

Grow demand for carbon removal as a Stripe Climate Fellow

In order for carbon removal to get to climate-relevant scale, demand for it needs to grow dramatically. Since 2020, **Stripe Climate** has made it easy for businesses that accept payments through Stripe to direct a fraction of their revenue to buy permanent carbon removal. And in 2022, Stripe started **Frontier**, a \$1 billion advance market commitment to scale the field further.

While demand for carbon removal is growing, it's still a long way short of the ~\$20 billion needed globally per year by 2030. Furthermore, it's highly unlikely that any one initiative or policy will be sufficient. Just as a diverse portfolio of technologies is needed on the *supply* side, we also need a diverse portfolio of *demand*-side ideas.

These ideas could be focused on catalyzing voluntary or policy action, take the shape of pay-forpractice or pay-for-tons, be technology-neutral or pathway-specific, and be implemented at the state, national or multinational level. But they will all take time to develop, and planting more seeds now maximizes the likelihood that they will add up to the ~\$20 billion per year needed by 2030.

To encourage more demand-side innovation in carbon removal, we're piloting Stripe Climate Fellows. We're looking to fund exceptional people who have ambitious but feasible proposals to grow demand for carbon removal by 2030. Starting September 2024, selected fellows will be given grant funding to cover salary for one year and any other critical expenses to implement their proposal.



Due July 15, 2024

The problem

Demand for carbon removal isn't yet on track

Demand has grown substantially but still isn't anywhere close to being able to support the amount of carbon removal scientists say is needed. The quick math: by 2050, the world will need (very roughly) ~\$500B in annual demand (~5 billion tons at ~\$100 per ton). Even if we end up needing less and the price ends up being lower, our current trajectory will leave us orders of magnitude short.



Historical emissions via Global Carbon Project, "Current path" shows SSP4-6.0, removia pathways adapted from CICERO. For simplicity this chart only shows CO₂, though the modelled scenarios account for other greenhouse gas emissions, all of which will need to be reduced.

To be on track for 5 billion tons per year by 2050, carbon removal needs to scale to ~50-100 million tons per year by 2030. If we assume the average cost per ton in 2030 is \$200, that's ~\$20 billion *per year*. By comparison, Frontier is \$1 billion *over eight years*.

In short, existing demand comes nowhere close to the need. And because carbon removal companies need long-term demand commitments *now* in order to confidently build facilities that can deliver tons *later*, this lack of demand not only jeopardizes the world's climate goals, but also leaves existing carbon removal suppliers at risk of surviving through the end of the decade.

Policy is critical to create demand, even in the short-term

Experts recognize that policy intervention is the only route to carbon removal at climate-relevant scale in the long-term. Less attention has been paid to the role policy has to play in catalyzing demand *over the next 3-5 years*. But the voluntary market alone is unlikely to create ~\$20 billion per year in demand by 2030.

More bets are needed in more places

It's very unlikely that any 'one' policy solves the carbon removal demand problem. More likely, the \$20 billion needed by 2030 will be made up of a patchwork quilt of policies from around the world (not unlike climate policy more generally). These interventions will be a mix of pathway-agnostic and pathway-specific ideas, pay-for-tons and pay-for-practice policies, voluntary-driven and policy-driven interventions. Importantly, these interventions will likely be pursued for a wide range of reasons, some of which are motivated by scaling carbon removal and some of which are motivated by co-benefits. These initiatives will all take time, and some will scale while others will not. Planting more seeds now maximizes the likelihood carbon removal demand will be able to support the scale needed by 2030.

Apply to be a fellow

We're looking to fund exceptional people who have ambitious but feasible proposals to grow carbon removal demand by 2030. This is not an academic exercise—we're looking for proposals with a nearterm path to implementation such that they could translate into real demand for carbon removal suppliers within the next 3-5 years. Ideally these proposals, if successfully implemented, would collectively stack up to *many* more billions of dollars in demand globally by 2030. Stripe Climate Fellows will be given grant funding to cover salary and other critical expenses for one year to work on their proposal, as well as support from the Stripe Climate team.

