The Central Valley is home to the largest concentration of dairies in California. In addition, the region suffers from widespread groundwater contamination, poor air quality, heavy truck traffic, high rates of asthma and other chronic and acute health conditions. Large industrial dairies are major contributors to these problems, especially impacting the people who live and work in nearby rural and agricultural communities.

These massive dairy operations cause nitrate contamination in groundwater and produce air pollution—beyond methane—that has local and basin-wide impacts. In the San Joaquin Valley, dairies are a source of ammonia, which is both a toxic air contaminant and a main precursor to fine particle pollution, and a significant source of smog-forming volatile organic compounds (VOCs). A recent report on nitrate impacts from Central Valley dairies documents elevated nitrogen concentrations beneath all dairies participating in the dairy representative monitoring program and notes significant nitrogen contamination of both deep and shallow groundwater under dairies.

While large dairies are sickening local communities, the gas industry is promising that these same dairies are an appropriate source for “renewable” energy. Ignoring the significant local impacts, gas companies and industry groups claim that dairy digesters, which capture methane from dairy manure lagoons, can be used for fuel in a way that is sustainable.

Leadership Counsel for Justice and Accountability works directly alongside residents in the Central Valley who live everyday with the odors, poor air quality, and contaminated water caused by large dairies. We, along with dozens of other organizations, are committed to tackling our state’s climate crisis while simultaneously improving air and water quality throughout the state. We envision and support investments, programs, and policies that create environmentally sustainable and just agricultural systems and truly clean energy solutions.

Dairy digesters are not a solution. The Dairy Digester Research and Development Program (DDRDP), funded by the Californian Department of Food & Agriculture, doubles down on the problems that have arisen from intense consolidation in the dairy industry over time that has contributed to harmful local impacts. Additionally, this approach only further delays a transition away from dirty energy.

Dairy digesters do not address dairy’s contribution to air and water degradation, which results from a variety of dairy operations, beyond manure lagoons. For example, over-application of manure on cropland, silage, pre- and post-digester manure management, and dust all generally contribute to local pollution. About 96 percent of nitrate contamination is caused by nitrogen applied to cropland, 33 percent of which is from animal manure applications.

Similarly, digesters do not eliminate the noxious odors that infiltrate nearby neighborhoods. Furthermore, digesters do nothing to address the climate impacts of enteric emissions (from cows releasing gas) which account for about half of the methane emissions from dairies.

Expanding the capture of methane for biogas means we will need even larger factory farms that put the health of local, often low-income communities and communities of color, at greater risk. Digesters likely have a deleterious impact on nearby communities and the local environment by encouraging increased herd sizes to generate greater revenue from energy production and by incentivizing greater concentration of dairies around energy infrastructure. Concentrating cows
and their waste will only intensify the amount of ammonia, NOx emissions, and water pollution produced by dairies.

As California aims to move away from dirty energy, dairy digesters and the attempt to paint them as “clean,” “green,” and “renewable” undercuts genuine attempts to expand the state’s clean energy infrastructure. While industry leaders from the natural gas and agricultural industries promote biogas as clean energy and so-called “renewable” natural gas, biogas is neither clean nor renewable. Unlike naturally occurring and pollution-free sources of renewable energy such as solar and wind, the source of energy used in dairy digesters is not an inevitable or ordinarily occurring consequence of raising livestock.

Current status quo industrial livestock management systems and the current regulatory environment prevent a shift towards approaches that could help dairies avoid such large methane emissions in the first place. A system that sustains huge numbers of cows per acre -- and huge amounts of cow poop -- is not a solution.

Additionally, biomethane production is very expensive and supply is limited. Subsidizing production on the backs of rate-payers and tax-payers locks California into maintaining a costly gas distribution system that the state must transition away from to meet its climate goals and protect its residents.

California’s vast gas distribution system is more than just costly however, it’s dangerous. By its nature, gas is a volatile fuel, and no matter whether it is biogas or natural gas, it puts communities at risk of leaks and explosions. We won’t be fooled by the gas industry’s expensive marketing campaign because gas is gas is gas. It is a danger in our homes and schools; and burning gas no matter where it comes from contributes to climate impacts.

Leadership Counsel has drafted a letter to CDFA, given testimony at key legislative hearings, talked with media, and worked with partners to shine light on the need to address local impacts, shift farmers away from dependence on extremely high herd densities, and lift up small-scale farmers and farmers of color who are utilizing agroecological practices. CDFA also must ensure that dairy farms meet water and air quality standards before receiving state funding, rather than continue subsidizing agribusinesses that threaten the health of local communities.

We urgently need a holistic approach to dairy manure management that addresses methane, groundwater quality, and air quality for the Central Valley and beyond.