

Microsoft's Hypocrisy on AI

Karen Hao

Microsoft executives have been thinking lately about the end of the world. In a white paper [published](#) late last year, Brad Smith, the company's vice chair and president, and Melanie Nakagawa, its chief sustainability officer, described a "planetary crisis" that AI could help solve. Imagine an AI-assisted tool that helps reduce food waste, to name one example from the document, or some future technology that could "expedite decarbonization" by using AI to invent new designs for green tech.

But as Microsoft attempts to buoy its reputation as an AI leader in climate innovation, the company is also selling its AI to fossil-fuel companies. Hundreds of pages of internal documents I've obtained, plus interviews I've conducted over the past year with 15 current and former employees and executives, show that the tech giant has sought to market the technology to companies such as ExxonMobil and Chevron as a powerful tool for finding and developing new oil and gas reserves and maximizing their production—all while publicly committing to dramatically reduce emissions.

Although tech companies have long [done business](#) with the fossil-fuel industry, Microsoft's case is notable. It demonstrates how the AI boom contributes to one of the most pressing issues facing our planet today—despite the fact that the technology is often lauded for its supposed potential to improve our world, as when Sam Altman [testified](#) to Congress that it could address issues such as "climate change and curing cancer." These deals also show how Microsoft can use the vagaries of AI to talk out of both sides of its mouth, courting the fossil-fuel industry while asserting its environmental bona fides. (Many of the documents I viewed have been submitted to the Securities and Exchange Commission as part of a whistleblower complaint alleging that the company has omitted from public disclosures "the serious climate and environmental harms caused by the technology it provides to the fossil fuel industry," arguing that the information is of material and financial importance to investors. A Microsoft spokesperson said the company was unaware of the filing and had not been contacted by the SEC.)

For years, Microsoft routinely promoted its work with companies such as [Schlumberger](#), [Chevron](#), [Halliburton](#), [ExxonMobil](#), [Baker Hughes](#), and [Shell](#). Around 2020, the same year Microsoft made ambitious climate commitments that included a goal to reach [carbon negativity](#) by 2030, the tech firm grew quieter about such partnerships and focused on messaging about the transition to net zero. Behind the scenes, Microsoft has continued to seek business from the fossil-fuel industry; documents related to its overall pitch strategy show that it has sought energy-industry business in part by marketing the abilities to optimize and automate drilling and to maximize oil and gas production. Over the past year, it has leaned into the generative-AI rush in an effort to clinch more deals—each of which can be worth more than hundreds of millions of dollars. Microsoft employees have noted that the oil and gas industries could represent a market opportunity of \$35 billion to \$75 billion annually, according to documents I viewed.

Based on the documents, executives see these generative-AI tools—the buzziest new technology since the iPhone, and one that Microsoft has invested billions of dollars in—as a kind of secret weapon for client outreach. During an internal conference call with more than 200 employees last September, a Microsoft energy exec named Bilal Khursheed noted that, since the company's generative-AI investments, the energy industry was turning to Microsoft for guidance on AI in a way that had perhaps "never happened before." "We need to maximize this opportunity. We need to lay out the pathway to adopting generative AI," he said, according to a transcript of the meeting I viewed. One such pathway? Using generative algorithms to model oil and gas reservoirs and maximize their extraction, Hema Prapoo, Microsoft's global lead of oil and gas business, said later in the meeting. Several documents also emphasize Microsoft's unique relationship with OpenAI as an additional selling point for energy clients, suggesting that GPT could drive productivity separate from fossil-fuel extraction. (OpenAI did not respond to a

request for comment.)

From a business perspective, of course, Microsoft's pursuit of massive deals with fossil-fuel companies makes sense. And such partnerships do not necessarily mean that the company is contradicting its climate commitments. Microsoft executives have made the case that AI can also help fossil-fuel companies improve their environmental footprint. Indeed, both Microsoft and its energy customers defend their partnerships by arguing that their goals work in harmony, not contradiction. They told me that AI services can make oil and gas production more efficient, increasing production while reducing emissions—a refrain I saw repeated in documents as part of Microsoft's sales pitches. In addition, some of these companies run wind farms and solar parks, which further benefit from Microsoft's cloud technologies. Microsoft has also touted exploratory academic research into how AI could be used to discover new materials for reducing CO2 in the atmosphere.

