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14 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA  
15 IN AND FOR THE COUNTY OF FRESNO

16 COMMUNITIES FOR A BETTER  
ENVIRONMENT,

17 Petitioner,

18 v.

19 CALIFORNIA AIR RESOURCES BOARD;  
20 STEVEN S. CLIFF, in his official capacity as  
Executive Officer of the California Air Resources  
21 Board; and DOES 1-20,

22 Respondents.

Case No. [24CECG05430](#)

**VERIFIED PETITION FOR WRIT OF  
MANDATE AND COMPLAINT FOR  
INJUNCTIVE RELIEF**

Code Civ. Proc., §§ 1085, 1094.5;  
Pub. Resources Code, § 21000 et seq.

1 **INTRODUCTION**

2 1. This Verified Petition for Writ of Mandate and Complaint for Injunctive Relief  
3 (“Petition”) challenges the decision of the California Air Resources Board (“CARB”) to approve  
4 amendments to the Low Carbon Fuel Standard (“Amendments” or “Project”) that lock in decades of  
5 subsidies for polluting fuels without the required analysis and mitigation of their wide-ranging  
6 environmental harms. As explained below, CARB’s actions in approving the Project, certifying an  
7 inadequate Final Environmental Impact Assessment (“Final EIA”), and adopting related findings and a  
8 statement of overriding considerations violated the California Environmental Quality Act (“CEQA”),  
9 Public Resources Code section 21000 et seq., and the CEQA Guidelines, 14 California Code of  
10 Regulations section 15000 et seq.

11 2. First adopted in 2009 to reduce greenhouse gas emissions (“GHG”) emissions, the Low  
12 Carbon Fuel Standard (“LCFS”) program generates billions of dollars in annual subsidies for  
13 transportation fuels that are intended to reduce the average carbon intensity of California’s  
14 transportation fuel. Although technical advances since the LCFS’s inception have enabled widespread  
15 availability of zero-emissions electric vehicles (“EVs”), the lion’s share of LCFS revenues incentivize  
16 polluting fuels like biofuels rather than EV technologies. Biofuels derived from food crops (“crop-based  
17 biofuels”) are of particular concern because they cause a host of adverse impacts to vulnerable  
18 communities when they are grown, when they are refined, and when they are combusted in vehicles.  
19 Biofuel feedstock cultivation is linked to increased global food insecurity and deforestation, biofuel  
20 refining increases exposure to toxic and criteria air pollution in surrounding communities, and biofuel  
21 combustion in vehicles emits pollution that harms Californians already breathing unhealthy air.

22 3. In adopting the Amendments, CARB brushed aside evidence submitted by impacted  
23 community members, academics, scientists, advocates, and former CARB staff on the significant harms  
24 from crop-based biofuels and the need for the Amendments to include effective limits on their  
25 participation in the program. Rather than impose the necessary limits, the Amendments will increase  
26 crop-based biofuel production beyond their already high levels, as CARB acknowledges.

27 4. In addition to impacts from biofuels, the Amendments will expand the production of  
28 polluting fuels such as hydrogen produced from methane, a GHG, despite the evidence that such

1 production emits GHGs and other air pollutants and undermines the production of cleaner hydrogen  
2 alternatives.

3 5. The Amendments also subsidize the unlimited growth of direct air capture (“DAC”), an  
4 energy-intensive technology that purports to remove carbon from the atmosphere. Although DAC is not  
5 even a transportation fuel, DAC is allowed to participate in the program, and CARB’s modeling shows  
6 that DAC projects will become more cost-effective than reducing fossil fuels, perversely prolonging  
7 fossil fuel use in California.

8 6. Additionally, the Amendments introduce a new provision, the Auto-Acceleration  
9 Mechanism (“AAM”), that allows key components of the program to be modified without a formal  
10 rulemaking, hampering the public’s ability to scrutinize the program’s effectiveness and determine  
11 whether ongoing subsidies are consistent with California’s climate and air quality requirements.

12 7. CARB’s decision to direct billions of dollars to polluting fuels for decades to come will  
13 cause substantial impacts to the environment and human health. Despite years of effort by Petitioner and  
14 other members of the public to alert CARB to the gravity of these impacts and the deficiencies of  
15 CARB’s environmental review, CARB failed adequately to disclose, analyze, and mitigate these and  
16 other foreseeable environmental impacts before approving the Project.

17 8. CARB’s findings and statement of overriding considerations, adopted in connection with  
18 the Project, are also invalid both because they unlawfully purport to override impacts that can and  
19 should have been analyzed and mitigated more fully and because they are not based on substantial  
20 evidence supporting either the purported benefits of the Project or the environmental effects being  
21 outweighed.

22 9. CARB also failed to properly respond to numerous public comments on the Draft and  
23 Revised Draft EIA; its responses were conclusory, evasive, confusing or otherwise non-responsive,  
24 contrary to the requirements of CEQA. CARB further violated CEQA by failing to recirculate a new  
25 EIA for public comment even after significant new information was presented in comments and after  
26 CARB made significant changes to the Project that were not analyzed in the Final EIA.

1 10. For these reasons, Petitioner requests a writ of mandate directing CARB to vacate and set  
2 aside its approval of the deficient portions of the Project, its certification of the Final EIA, and its  
3 adoption of related findings and statement of overriding considerations.

4 **PARTIES**

5 11. Petitioner COMMUNITIES FOR A BETTER ENVIRONMENT (“CBE” or “Petitioner”)  
6 is a community-based California non-profit environmental health and justice organization. CBE’s  
7 mission is to build people’s power in California’s communities of color and low-income communities to  
8 achieve environmental health and justice by preventing and reducing toxics and air and water pollution  
9 and building healthy and sustainable communities. CBE’s members live fence-line to refineries,  
10 industry, and transportation corridors. The communities where CBE organizes suffer from  
11 disproportionately high rates of asthma and respiratory illnesses, heart problems, cancer, low birthrates,  
12 and miscarriages.

13 12. By this action, CBE seeks to protect the health and welfare interests of its members and  
14 the general public, and to enforce a public duty owed to them by CARB. CBE’s members have an  
15 interest in their health and well-being, as well as an interest in the conservation, environmental,  
16 aesthetic, and economic interests of California. CBE’s members who live, work, and recreate near  
17 biofuel refineries, hydrogen plants, and transportation corridors have a right to and a beneficial interest  
18 in CARB’s compliance with CEQA. These interests in a clean environment have been, and continue to  
19 be, threatened by CARB’s decision to certify the Final EIA and approve the deficient portions of the  
20 Project in violation of CEQA and, unless the relief requested in this case is granted, will continue to be  
21 adversely affected and irreparably injured by CARB’s failure to comply with the law.

22 13. Respondent and defendant CALIFORNIA AIR RESOURCES BOARD is the state  
23 agency responsible for protecting the public from the harmful effects of air pollution and developing  
24 programs and actions to fight climate change, with certain powers and duties under the California Health  
25 and Safety Code.

26 14. CARB is the “lead agency” for purposes of Public Resources Code section 21067, having  
27 the principal responsibility for conducting environmental review for and approving the Project. CARB  
28 operates a certified regulatory program pursuant to Public Resources Code section 21080.5. Under this

1 equivalent program, CARB need not prepare an initial study, negative declaration or environmental  
2 impact report, but it remains subject to other provisions of CEQA. CEQA Guidelines, § 15250.

3 15. Respondent STEVEN S. CLIFF is the current Executive Officer of CARB, who is made a  
4 party to this action in his official capacity only. Mr. Cliff acts as the director and manager of CARB  
5 professionals and other staff personnel, who all report to him.

6 16. Petitioner does not know the true names and capacities, whether individual, corporate,  
7 associate, or otherwise, of Respondents DOE 1 THROUGH DOE 20, inclusive, and therefore sues said  
8 Respondents under fictitious names. Petitioner will amend this Petition to show their true names and  
9 capacities when they are known. Respondents and defendants are collectively referred to herein as  
10 “Respondents.”

### 11 JURISDICTION AND VENUE

12 17. This Court has jurisdiction over the matters alleged in this Petition pursuant to Code of  
13 Civil Procedure sections 1085 and 1094.5, and Public Resources Code sections 21168, 21168.5, and  
14 21168.9.

15 18. Venue is proper in this Court because CARB is a state agency, Mr. Cliff is a state officer,  
16 and the Attorney General has an office in this county. Cal. Civ. Proc. Code § 401.

17 19. In accordance with Public Resources Code section 21080.5 subdivision (g), this Petition  
18 has been filed within 30 days of CARB’s Notice of Decision approving the Project and certifying the  
19 Final EIA, which was filed on November 22, 2024 and posted on November 27, 2024.

20 20. Petitioner has complied with Public Resources Code section 21167.5 by serving a written  
21 notice on December 16, 2024 of Petitioner’s intention to commence this action against Respondents. A  
22 copy of this written notice and proof of service is attached as Exhibit A to this Petition.

23 21. Petitioner is complying with the requirements of Public Resources Code section 21167.6  
24 by concurrently filing a notice of its election to prepare the administrative record for this action.

25 22. Petitioner will promptly send a copy of the Petition to the California Attorney General,  
26 thereby complying with the requirements of Public Resources Code section 21167.7.

27 23. Petitioner has performed any and all conditions precedent to filing this instant action and  
28 has exhausted any and all available administrative remedies to the extent required by law.

1 24. Petitioner has no plain, speedy, or adequate remedy in the course of ordinary law unless  
2 this Court grants the requested writ of mandate to require Respondents to set aside their approval of the  
3 deficient portions of the Project and the Final EIA. In the absence of such remedies, Respondents'  
4 approvals will remain in effect in violation of state law.

5 25. Petitioner has exhausted all administrative remedies by submitting written comments on  
6 the Project to Respondents to request compliance with CEQA and the completion of full and adequate  
7 environmental review. All issues raised in this petition were raised before Respondents by CBE, other  
8 members of the public, or public agencies prior to approval of the Project.

9 26. The maintenance of this action is for the purpose of enforcing important public policies  
10 of the State of California with respect to the protection of the environment under CEQA. The  
11 maintenance and prosecution of this action will confer a substantial benefit upon the public by  
12 protecting the public from environmental and public health harms alleged in this Petition. Petitioner is  
13 acting as a private attorney general to enforce these public policies and prevent such harm.

