

Off-put by offsets: Why some advocates doubt 'net zero' pledges

May 6 2021, by Benjamin J. Hulac



Credit: CC0 Public Domain

Look at the fine print to understand the climate goals that governments and companies have set and search for one term in particular: net-zero.

During [climate talks](#) in late April, the United States set a goal to cut its net emissions 50% to 52% from 2005 levels by 2030, and it has also pledged to reach net-zero emissions by 2050. Other high-emitting

nations also set their own goals.

The European Union pledged to cut net emissions 55% from 1990 levels by 2030 and zero them out by 2050, while China has said it will hit "peak" emissions by 2030 and achieve [carbon neutrality](#) by 2060 and Canada aims to reach net-zero emissions by 2050.

Those and hundreds of other targets from nations and companies are net-zero pledges, meaning they can be met even if emissions are not sharply reduced. That's because the emissions may be offset by emission-trapping steps elsewhere, such as planting trees or capturing and storing carbon through farming practices or new technology.

But [climate](#) advocates worry that while net-zero goals are based on [climate science](#), they allow governments and corporations responsible for emissions to delay tough decisions, rely on new and unproven technology, have no clear standards to account for the amount of carbon that goes into and comes out of the atmosphere, lack an international governing body to apply any such standards, and do not address the root cause of climate change by lowering fossil fuel use directly.

Paula DiPerna, special adviser to CDP North America, part of a global charity that runs an international environmental disclosure system, said net-zero targets can be useful if they are a handful of years away, not decades.

"Net-zero by 2050 is a meaningless target," DiPerna said. "If you look at the arc of decision-making, if you look at the arc of an executive's career, if you look at the arc of a presidential administration, you got four, three, two, five years to execute your power," she said. "You can promise anything for three decades, but it's what can you do within the arc of your control that's important."

"I tend to look at the net-zero more as a term of art than anything else," she added. "And it has to have a due date within the arc of responsibility of an individual who's got responsibility today or it's also meaningless."

In a set of recommendations unveiled in March, the Environmental Defense Fund said mechanical and natural carbon offset are vital to reaching an equilibrium of things that emit carbon and things that trap it. Still, in its list, compiled with input from banks, consumer goods companies and environmental groups, EDF said offsets must be met with deep emissions reductions.

"Removal mechanisms—both technological and nature-based—will also become essential in balancing residual CO₂ emissions in the future," the recommendations read. "But, they cannot provide the full answer at this moment based on the potential supply, maturity and cost of these interventions. Drastic emissions cuts are needed now."

Lorne Stockman, an analyst for Oil Change International, a climate advocacy group, is also skeptical of the net-zero concept. "It's an escape hatch," said Stockman, adding that oil and gas companies view certain types of offsets, such as technologies that trap emissions or suck them out of the air without addressing emissions in their core operations, as lifelines.

"They see that as having potential for them to not have to radically alter their business," Stockman said. "So if you can capture emissions, then we can carry on digging up oil and gas and burning it."

Mike Coffin, an analyst with the London-headquartered climate finance group Carbon Tracker, said short-term goals are critical.

"It's how we get to net-zero that matters," Coffin said. "Companies have almost sort of won the battle, saying, 'OK, we're getting to net-zero,

that's all we need to do.' Well, it's not."

Sans details, corporate climate pledges, such as those to balance out what a company emits with offsets, can be deceptive, Coffin said.

"Without any interim targets, it's kind of meaningless," he said. "They could grow for the next 29 years and suddenly shrink the target and we would, as a planet, then far exceed the carbon budget," he added, using a term to describe how much more fossil energy can be burning to prevent the worst of climate change.

Still, the Biden administration and Democrats in Congress have embraced the net-zero concept.

House Democrats have a bill to cut emissions 50% by 2030, also from 2005 levels, and set a national goal to "achieve net-zero" emissions by midcentury. Multinational companies have made net-zero pledges too, including General Motors, which said it wants to be carbon-neutral by 2040, and Ford, which made a 2050 net-zero promise, while oil supermajor BP wants to be net-zero by midcentury.

There is no clear standard of what constitutes a carbon offset, and there is no global organization that defines offsets, sets criteria for them or verifies their validity, experts said.

Reaching net-zero goals requires offsets, which are essentially credits that balance out emissions released somewhere else, typically without requiring [emission](#) cuts from the things that are doing the emitting.

They often come in the form of trees or land that farmers promise not to develop. Or they may fund renewable energy projects. Many offset marketplaces gear their sales to people rather than businesses by promoting, for example, offsets for airline passengers.

But some offsets—such as technologies known as carbon capture and storage, which traps emissions before they hit the atmosphere, and direct air capture, which sucks emissions out of the air after they're released—are nascent and highly expensive.

Richard Newell, president and CEO of Resources for the Future, a nonpartisan research group, said the mechanics behind direct air capture are proven. "The question is, how expensive is it to do it at scale?" he said.

"It's a relatively expensive way to reduce emissions," Newell added. "If you can reduce the emissions before they go into the atmosphere, that tends to be much cheaper than removing them afterward."

For industries particularly hard to decarbonize, such as aviation, offsets will be critical to reaching net-zero emissions, Newell said, while DiPerna said interest in offsets is positive.

During a recent call-in New York radio show, when she was fielding questions, DiPerna said someone from Seattle called the studio to ask for advice.

"The employees were being asked to vote on what kind of offsets they wanted the company to buy to get to their carbon-neutral goal," she said. "This is very good-faith stuff. This is getting down to the employees participating and the company putting some money on the table."

One outfit of volunteer designers, writers, humorists and a NASA climate scientist calling themselves the Climate Ad Project skewered the use of carbon offsets in a recent online cartoon starring Sherlock Holmes, who accuses a dinner guest, Lord Reginald, of being a killer.

"Bravo, but you failed to account for one thing," Reginald replies,

tenting his fingers in a sinister only-in-the-movies style. "I purchased a murder offset," Reginald says, producing an official-looking document. "I went to London to find Jack the Ripper and paid him not to murder for a month. So you see, Mr. Holmes, the world is in fact a little less murderous."

Of course, murder offsets don't exist.

But the authors of this sequence view the linked terms of net-zero and carbon offsets as distractions from the root causes of climate change.

"People so desperately want to be able to do something easy so that they feel like they're not contributing to the problem anymore," Peter Kalmus, a climate scientist who works at NASA's Jet Propulsion Laboratory in Southern California and started the Climate Ad Project in July, said in an interview, adding that he was speaking in a personal capacity.

Aaron Hagey-MacKay, a copywriter with the all-volunteer project, which he said does not take donations, came up with the murder offset ad with Kalmus.

Offsets delay the hard, science-based choices to significantly curtail [fossil fuel use](#), Kalmus and Hagey-MacKay said.

"We have to stop this magical thinking, and this incrementalism, and just go straight to the heart of the problem, which is ending the fossil fuel industry as quickly as we can and completely stopping fossil fuel, everywhere, at every scale," Kalmus said. "There's no dancing around the edges anymore."

©2021 CQ Roll Call

Distributed by Tribune Content Agency, LLC

Citation: Off-put by offsets: Why some advocates doubt 'net zero' pledges (2021, May 6)
retrieved 27 April 2024 from
<https://phys.org/news/2021-05-off-put-offsets-advocates-net-pledges.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.