The idea that AI's climate benefits will outpace its environmental costs is largely speculative, however, especially given that generative-AI tools are themselves [tremendously resource-hungry](#). Within the next six years, the data centers required to develop and run the kinds of next-generation AI models that Microsoft is investing in may use [more power](#) than all of India. They will be [cooled by millions upon millions of gallons of water](#). All the while, scientists agree, the world will get warmer, its climate more [extreme](#).

[Read: AI is taking water from the desert](#)

Microsoft isn't a company that exists to fight climate change, and it doesn't have to assume responsibility for saving our planet. Yet the company is trying to convince the public that by investing in a technology that is also being used to enrich fossil-fuel companies, society will be better equipped to resolve the environmental crisis. Some of the company's own employees described this idea to me as ridiculous. To these workers, Microsoft's energy contracts demonstrate only the unsavory reality of how the company's AI investments are actually used. Driving sustainability forward? Maybe. Digging up fossil fuels? As Prapoo put it in that September conference call, it's a "game changer."

Before Holly Alpine left Microsoft earlier this year—fed up, she said, with the company's continued support of fossil-fuel extraction—she had spent nearly a decade there working in roles focused on energy and the environment. Most recently, she headed a program within Microsoft's cloud operations and innovation division that invests in environmental sustainability projects in the communities that host the company's data centers. Alpine had also co-founded a sustainability interest group within the company seven years ago that thousands of employees now belong to. (Like the other named sources in this story, she did not provide any of the documents I reviewed.)

Members of this group initially concerned themselves with modest corporate matters, such as getting the company's dining halls to cut down on single-use items. But their ambitions grew, partly in response to Microsoft's own [climate commitments](#) in 2020. These were made during a moment of heightened climate activism; millions around the world, including [tech workers](#), had just rallied to protest the lack of coordinated action to cut back carbon emissions.

Microsoft has failed to reduce its annual emissions each year since then. Its latest environmental report, [released this May](#), shows a 29 percent increase in emissions since 2020—a change that has been driven in no small part by recent AI development, as the company explains in the report. "All of Microsoft's public statements and publications paint a beautiful picture of the uses of AI for sustainability," Alpine told me. "But this focus on the positives is hiding the whole story, which is much darker."

The root issue for Alpine and other advocates is Microsoft's unflagging support of fossil-fuel extraction. In March 2021, for example, Microsoft expanded its partnership with Schlumberger, an oil-technology company, to develop and launch an AI-enhanced service on Microsoft's Azure platform. Azure provides cloud computing to a variety of organizations, but this product was tailor-made for the oil and gas industries, to assist in the production of fossil fuels, among other uses. The hope, according to two internal presentations I viewed, was that it would help Microsoft capture business from many of the leading fossil-

fuel providers. A spokesperson for Schlumberger declined to comment on this deal.

Recent AI advances have complicated the picture, though they have not changed it. One slide deck from January 2022 that I obtained presented an analysis of how Microsoft's tools could allow ExxonMobil to increase its annual revenue by \$1.4 billion—\$600 million of which would come from maximizing so-called sustainable production, or oil drilled using less energy. (An ExxonMobil representative declined to comment.) Other documents provided details on multiple deals Chevron has signed with Microsoft to access the tech giant's AI platform and other cloud services. An executive strategy memo from June 2023 indicated that Microsoft hoped to pitch Chevron on adopting OpenAI's GPT-3.5 and GPT-4 to "deliver more business value." A Chevron spokesperson told me that the company uses AI in part to "identify efficiencies in exploration and recovery and help reduce our environmental footprint." There is the tension. On the one hand, AI may be able to help reduce drilling's toll on the environment. On the other hand, *it's used for drilling*.

[Read: Every time you post on Instagram, you're turning on a light bulb forever](#)

How do these companies weigh the environmental benefits of a more efficient drilling operation against the environmental harms of being able to drill more, faster? A Shell spokesperson provided a quantifiable example of their thinking: Microsoft's Azure AI platform allowed Shell to calculate the best settings for its equipment, driving down carbon emissions at several of its natural-gas facilities. One facility saw an estimated reduction of 340,000 metric tons of carbon dioxide per year. This seems impressive: [Using estimated emissions from the EPA](#), this is roughly the amount of CO₂ generated by 74,000 cars annually. Relative to Shell's total emissions, however, it's practically insignificant. According to [the company's own reporting](#), Shell was responsible for about 1.2 billion metric tons of emissions last year.

