SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Blakespear, Chair
2025 - 2026 Regular

Bill No:	AB 2046		
Author:	Ransom		
Version:	2/17/2026	**Hearing Date:**	6/17/2026
Urgency:	No	**Fiscal:**	Yes
Consultant:	Heather Walters		

SUBJECT: Vehicles: pollution control devices

DIGEST: This bill deems fuel retrofit systems for gasoline to E85 for light- or medium-duty gasoline-fueled vehicles certified by the United States Environmental Protection Agency as compliant with state requirements, and precludes the California Air Resources Board from imposing any additional requirements.

ANALYSIS:

Existing law:

1) Establishes CARB as the air pollution control agency in California and requires CARB, among other things, to control emissions from a wide array of mobile sources and implement the Federal Clean Air Act (FCAA). (Health and Safety Code (HSC) §39500 et seq.)

2) Requires CARB to adopt and implement technologically feasible emission standards for new motor vehicles to, among other things, ensure compliance with state air quality laws and the FCAA, and prohibit vehicles that do not comply with those emissions standards from being certified for use in the state. (HSC §43100 et seq.)

3) Requires CARB to adopt motor vehicle fuel specification requirements for the control of air contaminants and air pollution where it is necessary, cost effective, and technologically feasible to do so. (HSC §43013).

4) Prevents CARB from adopting any regulations setting specifications for motor vehicle fuels unless that regulation, and a multimedia evaluation of any significant adverse impacts on public health or the environment, have been reviewed by the CEPC, as specified. (HSC §43830.8)

5) Prohibits a person from installing, selling, offering for sale, or advertising any device, apparatus, or mechanism intended for use with, or as a part of, a

required motor vehicle pollution control device or system that alters or modifies the original design or performance of the motor vehicle pollution control device or system. (Vehicle Code (VEH) §27156)

6) Allows, to a vehicle, an alteration, modification, or modifying device, apparatus, or mechanism if CARB finds by resolution that it does not (i) reduce the effectiveness of a required motor vehicle pollution control device, and (ii) result in emissions from the modified or altered vehicle that are above levels that comply with existing state or federal standards for that model-year of the vehicle being modified or converted. (VEH §27156)

This bill:

1) Exempts an alternative fuel retrofit system for a light-duty or medium-duty gasoline-fueled vehicle that converts the vehicle to a dual-fueled vehicle that can utilize gasoline or E85 fuel if the alternative fuel retrofit system has been certified by the United States Environmental Protection Agency (U.S. EPA) from various air pollution-related requirements.

2) Requires that CARB shall not require state certification, executive order approval, or any additional testing or demonstration for an alternative fuel retrofit device as described above.

3) States that a person who installs an alternative fuel retrofit device, as described above, shall not be deemed to have installed an unlawful emissions-related device solely on the basis that it has not been approved by CARB.

4) States that notwithstanding any other law, a person or entity that sells, dispenses, transports, or offers for sale E85 fuel shall not be subject to civil, administrative, or criminal liability for supplying E85 fuel to a vehicle equipped with an alternative retrofit device, as described above.

Background

1) *Vehicles and air pollution*. Vehicles are one of the primary sources of air pollution nationally. As such, the Federal Clean Air Act authorizes the U.S. EPA to establish and regulate emissions standards for mobile sources.

   California, due to its preexisting vehicle-emission standards and severe motor vehicle air pollution problems, has historically been authorized under the FCAA to implement separate mobile emission standards from the federal government. Other states may choose to follow either the national standard or

the stricter California standards.

State law assigns CARB with primary responsibility for control of mobile-source air pollution, including adoption of rules for reducing vehicle emissions, the specification of vehicular fuel composition, emissions control devices, and engine standards.

Recent actions by the U.S. EPA have precluded CARB from being able to enforce a number of vehicle emission standards that would be more stringent than required under the FCAA. Regardless, a number of existing regulations previously received U.S. EPA FCAA waivers for CARB to hold certain processes to higher standards.

2) *Ethanol in gasoline in California*. Gasoline is a fuel made from crude oil and other petroleum liquids. Gasoline is mainly used in vehicle engines. Petroleum refineries and blending facilities produce finished motor gasoline for retail sale at gasoline fueling stations.

