
SENATE COMMITTEE ON ENVIRONMENTAL QUALITY

Senator Blakespear, Chair

2025 - 2026 Regular

Bill No: AB 839

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Urgency: No

Fiscal: Yes

Consultant: Eric Walters

SUBJECT: California Environmental Quality Act: expedited judicial review: sustainable aviation fuel projects

DIGEST: This bill provides for expedited California Environmental Quality Act (CEQA) review for up to three sustainable aviation fuel (SAF) facilities that don't use fossil fuels or increase air pollution – providing for expedited (270 days, if feasible) judicial review for projects certified by the governor, approved by the lead agency on or before January 1, 2033, and meeting specified environmental and labor requirements.

ANALYSIS:

Existing law:

- 1) CEQA requires lead agencies with the principal responsibility for carrying out or approving a proposed project to prepare a negative declaration, mitigated negative declaration, or environmental impact report (EIR) for this action, unless the project is exempt from CEQA (CEQA includes various statutory exemptions, as well as categorical exemptions in the CEQA guidelines). (Public Resources Code (PRC) 21000 et seq.)
- 2) Authorizes judicial review of CEQA actions taken by public agencies, following the agency's decision to carry out or approve the project. Challenges alleging improper determination that a project may have a significant effect on the environment, or alleging an EIR does not comply with CEQA, must be filed in the superior court within 30 days of filing of the notice of approval. The courts are required to give CEQA actions preference over all other civil actions. Requires the court to regulate the briefing schedule so that, to the extent feasible, hearings commence within one year of the filing of the appeal. Requires the plaintiff to request a hearing within 90 days of filing the petition. Requires the court to establish a briefing schedule and a hearing date, requires briefing to be completed within 90 days of the plaintiff's request for hearing, and requires the hearing, to the extent feasible, to be held within 30 days thereafter. (PRC 21167 et seq.)

- 3) Establishes, pursuant to SB 149 (Caballero), Chapter 60, Statutes of 2023, procedures for expedited administrative review (i.e., concurrent preparation) and judicial review (i.e., requiring the courts to resolve lawsuits within 270 days, to the extent feasible) for four categories of public and private “infrastructure” projects, including specified energy, transportation, water, and semiconductor/microelectronic projects.
- 4) Authorizes the governor to certify each of the four project types, provided the applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency’s action on a certified project.
- 5) Requires additional greenhouse gas (GHG) mitigation for energy infrastructure and semiconductor/microelectronic projects, requiring the project does not result in any net additional GHG emissions. A project is deemed to meet these requirements if the applicant demonstrates to the satisfaction of the governor that the applicant has a binding commitment that it will mitigate impacts resulting from the emission of greenhouse gases, if any, in accordance with PRC 21183.6.
- 6) Requires an applicant for certification of an infrastructure project to do all of the following:
 - a) Avoid or minimize significant environmental impacts in any disadvantaged community, as defined;
 - b) If measures are required pursuant to CEQA to mitigate significant environmental impacts in a disadvantaged community, mitigate those impacts consistent with CEQA. Requires mitigation measures to be undertaken in, and directly benefit, the affected community; and
 - c) Enter into a binding and enforceable agreement to comply with these community mitigation requirements in its application to the Governor and to the lead agency prior to the agency’s certification of the EIR for the project. (Public Resources Code (PRC) 21189.80 et seq.)
- 7) Sets, pursuant to Executive Order S-01-07, a statewide goal to reduce the carbon intensity (CI) of California's transportation fuels and requires ARB to consider adopting a low carbon fuel standard (LCFS) to implement this goal. In 2009, ARB adopted the LCFS as a regulation. The LCFS attributes CI values to a variety of fuels based on direct and indirect GHG emissions. The LCFS permits producers of certain low CI fuels to opt in to LCFS regulation for the purpose of generating credits, which can be banked and used for compliance, sold to regulated parties, and purchased and retired by regulated parties. In

addition, LCFS credits can be exported to other GHG emission reduction programs. (17 CCR 95840 et seq.)

