

COP28

Global Methane Pledge's slow start

This article is part of IATP's Dubai COP28 Series published ahead of the U.N. Framework Convention on Climate Change (UNFCCC) annual Conference of the Parties (COP), this year held in Dubai, United Arab Emirates. The full series can be read [here](#).

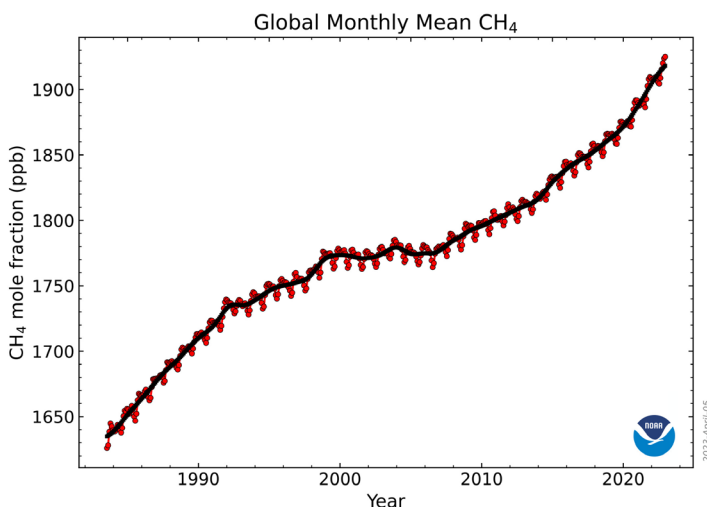
Two years ago, more than 120 countries (now 150), led by the United States and European Union, signed the [Global Methane Pledge](#) at COP26. The Pledge committed to reduce global methane emissions 30% by 2030, but only two years later, countries are badly off track. According to [National Oceanic and Atmospheric Administration \(NOAA\)](#), atmospheric methane increased 14 parts per billion in 2022, the fourth largest increase since 1983 after a record increase in 2021. Despite agriculture's role as the world's largest source of anthropogenic methane (mostly from ruminant animals), governments continue to focus

methane reduction efforts narrowly on the oil and gas sector. When countries meet again at the Methane Ministerial during COP28, it will be another test of whether the voluntary Pledge can spur meaningful action.

Reducing methane is considered particularly critical in the fight against climate change. In 2021, the Intergovernmental Panel on Climate Change (IPCC) [urged action to reduce methane](#) because the gas, while more potent than carbon dioxide (80 times more potent over a 20-year period), only stays in the atmosphere for around a decade. Sharp reductions in methane can bring more immediate climate benefits than reductions of carbon dioxide, which can stay in the atmosphere for up to 1,000 years.

Agriculture is the largest anthropogenic source of methane, responsible for about one-quarter of global emissions, with the [livestock sector](#) as the single largest contributor (32%). Even those numbers may be underestimated. [In a report](#) earlier this year, the International Energy Agency (IEA) concluded that governments have significantly underestimated methane emissions overall, including from agriculture.

There is also growing evidence that the world's largest meat and dairy companies are driving the rise in agriculture methane emissions. Last year, IATP and the Changing Markets Foundation issued a [report](#) finding



Source: [NOAA](#)



