

August 27, 2024

California Air Resources Board  
1001 I Street Sacramento, CA 95814

**RE: Proposed 15-Day Modifications to Proposed Regulation Order**

Dear California Air Resources Board,

Advanced Biofuels Canada is the Canadian national trade association for advanced biofuels and renewable synthetic fuels. ABFC members produce a portfolio of liquid low-carbon fuels (including alternative jet fuels), sustainable feedstocks, and intermediary products. Our members operate over 10 billion gallons of low carbon fuel production capacity globally and are significant suppliers to renewable and low carbon fuel regulations in Canada, the US, and worldwide. Many of our members have operations in both the United States and Canada.

Regarding the Proposed Low Carbon Fuel Standard Amendments:

**Additional consultation requested** - The concepts included Modifications to *Section 95482. Fuels Subject to Regulation* item #4 (specifically the 20% limit of annual biomass-based diesel from virgin soybean and canola oil) have not been publicly presented or reviewed in any detail during CARB public workshops. The LCFS policy structure pioneered in California is regarded as a science-based and technology-neutral regulation; establishing feedstock limitations, without due consultation, goes against this science-based approach. Proposals of this magnitude and impact merit additional consultation and stakeholder engagement prior to finalization and enactment.

**As written, the 20% limit will result in stranded assets and introduces significant regulatory risk to project developers** - The proposed approach of limiting pathway holders to supply only 20% of annual biomass-based diesel reported on a company-wide basis with crop-based biofuels (soy & canola) will directly impair businesses that have invested in production facilities to supply low carbon biofuels to the California LCFS market. There are significant questions on application and implementation (e.g., will the limitation apply to rapeseed, winter canola, spring canola [?]; what is the process by which a feedstock would be considered for being subject to this 20% limit [?]; will the application and amount of the limit be reviewed with any established frequency [?], etc.).

**The specific identification of virgin canola and soybean oil pathways as being subject to the 20% limit should be further substantiated by Staff** - Analysis of the compliance data from Q1 2021 – Q1 2024 indicates that canola and soybean-based BD and RD have provided 8.2% of liquid biofuel credits and 10.7% of BD and RD credits. Other feedstock pathways for BD and RD (corn oil, tallow, UCO) provide 64% of all liquid fuel credits and 84% of BD and RD credits. It merits further explanation and supporting rationale for why virgin vegetable oils (soybean, canola) should be limited when other feedstock are not considered for limitation. Proceeding with feedstock limitations without sufficient consultation will hinder the advancement of alternative agricultural feedstocks for biofuel production lest they be similarly proposed for limitation without sufficient consultation. Additionally, the proposed limit will impair investments in agricultural innovation via Climate Smart Agriculture practices (e.g., yield enhancement, reduced inputs – fertilizer, pesticide, water use, etc., use of cover crops, use of low till/no till practices).

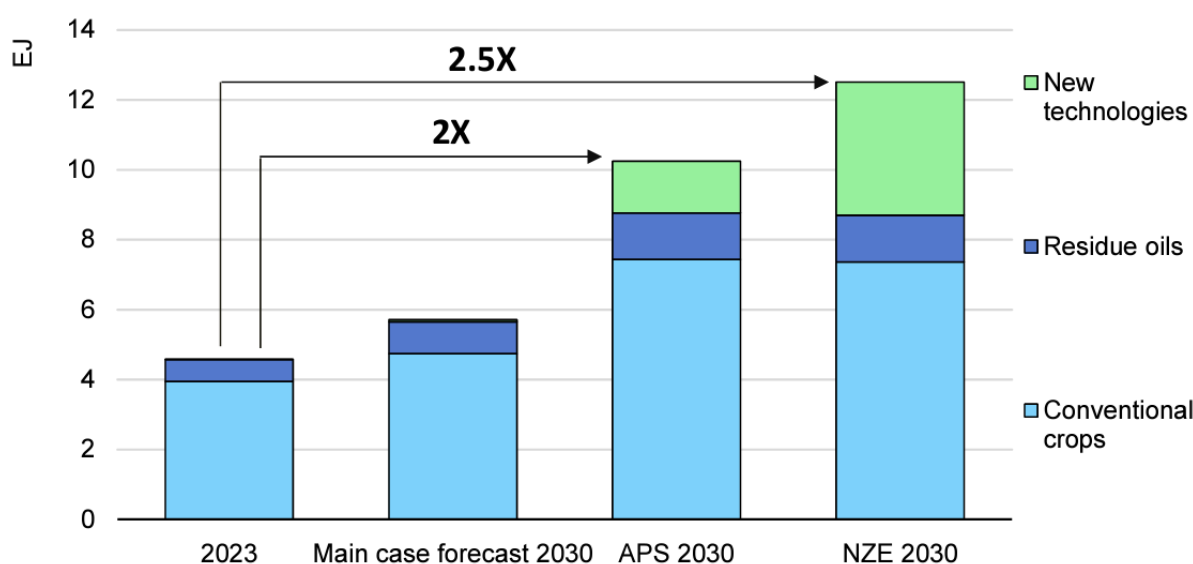
**Potential for increased petroleum diesel usage under the 20% limit:** California's LCFS demonstrates the extent to which low carbon fuels can achieve significant diesel emissions reductions in a relatively short time frame. If enacted, the proposed 20% limits would lead to backsliding in low carbon fuel use in diesel and impair the ability of the LCFS to achieve near-term GHG reductions. This is especially critical given the uncertainty around ZEV penetration in the MHDV fleet. Limiting the available amount of verified low carbon distillate fuels useable by the MHDV fleet will jeopardize the significant progress achieved in this 'hard to decarbonize' sector.

