***‘Recession Resilient’ Climate Start-Ups Shine in Tech Downturn***

Tech workers and investors are flocking to start-ups that aim to combat climate change.

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**By**[**Erin Griffith**](https://www.nytimes.com/by/erin-griffith)

Erin Griffith, who is based in San Francisco, has been reporting on start-ups since 2008.

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5 MIN READ

When Arebeth Pease was laid off from the tech start-up [MasterClass](https://www.nytimes.com/2020/05/25/style/masterclass-secrets.html) last year, she could have had her pick of jobs. But so many tech companies’ missions rang hollow, she said, and many were creating more problems than they were fixing.

Ms. Pease, 42, was drawn instead to Span, a start-up that makes smart home electrical panels and is among a class of fast-growing companies aiming to [combat climate change](https://www.nytimes.com/section/climate). She joined Span in September as an operations manager, with the start-up’s focus on slowing the effects of climate change as the main selling point.

“We’re actually doing work that matters,” she said.

As tech companies [slash perks and cut jobs](https://www.nytimes.com/2022/11/10/technology/big-tech-layoffs.html), the downturn has spurred a wake-up call among many workers, causing them to question whether their company’s role in society — selling ads or selling stuff, often — was actually making the world a better place. The result? More are now flocking to climate start-ups, just as investors pour money into the field.

Last year, climate start-ups in the United States raised nearly $20 billion, topping 2021’s high of $18 billion and nearly tripling 2020’s $7 billion, according to Crunchbase, a data provider. At least 83 climate-focused companies around the world are worth more than $1 billion, according to [HolonIQ](https://www.holoniq.com/climatetech-unicorns), a research firm.

Despite worries of a recession, enthusiasm about climate start-ups is undimmed. Laurence D. Fink, the chief executive of the investment firm BlackRock, recently [declared](https://www.cnbc.com/2021/10/25/blackrock-ceo-larry-fink-next-1000-unicorns-will-be-in-climate-tech.html) that 1,000 more $1 billion so-called climate unicorns were on the way.

“There is no line of business that will not be impacted by climate,” said Chris Sacca, one of the founders of Lowercarbon Capital, a climate-focused venture capital firm, at a conference run by Axios in October. “That’s also the opportunity.”

The momentum and excitement, investors said, are different from the cleantech boom of the mid-2000s, when investors poured money into a cohort of clean energy companies that were reliant on government subsidies. Many of those start-ups eventually went under.

“There were a lot of lessons learned from the first cleantech wave,” said Ben Marcus, an investor at the venture capital firm UP.Partners. “Investors are not just looking to invest in science projects but in real companies.”

Now broader economic trends have coalesced to bolster the market. The cost of renewable energy has [fallen](https://www.nytimes.com/2020/05/13/climate/coronavirus-coal-electricity-renewables.html) over the last decade. The Securities and Exchange Commission last year [proposed](https://www.sec.gov/news/press-release/2022-46) a rule that would require companies to report their emissions, creating demand for tools to measure them. The [Inflation Reduction Act](https://www.nytimes.com/interactive/2022/08/02/climate/manchin-deal-emissions-cuts.html), passed last year, [dedicated $370 billion](https://www.nytimes.com/2022/08/07/climate/senate-climate-law.html) to climate-related spending.

Large corporations have also elevated climate-focused initiatives to the boardroom, with 91 percent of the global economy now covered by “net zero” pledges of some sort, according to [Net Zero Tracker](https://zerotracker.net/), a nonprofit site.

Climate tech is “one of the few bright spots in the economy and one of the few industries that tend to be extremely recession-resilient,” said Rick Zullo, an investor at the venture capital firm Equal Ventures.

At least 135 funds focused on climate investing, with $94 billion under management, have been created since 2021, according to the[newsletter Climate Tech VC](https://www.ctvc.co/new-dry-powder-for-a-new-climate/). The largest tech investment firms — including [Sequoia Capital](https://twitter.com/schreier/status/1220465824701435904), Khosla Ventures, General Atlantic and TPG — have increased their investments in climate-tech companies, as have corporate investors like Salesforce and United Airlines.

Lila Preston, an investor at Generation Investment Management, the investment firm that Al Gore helped found in 2004, said the momentum was welcome and “absolutely needed.”

