

AGRICULTURE'S ROLE IN PRESIDENT BIDEN'S CLIMATE PLEDGE TO THE UN

On Earth Day, April 22, President Biden will update the United States' climate pledge to the United Nations at the [Leaders Summit on the Climate](#) with some of the world's largest polluting countries in virtual attendance. As part of reentering the U.N.'s Paris climate agreement, Biden is expected to strengthen the U.S. commitment to reduce greenhouse gas (GHG) emissions by 2030, a move necessary to meet the challenge of the climate emergency and to restore U.S. standing internationally. How agriculture is included within Biden's pledge will be a key indicator of the strength of this new commitment.

From the campaign trail, Biden repeatedly emphasized that farmers can be part of the climate solution and that agriculture can serve as a carbon sink, meaning that good farming practices can sequester GHGs emitted by polluters. Biden wants U.S. agriculture to be the first in the world to [achieve net zero](#) in reduced emissions though has never spelled out exactly how that could occur. The net zero terminology comes from the Paris Agreement, where countries make their own pledges to reduce emissions and combine those emission reductions with carbon removals (including sequestering carbon from forestry or farming) to reach net zero by 2050. The precise definition of net zero and what can be counted as removals continues to be both highly [controversial](#) and [contested](#). Earlier this year Mark Carney, the U.N. special envoy on climate change and finance and vice chairman and head of impact investing at Brookfield Asset Management, faced [almost immediate blowback](#) when he claimed investments in renewable energy would offset Brookfield's investments in coal, oil and gas industries — helping the firm to reach net zero.

United States Department of Agriculture (USDA) Secretary Tom Vilsack is pitching his version of net zero accounting by proposing [a government-run carbon bank](#), where the Department would buy carbon offset credits from farmers who sequester carbon and sell them to polluting companies claiming to reduce their emissions by buying offsets. Along these lines, Senate Agriculture Chair Debbie Stabenow, with the support of fossil fuel and agribusiness companies, is pushing [a bill that would direct the USDA](#) to set new rules on agriculture carbon offset credits for purchase by polluting companies. IATP and the National Family Farm Coalition outlined last year why these carbon offset markets [do not work well for farmers or the climate](#).

Will the Biden climate pledge consider agriculture as a source of offsets for polluters, or will it focus on reducing agriculture's own emissions and plan a transition for farmers and supply chains that focuses on building resilience to climate disruption? With that lens, here are five things we'll be looking for in Biden's climate commitment.

1. Will the U.S. set goals to reduce emissions from the factory farm system?

The Environmental Protection Agency's [\(EPA\) inventory tracked GHGs](#) from all sectors in the U.S. from 1990 to 2019 and conforms to reporting guidelines set by the United Nations Framework Convention on Climate Change (UNFCCC). While overall U.S. emissions are declining, agriculture-related emissions, which account for nearly 10% of the total, continue to rise. Most of agriculture's emissions are linked to the



potent GHG methane (28-34 times warming potential of CO₂) and nitrous oxide (300 times warming potential of CO₂). The EPA found that [since 1990, agriculture-related](#) methane emissions rose 17.5%, nitrous oxide emissions rose by 10.4% and carbon dioxide emissions rose 9.9%. Most of that increase can be attributed to the rapid growth over the [last three decades of factory farms](#), particularly those raising cattle and hogs.

The EPA found that methane emissions from manure management have risen 68% since 1990. The agency reports, “The majority of this increase is due to swine and dairy cow manure, where emissions increased 49 and 119 percent, respectively.” The EPA goes on to explain, “The shift toward larger dairy cattle and swine facilities since 1990 has translated into an increasing use of liquid manure management systems, which have higher potential CH₄ (methane) emissions than dry systems.”

The factory farm system of handling manure also results in nitrous oxide (N₂O) emissions, both through the storage of manure in giant lagoons and through the application of that manure as it runs off fields into waterways. The EPA found that nitrous oxide emissions from manure management have increased 40% since 1990. N₂O emissions related to agriculture soils, such as synthetic fertilizer use, also rose more than 9% — with much of the fertilizer applied to the corn, soybeans and other feed crops for animals within the factory farm system of production.

Earlier this month, U.S. rural and environmental groups (including IATP) [called for the](#) EPA to set standards to regulate methane emissions from large-scale dairy and hog factory farms under the Clean Air Act. Two recent reports by IATP and partners have documented the climate impact of the factory farm system globally, [finding that the top 20 meat and dairy companies](#) combined emitted more GHGs than countries such as the U.K., Germany and France. A Biden administration pledge to reduce the rising emissions from the factory farm system for dairy and hogs would send a strong signal about the overall U.S. emissions reduction commitment.

2. How will the pledge treat the importance of agricultural adaptation and resilience?

National level climate commitments to the U.N. are not only about emissions, but they also require an adaptation plan. Perhaps no industry is more impacted by the climate crisis than agriculture, with [drought conditions plaguing many Western states](#) as the latest challenge. The factory farm system is particularly vulnerable to extreme weather events associated with climate change, with manure lagoon spills damaging waterways and nearby fields [in North Carolina linked to recent hurricanes](#) and in Iowa linked to [Midwest flooding](#). In the Midwest and Northeastern states, temperatures have already risen across all seasons, growing seasons have become longer and there have been more extreme precipitation events in frequency and severity, [according to the USDA](#). Other major risks based on future climate trends identified by the USDA include: Competition from weeds and invasive plant species may increase; populations of damaging insects may increase; the risk of plant pathogens may rise; and the risk of pressure from pathogens and parasites of livestock may rise.