#### 14 **CEQA LEGAL BACKGROUND**

15 27. CARB's adoption of the Amendments is subject to CEQA. CEQA is a comprehensive  
16 statute designed to provide long-term protection of the environment. Cal. Pub. Res. Code §§ 21000–  
17 21189. CEQA review informs decisionmakers and the public about the potential significant  
18 environmental effects of a project. CEQA Guidelines, § 15002(a)(1). Such disclosure ensures that “long-  
19 term protection of the environment . . . shall be the guiding criterion in public decisions.” Cal. Pub. Res.  
20 Code § 21001(d). The Environmental Impact Report (“EIR”) is the “heart” of this requirement. *See No*  
21 *Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84. The EIR has been described as “an  
22 environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to  
23 environmental changes before they have reached ecological points of no return.” *County of Inyo v. Yorty*  
24 (1973) 32 Cal.App.3d 795, 810.

25 28. While CARB acts pursuant to a certified regulatory program which exempts the agency  
26 from preparing an EIR, the environmental analysis that CARB is required to undertake (i.e. an EIA) is  
27 deemed the functional equivalent of an EIR. 17 Cal. Code. Regs. §§ 60000-60007; *POET, LLC v. State*  
28

1 *Air Resources Bd.* (2013) 218 Cal.App.4th 681, 710. CARB’s actions are subject to the other applicable  
2 provisions of CEQA. 14 Cal. Code Regs. § 15250; *POET, LLC*, 218 Cal.App.4th at 710.

3 29. An EIR must identify and describe “[d]irect and indirect significant effects of the project  
4 on the environment.” CEQA Guidelines, § 15126.2(a). This includes environmental effects that cause  
5 adverse effects on human beings as well as physical changes to the environment caused by economic or  
6 social effects of a project. Cal. Pub. Res. Code § 21083(b); CEQA Guidelines, § 15131(a). An EIR must  
7 also identify and analyze cumulative effects when the “incremental effects of an individual project are  
8 significant when viewed in connection with the effects of past projects, the effects of other current  
9 projects, and the effects of probable future projects.” CEQA Guidelines, § 15065(a)(3); *id.* § 15130(a).  
10 In addition, “a sufficient discussion of significant impacts requires not merely a determination of  
11 whether an impact is significant, but some effort to explain the nature and magnitude of the impact.”  
12 *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 519.

13 30. A program EIR is an EIR which may be prepared on a series of actions that can be  
14 characterized as one large project and are related to individual activities carried out under the same  
15 authorizing statutory or regulatory authority and having generally similar environmental effects which  
16 can be mitigated in similar ways. “[D]esignating an EIR as a program EIR . . . does not by itself  
17 decrease the level of analysis otherwise required in an EIR. All EIRs must cover the same general  
18 content. The level of specificity of an EIR is determined by the nature of the project and the ‘rule of  
19 reason,’ rather than any semantic label accorded to the EIR.” *San Franciscans for Livable*  
20 *Neighborhoods v. City and County of San Francisco* (2018) 26 Cal.App.5th 596, 608 (internal citations  
21 omitted).

22 31. To measure the environmental damages of a project and provide adequate mitigation,  
23 CEQA and its implementing guidelines require that an EIR “include a description of the physical  
24 environmental conditions in the vicinity of the project” that generally reflect conditions “as they exist at  
25 the time the notice of preparation is published.” CEQA Guidelines, § 15125(a), (a)(1). This baseline is a  
26 key component in identifying and quantifying a project’s environmental effects and the starting point  
27 from which a lead agency measures whether an impact may be environmentally significant. *Id.*

1 32. CEQA requires public agencies to avoid or reduce environmental damage whenever  
2 feasible by considering changes in projects through project alternatives or enforceable mitigation  
3 measures. *See* CEQA Guidelines, §§ 15002(a)(2)–(3), 15126.4(a)(1)–(2); *see also* *Citizens of Goleta*  
4 *Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564–65. A public agency should not approve a  
5 project as proposed if there are feasible alternatives available that would substantially lessen any  
6 significant effects that the project would have on the environment. Cal. Pub. Res. Code, § 21002; CEQA  
7 Guidelines, §§ 15002(a)(3), 15021(a)(2), 15126(f); *Citizens for Quality Growth v. City of Mount Shasta*  
8 (1988) 198 Cal.App.3d 433, 443–45.

9 33. After releasing a draft EIR for public comment, the lead agency must evaluate comments  
10 received and offer a good faith, reasoned analysis in response. CEQA Guidelines, § 15088(a), (c). Major  
11 environmental issues raised when the lead agency’s position differs with recommendations and  
12 objections raised in the comments must be addressed in detail. *Id.* § 15088(c).

13 34. A lead agency is required to recirculate an EIR where significant new information is  
14 added to the EIR after public notice is given on the availability of the draft EIR, including changes to the  
15 project as well as additional data or other information. CEQA Guidelines, § 15088.5.

16 35. When the lead agency approves a project which will result in significant and unavoidable  
17 effects, the agency must provide reasons, supported by substantial evidence, to support its approval.  
18 CEQA Guidelines, § 15093(b).

## 19 STATEMENT OF FACTS

### 20 I. The Low Carbon Fuel Standard

#### 21 A. Market Design

22 36. Adopted by CARB pursuant to Assembly Bill (“AB”) 32 (the Global Warming Solutions  
23 Act of 2006), the LCFS is part of California’s efforts to cut “GHG emissions and other smog-forming  
24 and toxic air pollutants by improving vehicle technology, reducing fuel consumption, and increasing  
25 transportation mobility options.”<sup>1</sup>

26  
27  
28 <sup>1</sup> CARB, Low Carbon Fuel Standard, <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about>.



1           37.     The LCFS creates a credit market for fuels that is based on the principle that each  
2 transportation fuel has “life cycle” GHG emissions. A life cycle assessment evaluates the GHG  
3 emissions associated with the production, transportation, and use of a given fuel. The life cycle  
4 assessment includes direct emissions associated with producing, transporting, and using the fuels, as  
5 well as significant indirect effects on GHG emissions, such as changes in land use for certain fuels.  
6 Through a full life cycle assessment conducted as part the LCFS, fuels are assigned a “carbon intensity”  
7 (“CI”).

8           38.     The CI score assigned to a particular fuel is very important for its future demand and  
9 price. The LCFS requires California’s transportation fuel producers and providers to meet an annual CI  
10 standard, or benchmark, set by CARB in the LCFS regulation. The benchmark declines each year,  
11 meaning the overall CI of the State’s transportation fuel pool decreases over time. Fuels with CI scores  
12 lower than the CI benchmark generate credits, while fuels with CI scores above the CI benchmark  
13 generate deficits. Providers of transportation fuels must demonstrate that the mix of fuels they supply for  
14 use in California meets the LCFS CI benchmarks for each annual compliance period. An LCFS deficit  
15 generator meets its compliance obligation by ensuring that the number of credits it earns or otherwise  
16 acquires from another party is equal to, or greater than, the deficits it has incurred.

17           **B.     Crop-Based Biofuels**

18                   1.   The Growth of Biofuels

19           39.     When the LCFS was originally adopted in 2009, biofuels were the available alternatives  
20 to fossil fuels. According to CARB data, ethanol—a crop-based biofuel that can be blended into  
21 gasoline—was the program’s primary credit-generating fuel, and its use has remained relatively constant  
22 over time. As the LCFS CI benchmarks have become more stringent, renewable diesel (“RD”) and  
23 biodiesel (“BD”) (collectively “biomass-based diesel”) volumes sold into the program have increased  
24 dramatically.<sup>2</sup> For example, the share of biomass-based diesel credited under LCFS grew from one

25 \_\_\_\_\_  
26  
27 <sup>2</sup> RD and BD are made from soy, canola and other oilseed crops, animal fats, or used cooking oil. RD is  
28 produced using a hydrogen treatment which makes it chemically equivalent to fossil diesel such that it can  
serve as a “drop-in” substitute in vehicles and be transported using existing pipelines. Biodiesel does not  
undergo this treatment and can be mixed with fossil diesel at up to a 20 percent volume.

1 percent of total compliance volumes in 2011 to over half of volumes by 2023. Much of this growth is  
2 tied to increased cultivation of soy and canola for use as a biofuel. In 2019, RD and BD produced from  
3 soy and canola oil totaled 4.5 million gallons. By 2023, BD and RD volumes using these feedstocks  
4 totaled 434 million gallons—two orders of magnitude higher in four years.

## 5 2. Impacts from Biofuels Production in Refinery Communities

6 40. The most significant expansion of biofuel production in California is occurring at oil  
7 refineries that have been converted from refining crude oil (a fossil fuel) to refining biofuels, with  
8 significant air quality implications for communities near the facilities that refine these fuels. Refining  
9 biofuel feedstocks (such as soy and canola oil) can be more carbon-intensive than crude oil refining  
10 because many of these feedstocks have more oxygen than crude oil, requiring more GHG-emitting  
11 hydrogen production to remove the oxygen. In addition to emitting GHGs, facilities that manufacture  
12 hydrogen from methane also release numerous air pollutants that are harmful to human health, including  
13 fine particulate matter (“PM2.5”), nitrogen oxides (“NOx”), and toxic air contaminants such as volatile  
14 organic compounds (“VOCs”), among others. Additionally, biofuel refining itself emits significantly  
15 greater amounts of certain hazardous air pollutants than oil refining—including carcinogens like  
16 formaldehyde and acetaldehyde, among others.

17 41. Further, unlike crude oil, which is typically piped to refineries for processing, biofuel  
18 feedstock is transported to the refinery via diesel vehicles, railcars, and marine vessels which emit  
19 pollution in communities near these facilities and associated transportation corridors. For example, the  
20 Marathon refinery in Martinez, California, which suspended operations in 2020 before reopening as a  
21 biofuel refinery in 2022, now requires more daily diesel truck and railcar trips compared to when it  
22 operated as an oil refinery. As a result, the environmental impact report for the refinery conversion  
23 identified significant and unavoidable cumulative particulate matter (“PM”) pollution for residents and  
24 workers in the area. Nearby, the Phillips 66 refinery in Rodeo, California also converted from refining  
25 oil to refining biofuels in 2022 and is now one of the largest biofuel refineries in the world. In  
26 Paramount, California, the AltAir refinery secured approval of an expansion of biofuel production in  
27 2022, which added to already existing biofuel refining that had commenced in 2013, one year after the  
28 oil refinery had gone idle. Much like the Marathon refinery, the Phillips 66 and AltAir refinery

1 conversions also require increased delivery of feedstocks and, according to the environmental review  
2 documents for each conversion, will cause traffic and the associated pollution to increase substantially  
3 compared to when the refineries processed crude oil.

