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The Center for Biological Diversity's Comments on the Draft SB 237 Assessment Report

The Center for Biological Diversity submits the attached comments on the Draft SB 237 Assessment Report. Please let me know if you have issues accessing the document. Thank you.

Additional submitted attachment is included below.

June 18, 2026

Via CEC E-Comment Submission Portal

California Energy Commission
Attn: Siva Gunda, Vice Chair; Theresa Keates, Special Advisor
715 P Street
Sacramento, CA 95814

Re: Comments on Draft SB 237 Assessment Report

Dear Vice Chair Gunda and Commissioners:

I am writing on behalf of the Center for Biological Diversity and its members to provide public comments on the California Energy Commission's (CEC) draft Senate Bill 237 Assessment (Docket No. CEC-200-2026-007-LCD) (the Draft Report).

The Draft Report rightly highlights the need for a rapid and orderly transition away from fossil fuels. We agree that the **"energy transition… is the single biggest opportunity California has to permanently lower energy costs for working families"** (Draft Report, p. 7)[1] and urge the state to center that fact in policy making and funding decisions.

The Draft Report includes helpful information on the CEC's three-bucket framework to manage California's mid-transition and valuable acknowledgements of the reliability and affordability benefits of clean energy. We appreciate the stated intention to prioritize Buckets 2 and 3, to minimize the need for reactive Bucket 1 actions, and efforts to move the state towards clean energy. However, the Draft Report recommendations can be improved in several key areas. The CEC should revise its Draft Report to:

A. Prioritize the minimum inventory, resupply, and price gouging rulemakings, and coordinate with the Division of Petroleum Market Oversight (DPMO) to explore spot market transparency measures. The Draft Report should include rulemaking timelines and discuss implementation challenges for clarity and comprehensiveness.

B. Elevate and develop 'advancing decarbonization' as the foremost priority in Bucket 3, not least because of the holistic benefits, such as employment opportunities, lower energy costs, greater economic stability and resilience, and sustainable development, that a clean energy economy presents.

C. Abandon the CEC's rationale that implicitly or explicitly supports increased in-state crude oil production. In particular, we are concerned that "petroleum system

[1] Unless otherwise noted, in-text page citations refer to the Draft Report.

stabilization" cannot be meaningfully distinguished from system preservation, and that policy recommendations aimed at stabilization may entrench the state further into fossil fuel dependency.

D. Incorporate an honest assessment of SB 237 by reevaluating certain erroneous assumptions including, but not limited to, rolling back environmental and health protections will boost in-state crude oil production.

As the CEC and the Division of Petroleum Market Oversight (DPMO) have acknowledged, gasoline pricing volatility is largely beyond the state's control. The war in Iran has shown, yet again, that the state cannot insulate itself against global geopolitical forces with 'drill, baby, drill' polices. The economies that have been most buffered against this latest war are those with greater clean energy investments. Clean energy is energy security.[2]

Numerous experts have rebuffed industry calls for more drilling, underscoring extensive data demonstrating that drilling more will *not* lower or even level out gasoline prices.[3] Rising gas prices in the US are driven by global crude prices, not by state environmental and health protections. As DPMO has reported, another major factor driving high gas prices in California is the concentrated market power of refiners, resulting in a "mystery surcharge" on gasoline, particularly at name-brand stations, costing consumers $59 billion dollars in excess gasoline expenses from 2015-2024. The DPMO describes this conduct as "consistent with price gouging."[4] There is no justification for preserving the petroleum fuel system, or increasing in-state oil production, in California.

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[2] Noah Gordon, "Some Countries Are Better Prepared for an Energy Crisis This Time," *Carnegie Endowment for International Peace* (Apr. 2026), available at https://carnegieendowment.org/emissary/2026/04/iran-war-energy-crisis-fuel-oil-electric-car-battery-renewable

[3] See, e.g., Sivas, D., "The Future of Petroleum Refining in California is Not More Oil Drilling," Stanford Environmental & Natural Resources Law Program Blog (Aug. 22, 2025), available at https://law.stanford.edu/2025/08/22/the future-of-petroleum-refining-in-california-is-not-more-oil-drilling/ ("there are good evidence-based reasons to believe that, absent industry price-gouging, pump prices will not be significantly affected as California continues to transition away from fossil transportation fuels").

[4] Division of Petroleum Market Oversight, 2025 Annual Report, CEC-900-2025-001 (Oct. 2025), available at https://www.energy.ca.gov/sites/default/files/2025-10/CEC-900-2025-001.pdf

A. The Draft Report should provide a timeline for expedient rulemaking to curb market abuse by California refiners and should explore measures to enhance spot market transparency.

We agree with the Draft Report that the CEC should use the Maximum Gross Gasoline Refining Margin (GGRM) and penalty, resupply, and minimum inventory rules in tandem. But the prolonged rulemaking process and the decision to delay certain actions for years exposes Californians to market manipulation by refiners and an enduring mystery gasoline surcharge. While we acknowledge the rulemaking for minimum inventory and resupply requirements are complex and require careful analysis, the Draft Report does not adequately explain the obstacles facing prompt finalization of these rules.

We strongly urge the CEC to rescind its resolution to postpone the GGRM rulemaking for five years. A well-designed cap on refiner profits would realign incentives and protect consumers. The five-year delay signals to fossil fuel refiners that they can, without consequence, continue practices which harm California consumers, environment, and communities. The CEC need not tie its own hands to prevent timely regulatory responses.

The Draft Report should also explore measures to enhance transparency of the spot market so that retail gasoline prices are not artificially inflated by a small number of spot market transactions. These include a public spot market price index or measures to curb reactive spot market purchases. The DPMO has repeatedly flagged issues in the spot market, including that transactions are reported on a voluntary basis by market participants who may manipulate the market to increase prices.[5] As the CEC notes in the Draft Report (p. 9), increased transparency under recent special session laws has been critical to understand various market forces and tools to stabilize fuel prices and aid the state in transition planning. We urge the CEC to extend these efforts to the spot market.

B. Bucket 3 policies should drive the CEC's actions.

Bucket 3 should not be an afterthought or footnote to reference vague future or unfunded action. The CEC must focus on Bucket 3 policies that drive down demand for fossil fuels. We appreciate the CEC's acknowledgement that there is "no evidence that slowing the transition would improve reliability or affordability outcomes." (p. 57.)

Unfortunately, the three-bucket framework creates a strong bias towards stabilizing the petroleum fuel system at the expense of a meaningful analysis of opportunities, challenges, and concrete policies to advance clean transportation, and the holistic benefits that decarbonization represents. This is most evident in Chapter 6's relegation of its "Advance Decarbonization"

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[5] See DPMO, Transportation Fuels Reliability Workshop: Resupply Planning and Transportation Fuels Assessment Scope Overview (June 8, 2026), available at https://www.energy.ca.gov/event/workshop/2026-06/transportation-fuels-reliability-workshop-resupply-planning-and

section to a mere single page. Advancing decarbonization is the way to energy stability, reliability, and affordability; it should be elevated as the overarching Bucket 3 priority and integrated into other Bucket 3 goals. Clean energy investments are an established tool to support communities, provide employment opportunities for displaced workers, offer a sustainable development path for fossil fuel dependent regions, and improve energy reliability and affordability.[6]

Bucket 3 should also evaluate obstacles facing California's decarbonization programs and resources the CEC already has, and would need, to overcome these challenges in coordination with other state agencies.

