

CLIMATE

Exxon predicted global warming with remarkable accuracy years ago, study shows

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KEY POINTS

Three academics from Harvard and the University of Potsdam in Germany published a study in the journal Science on Thursday providing evidence that Exxon Mobil predicted global warming with incredible accuracy beginning in the late 1970s.

The report adds new details to previous reporting from Inside Climate News and others about how Exxon acknowledged human-caused climate change internally while denying it in public.

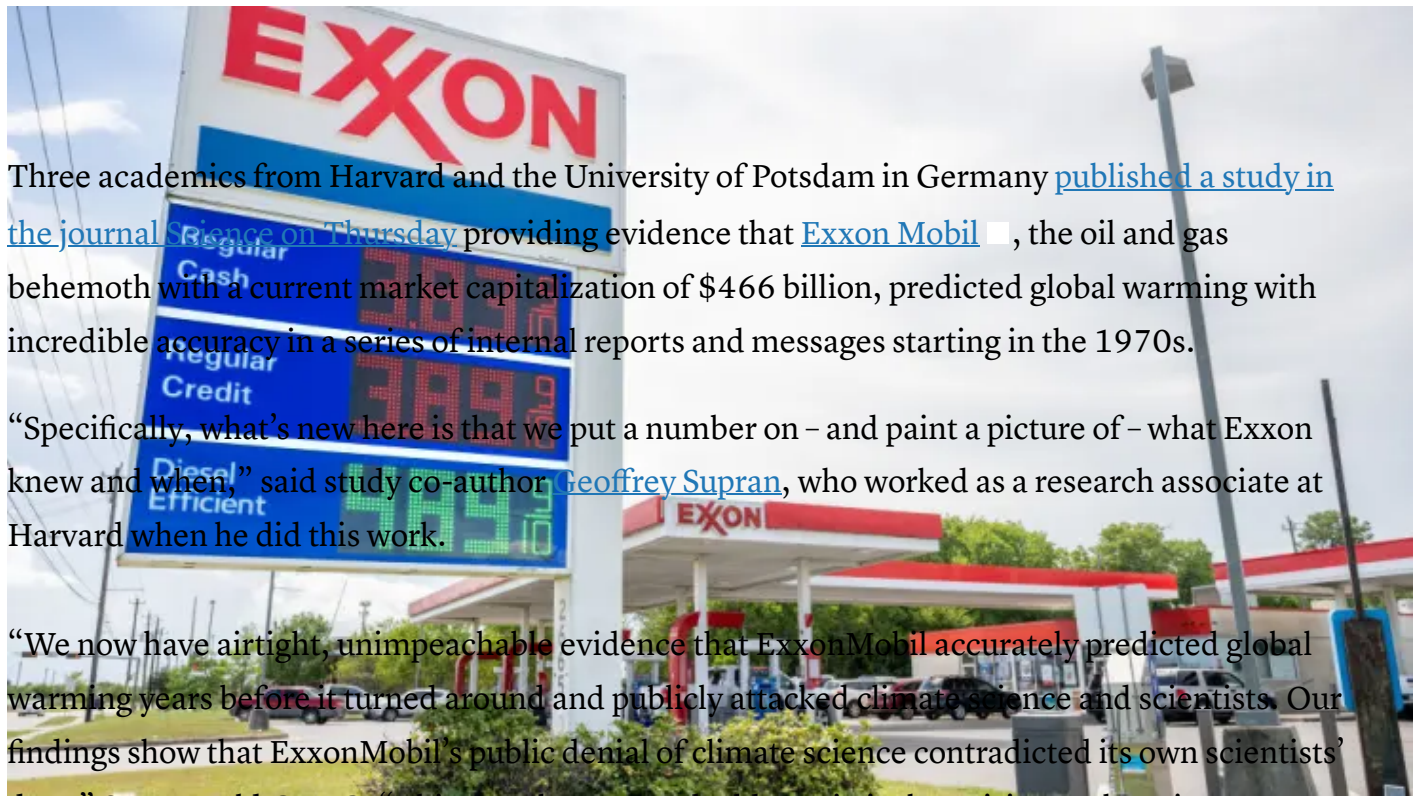
Exxon denies its wrongdoing, pointing to a court decision from 2019 that did not find the oil and gas company guilty of fraud in its climate change accounting.

