



May 28, 2021

The Honorable Gavin Newsom  
Governor, State of California  
State Capitol, First Floor  
Sacramento, CA 95814

The Honorable Toni Atkins  
Senate President pro Tempore  
State Capitol, Room 205  
Sacramento, CA 95814

The Honorable Nancy Skinner  
Chair, Senate Committee on Budget and Fiscal Review  
State Capitol, Room 5094  
Sacramento, CA 95814

Senator Bob Wieckowski  
Chair, Senate Budget and Fiscal Review  
Subcommittee 2  
State Capitol Building, Room 4085  
Sacramento, California 95814

The Honorable Anthony Rendon  
Speaker of the Assembly  
State Capitol, Room 219  
Sacramento, CA 95814

The Honorable Phil Ting  
Chair, Assembly Committee on Budget  
State Capitol, Room 6026  
Sacramento, CA 95814

Assemblymember Richard Bloom  
Chair, Assembly Budget Subcommittee 3  
State Capitol Building, Room 2003  
Sacramento, California 95814

**Re: The State Should Not Subsidize Dairy Biogas Production**

Dear Governor Newsom, Senate Pro Tem Atkins, Speaker Rendon, Senator Skinner, Assemblymember Ting, Senator Wieckowski, and Assemblymember Bloom

The undersigned organizations write to urge you to exclude state subsidies of the dairy biogas industry from the state budget. The state has already pumped hundreds of millions of dollars into

the dairy biogas industry for the benefit of a very few, to the detriment of many. Enough is enough. We specifically urge our leaders to refrain from lining the pockets of the dairy biogas industry with subsidies from the general fund, greenhouse gas reduction funds, or from federal relief money.<sup>1</sup>

We lay out below several reasons in short summary form as to why biogas subsidies are a bad idea. We can provide further detail on each:

### **Investing in Dairy Biogas Perpetuates and Exacerbates air and water pollution from dairies in California's Central Valley**

Biogas is derived from wet manure, produced by cows in large Confined Concentrated Animal Feeding Operations (CAFOs), by capturing the gas in a system called an anaerobic digester. Biogas creation for off-farm sales occurs almost exclusively on extremely large CAFOs, averaging approximately seven thousand cows each. And those mega-dairies are primarily located in the San Joaquin Valley, an area plagued with contaminated water and polluted air.

#### Water Pollution

Manure, laden with nitrate, is applied to fields following the anaerobic digestion process. Digesters do nothing to address nitrogen in manure. Nitrogen seeps into groundwater, causing and contributing to groundwater pollution which will impact drinking water sources for disadvantaged communities for decades.

#### Air Pollution, Odor, and Flies

Dairy CAFOs produce harmful air pollution and greenhouse gas (GHG) emissions, including the climate super-pollutant methane and are the leading source of volatile organic compounds (VOCs) and ammonia in the San Joaquin Valley, which contribute to harmful ozone (smog) and fine particulate matter (PM<sub>2.5</sub>), respectively. The Valley continues to have unhealthy air quality, and fails to meet state and federal air quality standards for ozone and PM<sub>2.5</sub>. A recent report published in the Proceedings of the National Academy of Sciences found that nationally, 12,400 deaths per year were attributable to PM<sub>2.5</sub> formed by ammonia.<sup>2</sup> Deaths from ammonia-related PM<sub>2.5</sub> in California were estimated at 1,690 annually – over thirteen percent of U.S. deaths – with most of them occurring in the San Joaquin Valley.<sup>3</sup> Further biogas incentives and production will only make this air pollution crisis worse, including increased ammonia emissions as a direct result of anaerobic digestion.<sup>4</sup>

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<sup>1</sup> As noted in an Assembly Appropriations Bill Analysis of SB 1440, there are already numerous sources of subsidies for dairy biomethane, including: the Low Carbon Fuel Standard, the Dairy Digester Research and Development Program, The Aliso Canyon Mitigation Settlement funds, the SB 1383 biomethane pilot project funds, the Bioenergy Market Adjustment Tariff (BioMAT), the Renewable Natural Gas Incentive Program, and other portions of the Greenhouse Gas Reduction Fund's revolving loan program.

<sup>2</sup> Domingo, et al, Air quality-related health damages of food, PNAS 2021 Vol. 118, No. 20 e2013637118, <https://doi.org/10.1073/pnas.2013637118>

<sup>3</sup> Domingo, et al, SI Appendix, Fig. S4 and Table S2, Air quality-related health damages of food, PNAS 2021 Vol. 118 No. 20 e2013637118, <https://www.pnas.org/content/suppl/2021/05/06/2013637118.DCSupplemental>

<sup>4</sup> Ammonia emissions from digestate – manure exiting an anaerobic digester – increased 81% relative to undigested manure. See Holly, et al., Greenhouse gas and ammonia emissions from digested and separated dairy manure during

Additionally, cows emit approximately the same amount of methane through their digestive processes as the manure when liquefied for biogas production, but remains unabated.

