



CLIMATE VAULT

2023 Impact Report

From Our Co-Founder

2023 was the warmest year on record and communities have felt these effects across different regions all around the world. In response to this, there has been increased action and focus in the climate space.

We've witnessed new government regulation, a growing number of lawsuits against corporate greenwashing claims, and a 70% drop in [Nature Based Avoidance offset prices](#) due to quality concerns. It has become increasingly clear that more than ever, the "status quo" of traditional offsets is not acceptable.

The voluntary carbon market has the potential to help confront the climate crisis, but the failure of traditional carbon offsets to deliver the promised reductions are holding it back. As the famous Einstein quote about how insanity is doing the same thing over and over and expecting a different result suggests, it is time for new approaches to offsetting carbon emissions.

Climate Vault is disrupting the supply side of the voluntary carbon markets with a simple idea— organizations should get the carbon reductions they pay for. We do not write complicated contracts with people and organizations around the world that are difficult to enforce in the best case. Instead, we free ride on the enforcement capabilities of the governments that run successful compliance or cap-and-trade markets for carbon dioxide and in the process stimulate the innovation in carbon dioxide removal technologies that the world so desperately needs.

We are grateful to the many individuals and corporate Partners who have worked with us through the years. With this support we have surpassed one million tons in our vault. According to the United States Government's official estimate of the damages of climate change, this means that Climate Vault and its partners have reduced the damages that climate change will cause by more than \$250 million.

Together, we are leading the carbon offset credibility revolution and reducing the climate damages that we bequeath to our children.

Here's to continuing our impact and vaulting more tons, together.



Michael Greenstone

Co-Founder, Climate Vault; Milton Friedman Distinguished Service Professor of Economics, University of Chicago

What We Do



Reduce CO₂ via
Compliance Markets



Support CDR
Technologies



Eliminate Atmospheric
CO₂ Forever

Our Impact so Far



Over 1.1M
Metric Tons of CO₂
Vaulted



\$18.7M+
in Donations



385+ Individual
Donors



55+ Corporate
Partners



Over \$250M
of societal
benefits realized



25 Thought
Leadership Events
in 2023

A Year in Highlights

- **Surpassed** 1.1 million metric tons of vaulted CO₂ emissions. This is equivalent to over \$250 million worth of societal benefits by taking credible climate action.
- **Recognized** the first annual Climate Vault Carbon Champion honorees
- **Co-hosted** our first two Climate Week NYC events with Partners Qlik and The Giving Block
- **Launched** the new Climate & Cocktails carbon neutral in-person event series
- **Approved** Science-Based Targets Accredited Solutions Provider (SBTi ASP) by CDP
- **Published** the inaugural Climate Action Report industry research piece
- **Shortlisted** in the Top 100 for for the Chicago Innovation Award
- **Implemented** a new employee benefit neutralizing the work from home footprint of our Vaulters
- **New partners** include Egon Zehnder, Fast Company, Angeleno Group, and more

All about CDR

Paving the Way to Eliminating Atmospheric CO₂

Carbon dioxide removal (CDR) has an increasingly important role to play in countering the effects of climate change. To achieve the goal of the Paris Climate Accord in limiting global warming to 1.5°C above pre-industrial levels, it is critical to decrease the amount of emissions entering the atmosphere, while also supporting CDR technologies that will remove historical emissions from the atmosphere.

This is why Climate Vault doesn't stop at emission reductions. We leverage the value of vaulted emission allowances to provide grant awards to the most promising and innovative CDR technologies available today. These CDR technologies go through a rigorous vetting process, led by the esteemed members of the Climate Vault Tech Chamber. Thanks to this process, our partners know that they are having an immediate impact today, while supporting cutting edge technology to make a better tomorrow for us all.

In February 2023, we kicked off our second search for grant applicants, via an RFP cycle. We look forward to reaching an outcome for this RFP cycle in Q2 2024.

Key Highlights

- More than a **500% increase** in application submissions
- Project submissions **spanned all three CDR Pathways** (Terrestrial, Technological, Oceanic) and included **over 15 unique CDR approaches**
- Proposed CDR projects are taking place in more than **18 countries across 6 continents**
- **6 project submissions were selected by the Tech Chamber** to move forward to the next stage of our review process, an independent third-party audit.

