

Biofuelwatch (Gary Hughes)

Please accept the comments from our organization Biofuelwatch describing the imperative of closing the biogenic CO2 emissions compliance obligation exemption loophole as soon as possible.



March 6, 2026

Lauren Sanchez, Chair
Members of the Board
Dr. Steven S. Cliff, Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Submitted electronically via <https://carb.commentinput.com/?id=pNeRj64MA>

RE: Proposed Amendments to the California Cap on Greenhouse Emissions and Market-Based Compliance Mechanisms Regulation – CLOSE BIOGENIC CO2 EXEMPTIONS LOOPHOLE

Esteemed Chair Sanchez, board members, Dr. Cliff;

The purpose of this letter submitted to the California Air Resources Board (CARB) in regards to [the Proposed Amendments to the California Cap on Greenhouse Emissions and Market-Based Compliance Mechanisms Regulation](#) (Amendments) is to provide a quick review of available greenhouse gas emissions data and illuminate the economic impacts resulting from the compliance obligation exemptions being granted to biofuel producers and distributors.

These exemptions essentially allow the covered entity enjoying the exemption to forego being required to invest in allowances to cover those exempted emissions. Fewer purchased allowances result in less allowance demand, which contributes to lower carbon prices. Depressed carbon prices reduce revenues for the achievement of the objectives of the program. Our organization [Biofuelwatch](#) is providing this letter because it is important to highlight the likely climate damage and significant economic losses accruing from the exemption from the compliance obligation for those entities that are producing, importing, distributing and/or selling liquid biofuel products like so-called ‘renewable diesel.’ **We urge state authorities to address this crucial issue, to revise the justifications for providing these exemptions, and to revoke them.**

Note that the [best available science](#) strongly associates persistent [water impacts, toxic pollution from agroindustry fertilizers and pesticides, deforestation, forest degradation, and other negative social, environmental and climate impacts](#) with the steady increase in production and consumption of liquid biofuel products like ‘renewable diesel’ and ‘sustainable aviation fuel.’

The exemption from the compliance obligation for the ‘biogenic CO2 emissions’ under cap-and-trade is predicated on the ‘carbon neutral’ character that is arbitrarily granted to biogenic fuels. However, a building [body of evidence calls into question the validity of the methodologies that CARB is relying on](#) to characterize these biofuel products as ‘carbon neutral.’ What is unarguable is that the biogenic CO2 emissions reported to CARB that are granted an exemption from the compliance obligation under cap-and-trade are indeed happening in the real world. Biofuel products such as ‘renewable diesel’ are being burnt in record quantities in the state. Those emissions are impacting communities, harming air quality, and damaging the global climate. The exemption from the compliance obligation for these emissions is based upon the erroneous assumption that photosynthesis neutralizes the pollution from burning these fuel products.

There are solid scientific and environmental protection reasons to revisit and revoke the exemptions granted to biogenic CO2 emissions under the markets-based compliance mechanism. Our quick review of the data combined with some rudimentary calculations will also drive home the economic reasons that these exemptions must be revisited, especially in light of the concerns about reduced revenues for the Greenhouse Gas Reduction Fund and an underperforming markets-based compliance mechanism.

The emissions data source for this exercise is the [2024 Annual Summary of Greenhouse Gas Mandatory Reporting](#) (released November 4, 2025)(see Appendix at close of this letter with relevant screenshots from the Excel spread sheet).

Though the conversion of refineries in the San Francisco Bay Area to making high emissions liquid biofuels is a critical issue that merits more attention, the lucrative exemptions being granted to the in-state refiners that are producers of these fuels’ pale in comparison to the value of the exemptions granted to the fuel suppliers that distribute these products around the state.

Note that a very significant amount of ‘renewable diesel’ is imported into the state of California. [Despite the poverty of available data regarding the specific import quantities and geographical source of the ‘renewable diesel’ being consumed in California](#), state agencies like CARB and the California Energy Commission (CEC) have shared that at certain junctures in the last several years upwards of 70% of the diesel being consumed in California is so-called ‘renewable diesel.’

