

To: California Air Resources Board and Staff

From: Mary Elizabeth, M.S., R.E.H.S.

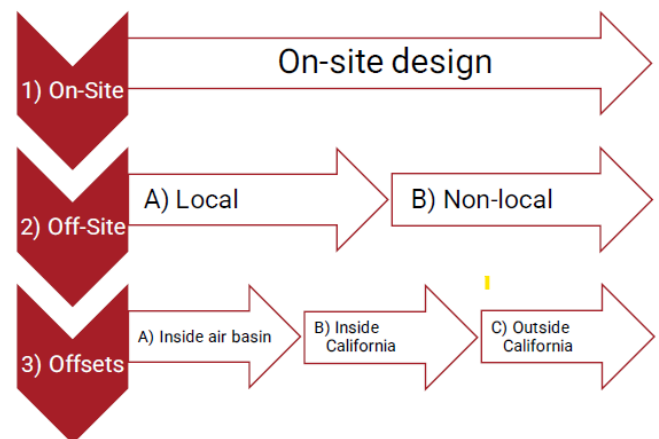
Dated: 10.16.2024

Re: Low Carbon Fuel Standard Regulations Revisions

The increased time for phasing out fossil fuel hydrogen production credits is prolonging the use of fossil fuel and endangering our air quality and climate with further greenhouse gas emissions, including nitrogen oxides that produce ozone a potent trigger to asthmatic episodes. Credits for hydrogen produced from fossil gas should be stopped immediately.

The continued allowance of credits for renewable methane not only affects communities far from California but go against CARBs CEQA recommendations: As a general rule, offsets purchased in the general area of the Project are preferred if onsite mitigations are insufficient as shown in the CARB Scoping Plan GHG Reduction and Mitigation Hierarchy shown on the right.<sup>1</sup>

Recent studies bring into question the assumptions used for induced land use changes and the effects of using biofuels when whole lifecycle analyses are performed.



Land protection is something that local and state regulatory agencies are hesitant to get involved with, but research has shown that under current land use regulations, carbon dioxide emissions from biofuel production exceed those from fossil diesel combustion.<sup>2</sup>

### The findings

With an average emission factor (EF) of 92 kgCO<sub>2</sub> GJ<sup>-1</sup>, we find that the production of modern biofuels, if averaged over a 30-year period, causes land-use-change emissions that are higher than those from burning fossil diesel (Fig. 1). If policymakers tax bioenergy according to these average expected emissions, that is, apply a similar carbon price to a litre of biofuels as to a litre of diesel, the total future bioenergy-induced emissions decrease, as the demand is reduced. However, we show that such a policy cannot bring down the high average emissions that are attributed to biofuels. Only strict and globally comprehensive protection of natural land will reduce the EF and hence, only then, will those biofuels that replace fossil fuels effectively reduce CO<sub>2</sub> emissions.

When I receive notices of consideration of credits for biomass fuels shipped from overseas or across the country, I don't know how to respond, and this goes to convolutions allowed to accommodate for various industry "needs". Statements of overriding consideration have harmed disadvantaged communities and the same will occur if credits for fossil gas hydrogen and "renewable credits" mitigations are allowed to continue. As a member of the Stockton AB617 Steering Committee I am well aware of the regulatory and mitigation environment associated with the implementation of our CERP. As the Delta-Sierra Group Conservation Chair I am well aware of the disproportionate harms that have occurred in Stockton over many years and continues today with findings of overriding consideration that affect disadvantaged communities in Stockton, CA.

<sup>1</sup> Office of Planning and Research. CEQA 202 Series: Greenhouse Gas Emissions. 4.18.2023. Accessed [https://opr.ca.gov/ceqa/docs/20230517-CEQA\\_202\\_GHGAnalysis\\_Slides.pdf](https://opr.ca.gov/ceqa/docs/20230517-CEQA_202_GHGAnalysis_Slides.pdf)

<sup>2</sup> Merfort, L., Bauer, N., Humpeöder, F. et al. State of global land regulation inadequate to control biofuel land-use-change emissions. Nat. Clim. Chang. 13, 610–612 (2023). <https://doi.org/10.1038/s41558-023-01711-7>