

# Yes, the pandemic crushed carbon emissions. Now they're back

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Credit: CC0 Public Domain

It's not easy to move the needle on global carbon emissions—even a little bit.

But economies worldwide were so hobbled by the COVID-19 pandemic that the needle fell by 7 percent in 2020, according to a tally by the

Global Carbon Project, a research network. It was the biggest percentage decline in human-generated [carbon emissions](#) ever—far more than the 1.4 percent observed after the 2008 financial meltdown.

Yet while global emissions plunged in 2020, the steepest drop happened in the spring. Emissions in many highly industrial nations, like the U.S., China and Brazil, are back to or above prepandemic levels, prompting [climate scientists](#), [government officials](#) and energy experts to warn that last year marked a respite and bought time to solve the climate crisis.

They are preaching against complacency and predicting emissions will jump as inoculations increase. And they are warning of what lies in wait if humans do not arrest emissions to a safe degree.

"The rebound in [global carbon emissions](#) toward the end of last year is a stark warning that not enough is being done to accelerate clean energy transitions worldwide," Fatih Birol, the head of the International Energy Agency, said. "If governments don't move quickly with the right energy policies, this could put at risk the world's historic opportunity to make 2019 the definitive peak in [global emissions](#)."

With the vaccine distribution and inoculation on the rise, heat-trapping emissions are not likely far behind, as analysts with the Rhodium Group, a nonpartisan research firm, point out. "With coronavirus vaccines now in distribution, we expect economic activity to pick up again in 2021, but without meaningful structural changes in the carbon intensity of the US economy, emissions will likely rise again as well," they said.

A U.N. environmental report said the pandemic was a blip: "The immediate reduction in emissions is expected to have a negligible long-term impact on climate change."

Addressing the U.N. Security Council in late February, John Kerry,

special climate envoy for the Biden administration, didn't even mention the pandemic in a 1,298-word speech, instead focusing on the destabilizing security risks that will plague a hotter world.

Kerry, a former Democratic senator from Massachusetts, attended the so-called Earth Summit in Rio de Janeiro in 1992, a seminal gathering that established climate diplomacy.

To climate veterans like him, the global health crisis has been a stopgap measure to address the more threatening environmental crisis.

"We bury our heads in the sand at our own peril," Kerry said. "It is time to start treating the [climate crisis](#) like the urgent security threat that it is."

The Biden administration and congressional Democrats have made climate change an early priority. President Joe Biden invoked climate change in his inaugural address, saying the Earth is in crisis and "the cry for survival comes from the planet itself."

House Democrats filed a bill this month to zero out domestic greenhouse gas emissions by 2050, half of which would come by 2035. And Senate Majority Leader Charles E. Schumer, D-N.Y., not typically known for his work on environmental topics, last month called climate change "the existential threat of our time."

At the least, the pandemic bought time.

It knocked the U.S. back on track to meet the goals of the Paris climate agreement, with domestic emissions down 20 percent from 2005 levels, according to BloombergNEF, an energy research organization.

Forces in the electricity market provide reasons to be bullish on carbon reduction. Installers in the U.S. set records in 2020 for building the most

wind and solar power in a calendar year, coal-fired electricity dropped to a modern low of just 19 percent of domestic electricity production, and renewable energy sources in the country hit an all-time high mark.

"The sheer size of the accomplishment is pretty remarkable," said Ethan Zindler, head of Americas at BloombergNEF, of emissions cuts and renewables growth, adding that lowering emissions from the transportation sector—the No. 1 source of greenhouse gases coming from America—will require government intervention. "Transportation will not necessarily get there without new policies and regulations."

The pandemic, which last March and April ushered in eerily quiet streetscapes, empty highways, clear skies and office parks and city centers that resembled ghost towns, led to jaw-dropping energy stats.

Imagine removing all the European Union's emissions.

That's the equivalent of what occurred, IEA said in March. Such a sharp plummet has never happened, IEA said. "Broadly speaking, this is the equivalent of removing all of the European Union's emissions from the global total," the IEA said.

Worldwide, carbon pollution from energy-related sources dropped 5.8 percent, IEA said.

In the U.S., energy consumption fell to a 30-year low in April, emissions dropped to a record low, and emissions from oil use in the transportation sector crashed that month to their lowest point since February 1983, federal data show. Crude oil production dipped for the first time since 2016.

Traffic on all roads and streets in the country dwindled by 39.8 percent in April and by 25.5 percent in May, versus the same months of 2019,

according to the Federal Highway Administration.

Overall, Americans drove 13.2 percent less in 2020 than the year before.

Monthly transit use, including buses, ferries, trains, subways and trolley, started to slide in March last year. Then it cratered in April, according to figures from the National Transit Database, down 81.3 percent from ridership that month the previous year.

Writing in the journal Nature Climate Change, researchers reported on March 3 that "widespread disruptions" to transportation services had the largest effect in curbing emissions of carbon dioxide, or CO<sub>2</sub>, and other waste gases.

They called the pandemic and government restrictions a "pause button" that cannot continue so long as industrialized nations rely on fossil energy.

Corinne Le Quéré, a professor of environmental sciences at University of East Anglia, in the U.K., said countries' climate pledges to cut emissions, as part of the Paris deal, are beginning to "pay off, but actions are not large-scale enough yet and emissions are still increasing in way too many countries."

Le Quéré, the lead author, said: "The drop in CO<sub>2</sub> emissions from responses to COVID-19 highlights the scale of actions and of international adherence needed to tackle [climate change](#)."

At the February U.N. meeting, attended by the heads of state of France, the U.K., Norway and other countries, Kerry called for "bold action" to zero out emissions by 2050.

"That is the only way that science tells us we can keep alive the

possibility of limiting this planet's warming to 1.5 degrees," Kerry said.

Failing to decarbonize the global economy and create new [climate](#)-friendly industries will lead to disaster, he said, "marching forward in what is almost tantamount to a mutual suicide pact."

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