4 42. The environmental problems associated with biofuel refinery conversions are particularly  
5 acute because refineries are often located in areas with already high pollution burdens and socio-  
6 economic vulnerabilities. According to CalEnviroScreen, a mapping tool developed by the California  
7 Environmental Protection Agency (“CalEPA”) that identifies the communities most burdened by  
8 pollution and vulnerable to its effects, residents in the census tracts closest to the Marathon refinery  
9 experience a pollution burden greater than 82–91 percent of the rest of the State. The pollution burden of  
10 residents near the Phillips 66 and AltAir refineries are similarly alarming in the 86<sup>th</sup> and 89-98<sup>th</sup>  
11 percentiles, respectively. CalEnviroScreen metrics also indicate that these communities are low-income  
12 communities and communities of color already experiencing increased rates of asthma and  
13 cardiovascular diseases, among other health burdens. Based on these combined environmental, health,  
14 and economic burdens, CalEPA has classified these communities as “disadvantaged.”

15 43. Beyond Martinez, Rodeo, and Paramount, other overburdened refinery communities  
16 around California could experience prolonged and heightened pollution exposure from biofuel refinery  
17 conversions and expansions.

18 44. In addition to locally elevated pollution, the air basins in which these refineries are  
19 located also face pollution problems that could be exacerbated by additional and prolonged refinery  
20 emissions. For example, the San Francisco Bay Area Air Basin where the Marathon and Phillips 66  
21 refineries are located is not in compliance with state pollution standards for PM. PM pollution is linked  
22 to serious health problems such as premature death in people with heart or lung disease, aggravated  
23 asthma, and other respiratory ailments. The AltAir refinery is in the South Coast Air Basin, which is in  
24 extreme non-attainment for many federal air quality standards, including ground-level ozone, or smog.  
25 Formed through chemical reactions between NOx and VOCs, ozone is linked to a wide variety of  
26 respiratory ailments.

1                   3. Impacts from Biofuel Use in California Vehicles

2           45.     Separate from biofuel production pollution, the growth of biofuel combustion in  
3 California vehicles also affects air quality throughout the State. Many parts of California do not meet  
4 federal and state standards for healthy air, and this failure has serious consequences for the health of  
5 Californians. For instance, as CARB acknowledges, high levels of NOx can cause a wide range of health  
6 harms, and many regions of the State are not in compliance with air quality standards for NOx.

7           46.     CARB data show that combustion of BD in vehicles can increase NOx compared to fossil  
8 fuel combustion, and CARB’s attempts to mitigate these impacts have not been shown to be effective.  
9 CARB data also show that the use of RD and BD does not significantly reduce PM pollution in new  
10 technology diesel engines (“NTDEs”) when compared to fossil fuel use.

11                   4. Indirect Land Use Change Impacts from Crop-Based Biofuels

12           47.     Growing crops for transportation fuel instead of food exacerbates food insecurity and has  
13 GHG and other impacts as non-agricultural land is converted to crop production. When it first adopted  
14 the LCFS, CARB recognized that in addition to direct GHG emissions, some fuels create emissions due  
15 to indirect land use change (“ILUC”) effects. An ILUC impact is initially triggered when an increase in  
16 the demand for crop-based biofuels begins to drive up prices for the necessary feedstock crop. Some of  
17 the options for farmers to take advantage of these higher prices are to take measures to increase yields,  
18 to switch to growing the crops with the higher returns, and to bring non-agricultural lands into  
19 production. When new land is converted to crop production, such conversions release the carbon  
20 sequestered in soils and vegetation. The resulting carbon emissions constitute the ILUC impact of  
21 increased biofuel production, and that impact is translated into an ILUC value for each type of biofuel.

22           48.     Since the 2009 adoption of the LCFS, CARB has relied on the Global Trade Analysis  
23 Project (“GTAP”) model to determine ILUC values for crop-based biofuels. In 2014, CARB conducted  
24 a Detailed Analysis for Indirect Land Use Change to update GTAP’s ILUC values, which were  
25 incorporated into CARB’s 2015 amendments to the LCFS. CARB’s analysis recognized that the  
26 diversion of agricultural land to biofuel feedstock production will exert an upward pressure on food  
27 commodity prices, and potentially lead to food shortages, increasing food price volatility and inability of  
28 the world’s poorest people to purchase adequate quantities of food.

1 49. Although deforestation has been linked to the cultivation of crop-based biofuels, GTAP  
2 explicitly excludes deforestation or conversion of other natural carbon-rich sensitive ecosystems as a  
3 consequence of biofuel production, thereby resulting in a lower ILUC value than if deforestation was  
4 accounted for.

5 50. ILUC impacts also increase as more land is diverted for biofuel production. In its 2023  
6 Model Exercise Technical Document, the United States Environmental Protection Agency (“U.S. EPA”)  
7 compared the response of GTAP and several other ILUC models to increased assumptions of soybean-  
8 oil biofuel production. All models showed greater ILUC impacts when higher levels of production were  
9 assumed. Despite this and other evidence, CARB relies on the ILUC values that it assigned to biofuels  
10 in the 2015 LCFS Amendments, which do not reflect existing and projected increased crop-based  
11 biofuel production.

### 12 C. Hydrogen

13 51. In addition to biofuels, hydrogen is also an LCFS credit-generator. Hydrogen can be a  
14 transportation fuel and, as noted above, hydrogen is also an input in fossil fuel and biofuel refining. The  
15 production of hydrogen can emit GHGs and other harmful pollutants. Most hydrogen is produced at oil  
16 refineries from methane, a GHG, through a process known as steam methane reforming. Hydrogen can  
17 also be produced through a process called electrolysis that extracts hydrogen from water molecules  
18 using electricity.

19 52. The vast majority of hydrogen that receives credits in the LCFS is derived from the  
20 methane in fossil fuels. Much of that methane has been paired with a type of emissions credit (called an  
21 “environmental attribute”) purchased from biomethane producers.<sup>3</sup> Under the LCFS regulations, those  
22 biomethane environmental attributes have negative CI values, allowing methane-derived hydrogen to  
23 receive a lower CI score—and thus more LCFS credits—than hydrogen produced from electrolysis.  
24 Also, biofuel refiners that use such hydrogen in their production process can also claim a lower CI score

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25  
26 <sup>3</sup> Biomethane is methane generated from the decomposition or heating of organic material in an oxygen-  
27 free environment. Major sources of biomethane include landfills and manure lagoons at large-scale  
28 livestock operations such as dairies. CARB allows California hydrogen producers to purchase these  
environmental attributes even when the biomethane producers are located out of state and never deliver  
their biomethane to California.

1 for their fuel product. Most hydrogen that is not produced at oil refineries is produced at merchant  
2 hydrogen plants.

3 **D. Direct Air Capture**

4 53. Aside from actual transportation fuels, projects that purport to remove carbon from the  
5 atmosphere, including DAC projects, can also receive LCFS credits. As CARB acknowledges, DAC  
6 requires substantial infrastructure development, including pipelines, and high amounts of energy. No  
7 DAC projects have been approved by CARB to date, but CARB projects that DAC credits will grow  
8 substantially over the next 20 years. According to CARB modeling, fossil fuel use increases when DAC  
9 enters the program, despite a decline in diesel fuel demand. In this way, DAC could function as an offset  
10 for the GHG emissions from fossil use, which would otherwise decline as the program’s CI benchmark  
11 becomes more stringent. As a result, rather than reduce legacy GHG emissions that cannot otherwise be  
12 mitigated, DAC crediting will likely extend California’s reliance on fossil fuels and, as CARB admits,  
13 shift investment away from alternative fuels to fossil fuels.

14 **E. Electric Vehicles**

15 54. Importantly, biofuels and hydrogen are not the only fossil fuel alternatives. Since the  
16 LCFS was originally adopted, battery technologies have evolved rapidly, enabling the widespread  
17 electrification of transportation in California. Electricity used for EV transportation can also generate  
18 LCFS credits. Unlike vehicles that combust biofuels and emit a wide range of pollutants like NOx and  
19 PM, vehicles powered by electricity do not emit harmful pollution. Indeed, given the perpetual air  
20 quality crisis in many of California’s most polluted air basins, regulators have determined that “there is  
21 no viable pathway to achieve the needed [NOx] reductions [to ensure compliance with air quality  
22 standards] without widespread adoption of zero emissions (ZE) technologies across all mobile sectors  
23 [(i.e. transportation)] and stationary sources, large and small.”<sup>4</sup> In other words, evidence shows that  
24 widespread deployment of zero-emissions technologies, not combustion fuels like biofuels, is necessary  
25 for Californians to breathe clean air.

26  
27 <sup>4</sup> South Coast Air Quality Management District, 2022 Air Quality Management Plan (Dec. 2022) at ES-5,  
28 <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>.

1           55.     Despite this identified need for technological transformation in the transportation section,  
2 electricity generates significantly fewer LCFS credits than biofuels. This difference in crediting is due to  
3 the favorable treatment that combustion fuels enjoy in the program, including the ability to generate  
4 negative CI scores and to reduce CI scores through purchasing “environmental attributes” from other  
5 producers. By contrast, electricity produced from zero-emissions solar and wind resources can never  
6 generate a negative CI score in the LCFS. Further, while fueling infrastructure and vehicles already exist  
7 for biofuels (as they are the same as for fossil fuels), EVs face constraints from the electric grid and  
8 from new vehicle adoption. Moreover, biomass-based biofuels (including BD and RD) and biomethane,  
9 benefit from the stacking of LCFS credits with federal dollars through the longstanding Renewable Fuel  
10 Standard. These subsidies put biofuels at a price advantage compared to EVs. While the LCFS offers  
11 crediting to EVs that attempts to address their infrastructure constraints, they are not sufficient to  
12 remedy this disparity.

13 **II.     CARB’s Rulemaking and Environmental Review Process**

14           56.     Since the adoption of the LCFS, CARB has amended the regulation in 2011, 2015, 2018,  
15 and 2019 in response to changing market conditions, court orders, legislation, and direction from CARB  
16 Board Members. In 2020, CARB began to hold workshops with stakeholders about another set of  
17 potential changes to the regulation.

18 **A.     Early Workshops and Public Comments**

19           57.     On November 9, 2022, CARB held a workshop in which it presented different alternative  
20 scenarios for potential changes to the LCFS regulation and stated that “in light of expected increase in  
21 global production capacity, staff continues to evaluate the need for adjustments to prevent potential  
22 deforestation, land conversion, and adverse food supply impacts.”<sup>5</sup> Staff referenced feedback that it had  
23 solicited from stakeholders on treatment of crop-based biofuels at a prior July 2022 workshop and  
24 requested more data and input on the impacts of crop-based biofuels.

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27 <sup>5</sup> CARB, Low Carbon Fuel Standard Public Workshop: Concepts and Tools for Compliance Target  
28 Modeling (Nov. 9, 2022) at Slide 28, <https://ww2.arb.ca.gov/sites/default/files/2022-11/LCFSPresentation.pdf>.

1 58. In response, stakeholders submitted additional information on the deforestation and  
2 global hunger impacts from crop-based biofuels. Several commenters also called for limits or caps on  
3 the use of these fuels given the environmental and human health risks posed by their rapid growth in the  
4 program.