We recommend the CEC thoroughly evaluate the following policy areas and benefits they represent:

- Accelerating zero-emission vehicle (ZEV) vehicle mandates and charging station deployment
- Increasing clean energy generation
- Expanding public transit and other modes, including land use planning, to reduce vehicle miles traveled
- Using local, regional and high-speed rail to replace short flights
- Accelerating well cleanup

The Center is concurrently submitting written comments on the Draft Transportation Fuels Transition Plan (attached hereto) and incorporate those comments here by reference.

While advancing decarbonization offers holistic benefits, ensuring direct transitional support to impacted workers and communities as the petroleum system shuts down is critical to the energy transition. We support the CEC's efforts to develop programs and secure funding for impacted workers and communities facing public revenue losses. Funding for these initiatives should be sourced from companies across the petroleum supply chain. We also support the development and implementation of safety plans and urge the CEC to hold companies responsible for adequately planning for and funding safe decommissioning, site remediation, and worker protections throughout the transition.

The Draft Report should acknowledge the holistic benefits of remediating fossil fuel infrastructures, including refinery sites and oil and gas wells. These benefits include protecting communities from toxic pollution and expanding employment opportunities for fossil fuel workers. As the Draft Report notes (p. 55), planning for site cleanup and redevelopment and remediation work can take decades. These activities require expertise that many fossil fuel

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[6] Pollin, Robert et al., "A Program for Economic Recovery and Clean Energy Transition in California", *Political Economy Research Institute* (June 2021), available at https://peri.umass.edu/publication/a-program-for-economic-recovery-and-clean-energy-transition-in-california/

workers are well-positioned to provide, and thus should be added as a transitional support strategy in regions with significant fossil fuel infrastructure.

The CEC should reject public subsidies to support petroleum operations or industry cleanup obligations. The public has already spent hundreds of millions in local, state and federal funds to plug wells and restore oil and gas leases in California, despite oil operators being legally required to pay for the cost of cleanup.[7] We fully support the Draft Report's recommendation for enhanced transparency into cleanup costs and timelines (p. 55), particularly for refinery sites for which such requirements are largely absent and publicly reported decommissioning obligations are minimal.[8]

We also agree that a comprehensive analysis of the magnitudes and mechanisms of financial assurances applied to the state's petroleum infrastructures can help inform which mechanisms are most secure, where loopholes in industry accountability exist, and the level of financial risk facing the state if industry participants neglect or evade their cleanup obligations. It is well established that third-party guaranteed surety bonds are the most secure financial assurance for the state and offer additional benefits, such as incentivizing prompt cleanup.[9] Corporate guarantees and self-insurance, by contrast, are meaningless when producers go bankrupt, which occurred in the coal industry and left the public with millions in cleanup liabilities.[10] These weak financial assurance regulations should not be repeated in California. We urge the CEC, in collaboration with CalGEM, to evaluate financial assurance mechanisms and ensure existing regulations are fully enforced in the oil and gas extraction sector.

We agree with the Draft Report's recommendation that the State should identify durable transition funding mechanisms. (p. 57) The Draft Report should also acknowledge the imminent funding cuts to the Greenhouse Gas Reduction Fund (GGRF). The CEC points to cap-and-invest as a "central element in achieving the GHG emissions reductions that California's statutes require." (p. 33) But recent changes to that program will gut GGRF funding for critical GHG-reducing programs, including transit and affordable (including infill) housing. The Draft Report

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[7] 14 Cal. Code Reg. section 1776.
[8] Asian Pacific Environmental Network, "Who pays for the cleanup when a refinery closes?" (June 2026), available at https://apen4ej.org/wp-content/uploads/2026/06/Who-Pays-Report.pdf.
[9] Gerard, David, "The Law and Economics of Reclamation Bonds," Resources Policy 26 (4): 189-97, pg. 91 (Oct. 2, 2000); Igarashi, Yoshiyuki et al., "Economics of Oil and Gas Development in the Presence of Reclamation and Bonding Requirements," Agricultural and Applied Economics Associations (2014); Andersen, Matthew et al., "Reclamation Costs and Regulation of Oil and Gas Development with Application to Wyoming." *Western Economics Forum.* Vol. 8. No. 1. 2009.
[10] Macey, J & Salovaara, J., "Bankruptcy as Bailout: Coal Company Insolvency and the Erosion of Federal Law," Stanford Law Review (April 2019), Vol. 71, 879-962, available at https://review.law.stanford.edu/wp-content/uploads/sites/3/2019/04/Macey-Salovaara-71-Stan.-L.-Rev.-879.pdf

should explain what these cuts will mean for the state's clean energy transition and identify alternatives to keep GHG-reducing projects afloat.

The Draft Report discusses petroleum fuel supply reliability, including alternative fuel specifications and supply and system resilience, as a Bucket 3 consideration. This is another example of petroleum system stabilization dominating the three-bucket framework, and we recommend incorporating this topic into Chapter 5 (on Bucket 2) and focusing Bucket 3 policies on advancing decarbonization and protecting communities and workers in the transition.

In sum, we urge the CEC to focus Bucket 3 explicitly on advancing decarbonization and provide more details into the holistic benefits to communities and workers and reliability and affordability goals that clean energy, particularly in the transportation sector, present.

C. The CEC should abandon all rationale that supports, implicitly or explicitly, boosting in-state crude oil production.

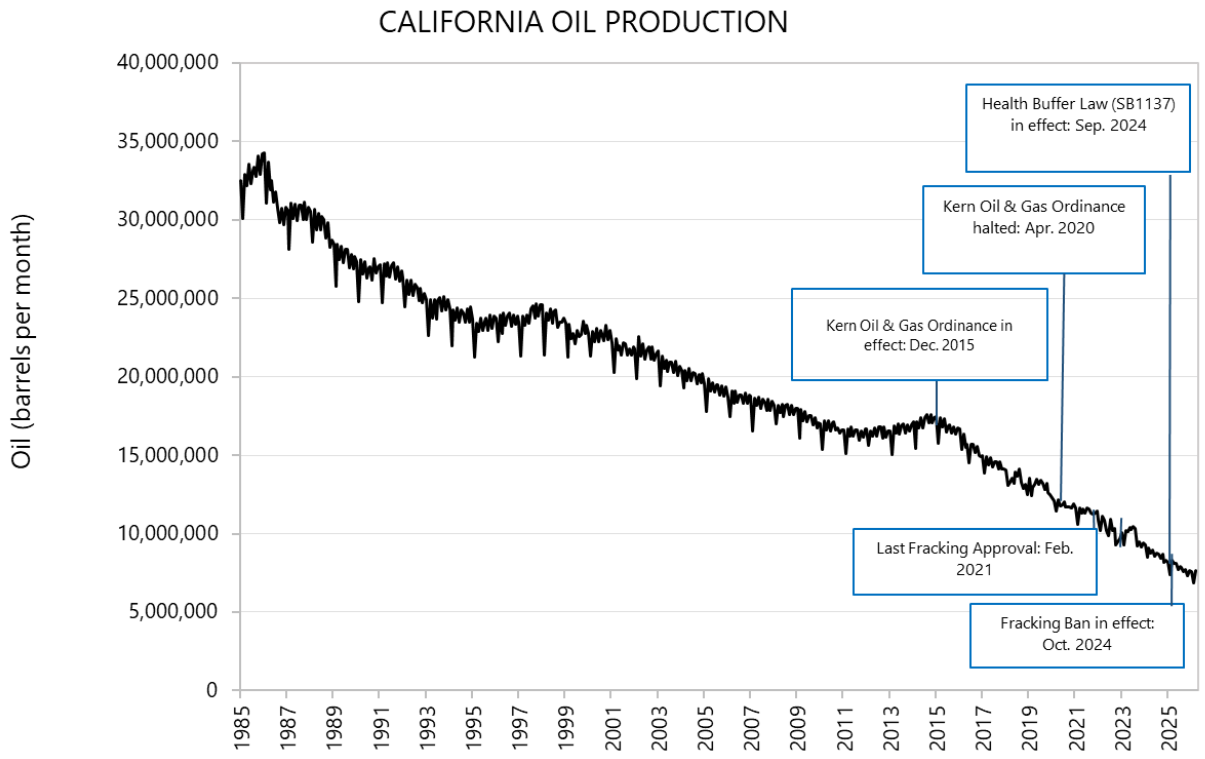
The CEC's Draft Report has rightly backed away from some of the erroneous assumptions that led to SB 237, yet many parts of the Draft Report still hinge on problematic reasoning. We urge the CEC to reconsider certain aspects of its analysis, as discussed below.

