

Date of Hearing: April 19, 2021

ASSEMBLY COMMITTEE ON TRANSPORTATION

Laura Friedman, Chair

AB 1389 (Reyes) – As Amended April 12, 2021

SUBJECT: Alternative and Renewable Fuel and Vehicle Technology Program

SUMMARY: Makes various changes to the Alternative and Renewable Fuel and Vehicle Technology Program, also known as the Clean Transportation Program (CTP). Specifically, **this bill:**

- 1) Revises the criteria by which the State Energy Resources Conservation and Development Commission (CEC) bases preference for projects funded under CTP. The criteria would now include:
 - a. The project's ability to reduce criteria air pollutants and air toxics and reduce or avoid multimedia environmental impacts, with prioritization for projects that reduce these emissions in disadvantaged communities and low-income communities.
 - b. The project's ability to support vehicle deployment and advanced vehicle infrastructure needed to meet the state's climate goals. The project serves, and is located in, disadvantaged communities and in low-income communities.
 - c. The project provides greenhouse gas (GHG) emissions and particulate matter reductions in areas classified as nonattainment under the federal Clean Air Act.
- 2) Removes certain criteria by which CEC bases preference for projects funded under CTP.
- 3) Requires the following to be eligible for CTP funding:
 - a. Medium- and heavy-duty (MD/HD) vehicle, including on-road and off-road vehicles), research, pilot, demonstration, and deployment projects that reduce emissions and particulate matter from fleets in the goods movement and public transit sectors.
 - b. Infrastructure deployment, and related workforce training programs, for MD/HD vehicles, utility distribution system upgrades, and grid integration technologies to support those vehicle technologies.
 - c. Programs and projects that support fleet conversion in the goods movement and public transit sector, including projects that support fleets with charging and refueling infrastructure, grid integration, warehouse and supply logistics, maintenance yard and utility upgrades, and technical and analytical support.
 - d. Vehicle fueling infrastructure deployment for multidwellings units, utility distribution system upgrades, and grid integration technologies.
- 4) Revises the list of projects that shall be eligible for funding to projects that "may" be eligible for funding to include, among other projects:

- a. Alternative and renewable fuel projects to develop and improve alternative and renewable low-carbon fuels, including electricity, ethanol, dimethyl ether, renewable diesel, natural gas, hydrogen, and biomethane, among others, and their feedstocks that have high potential for long-term or short-term commercialization, including projects that lead to sustainable feedstocks.
 - b. Demonstration and deployment projects that optimize alternative and renewable fuels for existing and developing engine technologies.
 - c. Projects to produce alternative and renewable low-carbon fuels in California.
 - d. Projects to decrease the overall impact of an alternative and renewable fuel's life-cycle carbon footprint and increase sustainability.
 - e. Alternative and renewable fuel infrastructure, fueling stations, and equipment.
- 5) Requires CEC to allocate a certain percentage of funding, awarded to projects with higher benefit-cost scores, for incentives for MD/HD vehicles used by owner operators and small fleet owners in the goods movement industry.
- 6) Requires CEC to expend at least 50% of the money, appropriated to CTP, for projects located in, and benefiting, disadvantaged communities.

EXISTING LAW:

- 1) Establishes CTP, administered by CEC, with funding from vehicle and vessel registration, vehicle identification plates, and smog-abatement fees that provide up to \$100 million annually for grants, revolving loans, loan guarantees, and other financial assistance to accelerate the development and deployment of clean, efficient, low carbon alternative fuels and technologies. The fees that fund CTP sunset January 1, 2024.
- 2) Requires CARB, in consultation with CEC, to develop and adopt guidelines for CTP to ensure that activities undertaken a) complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant and GHG emissions and b) maintain or improve upon emission reductions and air quality benefits in the State Implementation Plan for Ozone, California Phase 2 Reformulated Gasoline standards, and diesel fuel regulations.
- 3) Requires CEC to develop and adopt an investment plan to determine priorities and opportunities for CTP. Requires the investment plan to establish priorities for investment of funds and technologies to achieve the stated goals and describe how funding will complement existing public and private investments, including existing state programs. Requires CEC to submit a draft update each January, coincident with the Governor's Budget.
- 4) Requires CEC, in consultation with CARB, as part of the development of the investment plan, to assess whether charging station infrastructure is disproportionately deployed, and, to use CTP funding to more proportionately deploy new charging station infrastructure, unless CEC makes a finding that the disproportionate deployment is reasonable and furthers state energy or environmental policy.