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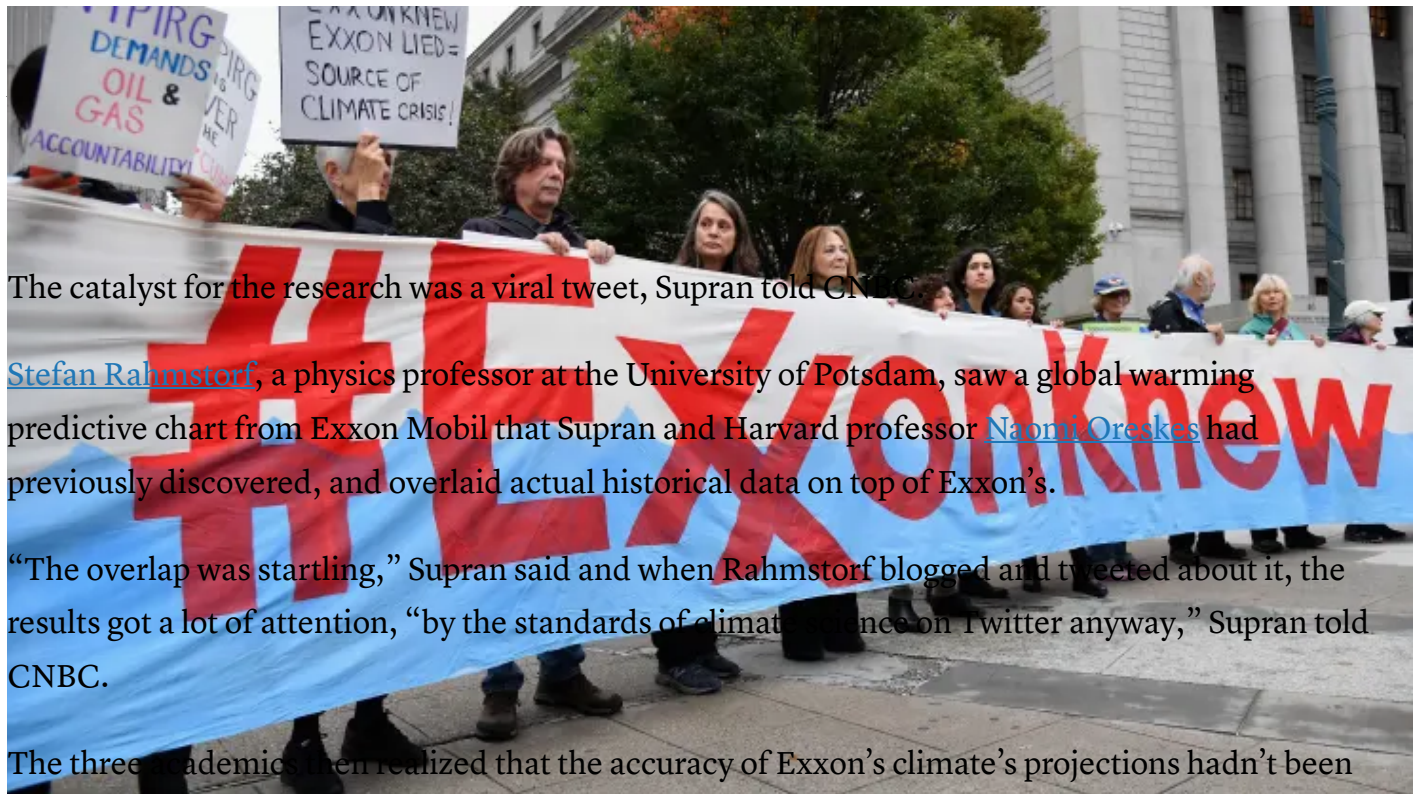
Three academics from Harvard and the University of Potsdam in Germany [published a study in the journal Science on Thursday](#) providing evidence that [Exxon Mobil](#) , the oil and gas behemoth with a current market capitalization of \$466 billion, predicted global warming with incredible accuracy in a series of internal reports and messages starting in the 1970s.