1. <u>The CEC should not use "refinery demand" as a goal or metric for fossil fuel production.</u>

The Draft Report rightly abandons the CEC's prior production goal, but still maintains that it may be necessary to expand in-state production up to 25% of "refinery demand." (p. 11.) There are several reasons this objective should be abandoned. First, annual oil production has declined steadily from 394 million barrels in 1985 to 105 million barrels in 2025.[11] The decline has been consistent regardless of changing health and safety regulations, environmental review, litigation, and fluctuating crude oil prices. The decline is a result of geology—California's oilfields are largely tapped out, the industry is at the end of its life, and no amount of permitting will bring high production volumes back (see Figure below).

[11] California Geologic Energy Management Division (CalGEM), Wellstar Data Dashboard, available at https://www.conservation.ca.gov/calgem/Online_Data/Pages/WellSTAR-Data-Dashboard.aspx (visited May 31, 2026).

California Oil Production (January 1985 – March 2026)



Source: U.S. Energy Information Administration, https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca1&f=m

Second, the proportion of in-state versus out-of-state production is secondary to decreasing overall demand for oil and gas. Artificially boosting in-state production toward an arbitrary and unattainable target will bear no benefit for Californians. In contrast, moving the state away from fossil fuel production by decreasing demand for petroleum fuels will safeguard the state from wild fluctuations in oil and gas prices, and support the CEC's aim to minimize reactive Bucket 1 policies.

Third, the Draft Report does not consider the environmental harm resulting from attempts to boost in-state production. The Draft Report in fact touts "responsible, safe in-state crude production." (p. 22.) There is no such thing — crude oil production is inherently dangerous for people and the climate, in particular due to the state's carbon-intensive oil extraction techniques, proximity to sensitive receptors, cumulative impacts to air quality, and overlap with the state's groundwater resources.

Fourth, using "refinery demand" as a metric for how much oil and gas should be produced is problematic because refineries freely export gasoline products globally to the highest bidder. There will never be a limit to refinery demand for crude oil so long as they can make a profit from selling it anywhere in the world. Pegging the state's production goals to refinery demand will not align with the state's domestic demand for fossil fuels.

2. The Draft Report policies do not distinguish petroleum system stabilization from preservation.

Under the Draft Report's analysis and recommendations, "petroleum system stabilization" cannot be meaningfully distinguished from preservation. Although the Draft Report states that "stabilization should not be confused with preservation" (p. 9), it also advocates for preservation by "promot[ing] investment confidence" and "serv[ing] the petroleum value chain." (pp. 1, 22.) Reliability and safety of existing infrastructure is important. Yet, the CEC's positioning appears supportive of preserving and even expanding fossil fuel infrastructure without any analysis of the economic risks and environmental harms.

For example, the Draft Report appears to view the proposed Western Gateway Pipeline as a positive development (p. 19), but it does not disclose or attempt to analyze the economic, climate, or health implications of greenlighting such a project, and provides no rationale for supporting the pipeline. It is unclear how new investment to expand a pipeline system does not constitute 'preservation,' as it will entrench California and neighboring states further into fossil fuel dependency. Moreover, Californians are all too familiar with pipeline spills. The state is currently engaged in litigation around restarting the pipeline that caused the 2015 Refugio oil spill. In May 2026, another major pipeline spill occurred in Los Angeles, sending thousands of gallons of crude oil into storm drains and into the Los Angeles River.[12] The CEC should withdraw its support from the Draft Report to avoid undermining the state's progress in moving away from fossil fuels.

The Draft Report also states that the CEC is "closely monitoring" SB 237's effect on permitting and oil production (p. 29), but is silent as to what steps should be taken once it becomes clear that cutting environmental review has not led to more production. It would be prudent to scrap SB 237's approach, but the oil industry will likely argue that even *more* cuts to environmental regulations are needed to boost production. The Assessment should clarify that the CEC will not support further cuts to environmental protections if SB 237 is unsuccessful in increasing production.

[12] Lin, S., "Crude oil spills onto Cesar Chavez Avenue in East L.A. after pipeline rupture," *Los Angeles Times* (May 22, 2026), available at https://www.latimes.com/california/story/2026-05-22/east-la-oil-spill

3. The CEC should coordinate with CalGEM to provide more transparency to the public about oil and gas activity.

The Draft Report notes that the California Geologic Energy Management Division (CalGEM) "maintains information on a wide range of programs related to its oversight of oil and gas operations" including SB 237 implementation. (p. 30.) But CalGEM has not provided timely updates on how many wells have been drilled under SB 237. The Draft Report's disclosure that only one new well has been drilled this year is an important fact for the public, but such information cannot be found on CalGEM's website. If drilling rates increase in the second half of the year, as the CEC projects, it will be crucial to get timely information on which wells have been drilled, and when.

CalGEM is required by law to make all public information collected or maintained available on CalGEM's internet website by July 1, 2026.[13] We encourage the CEC to work with CalGEM to provide timely information to the public.

4. The CEC can and should proactively move the state away from fossil fuel production on an enforceable timeline.

The Draft Report claims that the state "does not currently have the ability to control the timing or sequence of [the fossil fuel industry's] retirement." (p. 11.) This understates the importance of state policies in setting timely phase out dates and moving the state away from fossil fuels. For example, Governor Newsom has called for the end of internal combustion engine for passenger cars by 2035, and for medium- and heavy-duty trucks by 2045.[14] Governor Newsom also called for the end of fossil fuel production in the state by 2045.[15] We urge the state to utilize its full authority to facilitate a more rapid transition. Without enforceable deadlines to wind down fossil fuel infrastructure, the industry will continue to persist longer than necessary. And although the CEC claims stabilization should not be confused with preservation (p. 9), without clear termination dates, it will be impossible for the CEC and the public to discern the difference between the two. A lack of clear timetables will also open the door to industry demands for exemptions and bailouts similar to SB 237.

[13] Pub. Resources Code, sec. 3108.5(a).
[14] Office of the Governor, Executive Order N-79-20 (Sept. 23, 2020), available at https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf
[15] Office of the Governor, Governor Newsom Takes Action to Phase Out Oil Extraction in California, available at https://www.gov.ca.gov/2021/04/23/governor-newsom-takes-action-to-phase-out-oil-extraction-in-california/

D. The CEC should re-examine the erroneous assumptions that motivated SB 237, which severely undermined California's environmental and health protections and climate goals and artificially propped up the declining oil industry.

The Draft Report should expressly state that the June 2025 letter from Vice Chair Gunda to Governor Newsom erred in attempting to boost in-state crude oil production. SB 237 was premised on the erroneous reasoning that (1) eliminating environmental review and public participation for oil and gas projects would spur increased crude oil production in the state, (2) in-state crude production affects gas prices in California, and (3) increasing production was a desirable and feasible outcome despite the harms to public health, the environment and the climate. These underlying assumptions have shown to be incorrect.

