Tuesday, February 20, 2024 California Air Resources Board 1001 I Street Sacramento, CA 95814

By email: <u>isd@arb.ca.gov</u>, <u>LCFSWorkshop@arb.ca.gov</u> + submitted via online portal

To Whom It May Concern:

Attached are the Environmental Justice Advisory Committee's comments from our final 2022 Scoping Plan recommendations, along with the 8 point resolution adopted and discussed during our 2023 and 2024 meetings. While the recommendation language points to the 2022 Scoping Plan, many of the recommendations remain relevant to the rulemaking process, as well as providing foundational context for the resolution. We look forward to receiving direct responses to these recommendations and are hopeful that staff and the board will work to substantively integrate equity considerations into the Low Carbon Fuel Standard.

Sincerely,

Martha Dina Argüello, EJAC Co-Chair, Physicians for Social Responsibility-Los Angeles Dr. Catherine Garoupa, EJAC Co-Chair, Central Valley Air Quality Coalition

Non-Fossil Fuel Energy Generation	Type of Activity
"CARB should" is implied at the start of every recommendation.	

	Biogas	
NF41	CARB must acknowledge the significant environmental justice and sustainability concerns around biogas and particularly biomethane, including: (1) the incentivizing of ongoing and expanded, massive dairies and their associated impacts to the air, water, odor, and well-being of local communities; (2) the perpetuation of a polluting natural gas industry via sustained gas infrastructure; and (3) the improper accounting of emissions and emissions reductions from dairies in the state's credit schemes, which additionally allows ongoing oil and gas emissions.	Action/ Analysis
NF42	CARB and other state agencies must regulate livestock methane starting in 2024 instead of relying solely on incentives to yield dairy methane reductions, and do so in a manner that advances co-equal benefits to local air and water quality, odor, and community well-being.	Interagency Coordination
NF43	CARB must commit in the Scoping Plan to examining the life cycle impacts of dairy biogas to ensure the state is relying on the most accurate assessments of the technologies and fuels making up California's long term GHG reduction strategy. If a rulemaking is not already underway, the Scoping Plan must commit to addressing the problems and impacts of dairy biogas in a dedicated Low Carbon Fuel Standard (LCFS) rulemaking. LCFS Pathways certifications for dairy biogas should be paused until the conclusion of the rulemaking.	Action/ Analysis
NF44	Increase LCFS stringency to at least 30%–35% to meet the Governor's stated goal. This will force a more rapid removal of NOx- and black carbon-emitting internal combustion engine (ICE) powered stationary and mobile sources.	Action
NF45	Exclude polluting fuels like biogas, biofuels, and factory farm gas from the LCFS and any other definition of clean, renewable, and/or zero-carbon energy.	Action
NF46	Regulate dairies to limit methane instead of producing factory farm gas that benefits oil and gas companies and artificially delays progress to zero emission transportation.	Action
NF47	The SB 1383 moratorium on regulation expires in 2024, and as the Scoping Plan is a five-year plan, it must include a plan to begin regulating emissions from dairies in 2024. In the alternative, direct the upcoming LCFS rulemaking to address these issues, and pause certification of LCFS pathway applications that include these polluting fuels until the completion of the 2024/2025 rulemaking.	Action
NF48	Ensure that materials used to produce transportation fuels do not incentivize feedstocks and production practices that result in air quality and water quality degradation. Fuels derived from livestock and dairy manure must be excluded from the LCFS, and the LCFS must be reformed to ensure that its implementation does not negatively impact low-income communities, communities of color, and areas already suffering environmental degradation including areas that are in nonattainment status for state and federal air quality standards.	Action
NF49	A dramatic increase in alternative fuel production must not come at the expense of a transition to clean electricity, global deforestation, unsustainable land conversion, environmental justice, or adverse food supply impacts, to name a few examples. Staff must continue to monitor scientific findings on these topics to ensure that California	Action

