

# Grappling with the ‘entirely unprecedented’

By [David Gelles](#)

I started covering climate change four years ago, after more than a decade reporting on corporate America, technology and media.

Joe Biden was president, and he signed into law the Inflation Reduction Act, the biggest-ever federal effort to promote clean power, just a few months after I joined the beat. [The energy transition was underway](#), the financial sector was [marshaling its resources](#) to fund solar and wind projects, and there was a sense that efforts to reduce planet-warming emissions might succeed in slowing global warming.

That’s not the case anymore. [An article I just published](#) documents the rapidly intensifying effects of climate change, which have surprised many of the scientists who have spent their lives tracking these issues. They are now raising the alarm with increasingly dire language.

Seas are rising and glaciers are melting — and there’s also now a growing debate about whether the rate of planetary warming is actually speeding up. [New research](#) published this month found that even after accounting for other phenomena such as volcanic eruptions, solar radiation and natural variability, [the rate of global warming has accelerated since 2015](#).

“The rate of warming is entirely unprecedented,” Katharine Hayhoe, chief scientist for the Nature Conservancy and a professor at Texas Tech University, told me. “We certainly have never had eight billion people on the planet when it ever happened before.”

## Where are we headed?

Only recently, many climate scientists were revising some of their worst-case scenarios downward.

In the years after the 2015 Paris Agreement, nearly every country in the world pledged to reduce its emissions. Even China, still the largest polluter on Earth, embarked on [an ambitious effort to replace fossil fuels](#) with renewables.

As a result, a consensus emerged: While it might not be possible to limit global warming to 1.5 degrees Celsius above preindustrial levels, a goal that once served as a rallying cry for climate activists, holding the line at 2 degrees might be within reach. [That scenario would mean dodging at least some of the worst effects of climate change](#).

Then, Donald Trump returned to the Oval Office. At home, the president has rolled back regulations designed to limit planet-warming emissions, stymied the growth of wind and solar

power, upended the EV market, cancelled air quality regulations, and used federal resources to bolster the production of coal, oil and gas.

And overseas, the Trump administration has used booming U.S. natural gas exports as a bargaining tool, announced plans to take over Venezuela's oil industry, and launched a war with Iran that has triggered an energy crisis and driven some countries to [return to burning coal](#) in the face of global market disruption.

While other countries, including China, continue to press ahead with efforts to reduce their use of fossil fuels, it is becoming increasingly clear that **Trump's policies will seriously hinder the world's ability to slow the pace of planetary warming.**

### **The long view**

Climate change, it's often said, is the ultimate long-term problem in a world focused on short-term crises.

For much of the 20th century, scientists warned that burning fossil fuels relentlessly would lead to an intense rise in global heat. But temperatures climbed only gradually at first, even though we use more fossil fuels each year. So many of the worst effects seemed distant and manageable.

Now, global warming is no longer a far-off problem. As I write in today's article, a number of the planet's systems are flashing warning signs.

Oceans are warming at an accelerating rate. Glaciers are melting at a quickening pace. Sea levels are rising faster. Droughts, heat waves and storms are all growing more intense. And there are indications that some of [the world's tipping points](#), including drastic changes to ocean currents, could be breached in the not too distant future.

**The world has already warmed nearly 1.5 degrees, and appears on track to blow past 2 degrees by the end of the century, if not sooner, with dire consequences. Wall Street analysts are [anticipating a world that has warmed at least 3 degrees](#), a scenario that would render parts of the world uninhabitable and **unleash vast economic devastation.****

"Our civilization has evolved only over the last 6,000 to 8,000 years, when climate has been stable, so we are profoundly unsuited to the types of shocks that we're seeing today," Hayhoe said. "Human systems sort of bend to a certain point. And then, at some point, they break."