1. California's oil production continues to decline, regardless of SB 237.

The CEC and Department of Conservation (DOC) touted SB 237 as a way to increase in-state oil production to 125 million barrels per year. But the first five months of data under SB 237 confirm these projections were significantly overinflated. As of May 31, 2026, CalGEM issued 328 permits for new oil and gas wells in Kern County.[16] Despite the increase in permit approvals (and higher global crude oil prices), only one new well had been drilled as of March 31, 2026. (p. 29.) Production in 2026 continues to decline. According to CalGEM data, producers reported 21.72 million barrels produced in the first quarter of 2026, compared to 26.66 million barrels in the first quarter of 2025, a year-over-year decline of 18.5%.

This is consistent with data showing production declines in Kern County even during 2015-2020, when the county's fast-tracking ordinance was in place. From 2015 to 2020, production fell from 12 million barrels per month to 8.8 million barrels per month, about 26.6%.[17] In comparison, from 2020 to 2025, production fell from 8.8 million barrels per month to 6.4 million barrels per month, about 27.6%.[18] Now that litigation in Kern County has been set aside, the ongoing consistent decline shows that the litigation had little effect on the amount of actual production in Kern County. Similar rates of decline have occurred in oil-producing regions of the state outside of Kern.

Thus, environmental review and litigation cannot be blamed for the decline in production. The industry's four-decade downward trajectory is the result of geology, not environmental review (See Figure on p. 7, *supra*).

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[16] CalGEM Data Dashboard, available at https://www.conservation.ca.gov/calgem/Online_Data/Pages/WellSTAR-Data-Dashboard.aspx (visited May 31, 2026).
[17] Production data from U.S. Energy Information Administration, available at https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca1&f=
[18] Id.

While facts fail to establish a link between the litigation and production decline, the CEC still treats the "crude oil production permitting pathway for Kern County designed to address the rapid production decline" as a Bucket 2 accomplishment (p. 11; see also p. 28 [SB 237 was "designed to support crude oil production stabilization."].) SB 237 has not addressed the rapid production decline in California—that decline is continuing post SB 237—because the decline was and is not due to litigation, permitting, or environmental and health protections.

2. SB 237 gutted crucial environmental review.

The only area SB 237 has had a tangible impact is in gutting environmental review and public participation. The Draft Report claims that the state's "targeted stabilization" still adheres to the "state's health and environmental protections." (p. 28.) In reality, SB 237 *eliminated* these very protections for dangerous oil and gas projects in Kern County, by allowing CalGEM to eschew independent environmental review of these projects under the California Environmental Quality Act (CEQA). Under SB 237, CalGEM is allowed to skip further review for Kern County oil and gas projects covered by the county's Second Supplemental Recirculated Environmental Impact Report. (SSREIR), which does not examine any individual oil and gas project and creates a fast-tracked over-the-counter local permit that the county claims is ministerial.

Prior to SB 237, CalGEM was required to independently review oil and gas projects in Kern County under its duties as a "responsible agency" under CEQA.[19] CEQA confers to responsible agencies a critical second look at an individual project's potential health and environmental impacts, and the duty to impose any feasible mitigation measures that were not considered or adopted by the lead agency. The regional water board, local air district, and other agencies with authority over a project may also act as responsible agencies for a project. These CEQA requirements no longer apply to CalGEM or its sister state agencies under SB 237.

The elimination of CalGEM's review leaves the SSREIR as the sole environmental review under CEQA for most oil and gas projects in Kern County. The Kern County SSREIR which was invalidated twice by courts finding it to be legally deficient, does not meet CEQA's rigorous standards for disclosing, analyzing, and mitigating environmental harms from oil and gas. For example, the SSREIR does not evaluate any project in particular; it purports to cover all oil and gas activities over a 2.3 million acre "project area" for the foreseeable future.

Moreover, most of the analysis un the SSREIR is more than a decade old and has not been updated with the most recent science concerning the harms from oil and gas production. For example, the SSREIR does not adequately consider increasing harms from California oil and gas production. Extracting California's remaining oil requires more energy intensive and damaging

[19] 14 Cal. Code Regs., § 15096.

extraction methods.[20] As a result, the average carbon intensity of extraction from California's oilfields has increased from 81 kg CO2eq. per barrel in 2012 to 96 kg CO2eq per barrel in 2023.[21] This increasing carbon intensity has partially cancelled out the climate benefits of declining oil production in the state, and underscores the importance of California's laws to protect the environment, health, and climate.[22]

Nor does the SSREIR consider a 2023 report that details the industry's end-of-life well cleanup obligations. The report estimates that oil and gas companies' financial obligation to plug and abandon its wells could reach $21.5 billion, whereas estimated future cash flows (with which they should pay for well clean up) are less than a third, at only $6.3 billion.[23] Drilling more oil and gas wells will only increase total asset retirements costs and the potential financial burden on taxpayers, since bonding requirements continue to fall far short of covering these costs. Ensuring industry accountability for the cleanup of their existing wells should be prioritized.

Furthermore, the SSREIR does not contain mitigation measures that CalGEM would ordinarily be required to adopt as part of the review process. The SSREIR, for example, has no mitigation measures related to bonding to guard against harms from idle and orphan wells. Absent SB 237, CalGEM would have been legally required to consider the feasibility of imposing adequate bonding and any other mitigation measures. It also would have been required CalGEM to conduct an independent review of new information that changes the scope and severity of impacts. Eliminating CalGEM's role in the CEQA review process thus results in inadequate review and greater harms from oil and gas development in Kern County.

We further caution the CEC not to rely on SB 1137's setback as proof that nearby communities are safe from oil and gas pollution. Many studies show pollutants from oil and gas production can travel 3,200 feet, at least.[24] And even where human habitation is more distant, oil and gas production can have disastrous consequences for wildlife and their habitats.[25] Finally, greenhouse gas emissions from oil and gas projects will worsen the impacts from climate change

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[20] Fleming, J., Killer Crude: How California produces some of the dirtiest, most dangerous oil in the world, Center for Biological Diversity (June 2021), available at https://www.biologicaldiversity.org/programs/climate_law_institute/pdfs/June-2021-Killer-Crude-Rpt.pdf

[21] See CARB LCFS Crude Oil Life Cycle Assessment, available at https://ww2.arb.ca.gov/resources/documents/lcfs-crude-oil-life-cycle-assessment

[22] Fleming (2021), *supra*.

[23] Purvis, D., *There Will Be Blood: Decommissioning California's Oilfields,* Carbon Tracker Initiative (May 2023), available at https://carbontracker.org/reports/there-will-be-blood/

[24] See Table 3.8 (Summary of epidemiological studies that evaluate upstream oil and gas…) Shonkiff, Seth et al., "Public Health Dimensions of Upstream Oil and Gas Development in California: Scientific Analysis and Synthesis to Inform Science-Policy Decision Making," *California Oil & Gas Public Health Rulemaking Scientific Advisory Panel* (June 2024)

[25] See, e.g., Thompson, S., et al., "Avoidance of unconventional oil wells and roads exacerbates habitat loss for grassland birds in the North American great plains," *Biological Conservation* (2015) 192 (2015) 82-90.

regardless of where the project is located. Adhering to the SB 1137 setback is a commendable first step, but claiming oil production is "safe" when conducted outside of the state's health protection zone is inaccurate.