This bill:

- 1) Authorizes the governor to certify up to three SAF projects for streamlining pursuant to SB 149, and meeting the same labor, mitigation, and net zero GHG standards as private energy and semiconductor projects under SB 149.
- 2) Defines “sustainable aviation fuel project” as a project that is either:
 - a) A new construction, conversion of an existing facility, or an expansion of an existing SAF facility;
 - b) Used to manufacture, process, store, distribute, or transport SAF or feedstock used for the production of SAF; or
 - c) A new construction, conversion, or expansion of an existing facility to manufacture electrochemical components used in the production of SAF;

And that meets all of the following requirements:

- a) The project uses a “skilled and trained” workforce for all construction work and requires contractors and subcontractors to pay to all construction workers employed in the execution of the project at least the general prevailing rate of per diem wages;
 - b) The project does not use fossil fuels in its production process;
 - c) If the project involves the conversion or replacement of an existing Title V source (i.e., major sources of air pollution, including refineries), the project will reduce emissions of air pollutants compared to the baseline environmental conditions in the vicinity of the project, as determined by the applicable air district; and
 - d) If the project does not involve the conversion or replacement of an existing Title V source, the project will not cause a significant effect on the environment attributable to any air pollutant, as determined by the applicable air district.
- 2) Defines “sustainable aviation fuel” as hydrocarbon fuel that meets the American Society for Testing and Materials (ASTM) International standard D7566 for aviation turbine fuel containing synthesized hydrocarbons and can be used as alternative jet fuel, as defined in, and meeting the requirements of, the LCFS regulation.

Background

- 1) *California's aviation emissions landscape.* Aircraft jet engines emit a mixture of carbon dioxide (CO₂), water vapor, oxides of nitrogen (NO_x), particulate matter (PM), carbon monoxide, and other pollutants. 90% of the emissions from a flight occur at altitudes above 3,000 feet, with the remaining 10% being released during taxiing, takeoff, and landing. According to the U.S. Energy Information Administration, California's total 2020 jet fuel consumption was about 59 million barrels, or roughly 2.5 billion gallons. The international aviation market is responsible for about 2% of the world's GHG emissions. Nationwide, aviation emissions make up about 13% of transportation GHG emissions. In California, aviation accounts for 1% of all transportation-related GHG emissions.

SAF is an aircraft biofuel that has similar properties to conventional jet fuel; it is blended with conventional jet fuel and can work in the same conventional jet fuel infrastructure. Depending on the feedstock and technologies used to produce it, SAF can reduce life cycle GHG emissions compared to conventional jet fuel, and some SAF pathways may have a net-negative GHG footprint. Given the technology is still relatively new and being developed, SAF is currently much more expensive than conventional jet fuel.

CARB's 2022 Scoping Plan outlines a scenario that achieves GHG emission reductions that exceed levels expected based on existing policies, and keep the state on track to achieve the GHG reduction target for 2030 and to become carbon neutral no later than 2045. This scenario assumes 10% of aviation fuel demand is met by electricity (batteries) or hydrogen (fuel cells) in 2045. The scenario also assumes SAF meets most or the rest of the aviation fuel demand that has not already transitioned to hydrogen or batteries. While the scenario goals are clear, the pathways to accomplish these goals are not.

The LCFS sets a declining carbon intensity benchmark for transportation fuels used in California. In 2018, CARB approved changes to LCFS that authorized alternative, or renewable, aviation fuels to generate LCFS credits; these fuels do not generate deficits like gasoline and diesel do. Producers of alternative aviation fuels are permitted to voluntarily opt into the LCFS program. SAF remains a small part of the LCFS credit market, reportedly less than 1%.

- 2) *Electrochemical components.* Recent amendments expanded the scope of eligible SAF projects to include new construction, conversion, or expansion of an existing facility to manufacture electrochemical components used in the production of SAF. This appears to be intended to include so-called "e-SAF"

which is similar to SAF in that it is a drop-in aviation fuel substitute, but it differs in the feedstock and method for its production.

