Carbon Removal Alliance

Annual Report 2024

Photo courtesy of Unsplash

About the Carbon Removal Alliance

MISSION:

Be the bridge between innovators and policymakers working to advance highquality, permanent carbon removal.

VISION:

Build a gigaton-scale carbon removal industry that is categorically good for the climate, the economy, and people.

Foreword

The math is clear: the world's climate targets are unattainable without cleaning up past carbon emissions from the atmosphere. Even if we ended all emissions at the time of this publishing, carbon pollution from the past century will exist in the atmosphere for 1,000 years — melting ice caps, fueling wildfires, and more — or until humanity does something to change it.

In the last decade, hundreds of innovators have launched companies to meet this challenge, working to remove carbon dioxide with first-of-a-kind facilities, on farmland, and in our waterways across the country. And while the industry is growing quickly, today's projects remove only a fraction of the billions of tons that will be required by midcentury.

The U.S. government has a long history of spurring the world's most incredible innovations from satellite navigation to vaccine development — and carbon removal won't be any different. That's where our work lies: activating and partnering with U.S. policymakers, from the Department of Energy to Congress, to support the carbon removal industry.

Since launching, CRA has unlocked hundreds of millions of dollars in federal investment and worked closely with the Department of Energy and other agencies to shape federal carbon removal programs. Our work to increase demand for carbon removal and help establish industry quality led to two major milestones last year: the release of our MRV policy roadmap, <u>Establishing quality in carbon removal: a</u> <u>roadmap for MRV</u>, and the introduction of the bipartisan <u>Carbon Dioxide Removal investment Act</u>. These resources provide a path for legislators to grow the industry and bring its benefits to their states and districts across the country. There's no denying that carbon removal policy is facing some headwinds in 2025. But, the Carbon Removal Alliance was built for this moment. Over the past two years the Alliance has worked proactively to prepare for shifts like these. We built relationships across the political spectrum, set up site visits to carbon removal projects with members of Congress, commissioned jobs studies to highlight economic benefits, published state-level fact sheets, and built policies with bipartisan appeal.

In 2025, we are leading a campaign to grow federal programs and keep grants on track — helping our members leverage their state footprints as well as economic and job creation data to make the case to their lawmakers. We are also set to roll out a suite of memos with detailed policy ideas to boost demand for carbon removal solutions, and recently helped embed high-quality carbon removal as a potential compliance mechanism in a newly reintroduced Carbon Border Adjustment Mechanism bill in Congress.

None of this would be possible without our incredible members, science advisory board, and our board of directors.

Thanks for a great year, now, let's do this —

Giana Amador

Executive Director, Carbon Removal Alliance

CRA's Founding Observations

- The existing policy environment hindered innovation. 1. The first generation of carbon removal policy didn't meet the needs of an emerging class of American companies working to remove carbon. Often, carbon removal companies would ask their lawmakers for contradictory or narrow policies. United at the Alliance, we design more effective policies shaped by the realities of technology innovation.
- Lawmakers need to believe in carbon removal 2. and understand the full suite of benefits to their constituents. Carbon removal is brand new to most of the policymakers we talk to, and there's a lot to learn. We need to move beyond the climate imperative and make the benefits of carbon removal specific and visible in Washington, D.C. through public affairs campaigns, site visits, jobs and co-benefit analyses, and storytelling. We want to brand carbon removal as a triple-winner for lawmakers — a solution that helps the U.S. meet its climate goals, bring in-demand jobs to communities, and grow our economy. As projects pop up in districts and states across the country, we have an opportunity for lawmakers to see and believe what this technology means for their constituents.
- Carbon removal companies need more customers. 3. We need to build a market for carbon removal services. Unlike clean energy technology, there's no incumbent market to sell into. And without buyers, American carbon removal companies struggle to raise private sector funding, finance first-of-a-kind projects, validate technologies in the real world, and bring down costs. Policies that appeal to Democrats and Republicans while fueling demand for carbon removal are feasible — and we're holding the pen.
- It's too early to pick technology winners, but it's not too 4. early to set a high bar with policy. A successful carbon removal industry in the US includes a broad portfolio of approaches — there is no silver bullet technology. CRA is driven by our principles of high-quality and permanent removals, no matter the approach.

We support carbon removal solutions that are:



PERMANENT

Stored on time periods comparable to the atmospheric lifetime of carbon emissions. We focus on policies that promote carbon removal with permanence of a thousand years or more.



NET NEGATIVE

Net reduction in the amount of carbon dioxide in the atmosphere, accounting for embodied emissions in each carbon removal project.



ADDITIONAL

Demonstrably result in carbon removal that would not have otherwise occurred without the project existing, ensuring an actualized impact on the climate.



VERIFIABLE

Scientifically rigorous and transparent methods for monitoring, reporting, and verification.



CO-BENEFITS

Deliver a wide range of benefits to local communities and ecosystems. We support the development of practices, policies, and programs that center community benefits and mitigate potential risks.



Our theory of change

FROM THIS:	TO THIS:
An elite group of carbon removal companies	One credible, united voice advocating for high-quality carbon removal
Commercial realities and firsthand	→ Smarter, more effective policy
Regional cases for carbon removal	New congressional champions who understand, believe in, and vote for CDR

We build campaigns that connect innovation, policy, and politics to unlock federal funding and bring carbon removal to scale.



2024 Major Outcomes

NEW POLICY

A carbon removal tax credit

This legislation was introduced in the 118th Senate as S. 5369 and updates existing tax code to support the entire portfolio of carbon removal solutions, provided they meet the bar for quality and durability. If passed, it would provide developers a \$250 credit per ton of carbon dioxide removed from the atmosphere. This work is the result of a small coalition of nonprofits, progressive organizations, Republican advocacy groups, and companies.