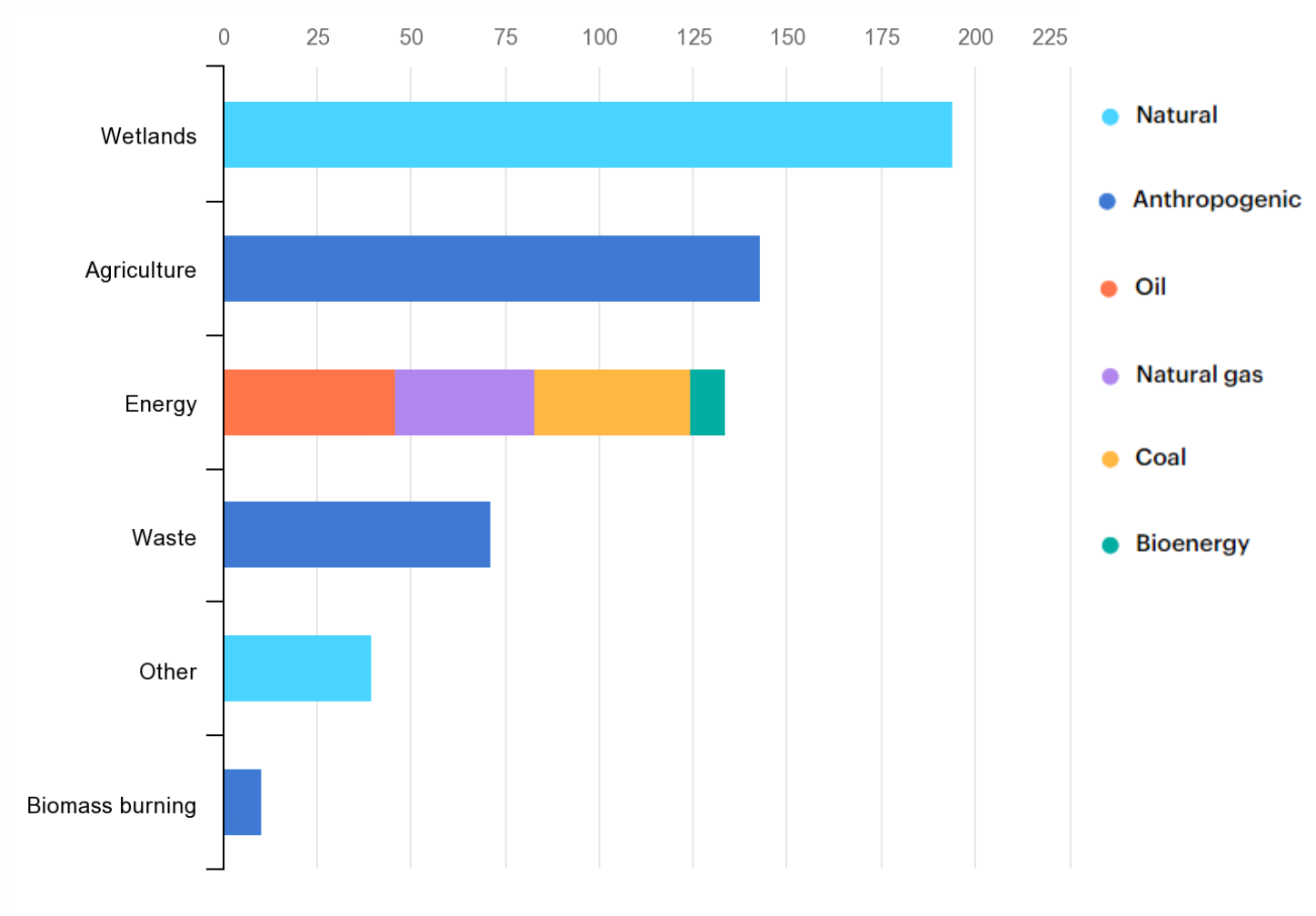
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Sources of Methane Emissions



Source: [IEA](#)

that 15 of the largest dairy and meat companies emit more methane than many countries, including Russia, Australia, Germany and Canada. Yet only six of these companies report their greenhouse gas emissions within their supply chain (including at the farm level), and none report their supply chain methane emissions. As troubling, the emissions from these companies are rising. Last month, [FAIRR reported](#) that the GHG emissions of the biggest meat and dairy companies continue to grow.

The U.S. Methane Reduction Plan Sidesteps the CAFO problem

Following COP26, the U.S. published its Methane Reduction Plan and [updated that plan](#) slightly prior to COP27. [IATP's analysis of the Biden plan](#) was sharply critical of the limited strategies to address agriculture methane; including a focus almost exclusively on the promotion of methane digesters on giant manure lagoons created at large-scale dairy, beef and hog operations. These digesters are enormously expensive, making them only practical for the largest Concentrated Animal Feeding Operations (CAFOs). By providing an additional income source for waste to CAFOs, digesters give these operations a market advantage over small and mid-sized farms, something the [dairy industry](#) is already wary about. They also create a perverse incentive to expand herd size

to produce more manure. Digesters don't capture methane from the animals themselves, who emit the bulk of methane from CAFOs, creating the potential for additional methane emissions from expanded herd sizes. Many [rural communities oppose the](#) use of digesters to capture and produce manure-based gas because of the residual air and water pollution. There continue to be questions about how much methane these projects actually capture, with very little independent data available. [Recent research](#) indicates that leaks from biogas projects are higher than from natural gas projects, [methane losses](#) can be as high as 15% and digester use can actually [increase other types of air pollution](#). A series of recent [digester-related spills](#) have also highlighted the risks to rural communities from these projects.

The Biden administration's focus on digesters is at least a recognition that large CAFO methane emissions are a problem. The [U.S. Environmental Protection Agency reported](#) earlier this year that agriculture methane in the U.S. increased nearly 16% since 1990, with most of the emissions tied to the transition to large-scale CAFOs in dairy and hog operations and the liquifying of manure in large lagoons at these CAFOs. U.S. methane emissions from manure increased a shocking 69% since 1990. CAFO manure is also a major source of another potent GHG nitrous oxide. Instead of directly addressing the multiple pollution issues associated with large CAFOs, the Biden Methane Reduction Plan, through its use of several subsidy programs, threatens to further entrench and even expand this polluting system.

The Biden administration's support for manure-based methane production has faced pushback from environmental justice and family farm groups and members of Congress. Last year, five [senators wrote the U.S. EPA and USDA](#) calling for limits on the use of incentives to support methane digesters on large-scale animal operations. In December 2022, more than 100 organizations [wrote the USDA](#) calling for no new farm conservation spending from the Inflation Reduction Act be used for manure-based biogas. Last month, nearly [200 groups echoed that call](#) to the USDA after the Department categorized methane digesters as a "climate-smart practice."

