

Date of Hearing: April 25, 2022

ASSEMBLY COMMITTEE ON TRANSPORTATION

Laura Friedman, Chair

AB 2797 (Petrie-Norris) – As Amended April 7, 2022

SUBJECT: Decarbonizing Fuels Incentive

SUMMARY: Establishes the Carbon Neutrality Fund (Fund) in the state treasury, with moneys available upon appropriation by the Legislature, and requires the California Department of Tax and Fee Administration (CDTFA) to pay incentive payments from the Fund to qualified taxpayers based on the carbon intensity (CI) of specified transportation fuel sold during the taxable year. Specifically, **this bill:**

- 1) Provides the following definitions, for purposes of the Decarbonizing Fuels Incentive:
 - a) “CI” – CI of the fuel or blend stock determined by a CA-GREET pathway and approved under the Low Carbon Fuel Standard (LCFS). CI includes the indirect land use change emission, if an agricultural commodity that is a food product is used as a feedstock for the production of the transportation fuel.
 - b) “Carbon-neutral fuel” – a liquid or gaseous transportation fuel that has a CI equal to zero, as measured by LCFS.
 - c) “Net negative carbon fuel” – a transportation fuel that has a negative CI, as measured by LCFS; and,
 - d) “Very low carbon fuel” – a transportation fuel having no greater than 50% of the CI of the closest comparable CI benchmark for gasoline or diesel fuel in a certain year, as measured by LCFS.
- 2) Establishes the Fund in the state treasury, with moneys in the fund being available only upon appropriation by the Legislature.
- 3) For taxable years, beginning on or after January 1, 2023, and before January 1, 2029, requires CDTFA to pay annually from the Fund an incentive to a qualified taxpayer on a first-come-first-served basis, and prohibits that incentive payment from exceeding the amount of use-fuel tax paid by the qualified taxpayer.
- 4) Requires the incentive payment for a taxable year to be an amount equal to an applicable amount multiplied by the number of diesel or gasoline gallons equivalent of qualified transportation fuel.
- 5) Sets the applicable amount as follows:
 - a) Five cents (\$0.05) for a very low carbon fuel; and,
 - b) Ten cents (\$0.10) for a carbon-neutral fuel or a net negative carbon fuel.
- 6) Authorizes CDTFA to adopt regulations necessary to accomplish the purposes of the Decarbonizing Fuel Incentive.

- 7) Limits the aggregate amount of incentive payments under the Decarbonizing Fuel Incentive to \$500 million in a taxable year.

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 coordinate with local air districts to control emission from stationary sources in order to implement the Federal Clean Air Act.
- 2) Requires CARB, pursuant to California Global Warming Solutions Act of 2006 [AB 32 (Núñez), Chapter 488, Statutes of 2006], to adopt a statewide greenhouse gas (GHG) emissions limit equivalent to 1990 levels by 2020 and to develop a scoping plan for achieving the maximum technologically feasible and cost effective reductions in GHGs.
- 3) Requires, pursuant to SB 32 (Pavley), Chapter 249, Statutes of 2016, that CARB ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by 2030.
- 4) States the intent of the Legislature that CARB design emission reduction measures to meet the statewide emissions limits for GHGs in a manner that minimizes costs and maximizes benefits for California's economy, improves and modernizes California's energy infrastructure and maintains electric system reliability, maximizes additional environmental and economic cobenefits for California, and complements the state's efforts to improve air quality.
- 5) Imposes an excise tax on a user of fuel in an internal combustion engine to power a motor vehicle, as defined, at specified rates depending on fuel type. Requires users, with certain exceptions, and vendors of fuel subject to the Use Fuel Tax Law to obtain Use Fuel Tax permits and generally requires vendors to collect the tax upon sale to a user and remit the tax to the CDTFA.

FISCAL EFFECT: Unknown

COMMENTS:

Shortly after the enactment of the Global Warming Solutions Act of 2006, Governor Schwarzenegger issued Executive Order S-1-07, the LCFS, calling for a reduction of at least 10% in the CI of California's transportation fuels by 2020. The Scoping Plan additionally identified the LCFS as an action measure to reduce California's GHG emissions. The CARB Board approved the LCFS regulation in 2009 and began implementation in 2011.

What is the LCFS and how does it work? The LCFS sets annual CI standards, or benchmarks, which reduce over time, for gasoline, diesel, and the fuels that replace them. Under the current LCFS regulation, CI of transportation fuels must decrease 20% by 2030. CI is expressed in grams of carbon dioxide equivalent per unit of energy provided by that fuel. CI takes into account the GHG emissions associated with all of the steps of producing, transporting, and consuming a fuel—also known as a complete life cycle of that fuel. The 2022 CI benchmark is 89.5 for gasoline and 90.41 for diesel.

CI includes the “direct” effects of producing and using the fuel, as well as “indirect” effects that are primarily associated with crop-based biofuels. CARB uses two models to calculate the direct effects, which are the California Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (CA-GREET) and Oil Production Greenhouse gas Emissions Estimator (OPGEE) models. To calculate the indirect effects, the Global Trade Analysis Project (GTAP) model was updated and the Agro-Ecological Zone Emissions Factor (AEZ-EF) model was created to supplement GTAP’s estimates of GHG emissions from various types of land conversions.

