New American

Written by **Rebecca Terrell** on May 6, 2022

Published in the May 30, 2022 issue of the New American magazine. Vol. 38, No. 10

Biden Administration Shackles Taxpayers in Carbon-capture Scheme

Billions of our tax dollars are funding carbon dioxide (CO_2) harvesting across the United States. Experts say the senseless ventures have no impact on global temperatures yet are helping to fuel the energy crisis and raise already-skyrocketing prices you pay for just about everything.

AP Images

CO_2 — a simple molecule that is a crucial plant food and helps make life on earth possible — has been demonized since 2007, when the U.S. Supreme Court irrationally labeled this important atmospheric gas as an "air pollutant" and granted regulatory free rein to the Environmental Protection Agency. Now, in some apparently warped spirit of Dr. Seuss, the Biden administration wants to build huge machines that suck CO_2 directly from the sky.

Carbon-capture technology has been around for decades, trapping CO_2 as it is released from refineries, manufacturing facilities, and power plants. The process is known as carbon capture and sequestration (CCS), or carbon capture, utilization, and storage (CCUS). These methods either store the gas underground or put it to various uses such as producing high-value chemicals or extracting more petroleum from otherwise depleted oil wells. The Obama administration significantly ramped up requirements for power plants to implement inefficient CCS measures, which were lifted temporarily during Trump's White House tenure.

A technologically dubious cousin of CCS is the carbon dioxide removal (CDR) method known as direct air capture (DAC), which extracts the trace gas from the atmosphere. A May 2018 briefing published in *Geoengineering Monitor* described it as "a largely theoretical technique" that poses a number of problems aside from its exorbitant cost.

"To have any significant effect on global CO_2 concentrations, DAC would need to be rolled out on a vast scale, raising serious questions about the energy it requires, the levels of water usage for particular technologies, and the toxicity impacts from the chemical sorbents used," reads the overview. "In addition, safe and long-term CO_2 storage cannot be guaranteed, either in geological formations where leakage is a risk … or in products using CO_2, where carbon is likely to end up back in the atmosphere in one way or another."

Far be it from the Biden administration and Congress to let reality get in the way of their net-zero-by-2050 fantasies. Last November the president signed a $1.2 trillion infrastructure bill, passed by federal legislators (including 13 Republicans) in support of the "Build Back Better" agenda. Among the measure's disastrous provisions are $3.5 billion allotted to development of CCS technology and another $3.5 billion for CDR. On top of that, $2.5 billion goes to carbon storage projects, $2.1 billion to fund low-interest loans for CO_2 pipeline expansion, and hundreds of millions more to support associated federal and state tax-dollar-squandering provisions. JD Supra lists a few, including $15 million and $100 million prizes for competitions to develop precommercial and commercial DAC technology.

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Those contests will be part of the U.S. Department of Energy's (DoE) "Earthshots" initiative, announced last November as "the U.S. government's first major effort" in promoting CDR. Energy Secretary Jennifer Granholm called it a crucial move to "meet the urgent needs of the climate crisis." The agency anticipates removing "gigatons" of CO_2 from the air and storing it "for less than $100/ton of net CO_2-equivalent."

"I don't think those numbers are credible," Howard Hertzog, senior engineer at the MIT Energy Initiative, told Climate Now in an interview last August. He was discussing estimates made by Canadian-based DAC developer Carbon Engineering, which claimed "they can do it for between $100 and $300 a ton of CO_2." However, based on the pace of emerging technology he forecasts the realistic range will be $600 to $1,000 per ton by 2030.

It's a hefty price tag considering the claim that in order to limit global warming to 1.5° Celsius by mid-century "we'll have to remove 10 billion tons per year of CO_2 from the atmosphere," says Dr. Roger Aines of the Lawrence Livermore National Laboratory.

They have a long way to go, despite CCS currently in place. For example, Grist reports around 5,000 miles of CO_2 pipeline nationwide that conveys the trapped substance to underground storage. Experts estimate between 30,000 and 65,000 miles of pipeline will be needed to achieve government goals, and some worry about significant safety issues as the current network massively expands under generous infrastructure funding.

Risky Business

The nonprofit watchdog Pipeline Safety Trust (PST) calls CO_2 pipelines "Dangerous and Under-Regulated" in its March 2022 report. Highlighting the ineptitude of government supervision, PST explains that pipeline regulations have never addressed the specific dangers of CO_2 transport, though the federal Pipeline and Hazardous Materials Safety Administration (PHMSA) has been exercising oversight since 1991.

"CO_2 is an asphyxiant which is heavier than air and therefore, after a pipeline rupture, a plume can maintain a lethal concentration over large distances," PST executive director Bill Caram said in a March press release. "There are little to no regulations around appropriate siting, limiting dangerous and corrosive impurities, or building the pipelines to withstand the unique properties of transporting high pressure CO_2."

Residents of Satartia, Mississippi, learned in February 2020 just how dangerous it can be. A pipeline operated by Denbury Resources in the hills just outside town ruptured, sending a dense cloud descending on the village. Within minutes individuals began collapsing in their homes. Others tried to escape, but their vehicles "just shut off, since they need oxygen to burn fuel," reported HuffPost.

"While ambient CO_2 is odorless, colorless and heavier than air, the industrial CO_2 in Denbury's pipeline has been compressed into a liquid, which is pumped through pipelines under high pressure," the article explained. "A rupture in this kind of pipeline sends CO_2 gushing out in a dense, powdery white cloud that sinks to the ground and is cold enough to make steel so brittle it can be smashed with a sledgehammer."