5 59. In a February 22, 2023 workshop, CARB staff acknowledged data provided by  
6 stakeholders on the impacts of crop-based biofuels, presented new data on expected growth of these  
7 fuels, and once again recognized the risks associated with such growth. Staff’s presentation stated that  
8 “[b]iofuel production must not come at the expense of deforestation or food production.”<sup>6</sup> Staff asked  
9 “[w]hat indicators or resources should CARB monitor to understand if our programs are or are not  
10 having adverse impacts on land use or food availability?”<sup>7</sup>

11 60. In response, stakeholders provided additional information on the risks of biofuels,  
12 including numerous studies on climate impacts, food price and food insecurity effects, and biodiversity  
13 and ecosystem impacts, among other topics. Many stakeholders once again called for limits on the use of  
14 crop-based biofuels given these risks. Stakeholders also raised concerns about air quality and health  
15 impacts to fence-line refinery communities caused by increased fossil fuel-based hydrogen at oil  
16 refineries.

17 61. On May 31 and June 1, 2023, CARB held a community meeting on the LCFS. At that  
18 meeting, researchers from Stanford University presented modeling results from a scenario that included  
19 proposed changes to the LCFS regulation, such as capping the volume of biofuels allowed in the  
20 program, among other alterations.

21 62. The researchers explained their results, which showed that limiting biofuel volumes,  
22 along with other changes, would have several benefits. According to the researchers, these changes  
23 would shrink impacts from conversion of forest lands to crop lands. The researchers further explained  
24 that a cap on biofuels was reasonable and consistent with CARB priorities. For example, they found that

25 \_\_\_\_\_  
26 <sup>6</sup> CARB, Low Carbon Fuels Standard, Public Workshop: Potential Regulation Amendment Concepts,  
27 (Feb. 22, 2023) at Slide 41,  
[https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/lcfs\\_meetings/LCFSpresentation\\_02222023.pd](https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/lcfs_meetings/LCFSpresentation_02222023.pdf)  
28 f.

<sup>7</sup> *Id.*



1 their modeled scenario would increase the LCFS credit price and support EV deployment. The modeling  
2 indicated that, by limiting participation of biofuels and other polluting fuels, funding for EVs and EV  
3 infrastructure from the LCFS program would more than double, from \$15 billion to \$34 billion between  
4 2022 and 2030.

5 63. The Stanford researchers also found that the modeled scenario would likely provide air  
6 quality benefits from reduced production and use of biofuels and methane-derived hydrogen, among  
7 other benefits. Finally, the researchers alerted CARB that it was underestimating EV demand in its  
8 model and therefore over-relying on biofuels. They urged CARB to update its assumptions to reflect  
9 actual EV adoption levels.

10 **B. Recommendations of CARB’s Environmental Justice Advisory Committee**

11 64. On August 25, 2023, CARB’s Environmental Justice Advisory Committee (“EJAC”)  
12 held a meeting at which the potential amendments to the LCFS were discussed. Established by AB 32 to  
13 advise CARB on its implementation of the agency’s programs, the EJAC is comprised of representatives  
14 of California communities with the most significant exposure to air pollution. At the August 25, 2023  
15 meeting, the Stanford researchers once again presented the findings of their modeling, showing that  
16 capping crop-based biofuel volumes and other modifications to the LCFS would reduce land use change  
17 harms and refinery pollution and focus the LCFS subsidy on electrification of transportation.

18 65. On August 28, 2023, the EJAC issued a resolution noting numerous pollution impacts  
19 from the LCFS and calling for a wide range of changes to the regulation including an evaluation of  
20 impacts of alternative fuel production on communities, a cap on the use of crop-based biofuels at 2020  
21 levels pending an updated risk assessment to determine phase out timelines for high-risk, crop-based  
22 feedstocks, and elimination of LCFS credits for carbon removal projects such as DAC, among other  
23 changes to the program.

24 **C. September 2023 Standardized Regulatory Impact Analysis and Board**  
25 **Meeting**

26 66. On September 9, 2023, CARB released the Standardized Regulatory Impact Analysis  
27 (“SRIA”), which evaluated a potential set of changes to the LCFS. The evaluated changes to the LCFS  
28

1 did not include a limit on crop-based biofuel volumes or other key changes to the regulation proposed by  
2 many workshop commenters and the EJAC.

3 67. The SRIA contained an analysis of air quality impacts that evaluated only impacts to  
4 NOx and PM and did not include an analysis of other pollutants such as VOCs. The SRIA also failed to  
5 evaluate air quality and public health impacts to communities in the vicinity of biofuel refineries and  
6 hydrogen plants.

7 68. On September 28, 2023, CARB held a public board meeting in which CARB Board  
8 Members heard public comment on the potential amendments to the LCFS, asked CARB staff questions,  
9 and discussed the potential amendments.

10 69. Commenters at the board meeting urged CARB to analyze a cap on biofuel volumes to  
11 avoid the harms from unfettered biofuel expansion. Commenters explained that limits on biofuel  
12 volumes were feasible and practiced in other jurisdictions. For example, one commenter explained that  
13 the European Union implemented a cap on the consumption of food and feed-based biofuels under its  
14 renewable energy directive, with Germany having implemented this cap in its own national-level Low  
15 Carbon Fuel Standard.

16 70. Petitioner pointed out the pollution impacts in communities adjacent to refineries,  
17 explaining that “[t]he LCF[S] has encouraged a limitless amount of biofuels, which creates new  
18 pollution in communities that could have finally been free from refinery pollution,” and similarly called  
19 for a limit on biofuel volumes in the program.<sup>8</sup>

20 71. Other commenters also urged CARB to address problems with the LCFS’s treatment of  
21 hydrogen made from methane. They explained that rewarding such hydrogen over cleaner alternatives  
22 results in harmful emissions in the communities where such hydrogen is produced. For instance, a  
23 resident of Richmond, California, where a refinery and hydrogen plant are located, stated that “[t]he  
24 majority of hydrogen is made at refineries with fossil gas steam methane hydrogen. Not only is it  
25 expensive and dangerous, but it’s also doubling down on pollution in our backyards. And [the local air  
26

27 \_\_\_\_\_  
28 <sup>8</sup> Transcript of CARB Public Board Meeting at 201:24–202:02 (Sept. 28, 2023),  
<https://ww2.arb.ca.gov/sites/default/files/barcu/board/mt/2023/mt092823.pdf>.

1 district’s] flaring data shows that it doubled between 2018 to 2019 with the start of the added hydrogen  
2 plant.”<sup>9</sup> The community member also stated that “California’s own timelines tell us that we will need  
3 fewer refineries as we continue to build electric cars on the road. So why would you choose this moment  
4 now to invest in fossil fuel hydrogen? We can and must plan for refinery phasedown that protects  
5 workers, community members, and the environment. And we need clean renewable energy not dirty  
6 refinery hydrogen and other expensive polluting tactics.”<sup>10</sup>

7 72. In their deliberations about potential amendments to the LCFS, CARB Board Members  
8 expressed concern about the adverse effects of biofuels. For example, one Board Member stated that  
9 tropical forest-based biofuels were a concern of his and that the entire Board should be very concerned  
10 and “make sure that this LCFS program does not directly or indirectly, or in any way, shape, or form  
11 incentivize those activities in tropical forests, because that would really be cutting off our noses to spite  
12 our face.”<sup>11</sup>

13 73. Board Members also raised questions about air pollution increases from biofuel and  
14 hydrogen production. For example, one Board Member asked whether such emissions had increased, as  
15 a report from the California Office of Environmental Health Hazard Assessment had found, and asked  
16 CARB staff to address this finding given the air quality analysis in the SRIA.

17 **D. Initial Statement of Reasons, Draft EIA, and Public Comments**

18 74. On or around December 19, 2023, CARB posted the Staff Report: Initial Statement of  
19 Reasons (“ISOR”) and proposed amendments to the LCFS regulations, among other documents. On  
20 January 2, 2024, CARB made the Draft EIA available for public comment.

21 75. Among other changes, staff proposed to change the CI benchmark from a 20 percent  
22 reduction in average fuel CI by 2030 that is maintained in subsequent years to a 30 percent reduction by  
23 2030 that would increase to a 90 percent reduction by 2045. The proposed amendments also included  
24 the AAM, a new mechanism that would allow the CI benchmark schedule to change in response to  
25

26 \_\_\_\_\_  
27 <sup>9</sup> *Id.* at 119:11–17.

28 <sup>10</sup> *Id.* at 119:18–25.

<sup>11</sup> *Id.* at 311:10–14 (Board Member De La Torre).

1 market conditions, without undertaking a new public rulemaking or having to seek Board approval. The  
2 proposal continued to allow hydrogen made from fossil fuel-derived methane to claim low CI scores by  
3 purchasing illusory biomethane credits, and staff proposed to add new provisions for hydrogen used as  
4 an input in the biofuel refining process. The new provisions would allow refineries to lower the CI score  
5 of that pipelined hydrogen—and thus the CI score of the fuels produced using that hydrogen—by  
6 purchasing the environmental attributes of biomethane. Previously only hydrogen produced at refineries  
7 enjoyed such treatment.

8 76. The proposal did not include a limit on biofuels volumes or DAC project crediting.

9 77. On February 20, 2024, parties submitted comments on the ISOR, the Draft EIA, and the  
10 accompanying documents. These comments included but were not limited to the following concerns:

11 1. Failure to Adequately Analyze Impacts from Crop-Based Biofuel Production

12 78. Petitioner and other commenters raised concerns over the significant impacts from crop-  
13 based biofuels, stating that volume limits on crop-based biofuels, which the Draft EIA failed to include,  
14 were necessary to effectively limit these harms. Commenters stated that measures CARB included, such  
15 as through proposed sustainability criteria that would require certification that biofuels were not grown  
16 on recently deforested land, were ineffective because existing agricultural land could simply shift to  
17 selling virgin oil to the biofuel market with newly deforested land then used to meet food demands for  
18 those oils.<sup>12</sup>

19 79. Commenters also faulted the Draft EIA for failing to disclose the human health impacts  
20 from increased hunger and global food insecurity that result from increased biofuel production. As noted  
21 in comments by Jim Duffy, former CARB Branch Chief overseeing LCFS, “a portion of the GHG  
22 reductions that CARB is attributing to crop-based biofuels directly results from the most food insecure  
23 populations in the world eating less.”<sup>13</sup>

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26 <sup>12</sup> Virgin oils are oils produced from soy, canola and other oilseed crops for direct use in contrast to used  
27 cooking oil which can be reutilized to make RD and BD.

