Intro

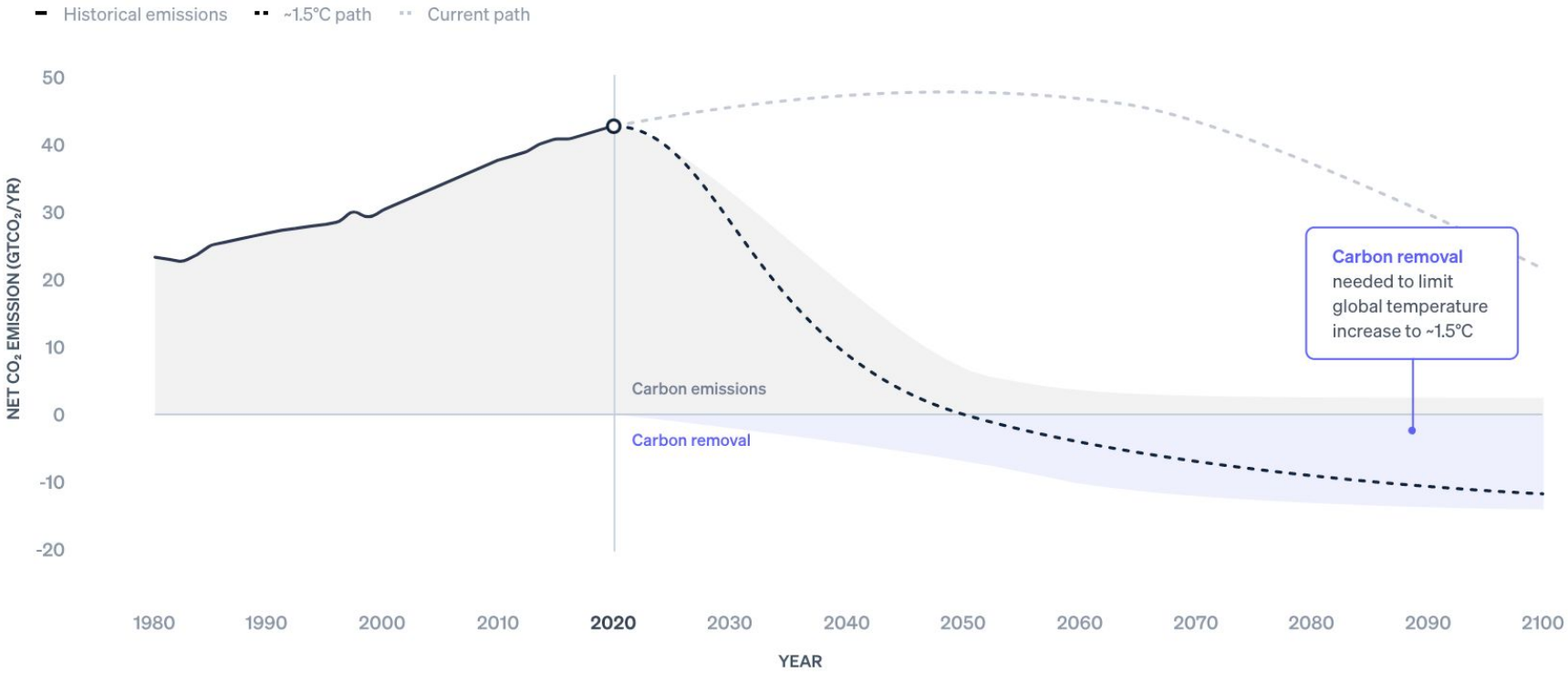
Stripe Climate

November 2021

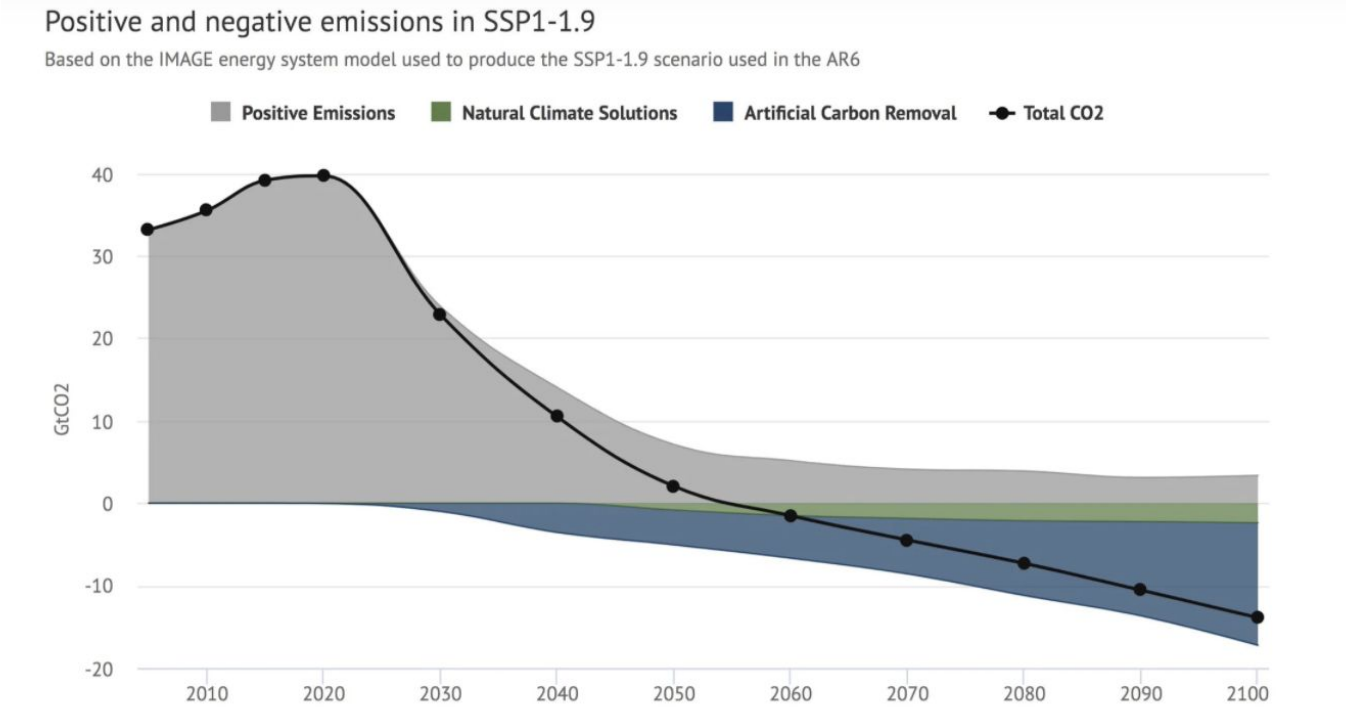
How it started