The incident sent 49 of the area's 300 residents to the hospital, while most of those remaining had to evacuate. No one died, but an emergency authority said many would not have survived if the disaster had occurred at night while people were sleeping. Residents now live with residual lung, stomach, and neurological problems they never experienced before. Adding to the stress are worries that it could happen again. In fact, another accident spewed even more CO_2 the following October during repairs to the damaged section, causing repeat evacuations. Even now, "PHMSA has yet to release an incident report detailing the cause of the rupture," reports Grist.

A Costly Mistake

Mississippi also holds a lesson in the economic costs of CDR. In an op-ed for *The Hill*, Manhattan Institute senior fellow Robert Bryce cited the Kemper County power plant owned by Southern Company, "a project that aimed to prove feasibility of CCS." DoE subsidized Kemper in 2010 with $270 million, but when construction time nearly doubled and expenses more than tripled over original expectations, "Southern canceled the project, sticking ratepayers with about $1.1 billion of those costs."

Of completed CCS projects, Bryce explained all are expensive. "They require huge amounts of energy to separate and capture" CO_2, and removing "it from flue gas cuts a power plant's output by as much as 28 percent." Moreover, "disposing of just 10 percent of global carbon dioxide emissions with CCS would require building an industry as large and sophisticated as the global oil sector," he noted.

That couldn't happen without Biden's infrastructure boost; before it, CCS was dying on the vine. *CEP* magazine, a publication of the American Institute of Chemical Engineers, reported last year that "the high cost of CCS and the intrinsic low value of CO_2 has led to the stagnation of the market," and that in 2020, CCS captured only 40 million metric tons of CO_2 globally.

Yet the price of CCS pales in comparison to DAC. "Climate Experts Say Vacuuming CO_2 From the Sky Is a Costly Boondoggle," reads a recent *Time* magazine headline. "The U.S. Government Just Funded It Anyway." The article describes pricey plans for direct-air capture hubs yet to be built, with very little return on investment foreseen. Each would be "able to pull a million tons of CO_2 out of the air" annually, though supposedly "to make a dent in climate change, the world would have to be sequestering thousands of times more carbon dioxide than those projects will." Moreover, *Geoengineering Monitor* reports that DAC requires so much energy that some promoters "have proposed to use 'small nuclear power plants' connected to DAC installations."

Environmentalists raise other objections to CDR. The Sierra Club calls carbon-capture projects "greenwashing schemes" actually intended to promote enhanced oil recovery. Enhanced oil recovery pumps trapped CO_2 into depleted oil wells to extract more petroleum, a move that activists grumble helps perpetuate "dependence on fossil fuels." They complain that industrial uses end up releasing captured CO_2 back into the atmosphere, and that stored CO_2 can eventually leak out as well. Though their misguided goal is an end of all hydrocarbon-sourced energy, they also acknowledge the dangers of CO_2 pipeline leaks and the threat that pipelines pose to private property rights through the inappropriate use of eminent domain.

In areas of planned pipeline expansion, landowners are fighting back. *AgWeek* reports that dozens of

counties across the Midwest have adopted resolutions opposing the projects, and farmers are refusing to sign easements. There is even activity in the Iowa legislature to limit eminent-domain authority of the state utilities board. Public comments on permits in Iowa and South Dakota are "overwhelmingly against the pipeline." North Dakotans are also opposed, but face a governor who "has been vocal in his support of carbon capture projects" and sits on a three-man industrial commission in charge of storage-site approval. Minnesota fares better, having no state agency charged with carbon-pipeline oversight, a situation that forces developers to negotiate with individual counties.

Carbon Crazy

The irony of CDR is that human activity has never been proven to adversely affect global temperature. A 2015 report by the Nongovernmental International Panel on Climate Change of the Heartland Institute details how UN bureaucrats came up with the anthropogenic (human-caused) hypothesis based on climate models that have since been "falsified by real-world data from a wide variety of sources." Nevertheless, UN edicts continue to influence climate policies worldwide, despite the fact that observed environmental changes are well within natural variability.

In fact, research reveals that CO_2, no matter the source, does not dictate global temperatures. Howard Hayden, retired physics professor at the University of Connecticut, explains in his book *Bass Ackwards: How Climate Alarmists Confuse Cause with Effect* that historical rec-ords prove that rising CO_2 concentration "comes after temperature changes."

Additionally, far from being a pollutant, carbon dioxide is vital to life on earth. In their book *The Many Benefits of Atmospheric CO_2 Enrichment*, researchers Sherwood and Craig Idso call it the "elixir of life" and detail 55 ways that rising levels of CO_2 benefit the earth, from advantages at the microscopic level to worldwide biodiversity.

Even if human-generated CO_2 could adversely affect climate, the federal government has absolutely no constitutional authority to subsidize or regulate the energy industry. As stated by Paul Homewood in his open letter to *The Daily Telegraph* on climate scaremongers, the solution is the free market, where "the best technologies come to the fore without the need for subsidies, regulations and mandates." Instead of chasing carbon-capture pipe dreams, elected officials should end subsidies and tax credits to worthless and dangerous CDR technologies and remove detrimental regulations on reliable energy sources that make our enviable standard of living possible.

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