



The Dairy Digester Dilemma: A False Climate Solution

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In a better-late-than-never move, the Biden administration recently announced an international initiative to reduce global methane emissions by at least 30 percent from 2020 levels by 2030. The pledge, which was announced ahead of its full unveiling at COP26 in Glasgow this November, is particularly important given that methane is 84 times more potent than carbon dioxide (over a 20-year period) in terms of contributing to the climate crisis. Researchers have calculated that a serious push to cut methane emissions could slow the rate of climate chaos by as much as 30 percent.

But the key is in the execution of such an ambitious goal. While the pledge offers a good start to tackling our global methane emissions, it does not go far enough. In the announcement, the Biden administration discusses new regulations and stronger standards targeting oil, gas, and landfill operations. However, current plans for methane reductions in the agriculture sector are completely voluntary.

The agriculture sector is the largest emitter of methane in the United States, accounting for about 36 percent of all methane emissions (compared to 30 percent for oil and natural gas). Since 1990, methane emissions from manure management programs have almost doubled. It's therefore quite clear that in order to achieve meaningful reductions of methane emissions in the United States, aggressive reduction goals and strategies for agriculture must be included.

Unfortunately, the federal government and many states such as California are banking on a Band-Aid fix to cutting methane emissions from agriculture: methane (dairy) digesters. Dairy digesters capture methane from dairy manure lagoons and convert it to biogas. While this sounds promising, **the fact is that dairy digesters are a false climate solution that actually increase environmental burdens and may even increase methane emissions. Here are just a few reasons why:**

- ✓ The biogas created from digesters is neither renewable nor clean. It emits significant pollutants, including particulate matter, carbon monoxide, sulfur dioxide, and ozone-forming criteria pollutants (i.e. nitrogen oxides (NOx)).
- ✓ Most small and mid-scale dairy operations do not produce enough manure to warrant the costs of installing a digester, as they cannot maintain one full time and are unlikely to have the capital for such an investment.
- ✓ Digesters incentivize increased herd sizes, and therefore increased emissions, as subsidies and credit schemes create a network of perverse incentives for dairies to create more waste and more methane

from cows. Along with it comes more air and water pollution in already environmentally-burdened communities and regions.

- ✓ Dairy digesters are expensive, costing between \$2 million to \$9 million to install, often requiring public subsidies to build, and there are concerns about their long-term economic viability and environmental benefit.

Rather than clean up its act by addressing the issue of our destructive industrial agricultural system at its core, the industry (supported by government agencies) has fixated on using this technology-based false solution of dairy digesters to capture and process methane in the hopes of turning it from a climate liability into marketable biomethane gas.

Not only are digesters a false solution when reducing methane emissions, they can also cause further harm to vulnerable communities. As noted above, dairy digesters incentivize increased herd sizes and lead to more mega-dairies. Mega-dairies produce serious environmental impacts by contaminating groundwater, emitting air contaminants beyond methane, attracting heavy-duty truck traffic, and producing odors. Digesters do nothing to address nitrogen in manure, which seeps into groundwater, causing and contributing to groundwater pollution which will impact drinking water sources for disadvantaged communities for decades. Mega-dairies are a large source of volatile organic compounds (VOCs) and ammonia, which contribute to harmful ozone (smog) and fine particulate matter (PM2.5), respectively.

These harmful air pollutants, a direct result of industrial agriculture, have been attributed to **17,900 deaths a year** in the United States. The resulting pollution, public health, and social equity effects fall especially on disadvantaged rural communities where these operations are located. For example, California's San Joaquin Valley, home to a number of large dairy operations, already does not meet state and federal air quality standards and cannot bear ongoing combustion of dirty fuels. Thus, incentives for digesters are perversely encouraging the expansion of unsustainable practices (i.e., large herd sizes, confinement, and manure lagoons) that create environmental and public health harms in the first instance, resulting in the production of new pollutants and emissions that may not have otherwise occurred.

Many states such as California require some polluters, such as the oil and gas industry, to pay for the environmental damage they cause, or at the very least, regulate them for such degradation. This is not the case for factory farm dairies. Industrial agriculture's harmful practices are often directly subsidized using tax and ratepayer money. A new United Nations report found that a staggering **90% of global agricultural subsidies** support practices that harm the health of both people and the planet. Rather than subsidizing the technologies that perpetuate these polluting practices, the U.S. and individual state governments should invest in transitioning these dairies to more sustainable and socially just methods and help rebuild robust agricultural economies which nurture existing systems rather than cause harm.

Center for Food Safety and many other organizations advocate for a more diversified approach to manure management that is appropriate for a wider range of dairies and livestock operations. Those approaches include advanced solids separation, scrape systems, composted manure, compost pack barns, and pasture-based strategies. Properly incentivized with public funds, these practices can help create dairy systems that benefit people and the environment and reduce the harms caused by mega-dairies that are disproportionately

impacting the health of people living in those vulnerable communities. Currently, programs like the California Department of Food and Agriculture's (CDFA) Alternative Manure Management Program (AMMP) provide a model for supporting production practices that reduce methane emissions in more environmentally sustainable ways. According to CDFA, 114 projects have already been funded by the AMMP which collectively are expected to reduce greenhouse gas emissions by an estimated 1.1 million metric tons of CO2 equivalent over the next five years.

In addition to incentivizing alternative manure management practices rather than polluting digesters, the Biden administration must take immediate action to regulate methane created by agriculture. In April, a group of organizations including Center for Food Safety, led by Public Justice, petitioned the EPA to reduce methane by regulating industrial hog and dairy operations under the Clean Air Act, and to reject so-called solutions such as factory farm gas championed by the industrial agriculture industry. The petition calls on the EPA to set emissions limits based on well-established pasture-based farms which provide myriad co-benefits including reducing climate, air, and water pollution while supporting rural economies to build back better.

This groundbreaking legal petition calls for immediate action from the EPA to exercise its existing authority under the Clean Air Act and fulfill its obligation to protect public health, rural communities, and our land, air, and water by listing and regulating industrial dairy and hog operations. Industrial dairy and hog operations are defined in the petition as facilities that confine at least 500 cows or 1,000 hogs without access to pasture while liquefying manure. As major sources of the super pollutant methane, the category endangers public health and welfare and now accounts for 33 percent of agricultural methane emissions, 13 percent of total U.S. methane emissions, and 1.3 percent of total U.S. greenhouse gas emissions.

The Biden administration will be taking a bold and critically necessary step by committing to reducing methane emissions, thus helping to save the planet from climate chaos. How it actually does this has the power to transform agriculture toward one that benefits vulnerable communities, ecosystems, and the planet at large.