   Petroleum refineries mostly produce gasoline blending components called gasoline blendstocks, which require blending with other liquids to make finished motor gasoline. In California, the blendstock used is called California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB). Until CARBOB has oxygenates (including but not limited to ethanol) and other components added, it is not finished gasoline which can be used in a vehicle.

   Most of the finished motor gasoline now sold in the United States contains about 10% fuel ethanol by volume (E10). Ethanol is added to gasoline mainly to meet the requirements of the Renewable Fuel Standard, which is intended to reduce greenhouse gas emissions and the amount of oil that the United States imports from other countries.

   Ethanol has a lower energy density than gasoline, so adding it to CARBOB results in a finished gasoline that can provide slightly less energy to a vehicle (i.e. that vehicle will likely not be able to drive as many miles on a full tank of E15 versus E10). However, ethanol is also less expensive than CARBOB, so adding it can lower the cost of that tank. There are other considerations (such as the impact on other air pollutants from evaporation or combustion, or more system-wide impacts on CARBOB and ethanol supply and demand) that must be made to determine the overall pros and cons of using higher ethanol blends in California.

   In the interest of exploring all options available to control the price of gasoline,

California recently (AB 30, Alvarez, Chapter 247, Statutes of 2025) authorized the blending of up to 15% ethanol. Prior to the passage of AB 30, California had been the only state in the U.S. that prohibited the use of E15.

3) *Even more ethanol—E85.* As opposed to the traditional E10 or the newly-authorized-in-California E15, E85 is a fuel blend of 85 percent ethanol and 15 percent gasoline. E85 has been in the marketplace for three decades and reduces emissions by more than 30 percent over traditional gasoline. Flex fuel vehicles (FFVs) can use any fuel ranging from 0 percent ethanol to 85 percent ethanol (E85). There are more than 22 million FFVs on the road in the U.S., roughly 8 percent of all vehicles.[1] In California, estimates put the number of FFVs are 1.3 million, or roughly 3.6% of all registered vehicles. In California, there are between four and five hundred E85 fueling stations statewide.[2] In 2024, the California Energy Commission estimated that there were 11,084 petroleum transportation fueling stations in California with a total of 15,131 fueling pumps. Only 3% of those pumps dispense E85.

   Some vehicles are sold as FFVs, but most traditional engines on the road are not compatible. An E85 conversion kit allows a gasoline-powered vehicle to run on fuel containing up to 85% ethanol. There are different categories of kits currently on the market that require different levels of alteration to the vehicle. The more basic kits include ethanol sensors and utilize the vehicle's engine control unit, cost approximately $800 and can be installed at home. If the consumer does not have the expertise to install their own kit, they must pay an installer for labor, which may range from $200-$450.

   E85 is typically priced lower than gasoline, but is not necessarily always a better deal. This is because FFVs typically get about 20-30% fewer miles per gallon when fueled with E85 compared to gasoline. Therefore, E85 should be priced 20 – 30% less than gasoline to achieve equivalent per mile costs. Otherwise, motorists will see little difference when using E85 versus gasoline.[3]

Comments

1) *Purpose of Bill.* According to the author, "Californians consistently pay more at the pump than drivers in other states, and uncertainty about future price spikes is rising due to international conflicts and in-state refinery closures. E85 is a cheaper and cleaner fuel alternative, but not all cars can take this type of

[1] E85 flex fuel. Renewable Fuels Association. https://ethanolrfa.org/ethanol-in-your-engine/e85-flex-fuel
[2] https://e85prices.com/california.html
[3] E85 and Flexible Fuel Vehicles. CARB. https://ww2.arb.ca.gov/sites/default/files/classic/isd/fuels/altfuels/e85/e85_flex_fuel_vehicles.pdf

fuel. Currently, California remains the only state that prohibits the use of E85 conversion kits, which is a proven technology that allows cars to switch from gas to E85. AB 2046 would allow E85 conversion kits to operate in California, which would give consumers more choices when looking for ways to access more affordable fuel."

2) *E85 conversion kits aren't banned today, just scrutinized.* Although no commercial E85 conversion kits are available in California today, that is because no manufacturer has sought approval of a kit that would meet California's strict standards. As described in the background section, California has had some of the worst air quality in the nation for decades but has made great strides towards improving it. A number of policies (including the use of CARBOB, the applicability of lower emissions standards, the requirement for smog testing) have been pioneered by California to address its air pollution issues. In that vein, E85 conversion kits—just like any other aftermarket part or conversion—must go through testing and certification by CARB.