Whereas most SAF today is produced from fats and oils or other conversion processes, if successfully deployed e-SAF would involve building the fuel molecule from scratch, as it were. The carbon that goes into e-SAF is captured from the atmosphere (either through carbon capture or, presumably, direct air capture), and then synthesized into fuel through an electrochemical process using clean electricity. According to Twelve, a Berkeley-headquartered carbon capture and technology company, “Unlike biofuels, which are constrained by land use and deforestation risks, [e-SAF] is electrochemically produced from CO₂, water, and renewable energy. Compared to biofuels, it uses up to 1,000 times less water and 30 times less land, with up to 30% more reduction in lifecycle GHG emissions compared to bio-based SAF.”¹

The trade-off for this lower-carbon intensity and resource requirements is, understandably, increased cost. The first commercial e-SAF plant is currently under development in Washington, and reports an intended 50,000 gallon/year capacity and projected carbon intensity of its e-SAF that is roughly 7% that of conventional aviation fuel and 9% that of SAF.

- 3) *The state of SAF production in California.* Currently, there are three operating SAF refineries in California that are conversions, or partial conversions, of existing petroleum refineries. These refineries are located in Paramount, Rodeo, and Martinez. In addition, there is a proposed SAF refinery in Riverbank, near Modesto, at the site of a former Army ammunition plant/Superfund site, which has been approved by Riverbank and completed the CEQA process. All of these SAF refineries are in communities that have lived with industrial pollution for decades and rank near the top of CalEnviroScreen metrics for air pollution and/or toxics.

These facilities refine SAF from fats, oils, and/or greases (FOGs), which are primarily imported. Commercial SAF feedstocks include tallow, used cooking oil, distiller’s corn oil (a byproduct of corn ethanol production), seed oils, and byproducts of palm oil refining. SAF production with approved LCFS pathways includes refineries in Louisiana and Montana and fats shipped from Southeast Asia and South America. Recently-adopted amendments to the LCFS will prohibit palm-based oils going forward.

None of the existing commercial refineries use agricultural or forest waste. Producing SAF from cellulosic waste—like from captured carbon and clean

¹ Twelve Benefit Corporation. E-Jet SAF FAQ. <https://www.twelve.co/post/e-jet-saf-faq>

electricity—is more complex and expensive than refining fats, which is already significantly more expensive than conventional, fossil jet fuel.

Comments

- 1) *Purpose of Bill.* According to the author, “AB 839 will provide an essential tool for California to draw investment for and production of sustainable aviation fuel in California. SAF production jobs are well-paying, highly skilled jobs (both in construction/retooling of facilities, and in production). California has 27 commercial airports, and two major international gateways (LAX and SFO). The State Scoping Plan requires that at least 3.2 billion gallons of SAF be used 20 years – by 2045. It is in our economic interest and our environmental interest that we do all we can to draw production of SAF to California. Commercial airlines and airports have been working for 10 years to bring SAF to the forefront of our policies that impact aviation in California. Research and development of SAF has been ongoing for decades, with in-flight testing first occurring in 2008. R & D continues on the use of desirable feedstocks, including municipal solid waste and woody biomass. SAF is and will be the step between conventional jet fuel use and electric technologies for larger aircraft, estimated to be 40 to 50 years away. This is a smart step and a smart policy for California.”
- 2) *Cleanliness is in the eye of the beholder.* In the same way diet soda and water cannot meet the same biological needs despite both being zero calories, carbon intensity alone does not capture the full environmental impact of a fuel’s production. While the scale-up of SAF to meet California’s goals is laudable on the basis of global GHG emission reductions, it should not be thought to solve all pollution problems associated with the production and use of aviation fuel. That does not mean we should stop producing SAF, it just means we should not think of it as a silver bullet.

