

Ten Reasons to be Optimistic About the Climate

1. Did you know...

We can end the climate crisis by 2050!?

We all want to restore a climate that can support the lives of our children and future generations. The fact that we can do so, however, is still a new idea in the climate-action world. As more people demand that our goal be a safe, pre-industrial climate by 2050 — a climate restored — it can be achieved.

2. Climate restoration means net-zero CO2 emissions...and far beyond

Today we pump about 36 billion tons of CO2 into the air each year. It's critical to stop adding CO2. But to restore our climate, we also need to remove the trillion tons already up there, from 200 years of fossil-fuel use. With methods perfected by nature over millions of years, we could remove over 50 billion tons a year for 20 years. That comes to a trillion tons — and the job will be done by 2050.

3. Restoring the climate honors the original intent of climate work

The world's accepted climate goals, stated as "stabilizing" greenhouse gasses, (now called "net-zero emissions," were determined in the 1980s, while CO2 levels were still theoretically safe. If we only "stabilize" them by 2050, they'll be more than 50 percent higher than humans have survived until 100 years ago. Climate chaos will only worsen.

Today, to meet the intent of world climate goals, we need to restore safe levels of CO2 before we stabilize them. And we can do so, given the will.

4. We're making climate restoration an idea whose time has come

In July 2023, California's Senate unanimously passed a resolution calling on the state and the nation to restore our climate. Similar resolutions are being considered in other states and at the national level.

As of early 2024, a huge institutional shift is starting. The Bezos Earth Fund framed their Greenhouse Gas Removal (GHGR) Ideation Prize around the goal of "returning greenhouse gas concentrations to pre-industrial levels"!

MIT announced in February 2024 that "Restoring the atmosphere" is one of their new climate missions.

5. We can restore the climate by following Nature's lead

Nature constantly pulls CO2 from the atmosphere, mainly through photosynthesis — green plants absorbing CO2 to grow — and making limestone, which is nearly half CO2 by weight.

Ten times in the last million years, Nature reduced the planet's temperature as part of the ice age cycle — with photosynthesis, but with a twist. The ocean is where this powerful, large-scale, planet-cooling photosynthesis takes place! Restoring vegetation in the ocean also restores sea life.

Scientists have also figured out how make synthetic limestone, so we can literally build and pave with CO2!

6. We can replicate how Nature pulls down CO2: an iron supplement in parts of the ocean

Nature pulls the Earth toward an ice age by increasing dust storms: more iron-rich dust blows off land and out to sea, where it fertilizes patches of ocean that have other nutrients but lack iron. Scientists only figured this out about 30 years ago. Can we replicate nature? Of course. Are we mobilizing to do it? We're just starting.

With miniscule amounts of iron fertilizer, microscopic green plants called "phytoplankton" bloom, pulling down a lot of CO2. The phytoplankton is also the base of the marine food chain, feeding fish and other marine life. Then the CO2 sinks and gets stored away in the deep as the phytoplankton and other organisms die naturally.

7. Did you know...We can make our roads and buildings out of CO2!

Nature stores most of the CO2 on Earth in limestone, produced from CO2 and calcium by shellfish and coral. Recently scientists replicated the process, and now we can make "synthetic" limestone. Concrete with synthetic limestone is already in buildings and runways at the San Francisco International Airport. This industry is waiting for more investment to expand worldwide.

Want to learn more and get involved?

ClimateRestoration.substack.com
Peterfiekowsky.com/crbasics
FoundationForClimateRestoration.org

8. Restoration methods are natural, safe, and remarkably inexpensive

Climate restoration methods use Nature's methods, so they've been tested and proven effective and safe over millions of years. Since they work naturally on a large scale — for free — we can put them to work very cheaply.

For instance, fertilizing ocean patches with iron is expected to cost just a few cents for every ton of CO2 that gets removed from the atmosphere. In contrast, new, industrial methods of removing CO2 typically cost \$500 - \$1000 per ton of CO2. The difference is clear, considering that we have a trillion tons to remove to restore the climate.

9. By talking about climate restoration, you can share realistic climate optimism.

Spreading the word that We Can End the Climate Crisis will help achieve it. With your help, we look forward to updating our common goal to climate restoration within a year.

10. Your children and future generations will thank you!

To request a presentation or interview, please contact:

PFieko@gmail.com; CDouglis@gmail.com