28 <sup>13</sup> Comments of Jim Duffy to CARB re: LCFS (Feb. 19, 2024), <https://www.arb.ca.gov/lists/com-attach/6792-lcfs2024-AWUGdQdgVmMHeAZZ.pdf>.

1           80. Commenters also stated that CARB’s continued reliance on its 2014 Detailed Analysis of  
2 Land Use Change did not reflect the significant increases in biofuel production that have occurred since  
3 that time and noted that U.S. EPA’s 2023 Model Comparison Exercise Technical Document found that  
4 when higher levels of soy-based diesel production were assumed in GTAP and other land use models, its  
5 CI increased, and in the case of two other models, exceeded that of fossil fuels. Commenters also  
6 identified unsupported and clearly erroneous assumptions in GTAP that serve to understate ILUC  
7 impacts, such as its failure to account for deforestation or loss of other carbon-rich lands resulting from  
8 increased biofuel production.

9           81. In a related vein, commenters also expressed concerns that proposed amendments  
10 extended the program from 2030 to 2045. They asserted that CARB did not know enough about future  
11 technologies to accurately predict the program’s trajectory to 2045 and expressed concern that the  
12 proposed amendments would lock in a variety of large subsidies for particular technologies like biofuels  
13 that would be difficult if not impossible to reduce in the future, even in the face of evidence showing the  
14 harms of biofuels and EVs’ superiority from a GHG and air quality standpoint.

15                   2. Lack of Analysis of Biofuels Refining Impacts on California Communities

16           82. Petitioner noted, among other deficiencies, that the Draft EIA and ISOR failed to analyze  
17 the proposed amendments’ foreseeable air quality impacts on refinery communities. For example,  
18 Petitioner’s comments pointed to existing biofuel conversions in low-income communities that already  
19 face high levels of pollution and alerted CARB of site-specific evidence demonstrating that biofuel  
20 refineries do not deliver necessary air quality improvements in already heavily polluted communities. As  
21 a result, Petitioner noted, refinery communities across California would be saddled with pollution for  
22 decades longer.

23           83. Additionally, Petitioner and other commenters noted that biofuel refining creates new  
24 health and safety risks for local communities, which CARB also failed to recognize. According to  
25 comments on the ISOR and Draft EIA, biofuel refining requires more intensive use of hydrogen  
26 compared to fossil fuels, which can cause more frequent flaring hazards that CARB had not  
27 acknowledged nor accounted for in its analysis of the proposed amendments and feasible alternatives.

1           84.     In addition to lack of disclosure of air quality impacts on refinery communities, Petitioner  
2 also asserted that CARB erroneously failed to adopt feasible and enforceable mitigation measures for  
3 these foreseeable impacts. Instead, Petitioner noted that CARB merely asserted air quality impacts on  
4 communities will be significant and unavoidable, while ignoring feasible mitigation options within the  
5 agency’s authority.

6           85.     Petitioner also identified the Draft EIA’s flawed calculation of air pollution impacts,  
7 which relies on emissions factors from an oil refinery that is not characteristic of biofuel-producing oil  
8 refineries. To produce a more accurate pollution estimate, Petitioner urged CARB to conduct a more  
9 thorough analysis of refineries that will foreseeably produce biofuels and generate emissions factors that  
10 are more characteristic.

11                   3. Failure to Adequately Analyze Hydrogen Production Impacts

12           86.     Commenters explained that the proposed amendments’ greatest hydrogen subsidies  
13 would go to polluting hydrogen derived from methane, while fewer subsidies would support cleaner  
14 hydrogen derived from electrolysis powered by new wind and solar resources.

15           87.     They explained how CARB’s flawed carbon accounting practices improperly allow  
16 hydrogen producers to claim low CI scores for their polluting fuel by purchasing “environmental  
17 attributes” from biomethane producers that may not be providing any actual emissions reductions, do  
18 not deliver the biomethane to California, and may have also already sold their environmental attribute to  
19 another buyer, given the lack of any tracking mechanism for such crediting schemes. Commenters also  
20 explained that such lavish LCFS subsidies to methane-derived hydrogen producers undermine the  
21 development of clean hydrogen in California and urged CARB to correct this skewed market signal that  
22 encourages expansion of polluting fuels.

23           88.     Commenters also raised concerns about the proposed amendments’ requirements for  
24 electrolytic hydrogen. They submitted evidence showing that electrolytic hydrogen production would  
25 increase GHG emissions unless it is powered by new renewable resources that supply energy in the  
26 same hour that the hydrogen plants operate. Commenters explained that the proposed requirements for  
27 use of low or zero-carbon electricity credits must be modified to avoid GHG increases.

1                   4. Failure to Analyze and Mitigate Impacts from Biofuel Combustion in  
2                   California Vehicles

3           89.     With respect to tailpipe emissions from biofuels, commenters asserted that CARB had  
4 improperly dismissed its own study from 2021, which found that the use of biofuels in California  
5 vehicles could increase NOx emissions in NTDEs and does not reduce PM emissions in NTDEs.  
6 Commenters urged CARB to take a conservative approach when estimating air quality impacts given the  
7 findings of this CARB study. They also proposed mitigation measures for air quality impacts including  
8 enhanced crediting for EV infrastructure and public transit, which can also receive LCFS credits by  
9 switching to alternative fuels, including operating electrified transit systems.

10                   5. Failure to Account for Adverse Impacts from Direct Air Capture

11           90.     Petitioner and other commenters raised concerns about the proposed amendments’  
12 crediting of DAC projects, noting that they could serve as an offset to fossil fuel use and thus may delay  
13 the phase down of fossil fuel use and refining in California.

14                   6. Flawed Greenhouse Gas and Air Pollution Accounting

15           91.     Commenters also raised global concerns about CARB’s GHG and air pollution estimates.  
16 They noted that CARB’s approach to estimating emissions reductions departed significantly from past  
17 LCFS analyses and was likely overstating the benefits of the proposed amendments. For example, they  
18 explained that CARB was attributing all emissions reductions to the LCFS when other programs and  
19 incentives like the federal Renewable Fuel Standard also have effects on alternative fuel development.

20           92.     Commenters also explained that CARB was improperly claiming emissions reductions  
21 from declining crude oil extraction in California when such decline was already occurring and  
22 attributable to numerous other market factors.

23                   7. Failure to Properly Analyze and Consider a Reasonable Range of  
24                   Alternatives

25           93.     Petitioner and other commenters faulted CARB for not considering a cap on biofuel  
26 volumes in its alternatives analysis in the Draft EIA. They urged CARB to consider such an alternative,  
27 as it had discussed a cap in the ISOR. They also explained that CARB’s discussion of a cap in the ISOR  
28

1 did not satisfy CEQA’s more comprehensive and stringent requirements for alternatives analysis  
2 because the ISOR did not analyze the relevant environmental effects under CEQA.

3 94. Some commenters proposed an alternative to the proposed amendments that included a  
4 cap on the volume of biofuels and expanded crediting for transportation electrification, among other  
5 changes.

6 **E. April 10, 2024 Staff Workshop and May 30, 2024 People’s Workshop**

7 95. On April 10, 2024, CARB held a workshop on the LCFS. The scope of the workshop was  
8 limited to changes to the CI benchmark, including the design of the AAM, and proposed sustainability  
9 criteria for biofuels. It did not include discussion of a volume limit on biofuels or the impacts of  
10 polluting hydrogen and DAC subsidies.

11 96. At the workshop, many parties representing the biofuels industry and other alternative  
12 fuel interests urged CARB to increase the stringency of the proposed CI benchmarks. They cited  
13 projected biofuel and biomethane growth higher than CARB’s modeling and advocated for a near-term  
14 “step down” in the CI benchmark to address the ongoing accumulation of credits, which they stated had  
15 led to lower credit prices and investment uncertainty. Additionally, these parties supported the AAM  
16 reasoning that it that would allow for automatic increases to the benchmark stringency based on the  
17 program’s performance, without requiring a new rulemaking process.

18 97. On April 24, 2024, ten public interest organizations sent a letter to the Chair of CARB  
19 detailing the deficiencies of the April 10, 2024 workshop, including its failure to address community  
20 concerns and positive proposals for improving the program. They also notified the CARB Chair that  
21 numerous public interest organizations would convene another workshop to allow for an open  
22 discussion of the current proposal and tangible solutions that support CARB’s goals.

23 98. On May 30, 2024, the researchers from Stanford University submitted comments in  
24 response to the April 10 workshop explaining that CARB’s analysis of the alternative scenario proposed  
25 by the EJAC was incorrect and that changes to the LCFS program, including limits on crop-based  
26 biofuels, could achieve the proposed project objectives while reducing harms from biofuels and other  
27 combustion fuels.



1           99.     On May 30, 2024, public interest organizations convened a workshop in which impacted  
2 California residents, scientists, and advocates presented concerns about the proposed amendments,  
3 including risks associated with unlimited biofuel volumes and incentives for polluting hydrogen,  
4 biomethane, and DAC. Presenters proposed key changes to the program including a limit on biofuel  
5 volumes and DAC projects, among others. They also explained why the proposed sustainability  
6 certification for biofuels would not be effective in addressing the myriad harms from unlimited biofuels.

7           **F.     First 15-Day Changes, Recirculated Draft EIA, and Public Comments**

8           100.    On August 12, 2024, CARB published proposed changes to the regulations that differed  
9 in certain ways from the regulation proposed in the ISOR. These changes are referred to as “15-day  
10 Changes” because CARB is required by regulation to grant the public 15 days to comment on them.  
11 Among other changes, the First 15-Day Changes added a provision that, beginning January 1, 2028,  
12 biomass-based diesel produced from soybean oil and canola oil is eligible for LCFS credits for up to 20  
13 percent combined of total biomass-based diesel annual production reported by the producing company,  
14 with the excess assigned the benchmark CI or the CI of the applicable fuel pathway, whichever is  
15 higher.

16           101.    The changes did not address concerns with hydrogen or DAC and made the existing  
17 hydrogen problems worse when compared to the ISOR by extending the time period during which  
18 methane-derived hydrogen producers could use biomethane environmental attributes to lower their CI  
19 score and thus enhance LCFS crediting for polluting hydrogen.

20           102.    On or around August 27, 2024, parties submitted comments on these changes. Among  
21 other concerns, commenters explained that the proposed change to the biofuels provisions did not  
22 address concerns over excessive biofuel volumes or polluting hydrogen. Commenters also critiqued  
23 CARB’s failure to analyze an alternative that includes limits on biofuel volumes, its failure to impose  
24 requirements that ensure electrolytic hydrogen production does not increase GHGs, and its failure to  
25 analyze the effects of reliance on DAC projects as an offset for fossil fuel pollution, which enables  
26 prolonged use of fossil fuels.

