

Why Apocalyptic Claims About Climate Change Are Wrong

[Michael Shellenberger](#) (proclaimed a "Hero of the Environment" by Time Magazine)



Climate scientists are speaking out against grossly exaggerated claims about global warming. Getty

Environmental journalists and advocates have in recent weeks made a number of apocalyptic predictions about the impact of climate change. Bill McKibben [suggested](#) climate-driven fires in Australia had made koalas “functionally extinct.” Extinction Rebellion [said](#) “Billions will die” and “Life on Earth is dying.” *Vice* [claimed](#) the “collapse of civilization may have already begun.”

Few have underscored the threat more than student climate activist Greta Thunberg and Green New Deal sponsor Rep. Alexandria Ocasio-Cortez. The latter [said](#), “The world is going to end in 12 years if we don't address climate change.” [Says](#) Thunberg in her new book, “Around 2030 we will be in a position to set off an irreversible chain reaction beyond human control that will lead to the end of our civilization as we know it.”

Sometimes, scientists themselves make apocalyptic claims. “It’s difficult to see how we could accommodate a billion people or even half of that,” if Earth warms four degrees, [said](#) one earlier this year. “The potential for multi-breadbasket failure is increasing,” [said](#) another. If sea levels rise as much as the Intergovernmental Panel on Climate Change predicts, another scientist [said](#), “It will be an unmanageable problem.”

Apocalyptic statements like these have real-world impacts. In September, a group of British psychologists [said](#) children are increasingly suffering from anxiety from the frightening discourse around climate change. In October, an activist with Extinction Rebellion ("XR") — an environmental group founded in 2018 to commit civil disobedience to draw awareness to the threat its founders and supporters say climate change poses to human existence — and a videographer, were [kicked and beaten](#) in a London Tube station by angry commuters. And last week, an XR co-founder [said](#) a genocide like the Holocaust was "happening again, on a far greater scale, and in plain sight" from climate change.

Climate change is an issue I care passionately about and have dedicated a significant portion of my life to addressing. I have been [politically active](#) on the issue for over 20 years and have researched and written about it for 17 years. Over the last four years, my organization, Environmental Progress, has worked with some of the world's leading climate scientists to [prevent](#) carbon emissions from rising. So far, we've helped prevent emissions increasing the equivalent of adding 24 million cars to the road.

I also care about getting the facts and science right and have in recent months corrected inaccurate and apocalyptic news media coverage of [fires in the Amazon](#) and [fires in California](#), both of which have been improperly presented as resulting primarily from climate change.

Journalists and activists alike have an obligation to describe environmental problems honestly and accurately, even if they fear doing so will reduce their news value or salience with the public. There is good evidence that the catastrophist framing of climate change is self-defeating because it alienates and [polarizes](#) many people. And exaggerating climate change risks distracting us from other important issues including ones we might have more near-term control over.

I feel the need to say this up-front because I want the issues I'm about to raise to be taken seriously and not dismissed by those who label as "climate deniers" or "climate delayers" anyone who pushes back against exaggeration.

With that out of the way, let's look whether the science supports what's being said.

First, no credible scientific body has ever said climate change threatens the collapse of civilization much less the extinction of the human species. “Our children are going to die in the next 10 to 20 years.’ What’s the scientific basis for these claims?” BBC’s Andrew Neil [asked](#) a visibly uncomfortable XR spokesperson last month.

“These claims have been disputed, admittedly,” she said. “There are some scientists who are agreeing and some who are saying it’s not true. But the overall issue is that these deaths are going to happen.”

“But most scientists don’t agree with this,” said Neil. “I looked through IPCC reports and see no reference to billions of people going to die, or children in 20 years. *How* would they die?”

“Mass migration around the world already taking place due to prolonged drought in countries, particularly in South Asia. There are wildfires in Indonesia, the Amazon rainforest, Siberia, the Arctic,” she said.

But in saying so, the XR spokesperson had grossly misrepresented the science. “There is robust evidence of disasters displacing people worldwide,” [notes](#) IPCC, “but limited evidence that climate change or sea-level rise is the direct cause”

What about “mass migration”? “The majority of resultant population movements tend to occur *within* the borders of affected countries,” says IPCC.

It’s not like climate doesn’t matter. It’s that climate change is outweighed by other factors. Earlier this year, researchers [found](#) that climate “has affected organized armed conflict within countries. However, other drivers, such as low socioeconomic development and low capabilities of the state, are judged to be substantially more influential.”

Last January, after climate scientists criticized Rep. Ocasio-Cortez for saying the world would end in 12 years, her spokesperson [said](#) “We can quibble about the phraseology, whether it's existential or cataclysmic.” He added, “We're seeing lots of [climate change-related] problems that are already impacting lives.”

That last part may be true, but it's also true that economic development has made us less vulnerable, which is why there was a 99.7% [decline](#) in the death toll from natural disasters since its peak in 1931.

In 1931, 3.7 million people died from natural disasters. In 2018, just 11,000 did. And that decline [occurred](#) over a period when the global population *quadrupled*.

What about sea level rise? IPCC estimates sea level could rise two feet (0.6 meters) by 2100. Does that sound apocalyptic or even “unmanageable”?

Consider that one-third of the Netherlands is below sea level, and some areas [are](#) *seven* meters below sea level. You might object that Netherlands is rich while Bangladesh is poor. But the Netherlands adapted to living below sea level *400 years ago*. Technology has improved a bit since then.

What about claims of crop failure, famine, and mass death? That's science fiction, not science. Humans today produce enough food for 10 billion people, or 25% more than we need, and scientific bodies predict increases in that share, not declines.