3. SB 237 has had no effect on gasoline prices or refinery closures.

Sacrificing our health and environment in pursuit of increased in-state oil production simply will not change the overriding incentives for refinery closures or lower gas prices. As summarized by economist Severin Bornstein, "The idea that ratcheting up production in California would change the price of gasoline isn't plausible."[26] Professor Bornstein reiterated at the May 5, 2026 Assembly Utilities and Energy Committee hearing that **"producing more oil in California is not going to change how the price of gasoline for consumers changes in the midst of those global shocks. The price of gasoline in California went up right with the rest of the world."**[27] Numerous other experts have made similar points.[28]

The cost impact of growing gasoline imports since 2020 has been negligible. The Draft Report notes that retail gasoline prices remained lower and more stable than in 2025, even as imports reached record levels that year (p. 20.) As the state's domestic refining capacity continues its inevitable contraction, import and distribution infrastructures will need to be upgraded and maintained to ensure a stable and accessible gasoline supply, while demand reduction measures are ramped up. The Draft Report should include a discussion of how the state can ensure import and distribution infrastructures support the short-term growth in gasoline imports, integrated with timelines and strategies to implement proactive (and sufficiently funded) demand reduction measures.

What *has* affected gasoline prices is the historic disruption of crude oil supplies due to the Iran conflict. The DPMO estimated that $1.13 of the recent increased costs at the pump is attributable to increased crude oil costs.[29] Another $0.32 was due to industry margins.[30] **The mystery surcharge has *widened* since the beginning of the conflict, underscoring the necessity of re-orienting refinery incentives** to supply the market sufficiently with fuel, through minimum

[26] Dale Kasler, "California oil industry wants to drill more. Why that wouldn't tame runaway gas prices," *The Sacramento Bee* (Mar. 22, 2022)
[27] Severin Bornstein, Faculty Director, Energy Institute at Haas UC Berkeley, Testimony at Assembly Utilities and Energy Committee Informational Hearing (May 5, 2026), available at https://www.assembly.ca.gov/media/assembly-utilities-and-energy-committee-20260505
[28] Jocelyn Fong, "20 Experts Who Say Drilling Won't Lower Gas Prices," *Media Matters* (Mar. 22, 2012), available at https://www.mediamatters.org/legacy/20-experts-who-say-drilling-wont-lower-gas-prices
[29] Milder, June 3, 2026 Senate Oversight Hearing, Utilities, Energy, and Communication, available at https://www.senate.ca.gov/media/senate-energy-utilities-and-communications-committee-20260603?format=video
[30] Id.

inventory, resupply, and price gouging regulations, rather than allowing or enabling them to continue operating unrestrained in ways the DPMO described are demonstrably oligopolistic.

Branded gasoline also costs significantly more than non-branded gasoline. DPMO noted that, despite the products being identical, this branded/unbranded discrepancy is even more marked in California than in other states. The DPMO explained that Chevron's gas stations charged *70 cents more per gallon* than other nearby gas stations (within a mile). Only branded gas (Chevron, Shell, Mobil, and 76) sold gas for over $6 per gallon since the beginning of the conflict.[31]

Conclusion

The Draft Report provides promising direction for the state's petroleum system decline, but suffers from the shortcomings described above. We encourage the CEC to revise the Draft Report so that policymakers and the public have an accurate picture of the energy transition and the challenges ahead without succumbing to unsupported industry assertions about the need for pro-oil policies.

We look forward to working with your agency going forward.

Best regards,

/s/ *Hollin Kretzmann*

Hollin Kretzmann

Center for Biological Diversity

Enclosures:

Center for Biological Diversity public comments re: Draft Transportation Fuel Transition Plan

cc:

Senate President pro Tempore Monique Limón

Speaker of the Assembly Robert Rivas

Senate Energy, Utilities, & Communications Committee Chair Ben Allen

Assembly Committee on Utilities & Energy Chair Cottie Petrie-Norris

[31] Id.

June 18, 2026

Via Email: docket@energy.ca.gov

California Energy Commission
Docket Unit, MS-4
Docket No. 25-SB-02
715 P Street
Sacramento, CA 95814

Re: Comments on Draft Transportation Fuels Transition Plan

The Center for Biological Diversity submits the following comments in response to the California Energy Commission (CEC) and California Air Resources Board's (CARB) *Draft Transportation Fuels Transition Plan* ("Transition Plan"), as mandated by Senate Bill X1-2. The Transition Plan rightly asserts the need and expectation of a clean energy transition in California that prioritizes human health and wellbeing.

However, how the transition proceeds matters. The CEC and CARB must chart a path forward that moves us expeditiously from our present fossil fuel dependency to a prosperous, clean-energy future. While this path may necessitate measures to stabilize fossil fuel supply in the short term, as noted in the Transition Plan, "supply stabilization" must not become a smokescreen for delaying a fossil fuel phaseout. Rather, measures such as minimum inventory, resupply, and price gouging rulemakings, as called for by SBX1-2 and AB X2-1, should be implemented to minimize disturbances and price volatility for consumers *while* fossil demand reduction strategies and community transition strategies are simultaneously deployed.

Further, in envisioning fossil demand reduction strategies, we must be careful not to lock in forms of energy and technology that, though different and available and expedient to deploy, are nonetheless harmful. We must be discerning not only in the need for a quick transition but also in choosing the future we transition to. As we aspire to decarbonize California's transportation sector, we must support the measures that best address greenhouse gas emissions, environmental and public health harms.

Therefore, we recommend the following strategies, discussed further below:

- Encourage rapid deployment of battery-electric vehicles and associated infrastructure;
- Prioritize electrification over biofuels in the state's Low Carbon Fuel Standard;

- Promote electrification, demand reduction, and only truly sustainable fuels, based on a lifecycle emissions and harm analysis, for aviation;
- Include fossil supply stabilization measures *only* as a short-term arrangement, emphasizing minimum inventory, resupply, price gouging rulemakings, and spot transparency measures in stabilizing supply.

As written, the draft Transition Plan is hardly a plan at all, lacking specifics on timelines, actions, milestones, and the key agencies necessary to accelerate fossil fuel demand reduction and clean transportation adoption. Specifics are essential in charting our course and overcoming obstacles to the clean transportation transition. Imminent funding cuts to the Greenhouse Gas Reduction Fund (GGRF) are one such obstacle, the result of recent changes to the state's Cap-and-Invest Program. This will undoubtedly impact funding to key programs such as those funding battery-electric vehicles and charging infrastructure, and there must be plans to cope and keep us on track. Thus, in the final Transition Plan, the strategies herein discussed should not only be prioritized, but the instruments needed for, and the challenges to, their rapid implementation should also be clearly presented.

For on-road transport, a clean transportation future means rapid deployment of battery electric vehicles and accompanying charging infrastructure.

Accelerated Battery Electric Vehicle Deployment

The California Climate Crisis Act (AB 1279) establishes the stringent goal of California reducing its economy-wide greenhouse gas emissions by 85% below 1990 levels by 2045.[1] With passenger vehicles alone responsible for 28.3% of California's greenhouse gas emissions,[2] it follows that the passenger vehicle sector should, at a minimum, also meet the economy-wide emissions target. This will require rapid progress in getting zero-emission vehicles (ZEVs) on California roads. According to one study, by 2045, roughly 77% of passenger vehicles on California roads should be ZEVs.[3] The new Drive Forward Light-Duty Vehicle Program must establish standards that allow that state to meet its climate-essential emissions targets, with complementary efforts in the medium-duty and heavy-duty sectors.