[Analysts](#) have assessed that as much as 75% of the ‘renewable diesel’ that is being consumed (i.e. burnt in diesel engines) is imported into the state.

This is congruent with the assessment by our organization that [2024 was a year of record imports of ‘renewable diesel’ into California from the Neste refinery in Singapore](#). Neste enjoys a generous exemption in 2024 from the markets-based compliance mechanism for the 3,240,505 tons of CO2 emissions attributable to that ‘renewable diesel’ fuel product refined in Singapore and subsequently imported, distributed, marketed, sold and burnt here in California.

As an example of our findings about the economic implications, **that compliance obligation exemption for Neste in 2024 could be worth more than \$80,000,000** – calculated with a hypothetical allowance price of \$25/ton (a below market allowance price).

By our estimates, using the 2024 data for generating rudimentary calculations, hundreds of millions of dollars of revenue are being lost to the state due to the exemption from the compliance obligation for the CO2 emissions from biogenic fuels. Note that what is included below is just a snapshot of the biogenic CO2 exemption loophole.

This exercise as presented here is based on a superficial sample of available data; this exercise should not by any means be considered exhaustive.

The purpose of this exercise is to instigate closer examination of the science and the economics of granting such valuable exemptions to non-covered/biogenic CO2 emissions under the markets-based compliance mechanism. It is the position of our organization that this biogenic emissions exemption is a loophole that must be closed as soon as possible.

****EMISSIONS DATA SAMPLE and Rudimentary Calculation of Value of Exemptions****

Fuel Suppliers biogenic fuels non-covered CO2 emissions

Valero - 3,793,121 tons exempted

Neste - 3,240,505 tons exempted

Phillips 66 - 5,921,489 tons exempted

Marathon Petroleum Company - 5,715,668 tons exempted

Chevron Products - 4,570,338 tons exempted

SUB TOTAL fuel suppliers - 23,241,118 tons exempted

@\$25/allowance = \$581,027,950 worth of exemptions

@\$30/allowance = \$697,233,540 worth of exemptions

Refineries non-covered biogenic CO2 emissions

Marathon Martinez/Neste joint venture - 103,568 tons exempted

Phillips 66 Rodeo - 252,905 tons exempted

Air Liquide Rodeo (hydrogen plant) - 146,443 tons exempted

SUB TOTAL refiners - 502,916 tons exempted

@\$25/allowance = \$12,572,900 worth of exemptions

@\$30/allowance = \$15,087,480 worth of exemptions

TOTAL SAMPLE non-covered biogenic and biogenic fuels CO2 emissions

Sample size refiners + fuel suppliers = 23,744,034 tons exempted

@\$25/allowance = \$593,600,850 worth of exemptions

@\$30/allowance = \$712,321,020 worth of exemptions

The hypothetical carbon prices used for this exercise are purposely at the far low end of the spectrum. The sum of lost revenues would be increased with every increase in the applicable allowance carbon price.

Using this exercise as a rough guide, it is safe to extrapolate that in the year 2024 alone more than \$500 million in lost revenue for the Greenhouse Gas Reduction Fund can be attributed to the exemptions to the cap-and-trade compliance obligation granted for the manufacture, import, distribution and sales of products like so-called 'renewable diesel.'

This is a critical matter that has thus far received scant attention from stakeholders, but it behooves CARB to take this issue seriously, and immediately. Not only is the flawed characterization of biofuels as 'carbon neutral' exacerbating the global climate and biodiversity crisis, the economic impacts of giving these polluting fuels a free pass under the cap-and-trade program are enormous and undermine the ability of the state to achieve climate objectives.

We can only hope that CARB leadership and staff take action to address this critical carbon market loophole as soon as possible. Thank you for your attention to this letter.