The United Nations Food and Agriculture Organization (FAO) [forecasts](#) crop yields increasing 30% by 2050. And the poorest parts of the world, like sub-Saharan Africa, are expected to see increases of 80 to 90%.

Nobody is suggesting climate change won't negatively impact crop yields. It could. But such declines should be put in perspective. Wheat yields increased 100 to 300% around the world since the 1960s, while a study of 30 models [found](#) that yields would decline by 6% for every one degree Celsius increase in temperature.

Rates of future yield growth depend far more on whether poor nations get access to tractors, irrigation, and fertilizer than on climate change, says FAO.

All of this helps explain why IPCC anticipates climate change will have a modest impact on economic growth. By 2100, IPCC projects the global economy will be 300 to 500% larger than it is today. Both [IPCC](#) and the Nobel-winning Yale economist, William Nordhaus, [predict](#) that warming of 2.5°C and 4°C would reduce gross domestic product (GDP) by 2% and 5% over that same period.

Does this mean we shouldn't worry about climate change? Not at all.

One of the reasons I work on climate change is because I worry about the impact it could have on endangered species. Climate change [may](#) threaten one million species globally and [half](#) of all mammals, reptiles, and amphibians in diverse places like the Albertine Rift in central Africa, home to the endangered mountain gorilla.

But it's not the case that "we're putting our own survival in danger" through extinctions, as Elizabeth Kolbert [claimed](#) in her book, *Sixth Extinction*. As tragic as animal extinctions are, they do not threaten human civilization. If we want to save endangered species, we need to do so because we care about wildlife for spiritual, ethical, or aesthetic reasons, not survival ones.

And exaggerating the risk, and suggesting climate change is more important than things like habitat destruction, are counterproductive.

For example, Australia's fires are not driving koalas extinct, as Bill McKibben suggested. The main scientific body that tracks the species, the International Union for the Conservation of Nature, or IUCN, [labels](#) the koala "vulnerable," which is one level less threatened than "endangered," two levels less than "critically endangered," and three less than "extinct" in the wild.

Should we worry about koalas? Absolutely! They are amazing animals and their numbers have declined to around 300,000. But they face far bigger [threats](#) such as the destruction of habitat, disease, bushfires, and invasive species.

Think of it this way. The climate could change dramatically — and we could still save koalas. Conversely, the climate could change only modestly — and koalas could still go extinct.

The monomaniacal focus on climate distracts our attention from other threats to koalas and opportunities for protecting them, like protecting and expanding their habitat.

As for fire, one of Australia's leading scientists on the issue [says](#), "Bushfire losses can be explained by the increasing exposure of dwellings to fire-prone bushlands. No other influences need be invoked. So even if climate change had played some small

role in modulating recent bushfires, and we cannot rule this out, any such effects on risk to property are clearly swamped by the changes in exposure.”

Nor are the fires solely due to drought, which is common in Australia, and exceptional this year. “Climate change is playing its role here,” [said](#) Richard Thornton of the Bushfire and Natural Hazards Cooperative Research Centre in Australia, “but it's not the cause of these fires.”

The same is true for fires in the United States. In 2017, scientists modeled 37 different regions and [found](#) “humans may not only influence fire regimes but their presence can actually override, or swamp out, the effects of climate.” Of the 10 variables that influence fire, “none were as significant... as the anthropogenic variables,” such as building homes near, and managing fires and wood fuel growth within, forests.

Climate scientists are starting to push back against exaggerations by activists, journalists, and other scientists.

“While many species are threatened with extinction,” [said](#) Stanford’s Ken Caldeira, “climate change does not threaten human extinction... I would not like to see us motivating people to do the right thing by making them believe something that is false.”

I asked the Australian climate scientist Tom Wigley what he thought of the claim that climate change threatens civilization. “It really does bother me because it’s wrong,” he said. “All these young people have been misinformed. And partly it’s Greta Thunberg’s fault. Not deliberately. But she’s wrong.”

But don’t scientists and activists need to exaggerate in order to get the public’s attention?

“I’m reminded of what [late Stanford University climate scientist] Steve Schneider used to say,” Wigley replied. “He used to say that as a scientist, we shouldn’t really be concerned about the way we slant things in communicating with people out on the street who might need a little push in a certain direction to realize that this is a serious problem. Steve didn’t have any qualms about speaking in that biased way. I don’t quite agree with that.”

Wigley started working on climate science full-time in 1975 and created one of the first climate models (MAGICC) in 1987. It remains one of the main climate models in use today.

“When I talk to the general public,” he said, “I point out some of the things that might make projections of warming less *and* the things that might make them more. I always try to present both sides.”

Part of what bothers me about the apocalyptic rhetoric by climate activists is that it is often accompanied by demands that poor nations be denied the cheap sources of energy they need to develop. I have found that many scientists share my concerns.

“If you want to minimize carbon dioxide in the atmosphere in 2070 you might want to accelerate the burning of coal in India today,” MIT climate scientist Kerry Emanuel said.

“It doesn’t sound like it makes sense. Coal is terrible for carbon. But it’s by burning a lot of coal that they make themselves wealthier, and by making themselves wealthier they have fewer children, and you don’t have as many people burning carbon, you might be better off in 2070.”

Emanuel and Wigley say the extreme rhetoric is making political agreement on climate change harder.

“You’ve got to come up with some kind of middle ground where you do reasonable things to mitigate the risk and try at the same time to lift people out of poverty and make them more resilient,” said Emanuel. “We shouldn’t be forced to choose between lifting people out of poverty and doing something for the climate.”

Happily, there is a plenty of middle ground between climate apocalypse and climate denial.