Once passed, this tax credit unlocks nearterm demand for hundreds of companies while setting a high bar for quality.

CONGRESSIONAL CHAMPIONS

New Congressional champions

We're motivating a new class of lawmakers to understand and care about carbon removal policy. Climate champions already know us — we're reaching across the aisle to make a case for the economic benefits of carbon removal. To date, we've logged almost 200 meetings on the Hill, hosted two fly-ins with carbon removal companies in tow, and built influence with critical offices. We have also brought dozens of U.S. lawmakers and their staff to carbon removal sites across the country. Each visit was an opportunity for them to understand carbon removal better — whether that is by setting standards for monitoring, reporting, and verification or by supporting a new carbon removal tax credit.

With more champions in Congress, we can pass the next generation of carbon removal policies.



Photo at Ebb Carbon's lab in South San Francisco, CA







FEDERAL PROGRAMS

Shaping more than \$3.7 billion in federal carbon removal spending

We were among the Department of Energy's closest advisors as they have crafted and administered the Carbon Negative Shot (\$100M), the Purchasing Prize (\$35M), and the DAC Hubs Program (\$3.5B). As a result, these programs are tech-neutral, grounded in the realities facing carbon removal companies today, and aligned with CRA principles. CRA has also supported companies through the application process, helping clarify rules, strengthen applications, and shape community benefit plans. Among the CRA membership, half have received federal grants instrumental to their operations in the last two years.

NEW POLICY

A federal policy platform for measuring quality

Corporate buyers, carbon removal companies, governments, and communities are calling for better carbon removal monitoring, reporting, and verification, but the field still remains uncoordinated and ineffective. Our report proposes revamped agency capacity to implement the next generation of carbon removal policy and drive credibility in the private sector markets for carbon removal.



Our team



Giana Amador Executive Director

Longtime leader in carbon removal. Founded Carbon180 in 2015.



Dana Jacobs Chief of Staff

Formerly led public affairs at Carbon180, working in the carbon removal space for four years.



Dan Frost Senior Communications Manager

Led public affairs and policy campaigns for the country's top companies, causes and candidates, most recently at Precision Strategies.



Eli Cain Senior Policy Manager

Formerly of Renewable Energy Laboratory (NREL), where he designed and built the carbon removal purchase prize.

Our board of directors

Nan Ransohoff, PhD, Stripe Climate

Peter Reinhardt, Charm Industrial

Jack Andreasen, Breakthrough Energy

Emily Grubert, PhD, University of Notre Dame

Gaurav Sant, PhD, University of Los Angeles & Equatic

Andrew Fishbein, Climeworks

Vikrum Aiyer, Heirloom

Noah Deich, Carbon180 & former Dept. of Energy

Our science advisory board

Grace Andrews, PhD, Hourglass Climate

Matt Long, PhD, [C]Worthy

Peter Minor, PhD, Absolute Climate

Noah Planavsky, PhD, Yale University

Dan Sanchez, PhD, University of California, Berkeley

Jennifer Wilcox, PhD, University of Pennsylvania

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In the news

_LATITUDE MEDIA

Can a new generation of DAC companies overcome the tech's big challenges?

Maeve Allsup, Latitude Media

_LATITUDE MEDIA

Carbon removal is here. What comes next will define this industry - and the green economy

Giana Amador, Latitude Media

POLITICO

Carbon removal groups push Senate to act fast on EPA water nominee

HEATMAP

Louisiana Is officially getting a direct air capture hub

Emily Pontecorvo, HeatMap

AXIOS

Lunch with a CO2 removal ringmaster

Jael Holzman, Axios

Bloomberg

Carbon removal Isn't just for corporations. Individuals are paying for it, too

Coco Liu, Bloomberg

POLITICO

Water works - Rep. Nanette Barragán visits Equatic

FAST@MPANY

In California's Central Valley, a massive carbon removal factory is pulling CO2 from the air

Adele Peters, Fast Company

1000 TEEPS

The Road to Gigaton-scale Carbon Removal, with Giana Amador

Keep Cool Podcast

What's ahead in 2025

Demand continues to be the greatest existential threat to the carbon removal industry. To get us to gigaton scale, we need market-making policies that attract a new swath of customers and give the federal government a stronger role to play in helping establish this new industry. We also need critical signals from philanthropy and the government that carbon removal is a stable and worthwhile investment.

Over the next two years, the Carbon Removal Alliance will focus on developing and passing the next generation of market creation policies. To do that we'll build out a portfolio of other potential demand drivers, such as carbon border adjustment mechanisms and ideas on how carbon removal will integrate with existing industry. These integration memos will include industries like wastewater treatment, mining, pulp and paper, and more.

Progress on carbon removal isn't possible without long-term political support. We're highly attuned to the fact that passing durable legislation and implementing federal programs requires a deep bench of congressional champions. Our work helps connect the benefits of local carbon removal projects with their representatives in Washington: hosting site visits, publishing regionally relevant economic and co-benefits analyses, and shaping local storytelling.

If we're successful over the next two years, we'll have a new set of policies at our fingertips that drive demand for 50 million tons of carbon dioxide by 2030 alongside a thriving, high-integrity carbon removal industry that clears a critical hurdle on the road to gigaton scale.

Carbon Removal Institute (CRI)





Financials & Transparency

The Carbon Removal Alliance is the c4 arm of the affiliated organization, the Carbon Removal Institute, a 501(c)(3).

The work of the Alliance could not have been accomplished without our funders, who understand and support our vision for a gigatonscale carbon removal industry that is categorically good for the climate, the economy, and people. As a small organization, their partnership is vital.

Note: these figures have not been audited.

Our supporters





Wellspring

Philanthropic Fund



Breakthrough Energy







Learn more about CRA at carbonremovalalliance.org