[1] Health & Saf. Code § 38562.2; California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality (December 2022), https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents
[2] California Air Resources Board, California Greenhouse Gas Emissions from 2000 to 2023: Trends of Emissions and Other Indicators (November 4, 2025), Figure 5, https://ww2.arb.ca.gov/sites/default/files/2025-11/nc-2000_2023_ghg_inventory_trends.pdf
[3] Miller, M. et al., Technology and Fuel Transition Scenarios to Low Greenhouse Gas Futures for Cars and Trucks in California to 2050, UC Davis, Institute of Transportation Studies (2025), https://escholarship.org/uc/item/40k5w5h9

ZEV deployment must proceed quickly and equitably if we are to see widespread adoption. Thus, in addition to uplifting programs such as the new Drive Forward, equity programs should be maintained. Equity-centered programs like Clean Cars for All (C4A) and the Clean Truck and Bus Voucher Incentive Project (HVIP) have been proven effective in addressing the largest sources of transportation pollution and filling market gaps,[4] but they are currently in danger of running out of funding. Such equity programs must continue if we are to have a future where zero-emission vehicles are used by all and not just the wealthy few. Incentives such as the $200M ZEV purchase incentive proposed by Gov. Newsom, should likewise be structured to give those from low-wealth communities equitable access.

Accelerated Charging Infrastructure Deployment

In concert with rapid ZEV deployment is the need for rapid charging infrastructure deployment. To keep up with the level of ZEV deployment projected under California's climate-aligned transportation regulations, light-duty chargers need to increase by a factor of 5 by 2030 and by a factor of 10 by 2035. Meanwhile, medium- and heavy-duty chargers need to increase by a factor of 6 and by a factor of 13 by 2035, respectively.[5] To meet this need, there must be an increase in charger reliability and accessibility, provisions for home charging to reduce the need for public charging, and an equitable distribution of charging since, for example, rural communities have less access to public fast charging than urban communities.[6]

Furthermore, hydrogen fuel deployment, and the deployment of hydrogen fuel cell vehicles, should be de-prioritized. Electric batteries outcompete hydrogen fuel in the light- and medium-duty transport sectors, and battery-electric vehicles have been adopted much more readily than fuel-cell-electric vehicles (FCEVs) across light- medium- and heavy-duty transport sectors in California.[7]

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[4] California Air Resources Board, Clean Cars 4 All (last accessed June 10, 2026), https://ww2.arb.ca.gov/resources/fact-sheets/clean-cars-4-all; California Air Resources Board, Clean Truck & Bus Vouchers (HVIP) (last accessed June 10, 2026), https://ww2.arb.ca.gov/our-work/programs/clean-truck-bus-vouchers-hvip

[5] California Energy Commission, Assembly Bill 2127 Second Electric Vehicle Charging Infrastructure Assessment Commission Report (February 2024), https://efiling.energy.ca.gov/GetDocument.aspx?tn=254869; California Energy Commission, Electric Vehicle Chargers in California (Accessed October 1, 2025), https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/electric; California Energy Commission, Medium-and-Heavy-Duty Zero Emission Vehicle Charging and Hydrogen Infrastructure (Accessed October 22, 2025), https://experience.arcgis.com/experience/f951c1433f804daea7f4c33c271aa935/

[6] California Energy Commission, Assembly Bill 2127 Second Electric Vehicle Charging Infrastructure Assessment Commission Report (February 2024), https://efiling.energy.ca.gov/GetDocument.aspx?tn=254869

[7] California Energy Commission, Light-Duty Vehicle Population in California (Accessed September 10, 2025), https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-

Hydrogen is simply outperformed by batteries as an energy carrier. Even hydrogen produced using clean, renewable energy (i.e., excluding fossil fuels, biomass and biogas) should play only a limited role in a carbon-free future, given the risks it carries. First, hydrogen is a potent, indirect greenhouse gas with 100 times the warming power of CO_2 over a 10-year period and 33 times over 20 years.[8] As a small molecule, hydrogen is more leakage-prone than methane, posing climate risks across the production and supply chains. Also, transporting hydrogen through pipelines is more dangerous than transporting methane: it is more likely to explode, burns hotter, and is more corrosive to pipelines.[9] And all forms of hydrogen production use massive amounts of water — much more than solar and wind per unit of energy produced — which would put extra stress on water supplies in areas already suffering from climate crisis-charged drought.[10]

Whenever direct electrification can be used instead of hydrogen, such as in the transportation sector, it is the demonstrably better choice. Electricity made from solar and wind is more efficient, lower cost, lower in CO_2 emissions, and a mature energy resource, and should be incentivized over hydrogen as we pursue a clean transportation transition.[11]

Directing Low Carbon Fuel Standard Funds to Direct Electrification

Though meant to subsidize the production of low carbon fuels, the Low Carbon Fuel Standard primarily subsidizes factory farm methane and renewable diesel, which are ultimately polluting combustion fuels. Meanwhile, transportation electrification is subsidized to a much lesser degree. From 2011 to 2023, about $22.1 billion worth of LCFS credits were issued with $17.7 billion (80%) going to biofuels, but only $4.3 billion (20%) going to electric fuel pathways.[12] In 2024, LCFS credits were worth over $2.2 billion, with renewable diesel receiving 40% of the credits, followed by electricity (25%), biomethane (21%), ethanol (10%), and biodiesel (5%).[13] In sum, biofuels generated $1.7 billion (75%) and electricity generation $557 million (25%) in credits in 2024.[14]

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statistics-collection/light; California Energy Commission, Medium- and Heavy-Duty Zero-Emission Vehicles in California (last accessed June 15, 2026), https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/medium

[8] Ocko, I.B. and Hamburg, S. P., Climate consequences of hydrogen emissions, 22 Atmos. Chem. Phys. 9349 (2022), https://doi.org/10.5194/acp-22-9349-2022

[9] Pipeline Safety Trust, Hydrogen Pipeline Safety, Summary for Policymakers (2023), https://pstrust.org/wp-content/uploads/2023/01/hydrogen_pipeline_safety_summary_1_18_23.pdf

[10] DiFelice, M. and Murray, B., Exposing a New Threat to Our Water: Hydrogen Power, Food & Water Watch (2023), https://www.foodandwaterwatch.org/2023/02/07/hydrogen-water-use/

[11] Hydrogen Science Coalition, https://h2sciencecoalition.com (last accessed June 10, 2026).

[12] Cullenward, D., California's Low Carbon Fuel Standard, Kleinman Center for Energy Policy (2024), https://kleinmanenergy.upenn.edu/research/publications/californias-low-carbon-fuel-standard/

[13] https://www.aaronsmithagecon.com/low-carbon-fuel-standards

[14] California Air Resources Board, LCFS Data Dashboard (last accessed June 10, 2026), https://ww2.arb.ca.gov/applications/lcfs-data-dashboard

This overvaluing of biofuels is highly problematic because they come associated with significant pollution and emissions burdens, not shared by electricity. Regarding factory farm methane, CARB uses heavily contested assumptions to assign negative carbon intensity (CI) values that generate lucrative credits to factory farms that intentionally produce methane.[15] CARB assumes that all methane produced by anaerobic digestion of livestock manure would otherwise have been emitted as uncontrolled methane, thereby treating "avoided methane" reductions as "additional." In reality, large dairies intentionally produce methane through concentrating liquified manure into lagoons.[16] These dairies increase production of a climate super-pollutant, some of which is captured and combusted to produce CO_2 and some of which leaks directly to the atmosphere. If these dairies instead used dry manure management methods, they would largely avoid methane production and the water and air pollution caused by manure lagoons.[17] Using its problematic assumptions, CARB has assigned highly negative CI scores to factory farm methane which has spurred a rapid buildout of anaerobic digesters to claim lucrative LCFS credits. Environmental justice groups have long pointed out that these incentives worsen pollution impacts from factory farms in highly burdened communities.