Sincerely,



Gary Graham Hughes, Co-Director / Americas Program Coordinator, Biofuelwatch

Email: garyhughes.bfw@gmail.com / Phone: +1-707-223-5434

APPENDIX:

SCREEN SHOTS for ease of review of emissions data

Air Liquide Rodeo (hydrogen plant for Phillips 66 Rodeo Refinery)

Facility Name	Report Year	Total Emissions (metric tons CO2e)	Entity Reported GHG Data (metric tons CO2e)	Verification
100194 AES Huntington Beach, LLC	2024	884,916	884,916	0
100297 AES Redondo Beach, LLC	2024	0	0	0
104952 AEM Advisory Group Inc.	2024	22,395	0	22,395
101797 Air Liquide Rodeo Hydrogen Plant	2024	512,680	512,680	0
101749 Air Liquide Large Industries (LPI) - Rodeo Hydroge	2024	484,651	338,218	146,483
101017 Air Products & Chemicals, Inc. - Martinez	2024	85,341	0	0
101248 Air Products Carson Hydrogen Plant	2024	773,376	0	0
101512 Air Products Manufacturing Corporation, Sacramen	2024	36,096	0	0
101096 Air Products Manufacturing LLC	2024	32,321	5,884	26,437
104917 Air Products Coast Hydrogen LLC - Torrance	2024	800,170	0	0
100127 Air Products Wilmington Hydrogen Plant	2024	785,977	0	0
1022 Alameda Municipal Power - RSD	2024	0	0	0
101431 Algenol Power Sanger, LLC	2024	4,712	0	0
104345 All American Asphalt - Corona	2024	15,477	0	0
104666 All American Asphalt - Irvine	2024	0	0	0
104926 Alliance Energy Services	2024	14,274	0	14,274
104759 ANR Paramount LLC - Fuel Supplier	2024	490,652	0	3,985
104899 Altman Specialty Plants	2024	7,291	0	0
104916 Alsea Energy Trading LLC - EPE	2024	3,845	0	0

Marathon Neste Martinez Refinery joint venture (renewable diesel production)

Facility Name	Report Year	Total Emissions (metric tons CO2e)	Entity Reported GHG Data (metric tons CO2e)	CARB-Calculated Covered Emissions (metric tons CO2e)	Verification
100914 Malburg Generating Station	0	0	0	166,166	0
104676 Marshfield Oil Company of Gainesville, Inc	0	22,253	274	0	22,227
5612 Marathon Petroleum Company LP - Fuel Supplier	0	27,733,543	5,715,668	0	27,733,543
104463 Marin Clean Energy - EPE	0	0	1,335	0	1,335
104169 Mariposa Energy LLC	0	0	51,147	0	51,147
104217 Marsh Landing Generating Station	0	0	86,537	0	86,537
100914 Martinez Refining Company LLC	0	0	3,653,237	0	3,653,237
101111 Martinez Renewable Fuel Facility	0	0	869,722	0	869,722
104932 Marathan, Inc. - Irvine	0	0	0	0	10,348
104384 Marathan, Inc. - Laguna Canyon	0	0	0	0	24,298
104633 Mathemaster Drying & Finishing	0	0	18,838	0	18,838
104805 MATREX OIL CORP	0	0	0	0	12,164
104813 Matsui Nursery, Inc.	0	0	0	0	9,394
104677 MBM-CA, LLC	0	0	0	0	11,051
100296 McKernick Limited	0	0	0	0	5,682
3044 Merced Irrigation District - RSD	0	0	0	0	0
101665 Merced Power, LLC (EPE)	0	0	0	0	0
104878 Mercuria Energy America - EPE	0	0	6,665	0	1,529
2046 Metropolitan Water District of Southern California	0	0	0	0	1,529

Neste (renewable diesel imported to California from Neste Singapore refinery)

Released November 4, 2025. California Air Resources Board. 2024 GHG Data. 2024 GHG Emissions by GHG. Average: 655217.033. Count: 20. Sum: 9828255.495.

Phillips 66 Rodeo Refinery (renewable diesel production)

Released November 4, 2025. California Air Resources Board. 2024 GHG Data. 2024 GHG Emissions by GHG. Average: 150106.9347. Count: 20. Sum: 2251634.021.

Valero fuel supplies (Diamond Green renewable diesel imported to California)

Released November 4, 2025. California Air Resources Board. 2024 GHG Data. 2024 GHG Emissions by GHG. Average: 3919356.377. Count: 20. Sum: 58790345.66.

