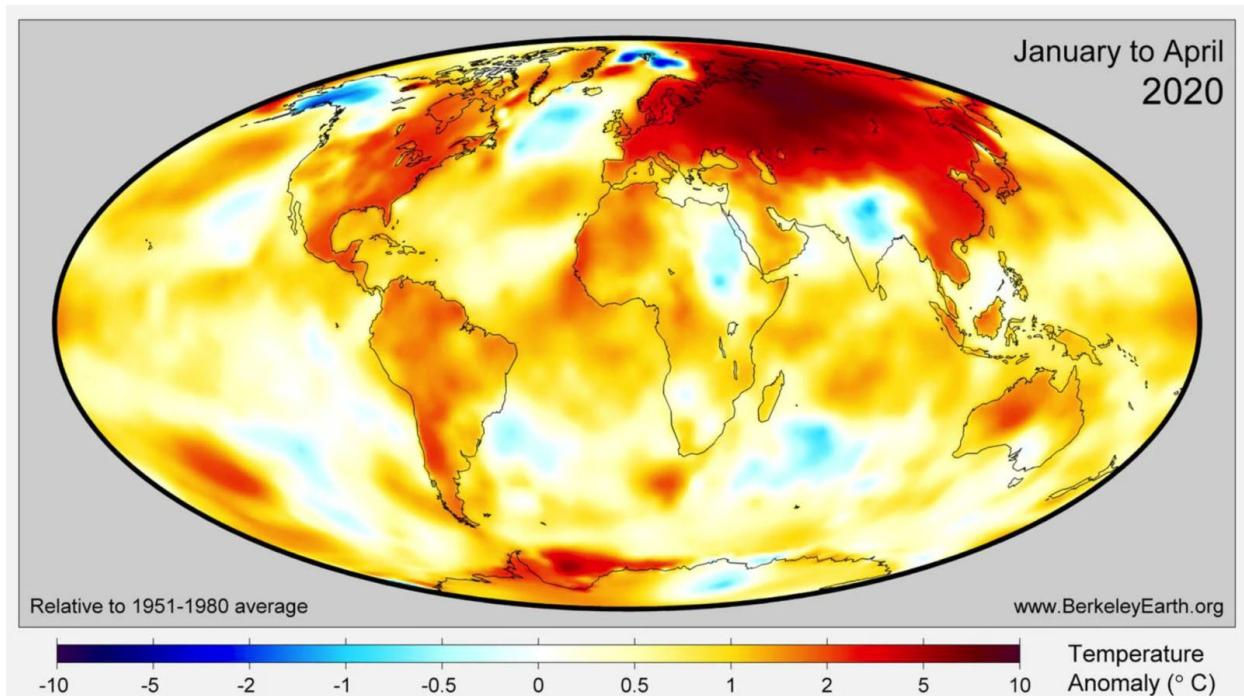


# Bill McKibben Explains Global Warming By The Numbers



Bill McKibben is a much better writer than I will ever be and he is tireless at putting his skills to work to inform the rest of us about the danger that lies ahead for humanity if we do not cure our addiction to burning stuff. Global warming has been happening for a very long time, thanks to the ability of heat from burning fossil fuels to run our factories, light our homes, keep us cool in summer and warm in winter, and power a massive number of ships, airplanes, cars, and trucks that can take us anywhere in the world at a moment's notice.

In 1988, James Hansen put Congress on notice that global warming was happening and we had better do something about it quickly. Since then, any number of scientific organizations — [IPCC](#) being the most prestigious of them — have told us that unless we stop extracting and burning fossil fuels, we will make the Earth a place that may continue to support various forms of life, but humans won't be among them.

Had we listened to Dr. Hansen 35 years ago, the cost of saving civilization would have been modest. But we didn't, and so now the cost is astronomical — around \$10 trillion, according to Elon Musk in his latest [Master Plan](#). Why haven't we done what we need to do to save ourselves from mutually assured destruction? Money. Lots and lots of money. In the April issue of [Rolling Stone](#), McKibben says it all comes down to simple math.

The value of all the oil, coal, and methane gas still buried underground around the world is \$100 trillion. Money talks, as the old expression goes. That \$100 trillion can buy a lot of influence in governments in every nation. At the latest COP 27 conference in Egypt, there were more fossil fuel lobbyists than delegates.

