

Feb. 23, 2021

Dear Chair Golden and Senate Committee on Natural Resources and Wildfire Recovery Members:

Stand Up to Factory Farms, a coalition of local, state, and national organizations concerned about the harmful impacts of mega-dairies on Oregon's family farms, communities, the environment, and animal welfare, **requests that the committee not pass Senate Bill 151 out of committee**. The Bovine Manure Tax Credit incentivizes and props up unsustainable mega-dairies in Oregon to the disadvantage of family farm dairies and the detriment of rural communities and the environment.

Misleadingly called a manure tax credit, Oregon's credit program is in reality a methane digester tax credit. Manure digesters are notoriously inefficient, uneconomical, and difficult to operate.¹ Because they are not profitable on their own, they are typically heavily subsidized.² Digesters are also only technologically and financially viable for large, concentrated livestock operations that use liquid manure systems.³ This factory farm model of livestock production is highly polluting, harmful to public health and animal welfare, and is a significant driver of climate change. Promoting digesters, which rely on this system of livestock production, promotes the factory farms harming Oregon's environment and farm economy.

 ¹ Food & Water Watch, Hard to Digest: Greenwashing Manure into Renewable Energy (Nov. 2016), <u>https://www.foodandwaterwatch.org/sites/default/files/ib 1611 manure-digesters-web.pdf</u>.
 ² See, e.g., U.S. EPA, Funding On-Farm Anaerobic Digestion,

<u>https://www.epa.gov/sites/production/files/2014-12/documents/funding_digestion.pdf;</u> Columbia Insight, Clearing the Air: The Power of Methane, <u>https://columbiainsight.org/clearing-the-air-the-power-of-methane/</u> (explaining that Threemile Canyon Farms' ability to finance its digester was a "onetime opportunity, because all these programs came together at once").

³ See, e.g., Markus Lauer et al., Making Money from Waste: The Economic Viability of Producing Biogas and Biomethane in the Idaho Dairy Industry, Applied Energy 222 (2018): 621–36, https://www.sciencedirect.com/science/article/pii/S0306261918305695.

Mega-dairy digesters are touted for their purported climate benefits from methane capture. But in reality, methane digesters are a false solution to climate change and have no place in Oregon's clean energy future. Digesters at best capture only the additional methane created by the adoption of factory farm practices in the first place. Digesters extract the methane created as vast quantities of liquefied animal waste rot in anaerobic storage systems. This waste storage system, created to enable factory farms' intensive confinement of hundreds or thousands of animals, generates methane that would not be created at all under aerobic waste management conditions - such as when livestock are on pasture. Moreover, these manure management-related methane emissions comprise only a fraction of the methane and other greenhouse gas emissions from these facilities.⁴ In short, digesters incentivize this highly polluting model of production, but do nothing to capture most of the resulting greenhouse gas emissions. If the State continues to promote technologies that are only viable for the largest mega-dairies, Oregon is likely to see more of these operations and a corresponding increase in the sector's overall greenhouse gas emissions, when considering increased enteric emissions along with methane leakage from gas pipelines and other infrastructure.⁵

Manure digesters also deepen Oregon's reliance on fossil gas and threaten to slow the State's transition off of fossil fuels and onto truly renewable sources of energy. Mega-dairies availing themselves of a range of incentives and credit schemes are increasingly partnering with fossil fuel companies to create so-called "renewable natural gas" from factory farm gas, connecting mega-dairy digesters with existing fracked gas infrastructure rather than utilizing the methane for on-farm energy needs.⁶ As a result, promoting this technology will undermine Oregon's climate change goals and create a perverse incentive to build and expand mega-dairies to benefit from the additional revenue stream created by monetizing the methane that this system generates.

Inherent limitations on factory farm gas availability further demonstrates that its production is a false solution to climate change. One study showed that the entire U.S.' biomethane potential adds up to only enough energy to replace diesel fuel use

⁴ C. Alan Rotz, Modeling Greenhouse Gas Emissions from Dairy Farms, Journal of Dairy Science Vol. 101 Iss. 7 6677 (Jul. 2018) ("enteric emissions are normally the largest source of greenhouse gas on a dairy farm."); M. Dutreuil, et al., *Feeding Strategies & Manure Management for Cost-Effective Mitigation of Greenhouse Gas Emissions From Dairy Farms in Wisconsin*, 97 J. DAIRY SCI. 5904, 5904 (2014) ("In total, enteric fermentation, feed production, and manure management typically account for 35, 32, and 26% of GHG at the farm scale, respectively.").

⁵ See, e.g., Emily Grubert, The Conversation, 'Renewable' natural gas may sound green, but it's not an antidote for climate change (Jul. 6, 2020), <u>https://theconversation.com/renewable-natural-gas-may-sound-green-but-its-not-an-antidote-for-climate-change-138791</u>.