All three operational SAF plants today are full or partial conversions of petroleum refineries. Although SAF production facilities could of course be constructed anew elsewhere (and would be eligible for ELDP certification under this bill), the economic incentives today seem to be best aligned when an existing liquid fuel resource (i.e. petroleum refineries) is converted to SAF production. While this does reduce the associated carbon intensity and move California towards achieving its SAF goals, this nevertheless keeps pollutive industries in communities where they have historically been.

This bill includes commendable provisions regarding air pollution from eligible projects; conversions from existing Title V facilities (such as

petroleum refineries) must result in reduced emissions from the existing baseline, and new construction must not cause a significant effect on the environment from any air pollutant. The devil may well be in the details on these provisions, and they can never provide the certainty of emission reductions that not having a fuel production facility at all would provide, but they do send a clear signal about the expectations around these projects.

- 3) *Discernment, discretion, and direction.* The scale-up that will be required for the SAF industry to achieve its Scoping Plan goals is massive. Even with parallel actions, such as the partnership in place between this bill's sponsor and CARB², there is much work to be done. Awarding ELDP status to three SAF projects will not be sufficient to reach California's stated goals.

This bill does not explicitly specify every detail of an eligible SAF project, opting instead to set a number of guardrails in place (no fossil fuels in its production process, a decrease or no effect in air pollution). Still, non-waste feedstocks could be used. Facilities that otherwise might have been closed could be given a new life as a slightly-less polluting SAF factory. Various factors across the fuels' life cycle could increase deforestation, lead to risk of spills or accidents, or even increase life cycle emissions as compared for fossil fuels.

Nevertheless, in deciding which eligible projects to certify, the Governor would be expected to weigh the myriad factors and considerations surrounding the projects. By limiting the scope of this bill to three projects, the hope is that projects that are less aligned with California's goals (e.g. high CI feedstocks, undue impacts on fence line communities, etc.) will not receive certification and the benefits the ELDP designation provides. Ultimately, it is challenging to strike the right balance between statutory prescriptiveness and ease of implementation. The guardrails in this bill are laudable, but cannot be perfect.

Although the scope of this bill may be narrow, the Committee should still consider the bar that is being set for eligible projects. It is reasonable to imagine future actions to promote SAF being conditioned on the criteria set here. As California charts a path to phasing down fossil fuels and increasing the production of alternatives, the ever-changing context will have to be considered each time further action is taken.

² CARB, 10/30/2024 "CARB and nation's leading airlines announce landmark partnership for a sustainable aviation future" <https://ww2.arb.ca.gov/news/carb-and-nations-leading-airlines-announce-landmark-partnership-sustainable-aviation-future>

DOUBLE REFERRAL:

If this measure is approved by the Senate Environmental Quality Committee, the do pass motion must include the action to re-refer the bill to the Senate Judiciary Committee.

Related/Prior Legislation

AB 1322 (R. Rivas, 2021) would have required CARB, to develop an incentives-based plan to promote the use of SAF and other alternatives to jet fuel to reduce the impact of commercial aviation on climate change. AB 1322 was vetoed by Governor Newsom.

SB 149 (Caballero, Chapter 60, Statutes of 2023) established new expedited (270 days, if feasible) judicial review procedures for four categories of public and private “infrastructure” projects.

SOURCE: Airlines for America

SUPPORT:

Aerospace and Defense Alliance of California
Boeing Company; the
California Airports Council
California Council for Environmental & Economic Balance (CCEEB)
California Hydrogen Business Council
California Manufacturers and Technology Association
Green Hydrogen Coalition
Neste Us, INC.
Rural County Representatives of California (RCRC)
Twelve
United Airlines, INC.

OPPOSITION:

350 Bay Area Action
Asian Pacific Environmental Network (APEN)
Biofuelwatch
California Environmental Justice Alliance (CEJA) Action
Californians Against Waste
Center for Biological Diversity

Center on Race, Poverty & the Environment
Communities for a Better Environment
Earthjustice
Judicial Council of California
Leadership Council for Justice and Accountability
Sunflower Alliance

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