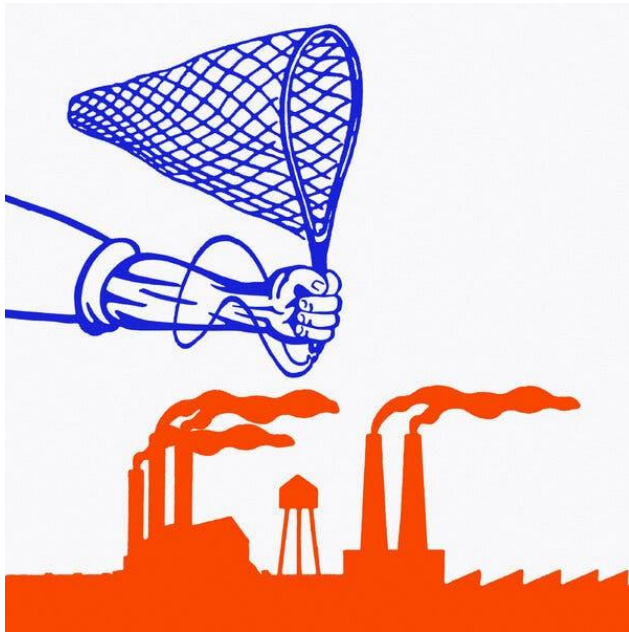


# The New York Times

## Carbon Capture Won't Save Us From Climate Change



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By [Peter Coy](#), Opinion Writer, Dec. 8, 2023 You're reading the Peter Coy newsletter, for Times subscribers only. A veteran business and economics columnist unpacks the biggest headlines. Get it in your inbox.

Fighting climate change by sucking carbon dioxide out of the air with giant blowers seems like a brilliant idea. Why knock yourself out trying to eliminate carbon dioxide emissions when you can continue to produce the emissions and then snatch them back from the atmosphere? That solution reminds me of the little red vehicle with robotic arms that the Cat in the Hat uses to clean up the house that he, Thing One and Thing Two have just trashed. "Have no fear of this mess," the Cat in the Hat tells the children. "I always pick up all my playthings."

But direct air capture of carbon, as the nascent technology is called, is not as reliable as Dr. Seuss's three-wheeled deus ex machina. And it's coming in for heavy criticism at [COP28](#), the United Nations climate summit that's happening in the desert city of Dubai, United Arab Emirates. "It's incredibly dangerous for the fossil fuel industry and its enablers in government to promote the idea that they can keep burning fossil fuels while pulling carbon out of the air or out of the smokestacks with technologies that consistently fail to deliver," Collin Rees, the U.S. program manager at Oil Change International, wrote in an email.

Direct air capture of carbon isn't a completely bad idea. In fact, it's going to have to be part of the solution to climate change eventually. That's because in some sectors of the economy, it's impossible or extremely costly to reduce greenhouse gas emissions all the way to zero. Jet aviation and cement production are two examples that people sometimes mention (although technological breakthroughs may change that). In such sectors, it's more cost-effective to get to net zero by allowing a little carbon to dribble out and then cleaning it up through direct air capture.

So it makes sense to invest in research on the technology for the long run. I'm glad that the Biden administration is spending \$3.5 billion to develop four regional hubs — the [first two](#) in Texas and Louisiana — to accelerate the development and deployment of direct air capture. Approaches differ, but the general idea is to push air through some kind of filter that separates out the carbon dioxide, then bury it in the ground or use it in manufacturing. The plan is to keep the energy-intensive process green by using electricity from renewable sources such as

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solar and wind. “The science says we cannot get to net zero 2050” without some use of carbon capture, John Kerry, the U.S. climate envoy, [said](#) on Wednesday.

The problem comes when direct air capture is seen as partly an alternative to vigorous efforts to reduce greenhouse gas emissions. The president of this year’s climate summit, Sultan Al Jaber, seems to lean in that direction. Al Jaber, who is the head of the United Arab Emirates national oil company, Adnoc, [said](#) last month that there was “no science” behind the idea that limiting global warming to 1.5 degrees Celsius above preindustrial temperatures would require ending fossil fuel production.

## A changing climate, a changing world

**Climate change around the world:** In [“Postcards From a World on Fire,”](#) 193 stories from individual countries show how climate change is reshaping reality everywhere, from dying coral reefs in Fiji to disappearing oases in Morocco and far, far beyond.

**The role of our leaders:** Writing at the end of 2020, Al Gore, the 45th vice president of the United States, [found reasons for optimism](#) in the Biden presidency, a feeling perhaps borne out by the passing of [major climate legislation](#). That doesn’t mean there haven’t been criticisms. For example, Charles Harvey and Kurt House argue that [subsidies for climate capture technology](#) will ultimately be a waste.

**The worst climate risks, mapped:** In this feature, [select a country](#), and we’ll break down the climate hazards it faces. In [the case of America](#), our maps, developed with experts, show where extreme heat is causing the most deaths.

**What people can do:** Justin Gillis and Hal Harvey describe [the types of local activism](#) that might be needed, while Saul Griffith points to how [Australia shows the way on rooftop solar](#). Meanwhile, small [changes at the office](#) might be one good way to cut significant emissions, writes Carlos Gamarra.

Adnoc is [working](#) on direct air capture with Occidental Petroleum. Oxy, as it calls itself, broke ground in April on a \$1.3 billion plant in Texas that will suck carbon dioxide out of the air. It intends to inject the carbon dioxide into the

ground to force more oil to the surface. So it’s part of a strategy to extend the life of the oil business. “This gives our industry a license to continue to operate for the 60, 70, 80 years that I think it’s going to be very much needed,” Vicki Hollub, Oxy’s chief executive, [said](#) at a conference.

That kind of talk worries climate scientists and activists. Even the International Energy Agency, which is hardly radical on environmental issues, [warned](#) recently against “excessive expectations and reliance” on carbon capture as a solution. The carbon capture the agency refers to includes direct air capture, namely pulling carbon dioxide from the atmosphere (very expensive), as well as pulling carbon dioxide from smokestacks, where it’s highly concentrated (less expensive).

It would take an “inconceivable” amount of carbon capture to keep the planet’s temperature from rising more than 1.5 degrees Celsius “if oil and natural gas consumption were to evolve as projected under today’s policy settings,” the agency wrote. The electricity required to capture that much carbon as of 2050 would be more than the entire globe’s use of electricity in 2022, it added.

Joseph Romm, a senior research fellow at the Penn Center for Science, Sustainability and the Media, sent me an article he wrote before the climate summit that called direct air capture a “trap” that “distracts from reducing CO2 emissions.” Direct air capture makes some sense in the long run, when all efforts to reduce greenhouse gas emissions have been taken to their fullest, he wrote to me in an email. But for decades to come, he wrote, “direct air capture will be a costly misallocation of renewables.”

So is direct air capture a savior or a snare? I conclude that it’s a savior in the long run but a snare in the short run. The right combination is to spend money researching and developing the technology for when it’s eventually necessary but put the bulk of our effort into cutting emissions drastically. The Cat in the Hat won’t save us now.