
SUSTAINABILITY

Exxon Knew about Climate Change almost 40 years ago

A new investigation shows the oil company understood the science before it became a public issue and spent millions to promote misinformation

By Shannon Hall on October 26, 2015

[Véalo en español](#)



The company's knowledge of climate change dates back to July 1977, when its senior scientist James Black delivered a sobering message on the topic. *Credit: Getty Images/MARS*

Exxon was aware of climate change, as early as 1977, 11 years before it became a public issue, according to a recent

investigation from InsideClimate News. This knowledge did not prevent the company (now ExxonMobil and the world's largest oil and gas company) from spending decades refusing to publicly acknowledge climate change and even promoting climate misinformation—an approach many have likened to the lies spread by the tobacco industry regarding the health risks of smoking. Both industries were conscious that their products wouldn't stay profitable once the world understood the risks, so much so that they used the same consultants to develop strategies on how to communicate with the public.

Experts, however, aren't terribly surprised. "It's never been remotely plausible that they did not understand the science," says Naomi Oreskes, a history of science professor at Harvard University. But as it turns out, Exxon didn't just understand the science, the company actively engaged with it. In the 1970s and 1980s it employed top scientists to look into the issue and launched its own ambitious research program that empirically sampled carbon dioxide and built rigorous climate models. Exxon even spent more than \$1 million on a tanker project that would tackle how much CO₂ is absorbed by the oceans. It was one of the biggest scientific questions of the time, meaning that Exxon was truly conducting unprecedented research.

In their eight-month-long investigation, reporters at InsideClimate News interviewed former Exxon employees, scientists and federal officials and analyzed hundreds of pages of internal documents. They found that the company's knowledge of climate change dates back to July 1977, when its senior scientist James Black delivered a sobering message on the topic. "In the first place, there is general scientific agreement that the most likely manner in which mankind is influencing the global climate

is through carbon dioxide release from the burning of fossil fuels," Black told Exxon's management committee. A year later he warned Exxon that doubling CO₂ gases in the atmosphere would increase average global temperatures by two or three degrees—a number that is consistent with the scientific consensus today. He continued to warn that "present thinking holds that man has a time window of five to 10 years before the need for hard decisions regarding changes in energy strategies might become critical." In other words, Exxon needed to act.

But ExxonMobil disagrees that any of its early statements were so stark, let alone conclusive at all. "We didn't reach those conclusions, nor did we try to bury it like they suggest," ExxonMobil spokesperson Allan Jeffers tells *Scientific American*. "The thing that shocks me the most is that we've been saying this for years, that we have been involved in climate research. These guys go down and pull some documents that we made available publicly in the archives and portray them as some kind of bombshell whistle-blower exposé because of the loaded language and the selective use of materials."

One thing is certain: in June 1988, when NASA scientist James Hansen told a congressional hearing that the planet was already warming, Exxon remained publicly convinced that the science was still controversial. Furthermore, experts agree that Exxon became a leader in campaigns of confusion. By 1989 the company had helped create the Global Climate Coalition (disbanded in 2002) to question the scientific basis for concern about climate change. It also helped to prevent the U.S. from signing the international treaty on climate known as the Kyoto Protocol in 1998 to control greenhouse gases. Exxon's tactic not only worked on the U.S. but also stopped other countries, such as China and

India, from signing the treaty. At that point, “a lot of things unraveled,” Oreskes says.

But experts are still piecing together Exxon’s misconception puzzle. Last summer the Union of Concerned Scientists released a complementary investigation to the one by InsideClimate News, known as the [Climate Deception Dossiers \(pdf\)](#). “We included a memo of a coalition of fossil-fuel companies where they pledge basically to launch a big communications effort to sow doubt,” says union president Kenneth Kimmel. “There’s even a quote in it that says something like ‘Victory will be achieved when the average person is uncertain about climate science.’ So it’s pretty stark.”

Since then, Exxon has spent more than \$30 million on think tanks that promote climate denial, [according to Greenpeace](#). Although experts will never be able to quantify the damage Exxon’s misinformation has caused, “one thing for certain is we’ve lost a lot of ground,” Kimmell says. Half of the greenhouse gas emissions in our atmosphere were released after 1988. “I have to think if the fossil-fuel companies had been upfront about this and had been part of the solution instead of the problem, we would have made a lot of progress [today] instead of doubling our greenhouse gas emissions.”

Experts agree that the damage is huge, which is why they are likening Exxon’s deception to the lies spread by the tobacco industry. “I think there are a lot of parallels,” Kimmell says. Both sowed doubt about the science for their own means, and both worked with the same consultants to help develop a communications strategy. He notes, however, that the two diverge in the type of harm done. Tobacco companies threatened

human health, but the oil companies threatened the planet's health. "It's a harm that is global in its reach," Kimmell says.

To prove this, Bob Ward—who on behalf of the U.K.'s Royal Academy sent a letter to Exxon in 2006 claiming its science was "inaccurate and misleading"—thinks a thorough investigation is necessary. "Because frankly the episode with tobacco was probably the most disgraceful episode one could ever imagine," Ward says. Kimmell agrees. These reasons "really highlight the responsibility that these companies have to come clean, acknowledge this, and work with everyone else to cut out emissions and pay for some of the cost we're going to bear as soon as possible," Kimmell says.

It doesn't appear, however, that Kimmell will get his retribution. Jeffers claims the investigation's finds are "just patently untrue, misleading, and we reject them completely"—words that match Ward's claims against them nearly a decade ago.