   This bill attempts to jumpstart the E85 conversion kit market in California by deregulating kit certification. Regardless of whether or not E85 conversion kits get the scrutiny they do now, a number of interrelated requirements still apply to CARB and drivers alike. Retooling the fuel system of a vehicle may have significant impacts on the sensors and other components that are required to pass smog testing; without CARB certification this could be jeopardized in FFV conversions. The U.S. EPA certification process is confidential, meaning CARB would ultimately have less information about the state's vehicle fleet. This would be expected to complicate efforts to continue cleaning California's air. However, the scope of this difficulty is proportional to the size of the E85 conversion market. If very few drivers convert their vehicles to take advantage of the lower-cost E85 fuel, the size of blind spot created for CARB will be similarly small. Nevertheless, especially at a time where CARB's other regulatory authorities have been under extensive attack by the U.S. EPA and Administration, the decision to further cede authority to the federal regulators should not be taken lightly, regardless of the size of the potential fleet.

3) *Ethanol: a low-carbon, high-baggage fuel.* Although ethanol itself contains less carbon than comparable fossil fuels, calling it "low-carbon" is not as clearcut a distinction. A growing body of evidence now indicates that corn ethanol may generate emissions comparable to, or even worse than, gasoline once full lifecycle impacts are considered.[4] The Environmental Protection Agency's own Science Advisory Board concluded in 2023 that recent

[4] World Resources Institute, The Global Land Squeeze: Managing the Growing Competition for Land. July 20, 2023. https://www.wri.org/research/global-land-squeeze-managing-growing-competition-land

emissions estimates for corn ethanol exceed those of gasoline.[5]

Producing ethanol requires substantial fossil fuel inputs, including fertilizer, processing energy and transportation. But the larger problem is land use: when crop production is diverted from the food supply into fuel production, forests and grasslands somewhere else get converted into new agricultural land to replace the lost food. That conversion releases massive stores of carbon into the atmosphere. Globally, the emissions from these land-use changes often outweigh the tailpipe emissions reductions ethanol is supposed to achieve.

As described in the background section above, while E85 is typically less expensive per gallon than conventional E10 gasoline in California, the lower energy density means that drivers will need to fill up more often to offset the lower energy density of the fuel. Nevertheless, as of writing, the average price of E10 gasoline in California is $5.85 per gallon, as opposed to $2.39 per gallon for E85. Even accounting for lower energy density, drivers could indeed pay less per mile using E85 than E10 at current prices. Such calculations cannot figure in the full cost of ethanol across its supply chain, just as they cannot for gasoline either.

Whether or not those savings justify the cost of an E85 conversion kit for one's vehicle is a decision consumers will need to weigh and determine if it makes sense for them. Whether or not ceding regulatory authority to the U.S. EPA by preventing CARB from more stringently certifying E85 conversion kits is a justifiable means to boost the market is the decision faced by the Committee today.

Related/Prior Legislation

SB 301 (Portantino and Newman) of 2023 would have required CARB to establish the Zero-Emission Aftermarket Conversion Project which would have provided a rebate of up to $4,000 per vehicle for qualifying vehicle conversions. The bill was vetoed by the Governor.

SB 660 (Newman) of 2017 would have created the Aftermarket Parts Account for the purpose of hiring additional staff to approve aftermarket parts. The bill died in the Assembly Transportation Committee.

AB 558 (Quirk-Silva) of 2017 would have allowed the Joint Legislative Committee on Climate Change Policies to recommend that CARB provide

[5] Letter to Michael Regan. Science Advisory Board. September 29, 2023. https://www.energymarketersofamerica.org/weeklyreview/attachments/epa-science-advisory-board-commentary-on-rfs.pdf

education and support to local governments on ensuring the use of E85 flexible fuel vehicles, among other subjects. The bill would also have required CARB to develop a summary on the distribution of E85 and flexible fuel vehicle registrations and develop policy recommendations to maximize the use of E85 in flexible fuel vehicles. The bill was vetoed by the governor.

SOURCE: California Fuels & Convenience Alliance

SUPPORT:

California Chamber of Commerce
California Fuels and Convenience Alliance
California New Car Dealers Association
Growth Energy
Pearson Fuels
Sacramento Asian Pacific Chamber of Commerce
Specialty Equipment Market Association (SEMA)

OPPOSITION:

None received

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