“You want the very best investors around the table with you when you are disrupting industries,” she said.

Still, with Silicon Valley-style growth comes Silicon Valley-style hype. Many in the industry are wary of the risks of too much money flowing into climate start-ups at inflated valuations. Some fear that the excitement will lead to more “greenwashing” — when businesses make “green” marketing a priority over actual impact — and infighting over which solution is best, ultimately damaging the industry’s credibility.

But the stakes are too high to be cynical, climate entrepreneurs and investors said.

“There’s a bigger fight to fight,” said Elisa Jagerson, an investor at Wildcat Venture Partners. “Everything else feels like rearranging deck chairs on the Titanic.”

It wasn’t always that way. When Julia Collins pitched investors on her climate tech start-up in 2019, she dedicated the first slide of her presentation to a dramatic explanation of the climate emergency. She had created Planet FWD, a software provider that helps businesses manage their climate impact, and Moonshot, a snack food company that uses regenerative ingredients, local suppliers and recycled packaging.

“I had to spend a lot of time on the pitches bringing people up the learning curve,” she said.

That has since changed as climate change and [extreme weather events](https://www.nytimes.com/video/extreme-weather) became impossible to escape. “We’re well beyond the point of having to prove climate change, or that it’s a big market,” said Ms. Collins, who no longer uses the dramatic slide in her pitches.

Some of the new climate start-ups are already increasing in value, at least on paper, fueled by the floods of cash. Josh Felser, an investor at Climactic, a venture capital firm, said the 11 climate companies that he and a partner had backed over the last two years were now worth two and a half times what they had been at the time of investment because other investors had put more money in at higher valuations.

“It’s not because we’re that good,” he said. “It’s because the market is so hot.”

Founders said business was booming because potential customers faced more outside pressure to become environmentally friendly, pushing them to spend money on things like emissions trackers and carbon offsets. Infogrid, a start-up that provides tools to make buildings operate and use energy more efficiently, previously had a hard time selling its products to customers, said William Cowell de Gruchy, the company’s chief executive.

“Now they’re like: ‘We’ve got to do this. Our shareholders are making us. Our boardroom is making us. Regulators are making us,’” he said.

Many tech workers have gone through a similar climate awakening. Olya Irzak, one of the founders of Frost Methane Labs, which helps reduce methane seeps from coal mines and other natural sources, has mentored people who want to work at climate companies for almost a decade. But during the pandemic, more people began reaching out to her and taking an interest in her annual list of climate start-ups, she said.

“People were sitting at home a lot, asking a lot of hard questions,” Ms. Irzak said. “That was when the tech talent pool started shifting really dramatically.”

One effort, Climate Draft, aims to help climate start-ups find advisers, investors and employees from the tech industry. More than 3,000 recently laid-off tech workers have [signed up](https://www.climatedraft.org/layoffs) to learn about jobs at climate companies, the company said. Another online community, [Work on Climate](https://workonclimate.org/), has ballooned to 16,000 members since it began in 2020. People use it to network and learn about jobs.

“Rebuilding every single industry we have is going to require the participation of everybody who is in the work force,” said Eugene Kirpichov, a [former engineer at Google](https://www.linkedin.com/feed/update/urn%3Ali%3Aactivity%3A6687859616610701312/) who helped found Work on Climate.

Diego Saez Gil, a founder of Pachama, a company that funds reforestation and sells carbon credits, said he had recently hired people from Meta, Google, Amazon, Airbnb and Tesla, with some even taking pay cuts to join. That’s a change from his past start-ups, where he found it tough to recruit people from big tech companies who would take pay cuts.

“The people coming to climate are missionaries,” he said. “They had some kind of awakening. They came to realize, ‘The planet is falling apart, and I’m working on making people click on ads.’”

That was what happened to Bryan Nella, 47, an account manager who has worked in tech for more than two decades. When pandemic shutdowns briefly cleared the skies of plane and car pollution, he reflected on his impact on society and the environment.

Last year, Mr. Nella joined SemiCab, a start-up that helps trucking companies eliminate miles driven with no cargo. He usually ignored calls from recruiters, he said, but felt inspired by SemiCab’s mission to reduce trucking emissions.

“There’s a lot more to feel good about,” he said.