

The Low Carbon Fuel Standard:

**An Unmitigated
Environmental Justice Disaster**

“Avoided Methane Emissions” in the LCFS

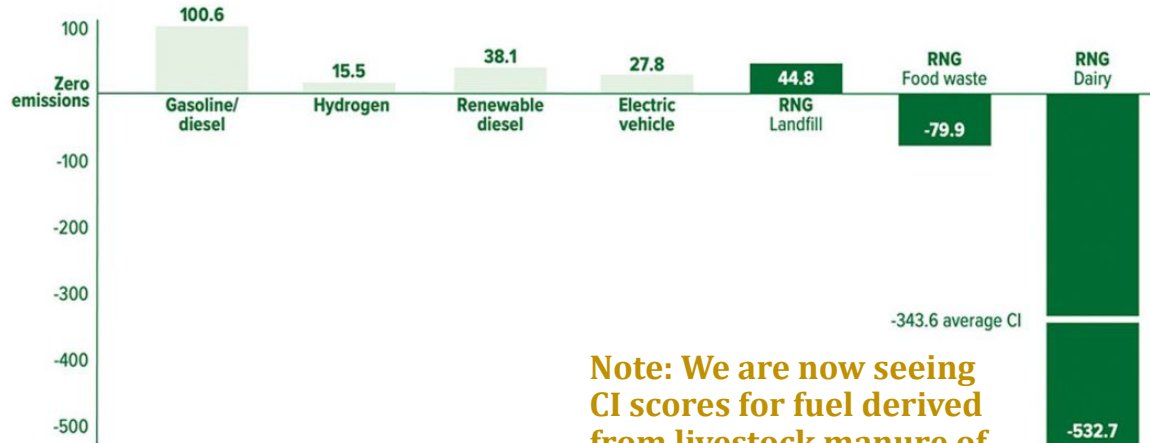
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There's nothing "low carbon" about livestock gas, however...

RNG is the lowest carbon alternative fuel



Carbon emission by fuel type (gCO₂e per MJ)



Note: We are now seeing CI scores for fuel derived from livestock manure of about negative 790!

Source: California Air Resources Board, Q4 2021 LCFS data, and certified pathways as of April 19, 2022.

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No animals were harmed in the making of this presentation and no carbon is removed in the production of this fuel.

A Flawed Baseline and Faulty Assumptions

Livestock methane will not be regulated

(When in fact CARB has the authority to regulate starting on January 1, 2024)

Liquid manure management systems are a necessary component of dairies

(When dry manure management prevents creation of methane in the first place and liquid manure management systems (as opposed to dry) are a relatively recent profit-maximizing development in the industry)

The only option other than converting methane from wet manure into gas is to vent the methane into the atmosphere.

(“If the methane can be captured for RNG production, it can be captured for diversion to a flare, and it is unrealistic to assume that capturable methane would be vented under a GHG conscious policy regime.” (Grubert, 2020))

HOARD'S DAIRYMAN

"The profit generated by manure and energy is a new dynamic... The profits from manure-generated energy could likely exceed the profit from milk. **At that point, milk has become the by-product of manure production.**"

– Michael McCully
Dairy industry consultant

SCCOP

THE
Solutions For The Farmer's Advisor

"[I'm] seeing some of the most innovative dairy producers across the country who are less than two years away from **making more money off the carbon contracts they sell than the dairy products they produce.**"

– Jeff Simmons
Elanco president and CEO

The Guardian

"Once you pay a cattle producer for their manure, you are effectively subsidizing the production of that manure. **You've altered the economics of cattle production.**"

– Richard Plevin
UC Berkeley researcher

"...**revenue from methane capture alone** could, in some cases, make up **almost 40% of total profits** for mid- and large-sized dairy farms in California... this could end up incentivizing farms to **increase herd sizes to produce more manure.**"

– Kevin Fingerman
California State Polytechnic University, Humboldt

An Environmental Justice Disaster

The image features a solid teal background. At the bottom, there is a horizontal, irregular white shape that resembles a piece of torn paper or a jagged cut. The text "An Environmental Justice Disaster" is centered in the upper half of the image in a white, sans-serif font.