Meanwhile, renewable diesel is primarily made from food crops like soybean and canola oil,[18] so it competes with food production (potentially raising food prices) and causes "indirect land use change" like deforestation which does not appear to be fully captured in the LCFS carbon intensity score.[19] Renewable diesel production also requires more hydrogen than conventional fossil diesel refining—and that hydrogen typically comes from the carbon-intensive process of steam methane reforming.[20] The sizable incentives for renewable diesel incentivize truck fuel switching from petroleum diesel to renewable diesel (another combustion fuel) instead of truck electrification.

The state should not be, through the LCFS, incentivizing fuels that propagate significant environmental harms and yield only dubious carbon emission reductions, especially at the

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[15] Fingerman, K. et al., Risks of crediting carbon offsets in low carbon fuel standards: lessons learned from dairy biomethane, 206 Energy Policy 114738, https://doi.org/10.1016/j.enpol.2025.114738

[16] *Animal Agriculture in the U.S. – Trends in Production and Manure Management*, Livestock and Poultry Env't Learning Cmty (2019), available at https://lpelc.org/animal-agriculture-in-the-u-s-trends-in-production-and-manure- management/

[17] CAL. AIR RES. BD., *Findings and Recommendations: Subgroup 1: Fostering Markets for Non-digester Projects, Senate Bill 1383 Dairy and Livestock Working Group* 3 (Oct. 12, 2018), available at https://ww2.arb.ca.gov/sites/default/files/2020-11/dsg1_final_recommendations_11-26-18.pdf

[18] U.S. DOE Alternative Fuels Data Center, Renewable Diesel (last accessed June 10, 2026), https://afdc.energy.gov/fuels/renewable-diesel

[19] Scafidi, A. and Leslie-Bole, H., Increased Biofuel Production in the US Midwest May Harm Farmers and the Climate, World Resources Institute (June 10, 2025), https://www.wri.org/insights/increased-biofuel-production-impacts-climate-change-farmers

[20] Karras, G., Changing Hydrocarbons Midstream: Fuel chain carbon lock-in potential of crude-to-biofuel petroleum refinery repurposing, Prepared for: National Resources Defense Council (2021), https://www.energy-re-source.com/_files/ugd/bd8505_757a3372387d46358c74d958d158fcb5.pdf

expense of expanding transportation electrification. The Transition Plan should be promoting mechanisms to get us to a fully electrified transportation sector expeditiously, and one such mechanism would be to amend the LCFS to incentivize electrification over problematic biofuels.

For air transport, a clean transportation future means electrification where possible and reductions in jet fuel demand, including for unsustainable alternative fuels.

Viability of Alternative Jet Fuels

The aviation sector is more difficult to decarbonize than the on-road sector due to current constraints on the viability of electrification. This has led to supposed "sustainable aviation fuel (SAF)" being put forth as a replacement for fossil jet fuel, and it is touted as a key fossil demand reduction strategy in the Transition Plan. However, many alternative fuels put forward as sustainable are anything but, and they fail in meeting a robust definition of the term.

Drawing on energy sustainability criteria, the following defines a sustainable biofuel and thus a sustainable aviation fuel: (1) the fuel must be produced using feedstock that is readily available and can be replenished; (2) collecting and processing the feedstock must not cause environmental and social harms; (3) procuring the feedstock must not result in significant land-use change or otherwise hinder land's natural ability to store and sequester carbon; and (4) the lifecycle greenhouse gas emissions from the fuel must be near zero relative to conventional jet fuel.[21] In applying these criteria, many alternative fuels sanctioned by the state are proven unsustainable and should be removed from consideration in decarbonizing the sector.

Among the most egregious alternative fuels labeled as SAFs are those that are crop-based. Crop-based biofuels are the furthest along in development and hence the most thoroughly subsidized. However, they are generally the least sustainable because they have high lifecycle greenhouse gas emissions and bring more land-use environmental harms. Being food crop-based, such fuels can displace existing food crop uses and cause new land clearing and indirect greenhouse gas emissions. For example, in an analysis of 17 potential alternative-fuel pathways looking at different feedstocks, technologies, and world regions, researchers found that using virgin vegetable oil had the highest indirect land-use change emissions because of links to high deforestation and peat oxidation in southeast Asia, driven by palm expansion.[22] In the same study, it was found that producing biofuels from any vegetable oil in any region, including corn and soy in the U.S. context, would encourage palm oil expansion and associated peat oxidation

[21] Fleming, J., The Biofuels Myth: Why 'Sustainable Aviation Fuels' Won't Power Climate-Safe Air Travel (August 2022), Center for Biological Diversity, available at https://biologicaldiversity.org/programs/climate_law_institute/pdfs/2022_The_Biofuels_Myth_Center_for_Biological_Diversity.pdf

[22] Zhao, X. et al., Estimating induced land use change emissions for sustainable aviation biofuel pathways, 779 Science and the Total Environment (2021), https://doi.org/10.1016/j.scitotenv.2021.146238

in southeast Asia due to substitutions among vegetable oils and international trade.[23] Thus, high indirect land-use change emissions from virgin vegetable oil biofuel pathways undermine some, if not all, of the greenhouse gas savings from these fuels.[24]

There could also be unforeseen harms to communities and the environment. One such harm is worsening water scarcity. A 2017 study found that increased production of crop-based biofuels heavily contributes to global water scarcity and is not the best option for bioenergy.[25] Meanwhile, a 2016 study found that biofuels rely on about 2-3% of the global water and land used for agriculture. Based on the food calories used for biofuel production, that amount could feed about 30% of the malnourished global population.[26] Just in the United States, about 140 million people could be fed with the resources for bioethanol, and about 10 million people could be fed with the resources for biodiesel, indicating the threat of crop-based biofuels to global food security.[27] Also, with increased production of crop-based biofuels, there is the potential for increased nutrient and pesticide runoff to surface waters and contamination of groundwater due to crop cultivation.[28]

Another harm from crop-based biofuels is the impact to communities from biofuel refining and resulting criteria pollutant emissions. Crop-based biofuels are most often produced using the Hydroprocessed Esters and Fatty Acids (HEFA) pathway, which reacts crop feedstock with hydrogen at high temperatures and pressures to form fuel.[29] Because of the high temperatures and extremely high pressures, runaway increases in temperature are common, which result in operators flaring refinery gases to bring conditions back under control. However, in doing so, toxic and smog-forming air contaminants are emitted such as particulate matter, sulfur dioxide, and hydrocarbons that worsen air quality. Because HEFA processes require more hydrogen than petroleum refining, it is expected that hydro-conversion-related flaring would be worse with

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[23] Id.
[24] Pavlenko, N. and Searle, S., Fueling flight: Assessing the sustainability implications of alternative aviation fuels, International Council on Clean Transportation (2021), https://theicct.org/wp-content/uploads/2021/06/Alt-aviation-fuel-sustainability-mar2021.pdf; Zhao, X. et al., Estimating induced land use change emissions for sustainable aviation biofuel pathways, 779 Science and the Total Environment (2021), https://doi.org/10.1016/j.scitotenv.2021.146238
[25] Gerbens-Leenes, P.W., Bioenergy water footprints, comparing first, second and third generation feedstocks for bioenergy supply in 2040, 59 European Water 373 (2017), https://www.ewra.net/ew/pdf/EW_2017_59_51.pdf.
[26] Rulli, M.C. et al., The water-land-food nexus of first-generation biofuels, 6 Nature Scientific Reports (2016), https://doi.org/10.1038/srep22521
[27] Id.
[28] National Research Council 2011. Renewable Fuel Standard: Potential Economic and Environmental Effects of U.S. Biofuel Policy. Washington, DC: The National Academies Press.
[29] Van Dyk, S. et al., Potential synergies of drop-in biofuel production with further co-processing at oil refineries, 13 Biofuels Bioproducts & Biorefining 760 (2019), https://doi.org/10.1002/bbb.1974

HEFA refining, along with explosion and fire risk.[30] With refineries most often sited in low-income communities and communities of color,[31] environmental justice harms are exacerbated by the presence of HEFA refining and would worsen with crop-based biofuel expansion. In 2024, Phillips 66 converted its 128-year-old Santa Maria Refinery into the Rodeo Renewable Energy Complex, producing renewable diesel and alternative jet fuel via the HEFA pathway,[32] serving as a specter of potential risk to surrounding communities.

