

Why we don't purchase carbon offsets.

In 2020, LaunchDarkly became carbon neutral by purchasing carbon offsets. This generated a lot of excitement, applause and emoji when this was announced to LaunchDarkly employees. In 2021, LaunchDarkly did not purchase any carbon offsets, and allocated the funds toward direct carbon capture.

Why did LaunchDarkly decide to not purchase any carbon offsets this year? Why contribute to direct carbon capture instead of forest preservation?

We all want to prolong Earth's habitability, and achieving carbon neutrality seems like a great idea. LaunchDarkly is responsible for a lot of carbon emissions: our servers use a lot of electricity and our team flies all over the world.

As we did more research, we became concerned that carbon offsets might not be as helpful as advertised.

Direct carbon capture, which pulls down already emitted carbon from the atmosphere and stores it for centuries, seems like a more promising way to deploy our financial resources to help the climate.

The situation

- Humanity emits more carbon, every year.
- The Earth is heating up, every year.
- Most <u>climate models</u> show that we need to annually remove
 5-10 gigatons of carbon dioxide by 2050 to limit global
 warming by 2 degrees celsius.

Carbon offsets are hard

- Existing nature-based solutions, such as reforestation and soil carbon storage, are going to be part of the solution, but we know these solutions lack long-term permanence and will run out of <u>arable land worldwide before reaching the scale</u> required.
- Humanity isn't actually that great at planting trees at scale.
 More specifically, trees that are planted in reforestation
 programs often don't make it to maturity.

- Carbon offsets are becoming more scarce and expensive.
- Forests burn, which is awful. It's extra awful when <u>forests that</u> have been counted in carbon offset programs burn.

Carbon offsets sometimes claim to <u>preserve forests that</u>

<u>weren't in danger of logging</u>, thus not fulfilling their purpose of protecting trees that would have otherwise been logged.

Carbon removal seem promising

- The world must scale up new solutions if we are to hit our collective net zero targets when they come due.
- Promising new carbon removal technologies are emerging, but far too slowly. The world's largest direct carbon capture factory just opened, and will only capture 4k tons per year, which is about 3 seconds worth of the world's current annual emissions. These early technologies will take time to mature; if we don't help these technologies develop now, they will not be at the scale and cost needed to achieve net zero in the coming decades.
- The hope is for carbon removal technology to follow the path of solar cells, computer processing and other technologies that started out expensive / inefficient and with investment became cheap / efficient.
- Once the technology becomes proven, the price will be lower and adoption can spread more easily.

Summary

Carbon offsets, and the conscience-soothing carbon neutrality they promised, sounded great. Upon further investigation, the benefits seemed more illusory. So we're funding direct carbon capture through <u>Stripe Climate</u> instead to help lower the cost of carbon removal and make it more scalable. We think this will ultimately have a greater impact on climate change than offsetting our company's carbon emissions via carbon offsets.

For more information, this ProPublica investigation shows how
California's carbon offset program actually causes increased
carbon emissions, and this article in The Atlantic lays out the
benefits of bringing down the cost curve of direct carbon capture
via Stripe Climate. A recent post on the LaunchDarkly Foundation
blog explores our decision at greater length. Climate change
mitigation only works if global emissions are dramatically curbed,
but doing so requires policy changes that are outside the scope of
the LaunchDarkly Foundation. Because of this, political solutions
were not explored.