In late 2019, Stripe pledged $1M to carbon removal

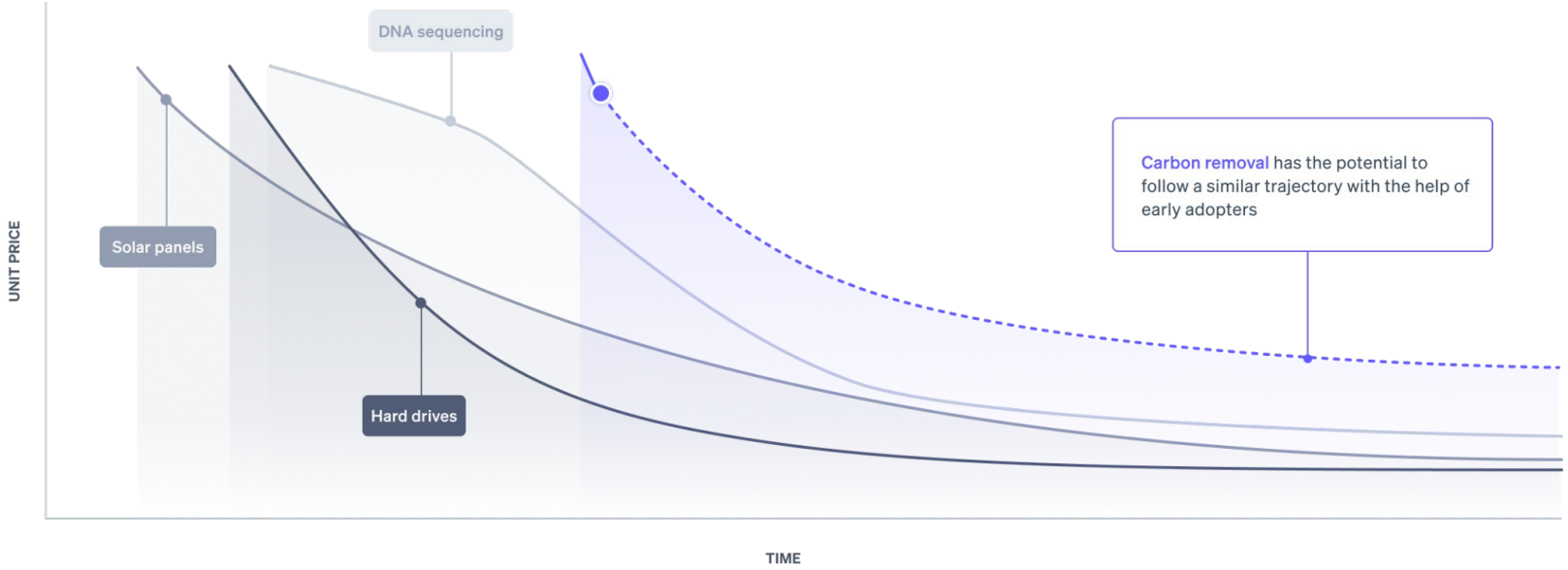
Both emissions reduction and carbon removal are critical to counter climate change