The Tech Chamber

Climate Vault's Technology Experts Chamber (the "Tech Chamber") is a group of science, technology, and policy experts that rigorously evaluates CDR technologies and provides strategic oversight for the CDR applicant selection process. The Tech Chamber's respective subject-matter expertise spans the three CDR Pathways.



Ernest Moniz (Chair)
President and CEO, Energy Futures Initiative, Former U.S. Secretary of Energy



Margaret Leinen
Vice Chancellor for Marine Sciences, Director of Scripps Institution of Oceanography and Dean of the School of Marine Sciences, UC San Diego



Daniel Schrag
Sturgis Hooper Professor of Geology, Professor of Environmental Science and Engineering, Director of the Center for the Environment, Harvard, Former Member of the White House Council of Advisors on Science and Technology



John Deutch
Emeritus Institute Professor, MIT Department of Chemistry, Former Under Secretary DOE



Steve Pacala
Frederick D. Petrie Professor in Ecology & Evolutionary Biology, Princeton



Cathy Woteki
Distinguished Institute Professor, Biocomplexity Institute, UVA Former Under Secretary USDA

Climate Vault's Review and Selection Process



RFP applications submitted.



Initial review conducted by CV team based on standard criteria.

Tech Chamber provides opinion on applications to undergo third-party audit.



Selected applications undergo third-party audit.



Applications with successful audit results are reviewed by CV team and Tech Chamber.

Grant winners are selected.



Grant award provided once CO₂ removal is achieved and verified.

Key Criteria

Each technology that Climate Vault and the Tech Chamber review are assessed against the same criteria, including:

- ◆ **Innovation:** The novelty of the technology and business model
- ◆ **Scalability:** The potential for the technology to be replicated at scale and to make a material contribution to achieving economy-wide carbon neutrality
- ◆ **Technical and Economic Feasibility:** The likelihood that the project can deliver the expected tonnes of carbon removal in a quantifiable manner within the proposed time frame
- ◆ **Additionality:** The extent to which a Climate Vault grant award will enable more carbon to be removed from the atmosphere than would have otherwise been possible without the grant award
- ◆ **Permanence:** The extent to which the project enables durable carbon storage of at least 50 years
- ◆ **Social Impact:** The extent to which the project also advances environmental and social objectives
- ◆ **Leakage:** The extent to which the project activities cause additional emissions to occur elsewhere

The Three CDR Pathways

At Climate Vault, we view CDR solutions according to three Pathways: Terrestrial, Technological and Oceanic.

- ◆ **Terrestrial:** Solutions that leverage the natural processes and capabilities of plants, soil and microorganisms to sequester and store carbon out of the atmosphere.
- ◆ **Technological:** Engineered solutions that remove and sequester carbon from the atmosphere. These include fully-engineered solutions as well as solutions that enhance natural carbon removal and sequestration processes through the application of engineered components.
- ◆ **Oceanic:** Solutions that leverage the ocean's function as a natural carbon sink and enhance the carbon sequestration capabilities of critical marine ecosystems.

Carbon Champions Taking Real Climate Action



Climate Vault is proud to be building a community of Carbon Champions that spans a variety of industries. All Climate Vault supporters are automatically considered a Carbon Champion, because they have taken steps to promote sustainability and reduce their carbon emissions in a way that has a meaningful impact. Regardless of the industry our Carbon Champions are in, they embody five key characteristics: Amplifier, Innovator, Strategist, Game Changer, and Catalyst.

In 2023, we launched the first annual Carbon Champions Award program to celebrate the supporters who have gone above and beyond in their climate commitments and leverage Climate Vault Tons as part of their holistic and credible climate action strategy. Congratulations to our six 2023 honorees: Morningstar, Inc., Wesleyan University, Qlik, T. Rowe Price, Cuningham, and Northern Trust.

Carbon Champion Amplifier Award



The Amplifier award celebrates the organization that drives awareness about the importance of addressing climate change while advancing thought leadership to inform and inspire a wider audience through a multi-channel approach.

Morningstar's team hosted and participated in a number of sustainability-focused events and conferences this past year that gathered sustainability leaders and stakeholders to discuss key challenges and opportunities.

"We are honored to receive the Carbon Champion Amplifier award, which recognizes our dedication to promoting transparency in climate data. We strive to aid investors' decision-making and support their ability to account for climate risks and opportunities in their investments."

