Oil companies’ unexpected plan to tackle climate change

Saudi Arabia and other big fossil fuel entities sign onto initiatives to cut methane as they try to position themselves as part of the fix for climate change.

By Timothy Puko

Many of the world’s biggest oil companies announced Saturday that they would slash methane emissions from their wells and drilling by more than 80 percent by 2030, an ambitious plan that could help curb runaway global warming.

The unexpected pledge, which could be one of the most consequential results from the United Nations Climate Change Conference, or COP28, underscores the fossil fuel industry’s profound influence at this year’s talks in Dubai. Sultan Al Jaber — the Emirati oil executive leading COP28 — had pushed for the international pact as a way to demonstrate how petrostates and oil and gas companies can speed the transition to cleaner energy.

The plan commits state-owned giants such as Saudi Aramco, along with corporate supermajors including ExxonMobil, to limit emissions of the climate superpollutant from their drilling and production work. It
also includes international monitoring efforts intended to hold companies to their promises, and came out on the same day that U.S. officials announced new rules they say would limit methane emissions from the oil and gas industry by nearly 80 percent over the next 15 years.

Methane, which is 80 times as potent as carbon dioxide within 20 years after it is released, is one of the most powerful forces at trapping heat. It accounts for more than half of the human-caused warming happening now, though it makes up only a quarter of global emissions. Halving methane emissions by 2030 could slow the rate of global warming by more than 25 percent and start a path to prevent 0.5 degrees Celsius of warming by 2100, according to 2021 research by a team of scientists from the Environmental Defense Fund and several U.S. universities.

The energy sector ranks as the second largest source of methane emissions from human activity, and most of that comes from oil and gas, according to the International Energy Agency. The oil and gas industry alone accounts for 14 percent of the world’s annual methane emissions, the agency estimates.

“If you add it all together, what it amounts to is really momentum building at a time when we really need it,” said Gina McCarthy, who once was President Biden’s top climate adviser and was the first to introduce methane limits on oil and gas operations as EPA administrator under Barack Obama. “People are ready to rally around an answer.”

For the oil-rich United Arab Emirates, COP28 has been a forum for them to show that oil and gas can play a vital role in powering the world even as fossil fuels warm the planet. Currently the industry leaks about 2 to 3 percent of all the gas it produces directly into the atmosphere, according to the Environmental Defense Fund. The pact would require them to reduce those emissions to just 0.2 percent of their output.

Charles Hendry, a former U.K. minister of state for energy and current fellow at the Atlantic Council Global Energy Center, said in an email that the industry needs to cut its emissions faster. “The underlying message is that this is their last, best chance to have an impact.”

Al Jaber said he is committed to transparency and hoped more companies would join the pledge, which covers more than 40 percent of global oil production. “We must bring everyone in to be accountable,” he said.

At COP28 on Saturday, Environmental Protection Agency Administrator Michael Regan detailed final standards to limit methane at U.S. oil and gas wells. The agency said it would impose stricter requirements for preventing and stopping leaks on about 900,000 new and existing wells, a move the oil industry once fought for years but which now many leading companies accept.

Separately in Dubai, Vice President Harris announced Saturday that the U.S. would pledge $3 billion to the Green Climate Fund, the United Nations’s flagship climate fund. Headquartered in South Korea, the fund helps vulnerable countries shift away from fossil fuels and adapt to increasing weather extremes.

“We are demonstrating through action how the world can and must meet this crisis,” Harris said, two days after the United States was criticized for a relatively paltry pledge — $17.5 million — to a separate fund addressing climate-related damage and emergencies.
Industry seeks to position itself as problem solver

The announcements reflect how the oil and gas industry — long vilified by climate activists — has become central to global climate negotiations.

Because methane is so potent, U.S. officials, the companies and climate advocates are focusing on it as one of the fastest ways to limit the acceleration of global warming. If successfully implemented, the initiatives could be a historic climate achievement, supporters say.

“If those promises are met, it’s got the potential to cut temperatures we would otherwise see within the next decade ... more than anything agreed to at prior COPs, more than anything I’ve seen in my entire career over 30 years,” said Fred Krupp, president of the Environmental Defense Fund. “There’ve been a lot of pledges made at COP that have never been fulfilled. We feel like we have to set up a robust accountability system.”

Some activist groups, however, said the rules fall short of addressing the real problem — fossil fuel production. “It’s not enough to tinker around the edges,” said Gabrielle Levy, associate director of methane gas communications for the group Climate Nexus. She said the world needs to take “concrete steps to cut those emissions at the source — by eliminating the source.”

Global efforts on methane have taken off in recent weeks, including a breakthrough at Sunnylands, Calif., in talks between U.S. climate envoy John F. Kerry and Xie Zhenhua, his counterpart from China, the world’s largest greenhouse gas emitter. China publicly committed for the first time to curbing methane and other greenhouse gases across its economy by 2035, but did not set any specific limits.

Former U.S. energy secretary Ernest Moniz, now a COP28 advisory committee member, said society needs large international coalitions to address climate change. Bringing in oil and gas companies is especially helpful to work at the scale required, he added.