**Support of compliance targets and curve smoothing** - Re: *Modifications to Section 95484. Annual Carbon Intensity Benchmarks*. ABFC supports the increased stringency of the LCFS (from 5% to 9%) in the 2025 compliance year and a smoothed trajectory towards the 2030 target of 30% reduction.

**Staff should consider an adjustment of the LCFS to re-focus the regulation on reducing the CI of liquid fuels supplied in California and remove ZEV from credit creation once an established penetration threshold is achieved.** As ZEV use expands, the credits available in the compliance market will remove the signal for ongoing and increasing decarbonization in gasoline and diesel fuels. Staff should consider whether the LCFS is best utilized to ensure that remaining Internal Combustion Engines have the highest use of low carbon liquid fuels possible.

**The inclusion of sustainability criteria in the California LCFS make it among the most appropriate jurisdictions in which agriculture-derived biofuels can be responsibly increased to achieve strengthened GHG reduction targets** - Analysis by the International Energy Agency (IEA) in their recent study (July 2024) 'Carbon Accounting for Sustainable Biofuels' firmly states that biofuels from agricultural crops defined as 'corn, sugarcane, canola/rapeseed, palm oil and other crops' need to expand to achieve Net Zero Emissions by 2050 scenario:

**Figure 1.3 Biofuel production by feedstock: Current, main case, Announced Pledges Scenario and Net Zero Emissions by 2050 Scenario, 2023-2030**



IEA. CC BY 4.0.

Notes: APS = Announced Pledges Scenario. NZE = Net Zero Emissions by 2050 Scenario. "Conventional crops" refers to corn, sugarcane, soybeans, canola/rapeseed, palm oil and other crops. "Residue oils" refers to used cooking oil, animal fats, palm oil mill effluent and other residue oils. "New technologies and practices" refers to biofuel production from (lignocellulosic) agricultural and forestry residues, municipal solid waste and oil seeds grown on marginal land through intercropping, double-cropping and other approaches that do not otherwise compete with food and feed production.

Sources: IEA (2024), [Oil 2024: Analysis and Forecast to 2030](#); IEA (2023), [World Energy Outlook 2023](#).

(Source: <https://www.iea.org/reports/carbon-accounting-for-sustainable-biofuels>, page 14)

The LCFS's inclusion of sustainability criteria, along with the Renewable Biomass provisions in the US RFS, ensure that irresponsible feedstocks are not utilized for credit creation.

**US and Canadian trade should be maintained and enhanced through regulatory cross compliance for sustainability certification between the LCFS and Canada's Clean Fuel Regulations (CFR) - ABFC**

recommends that CARB maintain open markets between Canada and the US on crops, fuels, and biofuels by aligning regulations and recognition of existing compliance and administrative measures. Specifically, CARB can recognize the verified adherence to the Canadian Clean Fuel Regulations' Land Use and Biodiversity Criteria<sup>1</sup> as achieving the requirements of the LCFS section 95488.9 (g).

**A revised approach to jet fuel is warranted** - The demonstrated effectiveness of the LCFS in reducing gasoline and diesel emissions should be harnessed to reduce aviation emissions. ABFC suggests that CARB re-consider its exemption for intrastate jet fuel and consult on a revised approach (whether within the current LCFS or via a new regulation) where all jet fuel sold in California is subject to both a minimum volume blend requirement of alternative jet fuel as well as a carbon intensity reduction requirement. This revised approach would address the issue identified that *'aviation fuel suppliers who would generate deficits under the initial proposal could simply acquire credits to meet that compliance obligation'*.<sup>2</sup> We note that this approach has been implemented in the British Columbia Low Carbon Fuel Standard as of January 2024.<sup>3</sup>

**CARB's actions to address jet fuel emissions will be impactful on other subnational jurisdictions: ABFC suggests that California expand its ambition towards jet fuel and align with the approach enacted in British Columbia that (1) obligates all jet fuel sold under the regulation, (2) prescribes minimum volumetric AJF use requirements, and (3) prescribes carbon intensity (CI) reduction requirements for jet fuel.**

British Columbia's updated LCFS statute:

- Was approved on December 11, 2023, and enacted on January 1, 2024.
- Requires 1% AJF by volume in 2028, 2% in 2029, 3% in 2030.
- Requires a 2% CI reduction from a fossil jet baseline of 88.83 gCO<sub>2</sub>e/MJ in 2026, 4% in 2027, 6% in 2028, 8% in 2029, and 10% in 2030.

BC's CI reduction requirements for jet fuel are lower than that of gasoline and diesel fuels. Gasoline has a 5% renewable content requirement and a 30% CI reduction requirement by 2030 (below 2010 levels);

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<sup>1</sup>Land use and biodiversity guidance: <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/energy-production/fuel-regulations/clean-fuel-regulations/compliance/guidance-land-use-biodiversity.html>

<sup>2</sup> As stated in the *Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information*.

<sup>3</sup> British Columbia LCFS: [https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/282\\_2023](https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/282_2023)

diesel has a 4% renewable content requirement and is subject to the same 30% CI reduction requirement by 2030. (We note that the CI reduction requirements for any fuel can be met by overcompliance in other fuel types though there must be a volumetric minimum supply of alternative jet fuel.

Thank you for this opportunity to provide comments.

Yours truly,

Advanced Biofuels Canada