

# Building Pathways to Carbon Reduction

**CLIMATE VAULT IS AN IMPACT ORGANIZATION** founded by economist Michael Greenstone at the University of Chicago and led by CEO Jon Cohen. The organization offers an innovative approach to addressing climate change by providing direct pathways for organizations of various sizes to participate in carbon credit markets, aiming to address emissions today, while also creating a market signal for long term carbon removal. Climate Vault was awarded the Environmental Stewardship Award at the 2024 Leading for Good Conference.

## Introduction

Jon Cohen, CEO of Climate Vault, and the team work with the team to create clear pathways to carbon offsets in a complicated landscape, while forging a path to a new market for long term carbon removal.

## About Climate Vault

Climate Vault, an award-winning registered 501(c)(3) organization, was founded in 2020 at the University of Chicago by economist Michael Greenstone. It offers a practical yet innovative approach for partner organizations to address carbon emissions.

Founded on the thesis that acquiring carbon pollution permits<sup>1</sup>, specifically from regulated cap-and-trade markets as opposed to voluntary markets<sup>2</sup>, provides immediate action in reducing emissions globally. Taking their innovative approach one step further, Climate Vault uses the value of their permits to drive innovation in the carbon dioxide removal arena, leveraging the unique due diligence capabilities of their technology chamber to create a price signal for early-stage innovators and entrepreneurs building the carbon removal market<sup>3</sup>.

## The Carbon Credit Market

The Carbon Credit Market (CCM) was valued at USD 364.03 billion in 2022. The market is projected to grow at a compound annual growth rate of 38.7% from 2023 to 2030, with Europe accounting for the dominant market share of 89.5%. A carbon offset builds up a carbon credit for the individual or organization through a transaction linked to another organization's actions to reduce carbon emissions. This uses a market mechanism to allow one organization to pay for a carbon reduction done by another organization.

## Regulatory Ambiguity and International Compliance

The carbon credit market faces a significant challenge. There is a wide range in offsets, from highly controlled regulated offsets to voluntary offsets, with a significant variation in offset quality and effectiveness. Standardized global regulations do not exist and there is significant variability across jurisdictions and offset types and quality. Some of the available voluntary carbon offsets have not delivered the environmental benefit at the scale or duration that was intended. According to Greenstone, many of these approaches "fail to meet the mark."

"What we're doing is unique," says Cohen, "in that by leveraging or relying on government regulated compliance markets, we can deliver a form of carbon credit or carbon offset to our clients that is trusted, verifiable, and impactful and has zero greenwashing risk."

Climate Vault, awarded the Environmental Stewardship Award at the 2024 Leading for Good Conference, is the first developed "integrated carbon reduction and removal platform," according to Cohen. Through their business model and 5-step process (see Exhibit 1), they have vaulted in more than a million tons of CO<sub>2</sub> in the atmosphere, thus partnering in the prevention of more than a quarter of a billion dollars in climate damage.

After vaulting carbon from the purchased carbon credits, Climate Vault is pushing to create a financial signal that will unlock capital for a new market in long term carbon dioxide removal. They have engaged a series of technical experts, led by former U.S. Energy Secretary Ernest J. Moniz, as an in-house Tech Chamber. These experts are vetting new technologies for long term carbon removal and Climate Vault will make early investments.