Kunal Kapoor,
CEO

Carbon Champion Innovator Award



The Innovator award celebrates the organization that seeks out and creates innovative solutions to mitigate and adapt to the impacts of a changing climate. They expand ways of thinking about reducing carbon emissions, supporting constituents, and building a more sustainable future.

Wesleyan University implemented a unique new travel fee for employees that enabled them to significantly mitigate its employee travel carbon footprint while also increasing awareness of the climate impact of each trip.

"After making the decision to focus on reducing our travel footprint, we started immediately thinking 'how can we do better?' And it seemed like the most obvious solution was to start by making folks responsible and aware of the full impact, both fiscally and environmentally, of their travel."

Jen Kleindienst,
Sustainability Director

Carbon Champion Strategist Award



The Strategist award celebrates the organization that seeks to identify and analyze key issues, then leverage data-driven insights into effective ways to address them—all in order to help organizations, communities, and individuals mitigate and adapt to the impacts of climate change.

Qlik took monumental steps to achieve net zero emissions by 2025, while also advancing data and AI solutions to help its clients understand their own carbon impact and implement meaningful solutions.

"This award is a testament to our unwavering dedication to innovative, sustainable solutions that not only address today's challenges but also pave the way for a greener, more responsible future."

Julie Kae,
VP of Sustainability and
Diversity, Equity and Inclusion

Carbon Champion Game Changer Award

T.RowePrice



The Game Changer award celebrates the organization that leads the charge against climate change by making a tangible difference in their own carbon footprint, as well as implementing diverse and creative solutions to deepen their impact.

T. Rowe Price established its own ESG Oversight Committee, engaged with employees and key stakeholders through various eco-focused campaigns, and surpassed its reduction goal in greenhouse gas emissions, ahead of the 2025 deadline.

"We are proud to receive Climate Vault's Game Changer award. Our partnership enables us to address our emissions from business travel, an area where our ability to reduce emissions is limited, and engage our workforce to address their personal carbon footprints."

Heather McDonold,
Corporate ESG Senior Manager

Carbon Champion Catalyst Award

Cunningham



The Catalyst award celebrates the organization that can drive and accelerate progress by collaborating with others, mobilizing and inspiring them to knock out their own carbon footprints.

Cunningham has been an active leader in the Large Firm Roundtable (LFRT) Sustainability Leaders' efforts to reduce carbon emissions from their firms' internal operations. The success of Cunningham and other like-minded firms has now emboldened the LFRT to request that all of its member firms commit to the same effort beginning in 2024.

"At this year's roundtable meeting, we got commitments from our CEOs that in 2024, all 62 member firms are going to offset scope 1 and 2 and business travel from scope 3. So, whereas a year ago, I could say that Cunningham is leading the way in this area, soon I'm just going to be going along with everybody else. And it's a truly wonderful thing to see that the design industry is moving very fast in this direction."

Paul Hutton,
Director of Regenerative Design

Overall Carbon Champion Award



The Overall Carbon Champion award recognizes the organization that exemplifies exceptional dedication and impact in more than one category and drives action, educates others and accelerates progress towards meaningfully combating climate change.

Northern Trust demonstrated commitment to mitigating its environmental impact in countless way including publishing its first report to the Task Force on Climate-Related Financial Disclosures (TCFD), Northern Trust Asset Servicing launching a voluntary carbon credit ecosystem to support the CDR space, committing to use Science-Based Targets (SBTi) to tackle its carbon footprint, and much more.

"We are honored to be named one of Climate Vault's Carbon Champion honorees. At Northern Trust, we believe we share the responsibility to meet the needs of our current generation while protecting the environment for future generations."

Jamie Jones Ezeili,
Chief Sustainability Officer

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We're grateful to the 118 individual donors that have supported our mission in 2023

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Vision for 2024 & Beyond



TONS

Climate Vault's goal is to drive \$1 billion worth of societal benefit, based on the Social Cost of Carbon, in partnership with our clients.



CARBON REMOVAL

Climate Vault seeks to build a large, diverse portfolio of high-quality carbon removal solutions, enabling our partners to permanently lock away carbon and support the growth and development of the critical yet nascent CDR ecosystem.



BENEFIT TO CLIENTS

As a "one-stop-shop" for our supporters, Climate Vault aims to be the most comprehensive sustainability solution that can verifiably measure, reduce + remove emissions.



CLIMATE VAULT