	policies, such as the LCFS, send appropriate market signals and do not result in	
	unintended consequences.	
	AB 32 Environmental Justice Advisory Committee, Draft Recommendations, F1E. ejacrecsrevised.pdf (ca.gov).	
NF50	Accelerate the reduction and replacement of fossil fuel production and consumption in California.	Action
	AB 32 Environmental Justice Advisory Committee, Draft Recommendations, F3. <i>ejacrecsrevised.pdf</i> (<i>ca.gov</i>).	
NF51	Incentivize private investment in new non-polluting and zero-carbon fuel production in California.	Action / Investment
NF52	Invest in the infrastructure to support reliable refueling for transportation such as electricity.	Investment
NF53	Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program, including eliminating eligibility for offsets that result in either the perpetuation or increase in local air or water pollution.	Action
NF54	Initiate a public process focused on options to increase the stringency, integrity, and scope of the LCFS:	Action / Analysis /
	 Evaluate and propose accelerated carbon intensity targets pre-2030 for LCFS. 	
	 Evaluate and propose further declines in LCFS post-2030 carbon intensity targets to align with the Final 2022 Scoping Plan. 	
	 Consider integrating opt-in sectors into the program. 	
	 Provide capacity credits for electrolytic hydrogen and electricity for heavy-duty fueling. 	
	 Evaluate and ensure full life cycle emissions from all LCFS pathways and each LCFS project, including all upstream and downstream 	
	 Evaluate and ensure that credits issues pursuant to the LCFS are based additional GHG emission reductions and were not already accounted for through other state or federal funding and incentive programs 	
	 Ensure that LCFS pathways and projects do not disproportionately impact communities of color, low-income communities, or communities already disproportionately burdened by environmental degradation and do not conflict with efforts to ensure that regions attain state and federal air quality standards. 	
	 Reevaluate the carbon intensity value of livestock and dairy gas based on a full life cycle analysis, an analysis of additionality for each project, and relevant regulatory programs. 	
	 Evaluate whether to remove livestock and dairy gas from the LCFS based on the role of the LCFS in incentivizing herd concentration near pollution-burdened communities and in pollution-burdened regions, accurate GHG emissions analyses, and conformity with additionality requirements. 	
NF55	Monitor for and ensure that raw materials used to produce low-carbon fuels or	Action /
	technologies do not result in unintended consequences, including allowing for ongoing	Analysis

pollution in low income communities, communities of color, and environmentally burdened	
regions and communities.	

		Type of Activity
Fossil Fuel Industry and Transportation		
F1	"CARB should" is implied at the start of every recommendation. Transportation / Reducing Vehicle Miles Traveled (VMT)	
F1E	Send a strong signal that CARB plans to amend the Low Carbon Fuel Standard (LCFS) to reflect serious climate and sustainability concerns. CARB must be clear about the very limited supply of sustainable, carbon-free liquid and gaseous fuels and avoid using them in any sectors where it is feasible to implement solutions that are zero-emission for both air pollution and GHGs. CARB has previously identified these environmental sustainability concerns in the 2018 CARB LCFS Environmental Assessment. Previous PATHWAYS modeling included a biofuels module that chose to exclude purpose-grown crops because of their harmful environmental impacts and climate risks and further limited the biomass used to in-state production in addition to California's population-weighted share of total national waste biomass supply.	Action
	Without intervention, the majority of renewable diesel and sustainable aviation fuel produced in the state will come from food crop and food system oils, predominantly soybean oil. A chief substitute for soybean oil is palm oil, whose production has been linked to significant deforestation and associated carbon sink loss. After a decade of studies, the European Parliament has voted to restrict use of soybean oil as a feedstock, by providing that it would no longer be counted toward the quota for first-generation biofuels. Belgium has already banned soybean oil-based biofuels as of 2022.	
	Although soy is currently the main feedstock concern, distiller's corn oil is a growing concern as well, with the production of ethanol causing major problems in the corn growing states. At the public EJAC meeting on July 25, 2022, Dr. Maureen McCue from Physicians for Social Responsibility-lowa described significant environmental problems caused by ethanol (using the lowa experience because lowa is the largest producer of ethanol in the U.S), including deforestation, soil and nutrient loss, pollinator extinction, and rising food costs. Additional market disruption results from the fact that distiller's corn oil was has long been used in animal feed, before large amounts of it were diverted to produce biodiesel.	
	The Scoping Plan should make clear that California fuels policy will assess and refrain from supporting fuels associated with soy, corn, and any other feedstocks, either due to CI impacts from ILUC, other environmental harms, or food system disruptions. At the very minimum, CARB should commit to establishing a cap on the availability of the LCFS subsidy for feedstocks such as soybean oil that carry the highest risks of market disruption or Indirect Land Use Change emissions, based on such factors as feedstock availability and California's proportional share of the distillate fuel market; the availability of LCFS credits should be limited in order to deter production of volumes and types of biofuel that are inconsistent with California's climate planning trajectories.	
	(Malins and Sandford. 2022. <i>Animal, vegetable or mineral (oil)</i> ? Cerulogy. https://theicct.org/wp-content/uploads/2022/01/impact-renewable-diesel-us-jan22.pdf .)	