In addition to water and air pollution, people that live near large dairies talk of flies and of evening odors so strong they cannot be outside.

### *Dairy Biogas Leads to Dairy Expansion and More Pollution*

Anaerobic digesters and pipeline infrastructure are typically constructed to accommodate expanded herd sizes or attract expanded herd sizes and dairy clusters.<sup>5</sup> Investment in dairy biogas production incentivizes continued and expanded large CAFO operations, and thus perpetuates and exacerbates pollution and nuisance from large CAFOs.

### *Rewarding Biogas Production Could Increase Harmful Methane Emissions*

The methane currently emitted from dairies is not an inevitable or normally occurring consequence of raising livestock; it is the result of unsustainable, profit-maximizing management practices including animal confinement, consolidation, and flush-based manure storage. Herds raised on pasture, in more manageable numbers, or with dry-handling manure systems avoid the creation of manure methane in the first place. By further subsidizing dairy biogas, the Legislature would be perversely rewarding the most polluting practices, thereby encouraging the dairy industry to continue to intentionally produce methane. Any increase in methane production is harmful to the climate, and even if the digesters seek to capture that methane, the risk of methane leakage is high in the industry.

### **Dairy biogas hinders our efforts to transition fully to clean energy**

California is poised – through policy and action - to phase out harmful polluting fuels and transition to truly clean energy. Dairy biogas is equivalent to fossil natural gas and emits the same pollutants as gas. The State should remain properly focused on achieving a zero-emission transportation system and electric grid, consistent with the Governor’s recent Executive Order, which eliminate not only GHGs but also PM2.5 and NOx pollution that would continue to be emitted by gas-powered vehicles and power plants. Similarly, relying on biomethane to decarbonize home heating foregoes the significant health benefits of swapping indoor gas combustion for modern, zero-emission

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storage and after land disposal, *Agriculture, Ecosystems and Environment* 239 (2017) 410–419, [https://www.researchgate.net/publication/313731233\\_Greenhouse\\_gas\\_and\\_ammonia\\_emissions\\_from\\_digested\\_and\\_separated\\_dairy\\_manure\\_during\\_storage\\_and\\_after\\_land\\_application](https://www.researchgate.net/publication/313731233_Greenhouse_gas_and_ammonia_emissions_from_digested_and_separated_dairy_manure_during_storage_and_after_land_application)

<sup>5</sup> Lakeside Pipeline LLC pilot application, involving an “initial cluster” plan of 10 dairies, encompassing 62,110 cows, notes that the “applicant’s future plans include expansions to up to 11 additional dairies (6 digesters)” and *contemplates expansion of dairy herd sizes*.

The Merced Pipeline LLC pilot application incorporates 8 dairies with 39,290 cows, notes that its “project team is already in discussions with the owners of 2 additional dairies,” and explains the possibility of “another 11 more potential expansion dairies” and similarly referencing “likely expansions of those dairies[’]” herd sizes

appliances. Simply put, neither its production nor use is clean. It is only clean on paper because it perversely gets “credit” for eliminating methane that the dairy itself intentionally created.

The fossil-fuel industry’s ability to paint biogas as “clean” facilitates ongoing dependence on and expansion of gas infrastructure and detracts from statewide efforts to transition to non-polluting fuel and energy.

Thank you for your consideration, and please let us know if you would like to further discuss the issues outlined above. We have also attached a fact sheet, which includes additional information regarding the false promises of the biogas industry.

Sincerely,

Phoebe Seaton and Jennifer Fearing (Board Member), Leadership Counsel for Justice and Accountability

Kevin Hamilton, Central California Asthma Collaborative

Tyler Lobdell, Food and Water Watch and Food and Water Action

Daniel Barad, Sierra Club California

Nayamin Martinez, Central California Environmental Justice Network

Brent Newell, Public Justice

Catherine Garoupa White, Central Valley Air Quality Coalition

Nina Robertson and Sasan Saadat. Earthjustice

Alexis Sutterman and Neena Mohan, California Environmental Justice Alliance

Caroline Farrell, Center on Race Poverty and the Environment

Ara Marderosian, Sequoia ForestKeeper

Rebecca Spector, Center for Food Safety