

Data show LCFS's air pollution reduction benefits the rich, not poor

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The rich receive twice as much benefit as the poor from air pollution reductions under California's low-carbon fuel standard according to data from the California Air Resources Board.

That finding, from data analysis we completed using the location of every EV, hydrogen, and natural gas charging station in the state, contradicts the new claim that an LCFS in Washington would reduce the impact of air pollution like particulate matter for low-income communities.

The passage of a low-carbon fuel standard (LCFS), which is designed to reduce the carbon-intensity of motor fuels and reduce CO2 emissions, is one of the top priorities for Governor Inslee and the environmental community. The Governor claimed, "The Clean Fuel Standard is the cleanest and best opportunity we have, bar none, to reduce carbon pollution from transportation in this state."

In testimony before the legislature, however, proponents admit this is not correct.

The cost of an LCFS is very high compared to the CO2 reduction, so proponents make another argument, saying it would also reduce traditional air pollution like particulate matter. Responding to my critique of the LCFS before a legislative committee, Floyd Vergara of the National Biodiesel Board who worked in California government on their LCFS, responded this way, saying "I heard earlier the concern about LCFS being an inefficient approach to reducing GHGs [greenhouse gases]. I think that misses the point because the LCFS was designed to achieve both GHG's and air quality air pollutants." In other words, "Yes, but..."

Although the cost to reduce CO2 is very high, proponents claim an LCFS would also reduce particulate matter (PM 2.5), especially in urban areas. Another person who testified in favor of the

bill noted that the impacts from particulate matter "are not distributed equally are low income and communities of color particularly along the I-5 corridor and around Sea-Tac Airport there an undue burden of air pollution."

The LCFS can't be justified based on CO2 reduction. The cost is extremely high, and as Mr. Vergara's comment demonstrates, you have to add other purported benefits for it to make sense. Proponents claim that the LCFS will reduce the impact of air pollution on certain, low-income communities.

Those claims, however, are contradicted by the real-world data and show a lack of understanding of how the LCFS works.

The LCFS can reduce CO2 in several ways. Switching a fleet of trucks from gasoline to natural gas is one way an organization could get "credits" in the system. For each metric ton of CO2 that is reduced, one credit is generated. Those credits can be sold to petroleum manufacturers to help meet CO2 reduction targets. So, a food distribution company in Othello could switch their fleet, generate credits, and sell them to BP to meet the requirements.

The bill also allows credits to be generated by promoting adoption of electric vehicles. So, a policy that increases purchase of electric vehicles in Vancouver could also be used.

In each of these scenarios, however, there is zero particulate matter reduction in the "I-5 corridor" near Seattle or SeaTac. There is no guarantee that any of the projects to generate credits under the LCFS would occur in the areas of concern for air pollution. Indeed, the legislation notes that the rules, "may not discriminate against fuels on the basis of having originated in another state or jurisdiction." Even if the credits are generated in California, they can count for Washington state, but do nothing to reduce air pollution here.

Additionally, even in-state, the projects that reduce particulate matter are located in wealthy communities.

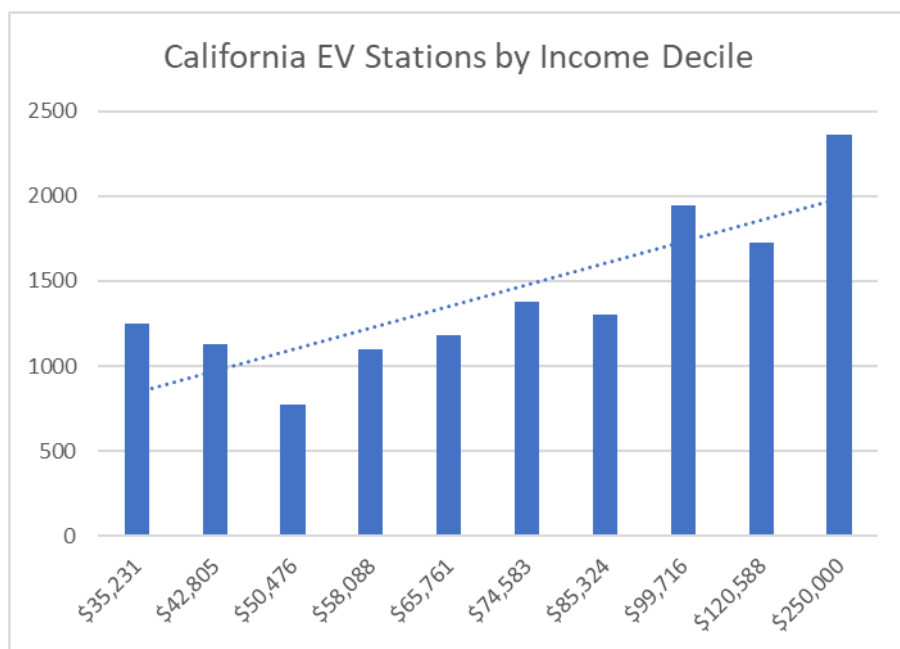
To test this, we examined all of the electric car charging stations, hydrogen and natural gas filling stations that generate LCFS credits in California using data provided on the state's LCFS information page. Electric and natural gas vehicles are the primary source of PM 2.5 reduction in the LCFS system. Ethanol does little to reduce PM 2.5. The scenarios in the Puget Sound Clean Air Agency's analysis show that the scenario that is most effective at reducing average PM 2.5 is the one with the

Despite the rhetoric from some LCFS advocates, the health benefits are for the rich, not the poor.

What's more, the total benefits are extremely small. The Puget Sound Clean Air Agency, which modeled an LCFS that is more aggressive than being considered by the legislature, admits the PM 2.5 reductions are small. The independent analysis they provided admits, "The additional reductions from the proposed CFS (Scenario A) are small in comparison to the anticipated reductions from federal vehicle standards. As the main goal of the CFS is to reduce GHG emissions, the reductions in PM2.5 are considered a co-benefit."

Despite justifying the LCFS as a tool to fight the "climate crisis," advocates have realized they need additional justifications. They have turned to the claim it reduces particulate matter for low-income groups in the hopes it will help justify an otherwise wasteful and ineffective policy.

Their claims, however, are not based on data but on empty rhetoric. The small reductions in particulate matter are disproportionately focused on wealthy neighborhoods. It is one more indicator that the LCFS doesn't achieve the goals the sponsors claim to want.



greatest number of EVs.

We matched those locations to median household income data from the U.S. Census, sorted by census tract. If the goal is to reduce PM 2.5 in low-income communities, as was claimed in the hearing, then we want EVs to be in low-income communities. As California's experience demonstrates, the reality is exactly the opposite.

The wealthiest 10% of census tracts have the most EV charging stations and natural gas filling stations in the state. The census tracts representing the top 30% of income earners have 43% of the charging stations. By way of contrast, the census tracts with the poorest 30% of earners have only 22% of the EV stations. The rich receive twice the benefit as those in poor communities.



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