27           103.    Commenters emphasized that CARB could achieve its objective of increasing the LCFS  
28 credit price by limiting the oversupply of credits from biofuels and biomethane and other alternative

1 fuels that yield dubious climate benefits and pose risks to human health and air quality. They  
2 emphasized that CARB’s proposed approach to shore up the credit price—i.e. by increasing credit  
3 demand rather than limiting the oversupply of credits—would exacerbate rather than reduce these  
4 environmental harms.

5 104. On August 16, 2024, CARB published a Recirculated Draft EIA (“RDEIA”). The RDEIA  
6 reflected project changes from the First 15-Day Changes and a reassessment of the Project’s air quality  
7 and GHG impacts.

8 105. On or around September 30, 2024, parties submitted comments on the RDEIA.  
9 Commenting parties noted that the RDEIA did not address many of the concerns raised in comments on  
10 the Draft EIA. They called CARB’s attention to numerous deficiencies in the RDEIA, including but not  
11 limited to the following:

12 1. Continued Failure to Analyze Impacts from Crop-Based Biofuel Production

13 106. Academics at Yale and Princeton University as well as other commenters stated that the  
14 RDEIA continued to fail to disclose the prominent role of reduced food consumption as a consequence  
15 of increased crop-based biofuel production and its corresponding impact on human health by  
16 exacerbating hunger among the world’s poorest people. Commenters also faulted the RDEIA for its  
17 continued failure to disclose the fundamental flaws in the GTAP model identified by numerous  
18 academic experts, as well as its failure to meaningfully discuss impacts and adopt mitigation submitted  
19 in response to CARB’s 2022 and 2023 workshop requests for data on these issues.

20 107. Commenters also stated that the proposed new 20 percent company-wide credit limit on  
21 virgin soy and canola oil in the First 15-day Changes was ineffective in mitigating project impacts, in  
22 part because excess virgin soy and canola would only be assigned the benchmark CI. They explained  
23 that, given the interchangeability of virgin oils in global markets, CARB must assign excess virgin oil  
24 production the CI of fossil diesel in order to limit rapidly increasing biofuel volumes and their harmful  
25 effects. Commenters noted the fact that CARB assigned the fossil diesel CI score to palm oil because  
26 CARB acknowledged the harmful land use change impacts of this oil and sought to discourage its  
27 participation in the program.

1                   2. Continued Failure to Properly Analyze Pollution Impacts from Biofuels and  
2                   Hydrogen Production

3           108. Petitioner and other commenters reasserted concerns made in comments on the Draft EIA  
4 that CARB failed to adequately analyze the proposed amendments' air quality and public health  
5 impacts, particularly on people who live near refineries. For example, among several concerns,  
6 commenters highlighted that CARB failed to sufficiently analyze health impacts because it failed to  
7 provide sufficient information about the magnitude and severity of health consequences of a wide range  
8 of emissions. Commenters noted that the RDEIA limited its air quality analysis to PM and NOx  
9 emissions, despite evidence showing that many other types of air pollutants could be caused by the  
10 Project and could have significant impacts.

11           109. Commenters further explained that the RDEIA failed to analyze potential air quality  
12 impacts from hydrogen production. They asserted that although the RDEIA admitted that production of  
13 hydrogen from methane is likely to increase because of the proposed amendments, CARB failed to  
14 disclose all pollutants associated with this process, which include not only PM and NOx but also carbon  
15 monoxide and VOCs that are harmful for human health, among other pollutants.

16                   3. Continued Failure to Analyze Impacts from Combustion of Biofuels in  
17                   California Vehicles

18           110. Commenters explained that the RDEIA's analysis and mitigation of the air quality  
19 impacts of biofuel use was deficient because it ignored relevant evidence indicating that use of biofuels  
20 in California vehicles has higher pollution impacts than assumed. They also asserted that CARB  
21 improperly locked biodiesel volumes at 2022 levels in its air quality modeling, explaining that BD  
22 volumes could increase and thus impose unmitigated air quality impacts on Californians.

23           111. Similar to comments made on the ISOR, commenters detailed how CARB failed to  
24 incorporate the findings of its own 2021 study which showed potential NOx increases from biofuel  
25 combustion in California vehicles because RD does not offset the NOx emissions from BD in NTDEs.  
26 Once again they asserted that the study did not show significant PM reductions from either BD or RD  
27 use in NTDEs. Commenters repeated that by ignoring these key findings from CARB's own study,  
28

1 CARB failed to accurately assess and mitigate the air quality impacts of biofuel combustion in  
2 California vehicles.

3 112. Commenters also described how CARB failed to consider other feasible mitigation  
4 measures such as a credit multiplier for zero-emissions transit vehicles that reflects their impact on  
5 vehicle-miles traveled and enhanced credit-generation potential for medium- and heavy-duty electric EV  
6 truck charging infrastructure.

7 4. Continued Failure to Account for Greenhouse Gas Emissions from Hydrogen  
8 Production

9 113. Petitioner and other commenters also asserted that the RDEIA failed to describe the  
10 Project’s crediting of hydrogen derived from methane and to adequately analyze and mitigate the GHG  
11 emissions from the Project’s increased production of this polluting hydrogen. Commenters further called  
12 into question CARB’s findings of GHG reductions from hydrogen that is paired with biomethane  
13 environmental attributes. They submitted evidence that the emissions reduction claims of biomethane  
14 producers are questionable, casting doubt on the integrity of their environmental attributes.

15 114. Commenters critiqued the RDEIA for failing to analyze and mitigate the impacts of the  
16 Project’s requirements for electrolytic hydrogen and the risk that the increased production of electrolytic  
17 hydrogen without adequate guardrails could lead to substantial GHG increases and unanalyzed strain on  
18 the electric grid.

19 5. Ongoing Failure to Properly Analyze Impacts from Direct Air Capture  
20 Crediting

21 115. Petitioner and other commenters once again raised concerns about the proposed  
22 amendments’ crediting of DAC. They alerted CARB that it had failed to account for emissions from the  
23 energy sources used to power DAC projects and impacts to the electric grid. They also noted that  
24 because DAC projects are not fuels and are not evaluated against the program’s declining CI benchmark,  
25 there is no end to the subsidy that they receive under the LCFS. Consequently, they explained, DAC  
26 projects will receive ever-increasing shares of the LCFS revenues. Commenters reiterated concern that,  
27 according to CARB’s modeling, DAC use is projected to increase substantially in tandem with a  
28 projected rise in fossil fuel consumption in California’s transportation sector. Such an outcome,

commenters explained, suggests that DAC will serve as an offset to enable continued fossil fuel use rather than a mechanism to reduce legacy GHG emissions. In this way, DAC reliance in the LCFS would sacrifice needed local air quality improvements and emissions reductions and run counter to California climate policies. Commenters alerted CARB that it had failed to disclose and mitigate such GHG and air quality impacts from unlimited DAC crediting.

6. Ongoing Greenhouse Gas and Air Quality Accounting Errors

116. Commenters once again raised concerns about CARB’s flawed methodology for estimating the GHG and air pollution effects of the Project. They pointed once again to CARB’s incorrect attribution of all emissions reductions from alternative fuels to the LCFS when other programs and incentives like the federal Renewable Fuel Standard also affect alternative fuel development.

117. Commenters also repeated their explanation that CARB was improperly claiming pollution reductions from declining crude oil extraction in California. They listed numerous reasons why these declines were already occurring, separate from the LCFS.

7. Continued Failure to Properly Evaluate a Reasonable Range of Alternatives

118. Commenters reiterated concerns that CARB failed to analyze a reasonable range of alternatives by failing to consider an alternative designed to direct a much larger share of program revenues to EVs by limiting polluting fuels. Commenters further noted CARB prejudiced consideration of any such alternative because the model relied on by CARB was incapable of forecasting increased deployment of EVs irrespective of credit prices or increased subsidies and incorrectly assumed reductions in polluting alternative fuels would correspond to increased reliance on fossil fuels.

**G. September 2024 Joint Environmental Justice Advisory Committee Meeting**

119. On September 12, 2024, CARB held a joint meeting with EJAC to, among other things, discuss the proposed LCFS amendments. At the meeting, multiple CARB Board Members expressed concerns about the impacts from crop-based biofuels and the need for stronger limitations.

120. One member noted that “there have been very significant concerns about the rapid growth of crop-based feed stocks in renewable diesel in California, and the extent to which these levels are unsustainable and pose risk of deforestation and diversion of farmland from food to energy production.” The member further stated that “if there’s blending over the 20% cap, having the value

1 assigned to those fuels be the value for fossil diesel as opposed to the lower proposed carbon intensity  
2 benchmark that would send a strong reduced incentive not to use crop based feedstocks.”<sup>14</sup>

3 121. Other Board Members echoed these concerns, with one member stating “all these crop  
4 based biofuels have the danger, as the EJAC presentation pointed out, of causing increased food prices  
5 around the world and deforestation. I am very concerned about this. We definitely have to be careful as  
6 the leaders in crop-based biofuel regulation through LCFS, we have to be very careful what signals we  
7 send worldwide, not just in California.” Another Board Member stated “this is an area that does keep me  
8 up at night. I worry about this area and all of its large-scale impacts on the world” and further expressing  
9 concerns with the accuracy of the GTAP model used to determine ILUC impacts.<sup>15</sup>

10 122. In addition to concerns about biofuels, CARB Board Members expressed concerns about  
11 polluting hydrogen production and requested changes to the regulation that would help address its air  
12 quality impacts.

13 **H. Second 15-Day Changes and Public Comments**

14 123. On October 1, 2024, CARB staff posted its Second 15-Day Changes to the proposed  
15 regulations. The new proposed regulatory text did not include any changes to the proposed regulation  
16 that would address the concerns conveyed by Board Members in the September 12, 2024 meeting and in  
17 Petitioner’s prior comments and the comments of many other parties. With regard to crop-based biofuel  
18 production, the Second 15-Day Change extended the 20 percent company-wide credit limit on biofuels  
19 produced from soy and canola oil to include sunflower oil but did not assign excess production the CI of  
20 fossil diesel as requested by numerous commenters. CARB also introduced changes to the AAM that  
21 were unclear in meaning and could result in significantly more stringent CI benchmarks earlier than  
22 CARB staff had previously proposed and analyzed. Staff also proposed new changes that would reduce  
23 crediting for heavy- and medium-duty EV truck infrastructure by hundreds of billions of dollars over the  
24 next ten years when compared to what was originally proposed in the ISOR.

25  
26  
27 <sup>14</sup> CARB, Joint Meeting with the Assembly Bill 32 Environmental Justice Advisory Committee (Sept. 12,  
2024), [https://cal-span.org/meeting/carb\\_20240912/](https://cal-span.org/meeting/carb_20240912/) (Board Member Rechtschaffen at 1:27).