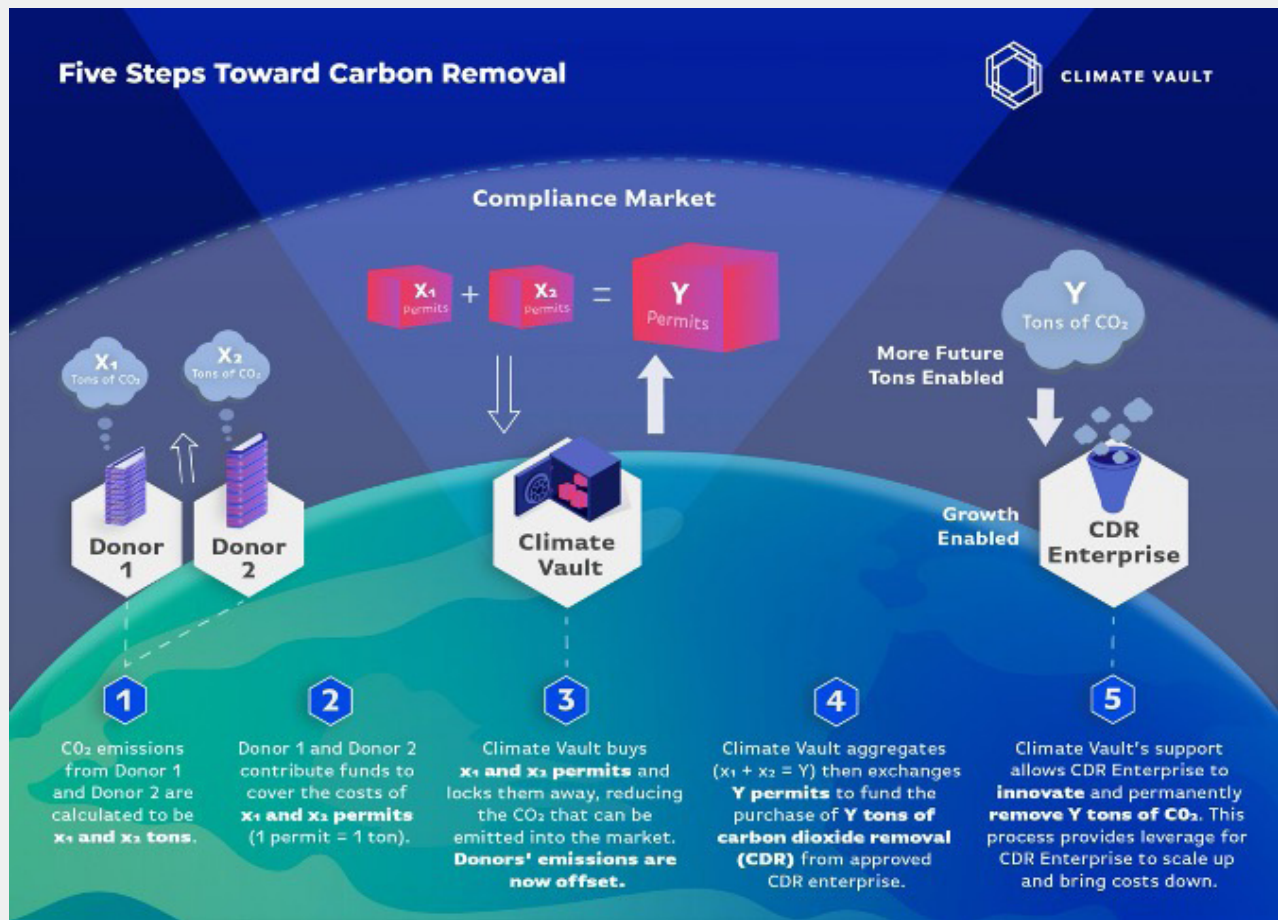


Exhibit 1: Five Steps Toward Carbon Removal · Source: Climate Vault, "Climate Vault Approach"

## Conclusion

Climate Vault is charting a course through a complicated sector to allow their partners to take action and purchase carbon offsets today. At the same time, they are using those current transactions to build a longer term carbon removal market, sparking investment in new technologies that will offer long term solutions to carbon.

## Looking Ahead

- How can Climate Vault continue to distinguish its approach to offsets in a global market?
- The carbon dioxide removal market is very early, what value proposition could bring partners in at this stage?
- Climate Vault is a nonprofit working between sectors, in what other situations are multiple sectors engaged in solutions?

<sup>1</sup> A carbon pollution permit, an economic term, is a legal authorization granted to companies or organizations that allows them to emit a certain amount of greenhouse gases (GHGs), such as carbon dioxide (CO<sub>2</sub>), into the atmosphere. Definition provided by Investopedia.com

<sup>2</sup> Cap-and-trade markets is a market-based environmental policy designed to limit overall emissions of pollutants, particularly carbon dioxide (CO<sub>2</sub>), resulting from industrial activity. Definition provided by Investopedia.com

<sup>3</sup> The Climate Vault Tech Chamber members include former U.S. Energy Secretary Ernest J. Moniz, John M. Deutch, Margaret Leinen, Stephen Pacala, and Daniel P. Schrag.

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