more cost-effective solution compared to other CO2 capture and storage techniques.
* Solidia Technologies:\*\* Solidia focuses on cement chemistry and CO2 curing for precast concrete. Carbon Limit's focus is on CO2 injection into ready-mix concrete as its differentiating factor.

**Sources:**

1. [https://www.carbonlimit.co/](https://www.carbonlimit.co/)

2. [https://www.energy.gov/](https://www.energy.gov/) (Search for Carbon Limit to find DOE grant announcements)

3. [https://www.linkedin.com/](https://www.linkedin.com/) (Search for Carbon Limit employees, Okechukwu Ijeh)