More sustainable feedstocks for SAFs include municipal solid waste and crop residues (e.g., the stalks and leaves of food crops) but, being waste products, they are inherently limited in supply and cannot be scaled up. Especially in the case of municipal solid waste, in the pursuit of feedstock for alternative jet fuel, the state must not inadvertently incentivize the production of more waste rather than continuing efforts to reduce waste and reuse, recycle and compost.[33] Moreover, the state must not encourage the production of alternative jet fuels under the guise of them being sustainable if those fuels fail to meet a basic definition of sustainability.

Reducing Jet Fuel Demand

With the limitations on fuel that can sustainably be supplied, jet fuel demand must be reduced altogether. Ultimately, if we are to wean ourselves from both conventional jet fuel and problematic alternatives, this means full electrification. For smaller aircraft and shorter flights, this is already possible. For instance, the aviation startup magniX has entered into partnerships providing electric batteries for small aircraft, with several successful demonstrations.[34] Electrifying the overarching aviation sector will require continuing advances in battery technology, with innovations such as lithium-air batteries showing promise.[35]

In the interim to full electrification of the aviation sector, there are innovative partially electric aircraft technologies being explored to span the transition. Partially electric aircraft include hybrid-electric and turboelectric aircraft. In turboelectric aircraft, gas turbines drive electrical

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[30] Karras, G., Changing Hydrocarbons Midstream: Fuel chain carbon lock-in potential of crude-to-biofuel petroleum refinery repurposing, Prepared for: National Resources Defense Council (2021), https://www.energy-re-source.com/_files/ugd/bd8505_757a3372387d46358c74d958d158fcb5.pdf

[31] Donaghy, T. et al., Fossil fuel racism in the United States: How phasing out coal, oil, and gas can protect communities, 100 Energy Research & Total Science 103104 (2023), https://doi.org/10.1016/j.erss.2023.103104

[32] Phillips 66, Rodeo Renewable Energy Complex (last accessed June 9, 2026), https://www.phillips66.com/rodeo-renewable-energy-complex/

[33] Fleming, J., The Biofuels Myth: Why 'Sustainable Aviation Fuels' Won't Power Climate-Safe Air Travel (August 2022), Center for Biological Diversity, available at https://biologicaldiversity.org/programs/climate_law_institute/pdfs/2022_The_Biofuels_Myth_Center_for_Biological_Diversity.pdf

[34] magniX (last accessed June 10, 2026), https://www.magnix.aero/.

[35] Khan, M.H. et al., Lithium-Based Batteries in Aircraft, 90 Engineering Proceedings (2025), https://doi.org/10.3390/engproc202509003.

generators that power electric motors that generate propulsion, while hybrid-electric aircraft use high-capacity batteries to provide some or all propulsion during one or more phases of flight.[36] NASA is currently developing such "Electrified Aircraft Propulsion (EAP)" systems, exploring electrification technologies to increase aircraft power and performance and new aircraft materials to minimize weight and fuel usage, with plans to introduce such innovations to the U.S. commercial aviation fleet no later than 2035.[37] The state should lead in supporting, promoting, and adopting such endeavors.

Fuel demand can also be reduced by instituting operational and air traffic management improvements. For instance, to improve fuel efficiency, airlines could increase flight payloads and fly more directly to destinations. Payload can be increased by flying with fewer empty seats or putting more seats into the same space. Avoiding unnecessary layovers and optimizing flight paths can also reduce fuel burn. Taxiways could also be optimized to minimize the time aircraft idle on the runway and the distance they have to travel prior to takeoff.[38] Finally, older aircraft could be retired more readily for replacement with more fuel-efficient models.[39] The state should engage more with airlines and airports to bring about such operational improvements.

As on-road transportation electrifies, aviation will constitute an increasing proportion of total transportation emissions. It is therefore essential that we set ourselves on the right path now to decarbonize the sector, which means reducing jet fuel demand and replacing the need for conventional jet fuel with only *sustainable* alternatives such alternative fuels produced from limited waste feedstocks, and partially electric aircraft as an interim step to fully electric aviation, as well as alternative modes of clean transportation, such as regional and high speed rail.

Fossil supply stabilization must only be an interim measure to a full clean transportation transition.

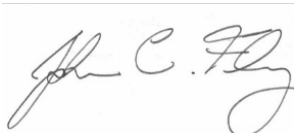
The Transition Plan is purportedly focused on the long-term goal of a complete clean transportation transition. Therefore, of the three strategy buckets presented in the plan – supply stabilization strategies, fossil demand reduction strategies, and regional and local-based

[36] NASA (last accessed June 10, 2026), https://www.nasa.gov/eap-technology/.
[37] NASA (last accessed June 10, 2026), https://www.tumblr.com/nasa/682245129667575808/a-beginners-guide-to-sustainable-aviation
[38] Calvet, L., Toward Environmentally Sustainable Aviation: A Review on Operational Optimization, 4 Future Transportation 518 (2024), https://doi.org/10.3390/futuretransp4020025; Li, N. et al., An Empirical Study on Low Emission Taxiing Path Optimization of Aircrafts on Airport Surfaces from the Perspective of Reducing Carbon Emissions, 12 Energies 1649 (2019), https://doi.org/10.3390/en12091649
[39] Rutherford, D., Standards to promote airline fuel efficiency, International Council on Clean Transportation (2020), https://theicct.org/wp-content/uploads/2021/06/Airline-fuel-efficiency-standard-2020.pdf

strategies – fossil demand reduction strategies and regional and local-based strategies warrant the greatest focus because they constitute forward-looking strategies, namely those that achieve the transportation energy mix aligned with our climate goals and those that prepare people to participate in the future clean energy economy, respectively. Supply stabilization strategies, meanwhile, are grounded in the present where fossil fuel dependence still exists. We must transition from this stage as quickly as possible if we hope to achieve our climate goals.

We acknowledge that supply stabilization measures are needed while forward-thinking fossil demand reduction strategies and community transition strategies are simultaneously deployed. Thus, the CEC must prioritize minimum inventory, resupply, price gouging rulemakings, and spot transparency measures in the short term, discuss implementation challenges for clarity and comprehensiveness, and establish rulemaking timelines. The CEC must also abandon all rationale that implicitly or explicitly supports increased in-state crude oil production. "Petroleum system stabilization" must not be conflated with system preservation, with policy recommendations aimed at stabilization inadvertently entrenching the state further in fossil fuel dependency.[40] Instead, the state must vehemently pursue fossil demand reduction measures so that fossil fuel dependency becomes a relic of the past. This means a final Transition Plan that defines specific timelines, actions, milestones, and key agencies necessary to accelerate fossil fuel demand reduction and a clean transportation future.

Respectfully Submitted,



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[40] For further discussion on this point, see Center for Biological Diversity, Comments to the California Energy Commission on the Draft 237 Assessment Report (June 15, 2026) (attached), Sections B, C.