“Specifically, what’s new here is that we put a number on – and paint a picture of – what Exxon knew and when,” said study co-author [Geoffrey Supran](#), who worked as a research associate at Harvard when he did this work.

“We now have airtight, unimpeachable evidence that ExxonMobil accurately predicted global warming years before it turned around and publicly attacked climate science and scientists. Our findings show that ExxonMobil’s public denial of climate science contradicted its own scientists’ data,” Supran told CNBC. “This corroborates and adds statistical precision to the prior conclusions of scholars, journalists, lawyers, and politicians.”

The phrase and hashtag “ExxonKnew” have become a rallying cry after previous reporting from [Inside Climate News](#) and others showing that Exxon publicly contradicted its own understanding of climate science.

Exxon Mobil says the “ExxonKnew” movement is a [“coordinated campaign” working to “stigmatize”](#) the oil company, “creating the false appearance that ExxonMobil has misrepresented its company research and investor disclosures on climate change to the public.”



The catalyst for the research was a viral tweet, Supran told CNBC.

[Stefan Rahmstorf](#), a physics professor at the University of Potsdam, saw a global warming predictive chart from Exxon Mobil that Supran and Harvard professor [Naomi Oreskes](#) had previously discovered, and overlaid actual historical data on top of Exxon's.

“The overlap was startling,” Supran said and when Rahmstorf blogged and tweeted about it, the results got a lot of attention, “by the standards of climate science on Twitter anyway,” Supran told CNBC.

The three academics then realized that the accuracy of Exxon's climate's projections hadn't been formally studied, and teamed up to write this report. They were surprised to discover is the extent and accuracy of Exxon's knowledge of climate science.

“It was startling to plot all of the company's projections onto one graph and find them all line up so tightly around the real-world temperature rise that has ensued since their reports. That gave me pause, seeing quantitatively that Exxon didn't just *know* some climate science, they helped advance it,” Supran told CNBC. “They didn't just vaguely know ‘something’ about global warming decades ago, they knew as much as independent academic and government scientists did. Arguably, they knew all they needed to know.”

According to their research, the academics found that [between 63% and 83%](#) of the climate projections Exxon made were accurate in predicting future climate change and global warming. Exxon predicted that climate change would cause global warming of $0.20^{\circ} \pm 0.04$ degrees Celsius per decade, which is the same as academic and governmental predictions that came out between 1970 and 2007.

The study in *Science* builds on work done by investigative journalists at [Inside Climate News back in 2015](#) and Democratic lawmakers at the [House Committee on Oversight and Reform](#), among many others.

Exxon continues to deny its wrongdoing.



“This issue has come up several times in recent years and, in each case, our answer is the same: those who talk about how ‘Exxon Knew’ are wrong in their conclusions,” Todd Spitler, spokesperson for Exxon Mobil, told CNBC.

Spitler pointed to the results of a 2019 case heard before the [New York State Supreme Court by Judge Barry Ostrager](#) which did not find the oil and gas company guilty of fraud in its [climate change regulation accounting](#).

“What the evidence at trial revealed is that ExxonMobil executives and employees were uniformly committed to rigorously discharging their duties in the most comprehensive and meticulous manner possible,” Ostrager wrote, and Spitler passed along to CNBC. “The testimony of these witnesses demonstrated that ExxonMobil has a culture of disciplined analysis, planning, accounting, and reporting.”



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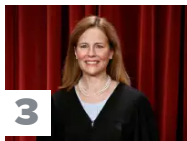
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