28 <sup>15</sup> *Id.* at 1:41 (Board Member Balmes 1:41); at 1:48 (Board Member Shaheen).

1 124. On or around October 16, 2024, parties submitted comments on these changes. The  
2 comments summarized once again the concerns of Petitioner and other stakeholders regarding the harm  
3 of biofuels and polluting hydrogen, among others, and CARB’s failure to adequately mitigate these  
4 harms. They emphasized that the proposed amendments would cause stranded fossil fuel assets and  
5 continued reliance on combustion fuels like biofuels and biomethane when the LCFS should be focused  
6 on zero-emissions solutions like EVs that benefit the climate and air quality.

7 125. On October 22, 2024, EJAC sent a letter to CARB Board Members urging them to vote  
8 no on the proposed amendments. The EJAC letter stated that the Second 15-Day Change failed to  
9 correct for the LCFS program’s lopsided support for combustion fuels, which harm California  
10 communities, threaten sensitive ecosystems, exacerbate global hunger, and worsen the climate crisis. To  
11 remedy these harms, EJAC asked for changes to the proposed amendments that included assigning  
12 excess crop-based biofuels the CI of fossil diesel and prohibiting credit generation for fossil methane-  
13 derived hydrogen paired with the environmental attributes of biomethane.

14 **I. Final EIA, November 2024 Comments and CARB’s Response**

15 126. On November 6, 2024, two days prior to CARB’s scheduled voting meeting on the  
16 proposed amendments, CARB posted the Final EIA along with a response to public comments. The  
17 Final EIA made no changes to the Project nor to the analysis of its environmental impacts.

18 127. On November 8, 2024, commenters submitted comments on the Final EIA, identifying  
19 numerous, persistent deficiencies in the EIA and the inadequacy of CARB’s response to comments,  
20 including but not limited to the following:

- 21 1. Failure to Describe and Analyze the Project’s Auto-Acceleration Mechanism  
22 and Imminent Changes to the CI Benchmark

23 128. Commenters raised concerns about the new changes to the AAM made in the Second 15-  
24 Day Change. Commenters alerted CARB that the meaning of the new regulatory text was unclear and  
25 that two different readings would yield two very different outcomes with respect to the pace of the CI  
26 benchmark decline over time. As a result, they explained, the proposed amendments’ meaning and  
27 effects would remain unknown to the public and decision-makers until after the window for analysis and  
28 deliberation is closed. Commenters also explained that this ambiguity regarding the possibility of

1 substantial future changes to the CI benchmark rendered the project description inadequate under  
2 CEQA.

3 129. Commenters raised additional concerns that CARB had failed to analyze and disclose the  
4 effects of imminent step-downs in the CI benchmark that would occur as a result of the new changes to  
5 the AAM. Commenters illustrated how declines in the CI benchmark would be substantial and would  
6 have reasonably foreseeable impacts on the environment that CARB had failed to analyze.

7 2. Continued Failure to Adequately Analyze and Mitigate the Impacts of Crop-  
8 Based Biofuels

9 130. Commenters stated that the Final EIA continued to ignore the health impacts of increased  
10 crop-based biofuel production from increased food insecurity. Commenters explained that CARB's  
11 response to comments on this concern, which referenced master responses that did not directly address  
12 food insecurity, was wholly inadequate. Commenters explained that human health impacts are  
13 cognizable under CEQA and that CARB could not legitimately claim that this impact was speculative  
14 because the link between increased demand for biofuels and increased food insecurity was well  
15 documented. They noted that CARB itself had recognized that additional demand for biofuels reduces  
16 food consumption as part of its 2014 Detailed Analysis of Land Use Change, an analysis that the  
17 proposed amendments continued to rely on.

18 131. Commenters asserted that, in continuing to fail to disclose the uncertainties and  
19 unsupported assumptions underlying the GTAP model and address the significant concerns raised in  
20 comments by prominent academic researchers, the Final EIA did not reflect a good faith effort at full  
21 disclosure as required by CEQA.

22 132. Commenters also explained that, in relying on decade-old projections of biofuel  
23 production that do not reflect the explosive growth in crop-based biofuel production and its  
24 corresponding impact on ILUC emissions rather than on existing and projected global levels of biofuel  
25 production, the Final EIA violated CEQA's baseline and cumulative impact requirements.

26 133. Commenters further noted that the Final EIA failed to adopt all feasible mitigation  
27 measures to reduce impacts of increased biofuel production including assigning to all excess crop-based  
28 oils the CI of fossil diesel rather than the benchmark CI.



1                   3. Continued Failure to Analyze Impacts from Combustion of Biofuels in  
2                   California Vehicles and to Correct Overestimation of Air Quality Benefits

3           134. Commenters repeated concerns that CARB had failed to remedy major flaws in its  
4 assessment of impacts from RD and BD combustion. They noted that CARB failed to explain the source  
5 of claimed emissions reductions from burning RD and BD in combustion engines and that CARB failed  
6 to account for the effects of other incentives. As they had in the RDEIA, commenters once again pointed  
7 to CARB’s disregard of its own 2021 study which showed that, in NTDEs, RD does not offset the NOx  
8 emissions increases of BD or reduce PM.

9           135. Noting CARB’s inadequate response to RDEIA comments, commenters explained that  
10 the regulations intended to mitigate the NOx increases from biodiesel use were not working and that  
11 CARB had failed to account for this fact. They pointed once again to CARB’s unsubstantiated decision  
12 to “lock” biodiesel volumes at 2022 levels. Commenters noted that these flaws rendered the CEQA  
13 analysis a failure as an informational document because it masked serious air pollution harms.

14                   4. Continued Failure to Address Impacts from Biofuels and Hydrogen  
15                   Production on California Communities

16           136. Commenters reasserted concerns that CARB continued to fail to adequately analyze and  
17 disclose localized impacts from biofuel and hydrogen production and adopt all feasible mitigation  
18 measures for these air quality impacts. Although CARB continued to conclude that the proposed  
19 amendments’ long-term operations could result in significant and unavoidable impacts to air quality,  
20 commenters noted that CARB failed to adequately disclose a wide range of emissions, continued to rely  
21 on outdated health impact assumptions, and failed to provide sufficient information about the magnitude  
22 and severity of health-harming emissions on refinery communities. Commenters asserted that these  
23 deficiencies violated CEQA and that neither CARB’s responses to prior comments nor the Final EIA  
24 remedied these violations.

25           137. Among several issues, commenters again highlighted the Final EIA’s failure to disclose  
26 air quality impacts that would foreseeably result from increased biofuel production, as well as  
27 production of hydrogen from methane for biofuel refining and for used as a transportation fuel. Given  
28 CARB’s acknowledgment that biofuel and hydrogen production were expected to increase as a result of

1 the proposed amendments, commenters explained that additional refinery conversions (from crude oil to  
2 biofuels) and increased production at existing biofuel refineries would likely occur, as well as expanded  
3 hydrogen production. Commenters alerted CARB to the Final EIA’s failure to identify these locations  
4 and its failure to analyze the associated emissions impacts. Commenters provided CARB with evidence  
5 demonstrating that the locations of already existing or already approved biofuel refineries, as well as  
6 refineries capable of immediate conversion to biofuel production, are identifiable and could have been  
7 feasibly disclosed by CARB in the Final EIA. According to commenters, it was insufficient for CARB  
8 to simply conclude, without analysis, that long-term air quality impacts of the proposed amendments  
9 would be significant and unavoidable for local communities.

10 138. Moreover, commenters again highlighted CARB’s lack of adequate mitigation for these  
11 air quality impacts. Of particular concern for commenters were CARB’s responses to prior comments  
12 claiming—without justification—that local air pollution would be partially offset by end use of BD, RD,  
13 and alternative jet fuel use at the regional level. According to commenters, these offsetting emission  
14 reductions were overblown, given CARB’s flawed assumptions about impacts from biofuel combustion  
15 in California vehicles. Even if there were an offsetting effect, commenters explained that potential  
16 regionwide benefits do not excuse CARB’s failure to analyze and mitigate worsening air quality and  
17 health risks for refinery communities, and putative regional improvements do not qualify as adequate  
18 mitigation for localized impacts.

19 139. Additionally, commenters pointed to CARB’s failure to analyze cumulative impacts to  
20 impacted communities from the Project’s expansion of biofuel and hydrogen production.

21 5. Ongoing Failure to Analyze Greenhouse Gas and Energy Impacts of  
22 Hydrogen Production

23 140. Commenters noted that CARB failed to cure defects in its treatment of electrolytic  
24 hydrogen and failed to analyze and disclose impacts from the production of hydrogen derived from  
25 methane, including when such methane is paired with purchased biomethane attributes. Specifically,  
26 commenters noted that the Final EIA and response to comments failed to address evidence that the  
27 Project’s weak requirements for electrolytic hydrogen would lead to GHG increases and strain on the  
28 electric grid. They also noted that CARB failed to mitigate these impacts. With respect to hydrogen

1 produced from methane, they reasserted concerns that CARB failed to analyze and mitigate the wide-  
2 ranging impacts of this component of the Project and pointed to new evidence about the negative effects  
3 of the proposed amendments' lavish biomethane crediting.

4           6. Continued Failure to Address Greenhouse Gas and Energy Impacts of Direct  
5           Air Capture

6           141. Repeating their unaddressed concerns about DAC's emissions impacts, commenters  
7 noted that the Final EIA failed to analyze and disclose the energy impacts of the proposed amendments'  
8 reliance on DAC. They also noted that although CARB stated in its response to comments that DAC will  
9 be powered by off-grid renewable energy, the proposed amendments did not require this power mix, and  
10 there was no sound basis for assuming it would be deployed. Without a requirement that all DAC  
11 projects only be powered by off-grid renewable resources, commenters asserted, there is no basis for  
12 assuming that DAC projects' energy and emissions impacts would in fact be mitigated.

13           142. Commenters further stated that CARB also failed to address the risk that new energy  
14 demand to power DAC risked competing with and adversely impacting critical transportation  
15 electrification efforts in California. They explained that CARB's existing rules required widespread  
16 deployment of EVs, which would increase demand for electricity to power the transportation sector, and  
17 they asserted that the Final EIA failed to address the fact that the Project's DAC reliance could hamper  
18 necessary transportation electrification, thereby undermining attainment of state EV goals and reducing  
19 the many climate and air quality benefits of zero-emissions transportation technology.

