6 startups get funding from Big Tech's carbon removal alliance

Article





The news: The alliance of Big Tech companies working under **Stripe**-owned **Frontier** to invest in carbon removal technologies is placing some initial bets on a handful of startups.

In April, Frontier, consisting of Stripe, Alphabet, Shopify, Meta, and McKinsey, put <u>\$925</u>
<u>million</u> toward advancing the carbon removal industry, <u>per</u> Protocol.



 Similarly in May, Microsoft, Alphabet, and Salesforce, along with dozens of other companies formed the <u>First Movers Coalition</u> to invest in carbon removal and other climate technologies.

6 carbon removal startups: The following <u>companies</u> received Frontier's initial funding to help drive down atmospheric carbon dioxide concentrations.

- AspiraDAC: Based in Australia, this startup is building a modular system that combines solar panels in a direct-air capture (DAC) process that can work with low-temperature heat.
- **RepAir:** This Israel-based company also has a DAC system that's powered by renewable energy and doesn't need heat to operate.
- <u>Travertine Technologies</u>: Instead of DAC, this startup just raised \$3 million in seed funding to commercialize a process that captures and permanently sequesters CO2 using minerals.
- Living Carbon: In addition to bioengineering trees to sequester more carbon, this startup is also using an R&D grant from Frontier to remove CO2 using algae and biopolymers.
- Lithos Carbon: Launched this year, Lithos is working to improve rock weathering as a way to pull carbon out of the air.
- <u>Calcite-Origen</u>: A joint venture between 8 Rivers Capital and Origen Carbon Solutions will pair Origen's zero-carbon lime manufacturing process with 8 Rivers' Calcite carbon removal tech.

The opportunity: The UN's climate panel has stated that carbon removal has become an <u>essential</u> part of decarbonizing the world. That's because reducing emissions alone still leaves CO2 in the atmosphere that will continue accelerating warming for <u>centuries</u> if it's not removed.

 Big Tech's funding for carbon removal will help advance the nascent industry that's struggling to gain market viability.

What's the catch? Carbon removal won't be able to avert climate change unless it's massively scaled, and the technology is currently too expensive for expansion.

 Economists say the cost to remove CO2 needs to drop to \$100 a ton, but the Frontierfunded projects only achieve between \$500 and \$1,800 a ton, per Protocol.

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 One solution is to focus on <u>carbon utilization</u> instead of carbon sequestration in which the captured CO2 can be used as a raw material for goods like concrete, synthetic gasoline, and textiles.

Use of Select Technologies to Achieve Emission Targets at Their Company According to Executives Worldwide, Oct 2021

% of respondents

	AI	Blockchain	Cloud	Data analytics	ΙοΤ
Shifting to the use of renewable energy	62%	50%	58%	56%	44%
Improving waste management	61%	49%	64%	57%	42%
Reducing emissions in the supply chain	63%	53%	63%	57%	47%
Reducing emissions in production and operations	70%	47%	69%	51%	55%
Increased transparency in measurement and disclosure of carbon footprint	75%	52%	75%	63%	61%
Reducing emissions by our customers	60%	54%	62%	53%	53%
Note: among respondents whose companie Source: Accenture, "Uniting Technology and Sustainable Technology Strategy," June 7, 2	d Susta			•	Your