Current solutions won't scale to the size of the problem; we need to develop a portfolio



Early customers can accelerate new technologies down the cost curve



Stripe Climate target criteria

	Today	By 2040
Permanence Stores carbon permanently	>1,000 years	>1,000 years
Physical footprint Takes advantage of carbon sinks less constrained by arable land	Yes	Yes
Cost Has a path to being affordable at scale	-	<$100 per ton
Capacity Has a path to being a meaningful part of the carbon removal solution portfolio	-	>0.5 gigatons per year
Additionality Results in net new carbon being removed rather than taking credit for removal that would have occurred regardless	Yes	Yes
Verifiability Uses scientifically rigorous and transparent methods for monitoring and verification	Modeled or measured directly	Modeled or measured directly
Net negative lifecycle Results in a net reduction in atmospheric CO_2	Negativity ratio < 1	Negativity ratio < 1
Safety & Compliance Legally compliant, responsibly and actively engaging with the public to determine and mitigate possible risks and negative externalities	Path to high	High

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Our purchases

10 carbon removal projects in our portfolio

climeworks

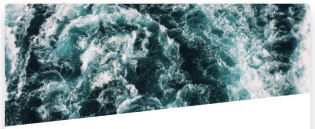
Climeworks uses renewable geothermal energy and waste heat to capture CO_2 directly from the air, concentrate it, and permanently sequester it underground in basaltic rock formations with Carbfix. While it's early in scaling, it's permanent, easy to measure, and the capacity of this approach is theoretically nearly limitless.

Capture Storage

CARBON CURE

CarbonCure injects CO_2 into fresh concrete, where it mineralizes and is permanently stored while improving the concrete's compressive strength. Today they source waste CO_2, but represent a promising platform technology for permanent CO_2 storage, a key component of future carbon removal systems.

Storage



SEACHANGE

Seachange leverages the power and scale of the world's oceans to remove carbon. Their experimental electrochemical process sequesters CO_2 in seawater as carbonates, an inert material comparable to seashells, thereby enabling energy-efficient and permanent CO_2 removal.

Capture Storage

RunningTide

Running Tide removes carbon by growing kelp in the open ocean. After maximum growth, the free-floating lines of kelp sink to the deep ocean where the embodied carbon is stored for the long term. Running Tide's approach is simple and scalable, powered by photosynthesis, ocean currents and gravity.

Capture Storage

CarbonBuilt

CarbonBuilt's process readily converts dilute CO_2 into calcium carbonate, creating a "no compromise" low-carbon alternative to traditional concrete. As a profitable and scalable solution for permanent CO_2 storage, CarbonBuilt's technology platform can serve as a critical component of future carbon removal systems using direct air capture.

Storage

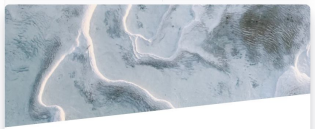
Project Vesta captures CO_2 by using an abundant, naturally occurring mineral called olivine. Ocean waves grind down the olivine, increasing its surface area. As the olivine breaks down, it captures atmospheric CO_2 from within the ocean and stabilizes it as limestone on the seafloor.

Capture Storage

CHARM

Charm Industrial has created a novel process for preparing and injecting bio-oil into geologic storage. Bio-oil is produced from biomass and maintains much of the carbon that was captured naturally by the plants. By injecting it into secure geologic storage, they're making the carbon storage permanent.