20           7. Failure to Analyze the Impacts of the Reduction in Crediting for Medium and  
21           Heavy Duty EV Infrastructure

22           143. Commenters alerted CARB that the Second 15-Day Changes included changes to  
23 infrastructure crediting that would amount to \$176 - \$1,261 million loss of annual revenues for medium  
24 and heavy-duty EV trucks between 2025 and 2035. They noted that this sum was enough to subsidize  
25 the cost gap of nearly 100,000 medium and heavy-duty trucks in that ten-year period. They explained  
26 that the effect of this change would be increased diesel emissions, which include toxic and carcinogenic  
27 diesel PM as well as NOx and other pollutants. They alerted CARB that it had not analyzed these  
28 impacts in the Final EIA.

1                   8. Ongoing Failure to Evaluate a Reasonable Range of Alternatives

2           144. Commenters reasserted their concerns with CARB’s failure to evaluate a reasonable  
3 range of alternatives pointing to fundamental flaws in its analysis. They faulted CARB for failing to  
4 analyze an alternative that restricted biofuel volumes, explaining once again that limiting biofuel  
5 volumes could serve to improve crediting for zero-emissions solutions which would both feasibly  
6 achieve the stated project objectives and avoid harms associated with biofuels, polluting hydrogen,  
7 biomethane, and other fuels. They also pointed to other flaws in the alternative analysis including  
8 CARB’s failure to model a phaseout of distortionary biomethane crediting and elimination of credits for  
9 DAC, and its failure to allow EVs to increase. Referencing the modeling and comments submitted by  
10 Stanford University researchers, commenters explained that CARB had ignored important evidence on  
11 the reasonableness of an EV-focused alternative. They emphasized that in failing to examine such an  
12 alternative, there was no way for the public to know what an alternative focused on EV support rather  
13 than combustion fuels would yield in terms of improved air quality and associated health benefits.

14                   **J. November 2024 Voting Meeting**

15           145. On November 8, 2024, CARB held a public voting meeting on the Project. Originally  
16 scheduled for February 2024, CARB had delayed the voting meeting to March and then to November,  
17 under two months before state regulations required the Amendments to be submitted to the Office of  
18 Administrative Law for approval.

19           146. Despite concerns expressed by Petitioner, scientists, and other members of the public,  
20 CARB certified the Final EIA, approved the Project, and adopted related findings and a statement of  
21 overriding considerations. Petitioner and over 100 members of the public appeared at the hearing to urge  
22 CARB not to approve the Project and to require fixes that would address harms from biofuels and other  
23 combustion fuels. These commenters emphasized that CARB had failed to properly assess and mitigate  
24 the harm of biofuels, hydrogen, biomethane, and other alternative fuels. They also emphasized that  
25 CARB had failed to properly evaluate many zero-emissions alternatives to the proposed amendments  
26 that would avoid air pollution and other impacts.

27           147. Board members directed a change to the regulatory text that would revert the crediting  
28 provisions for medium and heavy duty EV infrastructure to the ISOR version.

1 148. At the conclusion of the hearing, CARB approved the Project with 12 Board Members  
2 voting yes and two Board Members voting no.

3 149. On or around November 22, 2024, CARB filed a Notice of Determination for the Project,  
4 which was posted on the CARB website on November 27, 2024.

5 150. On December 12, 2024, CARB posted the final Board Resolution which required the  
6 Executive Officer to “prioritize implementation of the default proposed regulatory structure” for  
7 allocating LCFS credits to commercial medium- or heavy-duty EVs, rather than prioritizing issuance of  
8 those credits to other entities.

9  
10 **FIRST CAUSE OF ACTION**

11 **(Violations of CEQA: EIA Does Not Comply with CEQA; Inadequate Response to**  
12 **Comments; Inadequate Findings of Fact and Statement of Overriding Considerations;**  
13 **Failure to Recirculate)**

14 151. Petitioner hereby realleges and incorporates by reference the allegations contained in the  
15 preceding paragraphs.

16 **I. Failure of Final EIA to Comply with CEQA**

17 152. Respondents violated CEQA by certifying a Final EIA for the Project that fails to comply  
18 with the requirements of CEQA. The Final EIA’s legal inadequacies and violations of CEQA include,  
19 but are not limited to:

- 20 a. The Final EIA lacks an accurate, stable, and finite project description;
- 21 b. The Final EIA fails to accurately describe the environmental setting for the Project,  
22 thus hindering a proper analysis of Project impacts and preventing the public from  
23 understanding its potential impacts;
- 24 c. The Final EIA fails to adequately disclose or analyze the Project’s impacts on the  
25 environment, including but not limited to, the Project’s impacts on human health,  
26 greenhouse gases, air quality, utilities and service systems, and energy use;
- 27 d. The Final EIA fails to meet CEQA’s informational mandates and reflect a good  
28 faith effort at full disclosure;

- e. The Final EIA fails to adequately analyze the cumulative impacts of the Project;
- f. The Final EIA fails to adequately mitigate Project impacts;
- g. The Final EIA fails to consider and adequately analyze a reasonable range of alternatives.

**II. Inadequate Response to Comments**

153. Respondents failed to respond adequately to comments submitted by Petitioner and other members of the public. Instead, the responses given to numerous comments on the Project’s impacts and regarding the adequacy of the EIA’s treatment of mitigation measures and alternatives are conclusory, evasive, confusing or otherwise non-responsive and contrary to the requirements of CEQA.

**III. Failure of CARB’s Findings of Fact and Statement of Overriding Considerations to Comply with CEQA**

154. Respondents also violated CEQA and the CEQA Guidelines by adopting findings of fact and a statement of overriding considerations in connection with the Project that are invalid. Because CARB’s analysis of impacts and feasible mitigation is flawed, and it improperly declined to implement mitigation that could have reduced the identified significant environmental impacts, including, but not limited to, impacts to human health, greenhouse gases, air quality, utilities and service systems, and energy use, its findings and statement of overriding considerations are necessarily flawed as well. CARB cannot simply “override” impacts where it has failed to adopt feasible mitigation measures. Moreover, the findings are conclusory and unsupported by substantial evidence in that they, inter alia, fail to provide the reasoning, or analytic route from facts to conclusions, fail to describe the actual impacts of the Project on the environment, fail to quantify the cost and magnitude of impacts being overridden, and are grounded in demonstrably flawed and deficient data and analysis.

**IV. Failure to Recirculate EIA**

155. Comments submitted to Respondents after the Draft EIA and RDEIA were circulated provided significant new information within the meaning of Public Resources Code section 22092.1 and CEQA Guidelines section 15088.5 that was not addressed in the Final EIA. In addition, Respondents made significant changes to the Project after they issued the RDEIA and failed to recirculate the EIA to enable a meaningful opportunity for public review and comment.



1 Date: December 18, 2024

2  
3   
4

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6 Matthew Vespa, State Bar No. 222265  
7 Katrina A. Tomas, State Bar No. 329803  
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26 *Attorneys for Petitioner Communities for a Better*  
27 *Environment*  
28



1 **VERIFICATION**

2 I, Darryl Molina Sarmiento, hereby declare:

3 I am the Executive Director of Petitioner Communities for a Better Environment. I am  
4 authorized to execute this verification on Petitioner’s behalf. The facts alleged in the above  
5 Petition and Complaint are true to my personal knowledge and belief.

6 I declare under penalty of perjury under the laws of the State of California that the above  
7 is true and correct and that this verification is executed on this eighteenth day of December 2024  
8 at Rancho Cucamonga, California.

9 

10 Darryl Molina Sarmiento

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# Exhibit A



CALIFORNIA REGIONAL OFFICE | SAN FRANCISCO

50 CALIFORNIA ST. SUITE 500

SAN FRANCISCO, CA 94111

T: 415.217-2000

F: 415.217-2040

*Via E-Mail and First-Class Mail*

December 16, 2024

Clerk of the Board  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  
E-Mail: [cotb@arb.ca.gov](mailto:cotb@arb.ca.gov)

Ellen Peter, Chief Counsel  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  
E-Mail: [ellen.peter@arb.ca.gov](mailto:ellen.peter@arb.ca.gov)

**Re: Notice of Commencement of CEQA Litigation**

Dear Clerk and Chief Counsel of the California Air Resources Board:

This letter is to notify you that Communities for a Better Environment (“Petitioner”) will file suit against the California Air Resources Board (“CARB”) and Steven S. Cliff, in his official capacity as Executive Officer of CARB, (collectively, “Respondents”) for failure to observe the requirements of the California Environmental Quality Act (“CEQA”), Public Resources Code section 21000 et seq., and the CEQA Guidelines, California Code of Regulations section 15000 et seq. in the administrative process that culminated in the approval of amendments to the Low Carbon Fuel Standard (“Project”) and certification of an Environmental Impact Assessment (“EIA”) for the Project. This notice is given pursuant to Public Resources Code section 21167.5.

Among other relief, Petitioners will request that the Court issue a writ of mandate directing Respondents to vacate and set aside its approval of the deficient portions of the Project, its certification of the EIA, and its adoption of related findings and statement of overriding considerations.

Most respectfully,

Nina C. Robertson  
Matthew Vespa  
Katrina A. Tomas  
EARTHJUSTICE

*[Signatures continued on next page]*

A handwritten signature in black ink, consisting of several overlapping, fluid strokes that are difficult to decipher.

Shana Lazerow

Lauren Gallagher

COMMUNITIES FOR A BETTER  
ENVIRONMENT

*Counsel for Petitioner Communities for a  
Better Environment*

**PROOF OF SERVICE**

***Communities for a Better Environment v. California Air Resources Board et al.***

**Superior Court of the State of California – County of Fresno**

At the time of service, I was over 18 years of age and **not a party to this action**. I am employed in the County of San Francisco, State of California. My business address is 50 California Street, Ste. 500, San Francisco, CA 94111.

On December 16, 2024, I served true copies of the following document(s) described as:

**NOTICE OF COMMENCEMENT OF CEQA LITIGATION**

on the parties listed below:

Clerk of the Board  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  
E-Mail: [cotb@arb.ca.gov](mailto:cotb@arb.ca.gov)

Ellen Peter, Chief Counsel  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  
E-Mail: [ellen.peter@arb.ca.gov](mailto:ellen.peter@arb.ca.gov)

**BY MAIL:** I enclosed the document(s) in a sealed envelope or package addressed to the person(s) at the address(es) listed above and deposited the sealed envelope with the United States Postal Service, with the postage fully prepaid. I am a resident or employed in the county where the mailing occurred. The envelope or package was placed in the mail at 490 Lake Park Avenue, Oakland, CA 94610.

**BY E-MAIL OR ELECTRONIC TRANSMISSION:** I caused a copy of the document(s) to be sent from the e-mail address [jgriffin@earthjustice.org](mailto:jgriffin@earthjustice.org) to the persons at the e-mail addresses listed in the Service List. I did not receive, with a reasonable time after the transmission, any electronic message or other indication that the transmission was unsuccessful.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on December 16, 2024, at Oakland, California.



---

Joseph Griffin