“I expect that COP28 will deliver,” Moniz said in an email.

Some companies and environmentalists initially pitched vast and newly cheap supplies of natural gas as a cleaner alternative to coal, a “bridge fuel” until fully carbon-free sources of energy could supplant fossil fuels.

But new science, showing that leaks from methane undid much of gas’s climate benefits, undercut those claims. It ushered in a wave of regulatory crackdowns and political debates, and led oil and gas companies to spend millions to protect their businesses with new technology to detect and stop those leaks.
Levels of methane in the atmosphere have continued to rise. The National Oceanic and Atmospheric Administration recorded the fourth-largest annual increase last year since measurements began in 1983. Levels are now 2.5 times what they were in preindustrial times.

Officials from the European Union and the United States have pushed for China and other countries to join the Global Methane Pledge, which aims to cut methane emissions 30 percent by the end of the decade. Further expanding this coalition ranks among the Biden administration’s top priorities for the U.N. climate talks, U.S. officials have said.

They hope to shift that pledge work to action through these negotiations providing new spending to locate and address methane leak hot spots in several countries. U.S. officials are announcing nearly $1 billion in grants from government and philanthropic sources, particularly for poorer countries that have state-owned oil and gas producers that may be cash strapped.

U.S. officials have been working with such nations, including Turkmenistan, the world’s fourth largest methane emitter, and Kazakhstan, the 12th largest. Both joined the methane pact and Kazakhstan announced plans for new national standards in a bilateral deal with the United States. To receive the grant money, countries would have to commit to reducing their methane emissions from oil and gas production to nearly zero.

The British giant BP began trying to limit methane emissions as far back as the 1990s, but few others did because of the work’s low financial returns, said John Browne, the company’s former chief executive. Companies need a combination of incentives and penalties to spur action, he added, and the state-owned companies must be a part of the deal because they produce most of the world’s oil.
Al Jaber has spent this year prodding companies to join what he is calling the Oil and Gas Decarbonization Charter, which also requires commitments to stop burning off gas as waste — a process known as flaring — at their well sites by 2030 and effectively zero out all greenhouse gas emissions from their operations from 2050.

The key element is getting giant and often secretive state-owned oil companies to join the commitment and agree to outside monitoring, said Browne, who now has interest in a company that monitors methane emissions through satellite data. Brazil’s and Libya’s state-owned producers, among others, are also part of the deal, and more than a dozen such companies are making first-time commitments to eliminate emissions.

“It’s really important they pledge, and it’s even more important that we monitor it and what is said is done,” he said.

Several environmental and international groups Saturday also announced a coalition to do that, backed by $40 million from Bloomberg Philanthropies. The IEA, an arm of the U.N., EDF and the energy think tank RMI — all groups that already gather or use satellites and data to track methane emissions — agreed to collaborate and expand their efforts to hold oil and gas companies to their new methane commitments.

They said they would work together to share that data with financiers, commodity buyers and governments, and help countries, especially developing economies, to address their leaks. They also plan to advocate together for stronger government regulations.

JPMorgan Chase — a major funder of energy companies — had issued an analysis in the days leading up to COP28 encouraging oil and gas companies to aggressively reduce emissions, calling it an opportunity for both businesses and climate. It cited IEA estimates that the industry could eliminate more than 75 percent of its methane emissions with existing and well-known technology.

‘Unacceptably high level of annual emissions’

The industry has made strides in producing oil and gas with less emissions, but only limited improvement, according to the IEA.

“In our view, we are at a constant but unacceptably high level of annual emissions from the energy sector,” Tim Gould, the IEA’s chief energy economist, said in a phone call with reporters. “We still remain far above where the industry should be given the ease with which these emissions can be abated.”

Regan said in a statement that Biden was taking “strong action” Saturday to make the industry move faster. “We’ve crafted these technology standards to advance American innovation and account for the industry’s leadership in accelerating methane technology.”
Michael Regan, the administrator of the U.S. Environmental Protection Agency, speaks at the U.S. Center at the COP28 U.N. Climate Summit in Dubai on Saturday. (Joshua A. Bickel/AP)

The new rule, which largely resembles proposals the administration made over the past two years, includes a phaseout of flaring at new wells; requirements for more leak monitoring with the help of new technology; limits on emissions from vulnerable equipment such as valves, pumps and storage tanks; and a program to spot giant, unintentional releases that are often short-lived but the biggest sources of methane emissions.

“Even as we press to phase out our reliance on fossil fuels, we must work to clean up existing operations rapidly and rigorously, and today’s announcement does just that,” said White House National Climate Adviser Ali Zaidi.

The agency also will issue first-time guidance to states that will have to set reduction requirements on existing sources of methane. The Clean Air Act places the details of such plans in the hands of state agencies, and the EPA is giving them two years to complete those plans under these new rules, the federal agency said.

“They’re the strongest methane regulations on the planet,” Krupp said.

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Christian Shepherd in Dubai, Chico Harlan in Rome and Brady Dennis in Durham, N.C. contributed to this report.