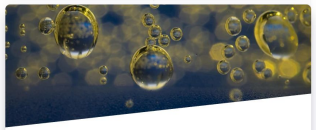
Capture Storage



Heirloom

Over geological timescales, CO_2 chemically binds to minerals and permanently turns to stone. Heirloom is building a direct air capture solution that enhances this process to absorb CO_2 from the ambient air in days rather than years, and then extracts the CO_2 to be stored permanently underground.

Capture Storage



MISSION ZERO TECHNOLOGIES

Mission Zero electrochemically removes CO_2 from the air and concentrates it for a variety of sequestration pathways. Their experimental room-temperature process can be powered with clean electricity and has the potential to achieve low costs and high volumes using modular, off-the-shelf equipment.

Capture Storage

the future forest company

Future Forest is conducting a field trial to accelerate mineral weathering by crushing basalt rocks into dust, spreading them onto the forest floor, and then measuring CO_2 uptake. This first-of-a-kind trial will help assess the potential for scale as well as the potential ecosystem impacts associated with enhanced weathering.

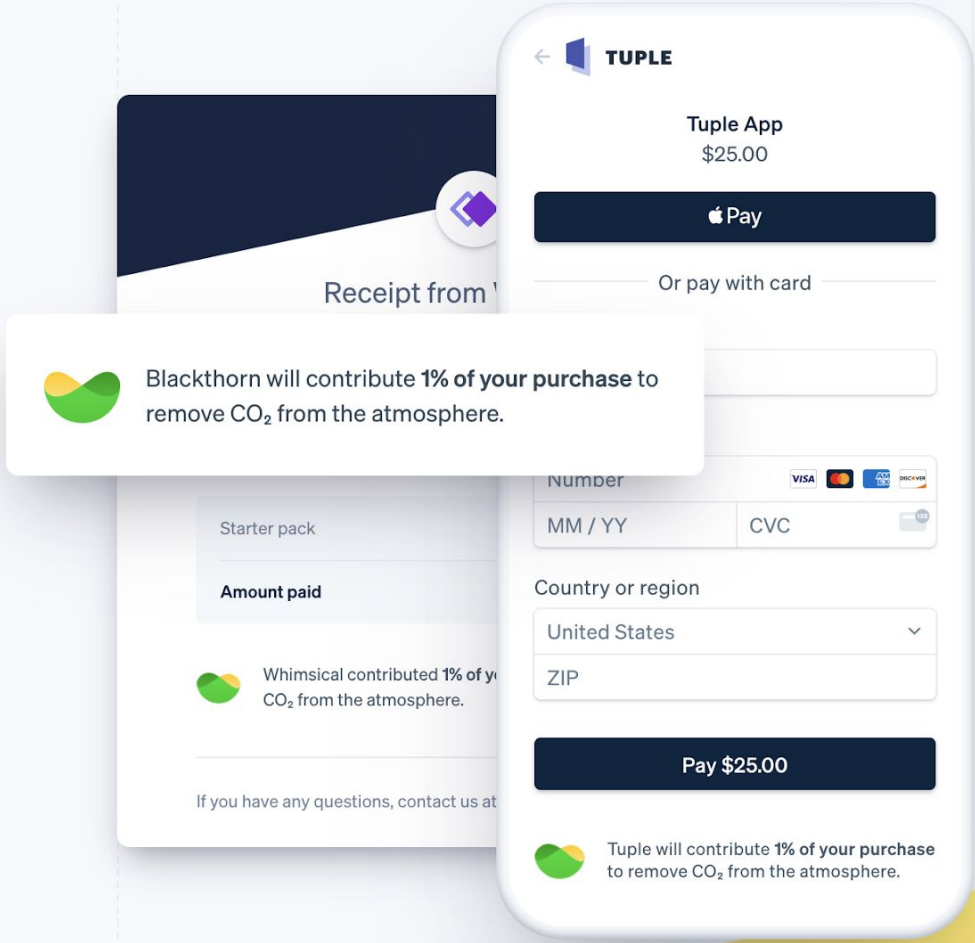
Capture Storage

Climate

Remove carbon as you grow your business

With Stripe Climate, you can direct a fraction of your revenue to help scale emerging carbon removal technologies in just a few clicks. Join a growing group of ambitious businesses changing the course of carbon removal.

Start now › Contact us ›



Progress so far

A year later

10K+

Stripe Climate users from 37 countries.

$9m+

Committed

10

Carbon removal projects. Stripe was the first customer for 7 of 10.