There are hopeful [indications that Biden](#) will take executive action to require the USDA to consider climate risk within its underwriting and loan conditions, thereby rewarding more resilient systems of production. A detailed plan to expand research, agriculture extension and farmer outreach focused on climate adaptation should be part of the Biden plan.

3. What role will agriculture-based offsets play?

USDA Secretary Vilsack has put forth the idea of establishing a carbon bank through the Commodity Credit Corporation. Such a bank would buy soil carbon offsets from farmers and sell them to polluters. Both family farm and environmental justice groups are opposed to this approach for several reasons:

- Put simply, these offsets allow polluters to pay to pollute. A [growing body of research](#) shows these carbon market policies do not work to reduce GHGs, and one of the main flaws in design is the use of offsets to substitute for investment to directly reduce emissions.
- U.S. pollution sources are disproportionately located in Black, Latinx, Indigenous, Asian and white rural communities, who continue to bear the health costs of pollution exposure to which agriculture-based offsets give the green light.

- The science to establish soil carbon offsets is still uncertain, with major questions about sequestration rates over time, geographic variability and the impact of climate change itself on soil carbon. More generally, fossil fuel emissions remaining in the atmosphere for decades to hundreds of years cannot be equated with the [short-term sequestration of biological carbon in soil](#).
- Farmers are paid little for offsets, get locked into long-term contracts and must turn over much of their on-farm data to offset project developers. Farmers who have been practicing organic or regenerative, agroecological practices for years cannot gain credits for their soil health building practices and investments. Small scale and diverse farm operations will likely not be able to access the offset market.
- The offset market has a long record of widespread fraud. For example, Nature Conservancy is conducting an internal investigation after [Bloomberg reported](#) the nonprofit was selling forestry based offsets of forest land that was already protected, with no plan to harvest.

A climate commitment that relies heavily on agriculture and other land-based offsets, instead of verified polluter emission reductions, undermines the integrity of that commitment and sets a dangerous example for other countries.

4. Will the pledge promote factory farm gas?

Large-scale dairies and global hog giant Smithfield are advocating for what is called factory farm gas. Factory farm gas involves the use of expensive methane digestors on giant manure pits created by large-scale dairy and hog operations. Increasingly, the gas produced from those digestors is piped into natural gas pipelines and categorized as “renewable,” serving to climate-wash the natural gas industry while incentivizing the production of more manure in rural communities. These digestors do not address [the multitude of other problems](#) for rural residents associated with the factory farm system.

Water pollution linked to hog and dairy factory farms has been an ongoing challenge for rural communities across the U.S. from [North Carolina](#) to [Wisconsin](#) to [Iowa](#). Many of these highly polluting factory farms are often located in low income, Black, Latinx, Indigenous and white rural communities. Rural residents in North Carolina counties where largely Black communities

are surrounded by clusters of hog operations owned or contracted to Smithfield in North Carolina have brought a [series successful lawsuits](#) charging the company with damaging their quality of life. In California’s [San Joaquin Valley](#), largely Latinx communities are suffering health harms from air and water pollution from neighboring mega-dairies. These digestors emit their own set of pollutants, and they do not rid rural communities of the extensive liquid manure that causes public health and environmental problems. In fact, these digestors incentivize more manure production, while enabling a system of production that undermines proven pasture-based farming with reduced, sustainable herd sizes that could restore rural communities and [help stabilize the climate](#).

5. Will the U.S. make a renewed financial commitment to help poor countries respond to the climate crisis?

In Copenhagen in 2009, countries [agreed](#) to a proposal by former Secretary of State [Hillary Clinton](#) to supply \$100 billion annually in public and private climate-related finance to poor countries by 2020. A U.N. independent expert [report](#) published earlier this year concluded that rich countries have not come close to fulfilling the commitment. Backtracking by the U.S. is part of the reason, including former [President Trump](#)’s decision to [renege on \\$2 billion](#) promised to the Green Climate Fund (designed to aid developing countries). The Biden administration should fulfill and indeed increase U.S. climate-related aid commitments and contributions, including to the [Green Climate Fund](#) (GCF) and the Adaptation Fund.

Last week, a coalition of groups issued a model [U.S. Fair Share climate commitment](#), calling for a 70% reduction in U.S. emissions, coupled with \$800 billion in international aid, by 2030. The proposal includes no land-based offsets and sets a strong benchmark for the Biden climate pledge.

Governments and companies are facing a credibility crisis when it comes to the climate. Net zero promises have served as marketing or branding claims, rather than real emission reductions that the climate crisis requires. Many in the U.S. and the world will be scrutinizing the seriousness of Biden’s climate pledge, and agriculture’s role will be an important part of that story.