⁶ See, e.g., Food & Water Watch, Renewable Natural Gas: Same Ol' Climate Polluting Methane, Cleaner-Sounding Name (Feb. 2021), <u>https://www.foodandwaterwatch.org/insight/renewable-natural-gas-same-ol-climate-polluting-methane-cleaner-sounding-name</u>.

in California alone.⁷ Even if this limited capacity were worth pursuing, it is not cost competitive and will drive up gas costs.⁸ As a result, continued subsidization of factory farm gas will only divert scarce resources from truly renewable, clean sources of energy and more climate-friendly agricultural practices that do not create vast quantities of methane due to dangerous liquid waste management.

The threat that factory farm gas incentives will entrench both factory farms and fossil gas infrastructure is not merely hypothetical. Since 2018, State data show that the Tax Credit has only been utilized by six corporate entities (at just four business addresses), and that the state's largest mega-dairy, Threemile Canyon Farms, has benefited from a staggering *78 percent* of certifications.⁹ Threemile has expertly gamed the subsidy system to profit off of its methane production, capitalizing not only on Oregon's tax credits and other public funds, but also California's cap and trade program and California's Low Carbon Fuel Standard program.¹⁰ Threemile also recently obtained a permit to process its gas for transport in fossil gas pipelines – and was able to use tax-exempt bonds intended for publicly beneficial initiatives in the process.¹¹

Mega-dairies that have taken advantage of Oregon's tax credit to date are not likely to stop using their digesters if the credit is no longer available, so concerns that eliminating the tax credit will increase emissions are misplaced. The credit has been due to sunset for several years, putting facility operators on notice that it is not a long-term funding stream. And there is no reason for concern that Threemile Canyon in particular will take its digester offline; the Statesman Journal reported when Threemile sought its permit for a gas treatment facility that it "will continue to receive Oregon's Biomass Tax Credit until that program expires . . . But the biggest revenue stream will come from taking advantage of incentive structures like

environment/2020/2/14/21131109/california-natural-gas-renewable-socalgas.

⁸ Id. (explaining that "shifting to RNG... would radically drive up gas costs," and biogas "projects become more difficult and expensive as time progresses — the opposite of economies of scale.
⁹ Or. Dep't of Agric., Bovine Manure Tax Credit Program Data, <u>https://data.oregon.gov/Revenue-Expense/Bovine-Manure-Tax-Credit-Program-Dept-of-Agricultu/cdnv-r4ea/data</u> (last visited Feb. 20, 2021).

⁷ David Roberts, Vox, The False Promise of "Renewable Natural Gas:" It's no substitute for shifting to clean electricity (Feb. 2020), <u>https://www.vox.com/energy-and-</u>

¹⁰ See, e.g., California Air Res. Bd., Cap-and-Trade Program Data, ARB Offset Credit Issuance Table, <u>https://ww3.arb.ca.gov/cc/capandtrade/offsets/issuance/arboc_issuance.xlsx</u> (sort for Offset Project

Operator "WOF PNW Threemile Project, LLC"); California Air Res. Bd., Low Carbon Fuel Standard Tier 2 Pathway Application Staff Summary: Iogen D3 Biofuel Partners II LLC, WOF PNW Threemile Project (Updated Oct. 16, 2020),

 $[\]underline{https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/b0072\ summary.pdf.$

¹¹ See, e.g., Tracy Loew, Salem Statesman Journal, Manure is big business at Oregon's largest dairy with conversion to natural gas (Mar. 31, 2019),

https://www.statesmanjournal.com/story/tech/science/environment/2019/03/31/oregon-threemilecanyon-farms-dairy-natural-gas-manure/3247197002/.

Oregon's Clean Fuels Program and California's Low Carbon Fuel Standard."¹² As Threemile itself said, factory farm gas is now its "most valuable product."¹³ Megadairies are simply not likely to take expensive digesters offline and, in doing so, forego revenue from the gas production itself.

Stand Up to Factory Farms respectfully asks the Committee not to pass SB 151 out of committee. The Bovine Manure Tax Credit disserves Oregonians by entrenching both factory farms and reliance on fossil gas, and will slow Oregon's necessary transition to truly clean, renewable energy. Thank you for your consideration.

Sincerely,

Stand Up to Factory Farms

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¹² Tracy Loew, Salem Statesman Journal, Manure is big business at Oregon's largest dairy with conversion to natural gas (Mar. 31, 2019), https://www.statesmanjournal.com/story/tech/science/environment/2019/03/31/oregon-threemile-canyon-farms-dairy-natural-gas-manure/3247197002/.
¹³ Id.