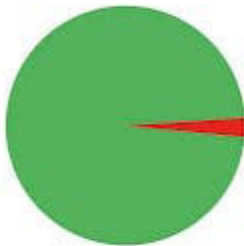
It also infects educational institutions, which then promote the interests of the fossil fuel industry instead of teaching young minds about the rapidly approaching crisis of an overheated planet. The latest example of that is Jody Freeman, a professor of environmental science at Harvard who gets \$350,000 a year for serving on the board of directors for ConocoPhillips.

According to [The Guardian](#), Freeman has lobbied the Securities and Exchange Commission, which is considering new disclosure requirements for energy companies, on behalf of ConocoPhillips. Nevertheless, so far as we know, Harvard has done nothing to discipline Freeman and she continues to accept money from the company while allegedly training the next generation of leaders. Is it a coincidence that ConocoPhillips has recently received permission from the Biden administration to expand its operations in the Arctic? You decide.

Lastly, it buys a lot of favorable publicity from news organizations like the *New York Times*, which for years was only too happy to sell space on its front page to ExxonMobil so the company could tout its [fuel from algae research](#). Exxon quietly shut down that program recently, having never made more than a token amount of its much ballyhooed “green fuel.”

### Global Warming And Simple Math

## The Scientific Consensus on Climate Change



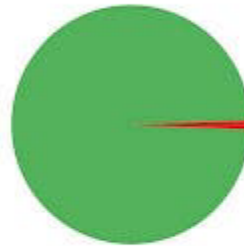
**97%**

Doran and  
Zimmerman 2009  
79 scientists



**97.5%**

Anderegg et al 2010  
908 scientists



**98.5%**

Cook et al 2013  
10,306 scientists

## Figure 11: Over 97% of Climate Scientists Agree that Global Warming is Real and Caused by Humans

McKibben likes to frame things in simple terms. He compares the Earth's atmosphere to a bucket. You can fill the bucket to the brim, but once it reaches that point, it can't hold anymore and overflows. Citing research by IPCC and other climate groups, McKibben says when our bucket for carbon emissions starts overflowing, catastrophic changes in average global temperatures, melting glaciers, and more powerful storms will be inevitable.

The IPCC says the "carbon budget" for the Earth is now at about 380 billion tons of carbon dioxide. To avoid exceeding our carbon budget — the point where carbon emissions tip the world over into an irreversible full blown climate disaster — 90% of all the fossil fuels currently buried underground will need to stay there, unburned.

The fossil fuel industry has plans on the table to extract enough coal, oil, and gas in the coming years to add extract *5 times* more coal, oil, and gas than the Earth can tolerate without going into total meltdown mode. "If you want to understand ... why the fossil fuel industry fights so hard," McKibben writes in *Rolling Stone*, we have to recognize that leaving all that fossil fuel in the ground "means stranding about \$100 trillion worth of assets in the soil."

### Global Warming & COP 28

The head of the next COP conference in the United Arab Emirates is Sultan Al Jaber. In a [SubStack blog post](#), McKibben says Al Jaber runs the Emirates renewable energy company Masdar, which has invested more than \$30 billion over the last two decades into renewable energy resources such as wind and solar. In the last two months, Al Jaber has told various international forums that "we have to rapidly reduce emissions" and that "oil and gas companies need to align around net zero," and that "we in the UAE are not shying away from the energy transition. We are running towards it."

But as an [article by The Guardian](#) this week revealed, the UAE is actually running in precisely the opposite direction. In fact, it has plans for the world's third largest expansion of oil and gas drilling. The busy Al Jaber in fact runs not just its renewable energy company but its fossil fuel company as well, and that one plans to spend \$150 billion over the next five years (compared, again, with the \$30 billion over the last two decades on the clean stuff) to enable an "accelerated growth strategy" for oil and gas production, McKibben writes.

### The Takeaway

If we listen to Bill McKibben, a planet that can sustain human life needs to stay below its carbon budget. It's simple math. The Earth is a bucket that can hold a certain amount of carbon dioxide before a warming process goes into overdrive. We are very close to that limit. If we exceed it, disaster is as certain as the next sunrise.

And yet...we continue to talk about fossil fuels as vital to our national security. America believes it should become a net exporter of oil and gas in order to maintain its position as a world leader, without ever stopping to consider what the world will be like if we exceed our carbon budget.

It's simple math, actually. Stop burning fossil fuels or stop living on Earth. It's our choice. Decisions don't get much simpler than that.