Large dairies and concentrating wet manure harms water and air.
And digestion doesn't help.

Nitrate pollution in drinking water leads to birth defects, blue baby syndrome, diabetes, bladder & ovarian cancer.

- Most pollution from manure happens from land application of manure to fields; digesters do not improve and may exacerbate nitrate pollution

Air pollution from large livestock operation causes severe health harm and even death. Ammonia from livestock kills over 1,000 people a year in the Valley alone.

- Digestion actually *increases* ammonia emissions

Odors and flies create severe mental and emotional distress. Researchers found significantly higher rates of stress, tension, and depression large livestock operations

- Residents report worse odors following the installation of digesters



A Worsening EJ Disaster



The LCFS, Consolidation, & the Concentration of Pollution in the SJV

↑ **26.8%** on dairies w/ > 2,500 cows ; ↓ **52.4%** on dairies w/ < 1,000 cows

Average herd size in CA ↑ **13%** 2012-17; ↑ **43%** from 2017-22

CA saw the biggest growth of large CAFOs w/ **57** moving into that category

↓ # cows in California; ↑ # of cows in the SJV

The SJV is now home to over **90%** of dairy cows in CA

Average herd size in the SJV grew from about **1,577** to about **2,052** cows

Seven SJV counties have **99.3%** of DDRDP-funded digesters and **86%** of livestock manure LCFS pathways in CA

Van Der Kooi (Fresno) ↑ **1,800** to **5,000** cows

Borba (Merced) ↑ **1,650** to **6,100** cows animals.

With the growth of their population to 1,025,716 the majority of California's milk cows are now on large CAFOs

Humans are Being Harmed

The image features a solid teal background. A white, torn paper effect runs horizontally across the bottom third of the frame, with irregular, jagged edges. The text "Humans are Being Harmed" is centered in the upper two-thirds of the image in a bold, white, sans-serif font.



CARB must regulate the dairy industry. We have to endure the flies, the odors, and the air quality impacts. Many people in my community live with asthma and other serious breathing problems.

The dairy industry impacts our air and water quality. I worry about our safety and our health.



Josefa Gonzalez
Pixley, Tulare County



I feel like our families are dying here in Pixley because of contamination from the dairies.

Please help us... because we are poor farmworkers, you have forgotten us. You have forgotten about justice and laws. We also deserve clean air and clean water.



María Arévalo
Pixley, Tulare County

Pixley houses the first and largest biogas cluster and approximately 140K cows. It is also home to Maria, Josefa and many others.



I worry a lot about dairies because of the impact they have on our environment, specifically the impacts they have on air quality.

It is no coincidence that many of our community members are facing health conditions since we are in very close proximity to dairies continuously expanding.

I urge CARB to reevaluate the LCFS program so that it prioritizes the health of residents that live close to dairies... instead of prioritizing the profit of dairy owners.

Beatriz Avila
Planada resident



I have lived in Planada since 1963. In 2003, the dairy arrived in our severely disadvantaged community of 4,000 people.

We need clean air and clean water — and no one is listening.

The dairy had 3,000 cows in the beginning and now it has 8,000. Pollution has only gotten worse.

David Rodriguez
Planada, Merced County



We urge CARB to refrain from the current initiatives in LCFS for dairies to expand and to produce methane gas.

We instead want to see the LCFS program impose more regulations on dairy emissions...

[The issue is] public health, quality of air, and public safety versus profits. Profits for a private business that's using government subsidies.

Patricia Ramos Anderson
President of League of United Latin American Citizens (LULA) and Central Valley Resident



Approximately 10 recent or current dairy expansions in Merced along with development of biogas clusters and pipelines.

Despite the onslaught of expansions, David, Beatriz, and Patricia consider themselves lucky that they live in one of few counties in the Valley that requires environmental review for all dairy expansions.

In summary....

***We're on the wrong path, but it
it's not too late to correct course***