We'll consider a few things when evaluating proposals:

- Is there a specific, clearly defined outcome to grow carbon removal demand in the next 3-5 years? We're looking for ideas with a clear, well-defined goal that could materialize into demand for carbon removal suppliers in the next 3-5 years.
- 2 How much new demand will be unlocked as a result of this idea being successful? We're looking for ideas that are sufficiently ambitious.
- 3 Can the bulk of the work to implement this idea be done in a year? While we don't expect the outcome of your initiative to materialize within twelve months (policy cycles in particular can be long), we want to fund ideas that can make substantial progress within a year.
- Is there a believable path to this actually getting done? We're looking for ambitious but feasible ideas. Help us understand how you'll make this happen—the more tactical and specific, the better. And, if there are meaningful co-benefits that would make this idea more likely to get traction, tell us. Relatedly, help us understand why you are the person to make this happen.
- Does this idea have beneficial knock-on effects, and/or is it replicable in other geographies? For example, could this initiative activate new constituencies who benefit from carbon removal (e.g. mining) or spur similar action from other geographies?
- 6 How additive is this idea? We'll prioritize initiatives that wouldn't happen without your intervention, and spur carbon removal demand that wouldn't materialize otherwise.

We're open to ideas that are tech-neutral or pathway specific (i.e. just enhanced rock weathering). We're also agnostic to the mechanism (i.e. regulatory or subsidy), and geographic scope (i.e. single country, multi-country)—so long as the idea considers the criteria above. All proposals should be focused on permanent carbon removal that meet our target criteria laid out here (examples of the types of carbon removal approaches to support can be found here).

We are particularly excited to see proposals that:

- Are focused on geographies outside of the US
- Result in technology-neutral procurement programs at state, national or multinational scale
- Motivate an industry that currently isn't buying carbon removal to do so
- Demonstrate effective political outcomes and smart policy design that can be replicated elsewhere (e.g., state compliance policies in the US)
- Build interest in carbon removal from concentrated industries (e.g., policies that unlock opportunities to engage large industrials with assets that could be leveraged for carbon removal)
- Advance carbon removal based on its co-benefits (e.g., carbon-negative energy or hydrogen production; air pollution reduction, etc.)

How to apply

The application is here and due July 15th.

Frequently asked questions

Will fellows be employed by Stripe?

No. Fellows will receive grant funding, but won't be employed by Stripe or Frontier.

Who can apply?

Anyone can submit an application. We are open to funding free agents as well as people at existing organizations that have wanted to spend time on carbon removal but haven't been able to because of budgetary constraints. If you're at an existing organization, it's important that there is a specific (excellent) person who will be responsible for and full-time dedicated to this initiative. If you have questions, please reach out to us at climate-fellows@stripe.com.

How many fellows will be selected?

We don't know yet. We'll try to balance funding as many exceptional "proposal/person" combinations as we find, while also keeping the program size manageable given this is our first time trying this.

What happens after I apply?

If you're a top candidate we'll reach out to schedule interviews and ask other follow-up questions about the proposal. Selections will be made by September.

When does the fellowship start?

Fellows can begin as early as September, though we are open to start dates through the end of 2024 based on what makes the most sense for a specific initiative and individual.

How much funding will fellows receive?

In the application we ask candidates to explain how much they'd need to implement their proposal and why. We intend to cover a salary for a full year as well as any other critical costs associated with implementing the idea.

Twelve months isn't that long. What happens when the program is over?

We know that twelve months isn't very long, especially when it comes to policy work. While we're starting with a year, if you are making huge progress and would benefit from more time, we will do our best to help you extend beyond that.

I have a different question, how do I get in touch?

Please email us at climate-fellows@stripe.com.