Fuels and fuel blendstocks introduced into the California fuel system that have a CI lower than the benchmark; such as electricity, hydrogen, renewable diesel, and renewable natural gas; earn credits. Conversely, fuels and fuel blendstocks with CIs higher than the benchmark generate deficits. Producers of fuel with CIs above the benchmark may purchase credits to comply with the program.

What does this bill do? This bill provides incentive payments to vendors equal to the gasoline or diesel gallons equivalent (DGE) of fuels subject to the Use Fuel Tax Law at rates that vary based on the CI of the fuel. The rate is five cents for fuels with 50% of the current year LCFS CI benchmark and 10 cents for fuels with a zero CI or negative CI. Thus, this bill would subsidize the production of fuels which either emit significantly lower amounts of GHGs than gasoline or diesel, do not emit GHGs, or decrease GHGs over the cumulative life-cycle of the fuel.

What types of fuels have a negative carbon intensity? Certain feedstocks are a source of climate-altering methane emissions, for example dairy cow waste used to make renewable natural gas. Using that waste to make fuel prevents carbon from otherwise being released into the environment. The resulting fuel is carbon negative, meaning it takes more carbon out of the environment than it produces. This pathway is not without controversy, as some environmental groups have asked CARB to carefully consider the unintended consequences that may arise, such as potentially increasing factory farming for the sake of fuel credits.

Will this bill decrease the carbon intensity of fuels? This bill provides a minimal benefit to fuel producers whose fuels are already incentivized by the LCFS. This bill will likely incentivize mostly compressed natural gas and liquefied natural gas, as those are the only fuels subject to the Use Fuel Tax that currently have significant volumes meeting the CI standards of the bill. It is unclear that this bill will result in significant changes by producers and a resulting decrease in the CI of fuels. The incentive amounts provided by this bill are approximately 5% of the current value of LCFS credits on a DGE basis. The table below compares the incentive amounts in the bill to the current LCFS credit value.

	This bill’s Incentive (\$/DGE)	LCFS Credit Value (\$/DGE)
"Very low-carbon fuel" - LCFS CI of 40	\$0.05	\$1.10
"Carbon Neutral fuel" - LCFS CI of 0	\$0.10	\$1.96

The Assembly Revenue and Taxation Committee policy analysis also acknowledges the uncertain impact of this bill in driving the production of lower CI fuels. “The production of fuel is necessarily based on the demand for fuel. In other words, producers of fuel will generally

adjust the amount they produce based on the overall consumption of the given fuel. This, in turn, is a function of the amount of vehicles which require the given fuel to operate. Generally, should the number of vehicles requiring a certain fuel increase, demand for said fuel would rise, the price of that fuel would rise, causing producers to increase the amount they bring to market of that particular fuel. While some producers of certain fuels may decrease the overall CI of their fuel to qualify for payments issued under this bill, this bill may also simply reward producers of fuels that already have CIs which are eligible under the requirements of this bill. Thus, it is difficult to determine the extent to which this bill would incent the production of fuels with lower CI.”

According to the author, “The United Nations’ Intergovernmental Panel on Climate Change concluded that the planet’s warming is at risk to reach or exceed 1.5 degrees Celsius within two decades, which would lead to irreversible damage to the planet and humanity with an array of natural disasters. California has a statewide goal (Executive Order B-55-18) to achieve carbon neutrality as soon as possible, but no later than 2045, and to maintain and achieve net negative emissions thereafter. Given the current climate emergency, additional policy tools are needed to help drive deep decarbonization of transportation fuels today to help California achieve carbon neutrality by 2045. This bill would complement the LCFS and Clean Transportation Program by providing additional incentives for the transition to deep decarbonized fuels and a successful transition away from high carbon fuels.”

In support, a coalition representing stakeholders in California which produce, sell and/or use the lowest carbon transportation fuels writes, “[This bill] will help California reach its 2045 carbon neutrality goal sooner by incentivizing increased production and use of very low to net negative carbon fuels. Given the state’s climate emergency, additional policy tools are needed to help drive deep decarbonization of fuels today. Encouraging greater development of such low carbon fuels today will ensure that future clean transportation markets will be powered by fuels that are in line with California’s goals.”

Double referral: This bill was heard by the Assembly Revenue and Taxation Committee on April 18, and passed out with a 9-1 vote. Please see that committee analysis for additional details.

Previous legislation: SB 1383 (Lara), Chapter 395, Statutes of 2016 requires CARB, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030, as specified. SB 1383 also establishes specified targets for reducing organic waste in landfills.

REGISTERED SUPPORT / OPPOSITION:

Support

Atlas Disposal Industries
Bioenergy Association of California
California Chamber of Commerce
California Natural Gas Vehicle Coalition
California Waste Haulers Council
City of Commerce

Clean Energy
Climate Resolve
Coalition for Clean Air
Coalition for Renewable Natural Gas
Environmental Justice League
Hexagon Agility
Morongo Basin Transit Authority
Mustang Renewable Power Ventures
Nationwide Environmental Services
Natural Gas Vehicles for America
Oberon Fuels
Paratransit, INC.
Quantum Fuel Systems LLC
Refuel Energy Partners
South San Francisco Scavenger Company
Trillium USA Company, LLC D.b.a. Trillium Cng
Tss Consultants
USA Renewable Energy
Western Propane Gas Association

Opposition

None on file

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