("Soy oil set to follow palm as crop faces biofuel feedstock restrictions." Biofuels International July 14. 2022. available at https://biofuels-news.com/news/soy-oil-set-to-follow-palm-as-crop-faces-biofuel-feedstock-restriction ns/. See Malins, C. Risk Management: Identifying high and low ILUC-risk biofuels under the recast Renewable Energy Directive; Cerulogy, 2019; 4, 14. http://www.cerulogy.com/wp-content/uploads/2019/01/Cerulogy_Risk-Management_Jan2019.pdf; Belgium to ban palm- and soy-based biofuels from 2022. Argus Media, Apr. 14, 2021. https://www.argusmedia.com/en/news/2205046-belgium-to-ban-palm-and-soybased-biofuels-from-2022.) (Final Environmental Analysis Prepared for the Proposed Amendments to the Low Carbon Fuel Standard and the Alternative Diesel Fuels Regulation, California Air Resources Board: Sacramento, CA, 2018. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2018/lcfs18/finalea.pdf) (Mahone et al., 2020. Achieving Carbon Neutrality in California: Pathways Scenarios Developed for the California Air Resources Board, California Air Resources Board, Energy and Environmental Economics, Inc., footnote 2 at 19-20, available at https://ww2.arb.ca.gov/sites/default/files/2020-10/e3 cn final report oct2020 0.pdf). Carbon Capture and Storage (CCS) and Carbon Capture Use and Sequestration F4 (CCUS) on Refineries, 'Blue Hydrogen' or 'Low-carbon Hydrogen) F4.1 Do not consider any engineered carbon removal for fossil fuel infrastructure in the 2022 Action Scoping Plan. a. Revisit the LCFS CCS Protocol to clarify the application of rigorous eligibility and application review criteria specific to different types of fossil fuel infrastructure. Currently, the protocol lacks adequate assessment criteria to evaluate the addition of carbon capture technology to different types of CCS capture facilities, as defined in the LCFS CCS Protocol Section A.2(19). Despite inclusion in the system boundary under Section B.1, the substantive Sections B.2 (Quantification of Geologic Sequestration of CO2 Emissions Reductions), and the entirety of Section C (Permanence Requirements for Sequestration), there must be no question which provisions apply to what types of capture facilities themselves, not only injection and sequestration sites. b. Additionally, the permissibility of weak financial assurance instruments in Section C.7 (Financial Responsibility) is unsupportable. c. Revisit regulations governing the Refinery Investment Credit program, title 17, CCR, section 95489(e), which currently fails to consider the range of risks necessary to protect refinery communities; additionally, amend the regulations to reflect initial assessments and findings from the first examples of CCS projects on fossil fuel infrastructure across the globe. d. Do not authorize LCFS credits for CCS infrastructure in EJ communities that would increase net criteria pollution; knowingly incentivizing projects that would increase net criteria pollutant emissions as described in section 95489(e)(1)(c), perpetuates and worsens a long legacy of environmental racism.