Within Microsoft, members of the sustainability group have repeatedly petitioned leadership to change its stance on these contracts. Google, for example, [announced in 2020](#) that it would not make custom AI tools for fossil-fuel extraction—couldn't Microsoft do the same? "We've never advocated for cutting ties with the fossil-fuel industry," Alpine told me. Microsoft could work with clients on their transition to clean energy, without explicitly supporting extraction, Alpine reasoned.

To help make her case, Alpine presented a memo to Smith in December 2021 that calculated the effects of the company's oil and gas deals. She pointed, for example, to a single 2019 deal with ExxonMobil that could purportedly "expand production by as much as 50,000 oil-equivalent barrels a day by 2025," [according to a Microsoft press release](#). Those extra barrels would produce an estimated 6.4 million metric tons of emissions, drastically outweighing a [carbon-removal pledge](#) that Microsoft made in 2020, she wrote. (I verified her estimate with multiple independent carbon analysts. ExxonMobil declined to comment.)

Employee advocates asked company leadership to amend its "Responsible AI" [principles](#) to address the environmental consequences of the technology. The group also recommended further restrictions on fossil-fuel-extraction projects. Around this time, Microsoft instead released [a new set of principles](#) governing the company's engagements with oil and gas customers. It was co-authored by Darryl Willis, the corporate vice president of Microsoft's energy division (and a former BP executive who served as [BP's de facto spokesperson during the Deepwater Horizon crisis](#)). Unsurprisingly, it did not adopt all of the group's suggestions.

What it did include was a stipulation that Microsoft will support fossil-fuel extraction only for companies that have "publicly committed to net zero carbon targets." This may be cold comfort for some: [A 2023 report](#) from the Net Zero Tracker, a collaboration between nonprofits and the University of Oxford, found that such commitments from fossil-fuel companies are "largely meaningless." Most firms claim a net-zero target that fully accounts only for their operational emissions, such as whether their offices, car fleets, or equipment are powered with green energy, while ignoring much of the emissions from the fossil fuels they produce.

When I talked with Willis about Microsoft's energy business, he repeated over and over that "it's

complicated.” Willis explained that his team is focused on expanding energy access—“There are a billion people on the planet who don’t have access to energy,” he said—while also trying to accelerate the decarbonization of the world’s energy. I asked him how Microsoft planned to achieve the latter goal when it’s chasing contracts that help companies drill for fossil fuels. “Our plan, candidly stated, is to make sure we’re partnering with the right organizations who are leaning in and trying to accelerate and pull this [sustainability] journey forward,” he said. In other words, the company does not see its approach to selling the technology as incompatible with its sustainability goals. “AI will solve more problems than it creates,” Willis told me. “A lot of the dilemmas that we’re facing with energy will be resolved because of the relationship with generative AI.”

Hoping to understand more about the company’s perspective, I also spoke with Alex Robart, a former Microsoft employee who left in 2022 and worked with Willis to write the energy principles. He called Microsoft’s approach practical. “Has Big Energy, incumbent energy, in a lot of ways behaved pretty badly, particularly in the past 25 to 40 years in the U.S. in particular, with regards to climate? Yeah, absolutely,” he told me. But he argued that fossil-fuel companies have to be part of the transition to cleaner alternatives and will do so only if they have financial incentives. “You need their balance sheets; you need their capital; you need their project-management expertise. We’re talking about building massive infrastructure, and building infrastructure is hard,” he said. Without that, “it’s fundamentally not going to work.”

[Read: America’s new climate delusion](#)

In the meantime, Microsoft has “not committed to a timeline” for phasing out work that is geared toward finding and developing new fossil-fuel reserves, a spokesperson said.

Lucas Joppa, Microsoft’s first chief environmental officer, who left the company in 2022, fears that the world will not be able to reverse the current trajectory of AI development even if the technology is shown to have a net-negative impact on sustainability. Companies are designing specialized chips and data centers just for advanced generative-AI models. Microsoft is [reportedly](#) planning a \$100 billion supercomputer to support the next generations of OpenAI’s technologies; it could require as much energy annually as 4 million American homes. Abandoning all of this would be like the U.S. outlawing cars after designing its entire highway system around them.

Therein lies the crux of the problem: In this new generative-AI paradigm, uncertainty reigns over certainty, speculation dominates reality, science defers to faith. The hype around generative AI is accelerating fossil-fuel extraction while the technology consumes unprecedented amounts of energy. As Joppa told me: “This must be the most money we’ve ever spent in the least amount of time on something we fundamentally don’t understand.”