# Dossier: Carbon Ridge, Inc

## SBIR Award Details

**Award Title:** N/A

**Amount:** $134,488.00

**Award Date:** 2023-12-04

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Carbon Ridge, Inc. is a US-based company focused on developing and deploying modular onboard carbon capture and storage (OCCS) solutions for the maritime industry to drastically reduce greenhouse gas emissions from existing ships. The company aims to address the significant decarbonization challenge facing the shipping sector, which is responsible for a substantial portion of global CO2 emissions. Carbon Ridge's unique value proposition lies in offering a cost-effective, retrofittable OCCS system that can be installed on existing vessels, allowing shipowners to comply with increasingly stringent environmental regulations without requiring premature fleet replacement or relying solely on expensive and unproven alternative fuels. They are targeting not just compliance, but creating a pathway to carbon negativity for the maritime industry.

**Technology Focus:**

* Carbon Ridge's primary technology is a modular, cryogenic OCCS system designed to capture CO2 directly from a ship's exhaust stream. The captured CO2 is then liquefied and stored onboard in specialized tanks.
* The company claims its technology can capture up to 95% of CO2 emissions from marine vessels, and their modular design allows for scalable implementation across a diverse range of ship types and sizes.

**Recent Developments & Traction:**

* In November 2022, Carbon Ridge announced a $6 million Series A funding round led by Crowley, with participation from the Grantham Foundation, and Alumni Ventures. The funding is intended to accelerate the development and commercialization of its OCCS technology.
* Carbon Ridge has secured partnerships with major shipping companies and classification societies to conduct pilot programs and technology demonstrations on various vessel types, including tankers and containerships. Details of which specific companies are often cited as confidential.
* Carbon Ridge has received significant recognition and awards for its innovative technology, including participation in industry accelerator programs.

**Leadership & Team:**

* Chase Dwyer (CEO):\*\* Background includes experience in climate tech venture capital and engineering management, with prior roles focused on the development and deployment of clean energy technologies.
* While CTO and President information is difficult to confirm publicly, key team members appear to have relevant experience in cryogenic engineering, maritime operations, and carbon capture technologies.

**Competitive Landscape:**

* Value Maritime:\*\* Value Maritime offers a CO2 capture and storage system for ships, but their approach often involves a more complex integration with the ship's systems and can be less modular.
* Carbon Ridge differentiates itself through its emphasis on modularity and ease of retrofit, allowing for faster and less disruptive implementation on existing vessels compared to competitors requiring significant vessel modifications.

**Sources:**

* [https://carbon-ridge.com/](https://carbon-ridge.com/)
* [https://www.crowley.com/news-and-media/news/carbon-ridge-series-a/](https://www.crowley.com/news-and-media/news/carbon-ridge-series-a/)
* [https://www.marinelog.com/tech/decarbonization/carbon-ridge-nears-onboard-carbon-capture-milestone/](https://www.marinelog.com/tech/decarbonization/carbon-ridge-nears-onboard-carbon-capture-milestone/)