EJAC Resolution re: the Low Carbon Fuel Standard

WHEREAS, the Low Carbon Fuel Standard (LCFS) has exacerbated and entrenched air, water, and odor pollution in communities most impacted by environmental injustices;

WHEREAS, The LCFS has worsened environmental injustice issues across the state, nation, and world by increasing and entrenching pollution on the frontlines of industrial agribusiness;

WHEREAS, California Air Resources Board (CARB) has the authority to regulate methane emissions from livestock as soon as January 1, 2024, pursuant to Health and Safety Code section 39730.7(b).

WHEREAS, the LCFS has exacerbated and entrenched harmful pollution in frontline oil refinery communities;

WHEREAS, the LCFS has exacerbated and entrenched harmful pollution from tailpipes by incentivizing combustion fuels;

WHEREAS, the LCFS has exacerbated and entrenched harmful pollution to global communities from deforestation and using food for fuels;

WHEREAS, the LCFS has exacerbated and entrenched harmful pollution in communities near and regions containing large dairies and other confined animal feeding operations by incentivizing the production, storage, and land application of wet manure;

WHEREAS, insofar as the LCFS reduces carbon emissions from the transportation sector, the provision of LCFS credits for carbon removal such as direct air capture eliminates the possibility of reducing commensurate carbon emissions and co-pollutant emissions from the transportation sector through the LCFS;

WHEREAS, insofar as CARB's goal for carbon removal is to be carbon negative, issuing LCFS credits for carbon removal such as direct air capture (DAC) ensures that it will not be carbon negative but rather offset continued burning of fossil fuels;

WHEREAS, the provision of LCFS credits for direct air capture harms frontline communities both directly with harms and risks from capturing and storing the carbon, and indirectly from displaced renewable deployment that could reduce emissions from fossil fuel power plants, as well as from foregone reductions in transportation sector emissions;

Therefore, be it resolved that the EJAC recommends that the CARB board direct staff to address the above risks, threats, and harms to environmental justice communities by incorporating the following changes, referenced throughout as the "Comprehensive EJ Scenario" into the Low Carbon Fuel Standard through the current rulemaking:

- 1. Conduct and incorporate a full life cycle assessment of all air pollution and greenhouse gas (GHG) emissions for all pathways, and their implications for environmental justice communities.
- 2. Conduct a full accounting of GHG and air pollution emissions associated with pathways relying on the production of fuel from livestock and dairy manure.
- 3. Eliminate avoided methane credits effective January 1, 2024.
- 4. Eliminate credit generation for pathways relying on the production of fuel from livestock and dairy manure for emissions reductions that otherwise would have occurred or were legally or contractually required to occur.
- 5. Cap the use of lipid biofuels at 2020 levels pending an updated risk assessment to determine phase out timelines for high-risk, crop-based feedstocks.
- 6. Prohibit enhanced oil recovery as an eligible sequestration method.
- 7. Do not issue LCFS credits for carbon removal projects such as Direct Air Capture.
- 8. Consider the inclusion of intrastate jet fuel and marine fuels as a deficit generator and provide analysis of this option as part of the LCFS.

Be it further resolved that the EJAC recommends that CARB formally consider the Comprehensive EJ Scenario as a regulatory alternative in the LCFS rulemaking process.

Be it further resolved that the EJAC recommends that CARB reform the LCFS to strengthen the Low Carbon Fuel Standard's support for zero emission vehicles including mass transit vehicles, drayage duty trucks, and heavy duty trucks.

Be it further resolved that the EJAC recommends that CARB immediately initiate formal rulemaking for the regulation of livestock methane pursuant to Health and Safety Code section 39730.7(b).