Fuel Suppliers (biogenic fuels non covered CO2 emissions)

2024-ghg-emissions-2025-11-04

Released November 4, 2025

California Air Resources Board

2024 emissions subject to a compliance obligation in the Cap-and-Invest Program equals **256,538,234** metric tons CO₂e, which includes emissions associated with fuel suppliers.

Annual Summary of GHG Mandatory Reporting
Non-Confidential Data for Calendar Year 2024

See the "Introduction" tab and the "Column Descriptions" tab for important information about the data shown.

AAB ID	Facility Name	2024 Reported GHG Data (metric tons CO ₂ e)				CAMB-Calculated Covered Emissions (metric tons CO ₂ e)				Verification Data			
		from Fuel Supplier CO ₂ e from Non-Biogenic	Fuel Supplier CO ₂ e from Non-Biogenic	Fuel Supplier CO ₂ e from Non-Biogenic	Electricity Imported	Emmitter Covered Emissions	Fuel Supplier Covered Emissions	Electricity Imported Covered Emissions	Total Covered Emissions	Total Non-Covered Emissions	Emissions Data	Product Data	
100024	Pacific Gas and Electric Company (PG&E) - Supplier	39,021,107	0	0	2,427,795	0	16,925,593	2,427,795	16,925,593	22,095,514	Positive	N/A	GH
5002	Southern California Gas Company - End User Emission	38,527,955	63,143	771	0	0	21,076,614	0	21,076,614	17,513,253	Positive	N/A	Tel
104010	Phillips 66 Company - Fuel Supplier	11,291,957	5,021,409	0	0	0	11,291,957	0	11,291,957	5,921,409	Positive	N/A	SCS
5012	Marathon Petroleum Company LP - Fuel Supplier	27,733,543	5,715,668	0	0	0	27,733,543	0	27,733,543	5,715,668	Positive	N/A	Tel
104223	Chexone Products Company - Headquarters Fuel Sup	27,828,097	4,570,338	0	0	0	27,828,097	0	27,828,097	4,570,338	Positive	N/A	AH
104071	Valero Marketing and Supply Company - Fuel Suppl	11,826,222	3,793,121	0	0	0	11,826,222	0	11,826,222	3,793,121	Positive	N/A	Tel
104717	NextEra US, Inc.	2,623	3,237,882	0	0	0	0	0	0	3,240,505	Positive	N/A	Loc
104352	Sacramento Municipal Utility District (SMUD) - Gas	2,070,729	23,342	0	0	0	0	0	0	2,094,071	Positive	N/A	TU
104494	Pinnac Travel Centers, LLC	320,054	1,937,203	0	0	0	320,054	0	320,054	1,957,203	Positive	N/A	Tel
104083	San Diego Gas and Electric (SDG&E) - Local Distribut	4,894,652	0	0	0	0	3,097,627	0	3,097,627	1,797,025	Positive	N/A	SCS
104080	Southern California Gas Co. - Distribution	0	0	0	0	0	0	0	0	1,590,794	Positive	N/A	Tel
104229	Hemlock Apple Corporation	913,757	1,147,556	0	0	0	913,757	0	913,757	1,147,556	Positive	N/A	Tel
104560	REI Marketing & Logistics Group, LLC	0	917	1,104,459	0	0	0	0	0	1,105,375	Positive	N/A	Ch
103703	Mohawk Energy Partners, USA, LLC	1,064,063	0	0	0	31,343	69,833	0	100,976	994,585	Positive	Positive	AH
5022	Pacific Gas & Electric Company (PG&E) - EPE	0	0	0	962,557	0	0	0	0	962,557	Positive	N/A	GH
104438	Muskel Corporation	63,140	846,501	0	0	0	63,140	0	63,140	846,501	Positive	N/A	AH
104005	BP Products North America Inc. - Terminals	2,152,467	843,999	0	0	0	2,152,467	0	2,152,467	843,999	Positive	N/A	AH
104474	PF Energy Western Region LLC	11,056,990	808,679	0	0	0	11,056,990	0	11,056,990	808,679	Positive	N/A	Loc

Ready Accessibility Investigate Average: 6,792,396 Count: 6 Sum: 40,754,376 100%