The Biden administration has backed biogas through multiple farm programs and new [tax credits](#). Last year, the [USDA created](#) the Partnership for Climate Smart

Commodities program, which distributed more than \$3 billion to projects it deemed climate smart. Much of that funding went to big dairy and meat companies (like Tyson, JBS, Smithfield, Danone and Nestle), including multiple projects that support biogas. The USDA's [Rural Energy for America Program](#) (REAP) and the [Environmental Quality Incentives Program](#) (EQIP) also provide grants and loans for big biogas projects. An [IATP analysis](#) earlier this year found that biogas contracts through EQIP were the single most expensive practice supported under the program.

Significant investments from the natural gas industry into agriculture have propelled growth in the biogas industry in the U.S. [Chevron](#), [Shell](#) and [BP](#) have all invested in biogas projects in the U.S. Most major biogas projects send the manure-gas to natural gas pipelines, supporting existing fossil fuel infrastructure, and are marketed as "renewable." The "renewable" classification makes projects eligible for federal and state credits, such as [California's Low Carbon Fuel Standard](#).

While the Biden administration's infatuation with biogas continues, it is possible that U.S. agriculture methane emissions will decline in the next several years due to a multi-year drought (consistent with climate change) that is contributing to a [shrinking of the cattle herd](#). The U.S. cattle herd is at its lowest level in 50 years and may continue to shrink through 2025, and with it, cattle-related methane emissions. While the U.S. is [expanding beef imports](#) to make up the difference, the emissions tied to those imports are not counted within the U.S. Greenhouse Gas Inventory.

There are options for the Biden administration to take stronger action to reduce agriculture methane. For example, in 2021, IATP joined family farm and environmental justice groups in [petitioning the EPA](#) to regulate methane emissions on large-scale dairy and hog operations under the Clean Air Act; however, the EPA has yet to act on that petition. The Biden administration is not alone in its lack of action. [A report](#) last year by the Changing Markets Foundation concluded that among 17 major agriculture countries that have signed the Methane Pledge, none had concrete measures and action plans to reduce agriculture methane. Since then, [New Zealand](#) has enacted policy to put a price on cattle and sheep related methane emissions starting in 2026, and [Ireland](#) is considering a variety of feed strategies to reduce agricultural methane.

While the Biden administration has been reluctant to take regulatory action on agricultural methane, the EPA is finalizing [a rule](#) to cut methane emissions from oil and gas operations and will soon propose a rule to [level a fee](#) on large oil and gas operations with excessive methane emissions.

Improving governance and accountability with the Global Methane Pledge

Reversing the trends in methane emissions is unquestionably a difficult challenge even under the best of governance and accountability structures. Currently, the Global Methane Pledge's lack of country-level accountability or tracking mechanism hampers its efficacy. There continues to be remarkably little information available on progress or setbacks in reducing methane emissions at the [Global Methane Pledge](#) website. Some countries signed onto the Pledge have announced a series of small-scale projects but lack systemic policy initiatives that will deliver actual methane emission reductions. Very few signatories have outlined a clear methane reduction plan.

There are some positive developments that could help address methane emission accountability and transparency. At COP27, the U.N. Environmental Program (UNEP) announced the launch of the [Methane Alert and Response System \(MARS\)](#), a satellite-based system to alert countries of major methane emission sources and to track corporate reporting of emissions. [NASA](#) and [Carbon Mapper](#) have set up their own satellite methane monitoring system. While the focus has been on oil and gas hotspots, [large-scale animal agriculture operations](#) have also been identified as major methane emission sources.

The EU recently moved forward on a [regulation to reduce methane](#) in the oil and gas sector, including rules to ensure imported methane gas meets EU standards. China, who has not signed the Methane Pledge, put forth its own [methane plan](#) earlier this month that includes more transparency and monitoring of emissions, though no concrete commitments to cut emissions. The World Bank is [expected to launch a new fund](#) for developing countries to address methane leakage from oil and gas.

Two years in, it is time to strengthen the Pledge's governance, transparency and accountability. Some have begun to advocate for an [agreement with mandatory commitments](#). In a report earlier this

month, the Environmental Investigation Agency made [several recommendations](#) to improve the governance of the Global Methane Pledge, including better monitoring and reporting by country and the development of policies and financial and technical support for implementing those methane reduction policies. To further help governments act on livestock methane emissions, in October the [Expert Panel on Livestock Methane](#) was launched to assess the science and strategies to reduce livestock emissions.

Even though agriculture is a larger source of methane emissions than oil and gas, the Pledge treats it differently. The Pledge reads: "For energy, countries commit to focus "on standards to achieve all feasible reductions." But for agriculture, reductions will be achieved "through technology innovation as well as incentives and partnerships with farmers." The softer language on agriculture-related emissions is likely linked the powerful lobbying of big meat and dairy companies. Lobbyists from the agricultural industry have increased their presence at the international level, with agribusiness industry lobbyists [more than doubling](#) between COP26 and COP27, and an even more [powerful and coordinated contingent](#) is expected at COP28.

Expect more announcements and initiatives from countries at COP28's Methane Ministerial. As methane emissions continue to rise, and the 2030 deadline approaches, it's time to consider governance improvements to the Pledge that increase country-level accountability and allow coordination on policies that directly address the primary sources of agriculture methane emissions. The Pledge has launched a critical conversation, but the time for talk is rapidly running out.