FISCAL EFFECT: Unknown

COMMENTS: Since 2006, California has set several pivotal goals to reduce GHG emissions and address the threat posed by global climate change. These goals require incremental progress that will ultimately lead to major emission reductions, including:

- Reducing GHG emissions to 1990 levels by 2020.
- Reducing GHG emissions to 40% below 1990 levels by 2030.
- Reducing short-lived climate pollutant emissions, such as methane, to 40 to 50% below 2013 levels by 2030.
- Achieving a carbon-neutral economy by 2045.
- Setting specific goals to boost the supply of zero-emission vehicles (ZEVs) and charging and fueling stations, including:
 - Putting at least 1.5 million ZEVs on the road by 2025.
 - Installing 200 hydrogen-fueling stations and 250,000 battery-electric vehicle chargers, including 10,000 direct-current fast chargers, by 2025.
 - Putting 5 million ZEVs on the road by 2030.
 - Transitioning 100% of new sales of passenger vehicles and trucks to ZEVs by 2035. Transitioning 100% of operating MD/HD trucks and buses to zero emissions by 2045 everywhere feasible, and 100% of drayage trucks by 2035.
- Transitioning 100% of operating off-road vehicles and equipment to zero emissions everywhere feasible by 2035.

According to CEC, in its 2020-2021 Investment Plan Update for the Clean Transportation Program, “achieving these goals will require significant technological and market changes within the transportation sector, which accounts for roughly 50% of state GHG emissions when accounting for “upstream emissions” from fuel production. In addition to these GHG emission reduction goals, the state must comply with requirements under the federal Clean Air Act to reduce emissions of criteria air pollutants. Reducing air pollution is important from an equity context, given that air quality burdens fall disproportionately on vulnerable and disadvantaged communities within the state.”

To meet the state’s ZEV goals will require a significant increase in the number of light and MD/HD ZEVs on the road and a drastic increase in the infrastructure necessary to support these vehicles. California’s cumulative ZEV sales reached 763,816 in September 2020. As of September 30, 2020, California has nearly 67,000 public and shared chargers installed, including over 5,000 DC fast chargers, and 44 hydrogen stations. The EV Charging Infrastructure Assessment states that an additional 121,000 chargers are planned, leaving a gap of 62,000 from the 250,000 chargers by 2025 goal. There is also a gap in hydrogen fueling station infrastructure, with 44 existing and 128 planned stations, that leaves California 28 short of its 200 target.

California’s ZEV targets require more infrastructure than the state’s goals. For passenger vehicle charging in 2030, the EV Charging Infrastructure Assessment estimates that to support 5 million plug-in electric vehicles (PEVs) the state would need 968,000 chargers. CARB’s Draft 2020 Mobile Source Strategy projects the state will need 180,000 MD/HD ZEVs in 2030 to achieve state climate and air quality goals and an additional 157,000 chargers to support these vehicles.

MD/HD vehicles contribute disproportionately to nitrogen oxide (NOx) emissions. Electrifying the state’s MD/HD sector will be crucial to meeting the state’s climate goals and improving air quality, especially in disadvantaged communities. MD/HD vehicles and equipment are critical to

California's businesses, freight operations, and transit systems, providing indispensable functions for domestic goods movement, international trade, mass transportation, and other essential services. Although they only represent a small share of California registered vehicle stock, accounting for about 1 million out of 31 million vehicles, or 3%, MD/HD vehicles are responsible for about 23% of on-road GHG emissions in the state because of comparatively low fuel efficiency and high number of miles traveled per year. MD/HD vehicles also contribute nearly 60% of the NO_x emissions and 52% of PM_{2.5} statewide.

MD/HD charging needs differ from those of passenger vehicles. In the next five years, MD/HD vehicles, such as delivery vans, class 8 trucks, and cargo handling equipment, will rapidly electrify due to market developments, regional air quality implementation plans, and state ZEV goals. While private light-duty vehicles typically see extended periods of downtime and generally have flexible charging patterns, MD/HD vehicles often necessitate fixed operating schedules, making infrastructure planning for these vehicles unique. Set operating schedules may ease infrastructure planning and present opportunities for vehicle-grid integration; however, less downtime and higher electricity draws also present challenges.

The CEC Investment Plan Updates for CTP guide the allocation of program funding. The investment plan reflects laws, EOs, regulations, and other funding programs to reduce GHG emissions, petroleum dependence, and criteria pollution emissions for all Californians. CEC incorporates input from stakeholders, a Disadvantaged Communities Advisory Group, and the CTP Advisory Committee during the construction of the investment plan. Since 2009, CEC has invested nearly \$900 million, through CTP, in projects that support the advancement and use of alternative fuels and advanced vehicle technologies. Because of the zero-emission infrastructure deployment gap discussed above, the most recent 2020-2023 Investment Plan Update for CTP focuses on providing funding for vehicle charging infrastructure to narrow the gap.

This bill would place a greater focus on funding investments in clean transportation in order to help the state meet its ambitious climate goals, in particular by prioritizing investments in MD/HD vehicles and related infrastructure. This bill would add project preferences for projects that have an equity component to reduce emissions and particulate matter in the state's most polluted areas. This bill still provides flexibility, within this new prioritization framework, for CEC to determine the best portfolio of clean transportation options in the light-duty and MD/HD infrastructure and alternative fuels sectors.

According to the author, "The CEC's Clean Transportation Program, formerly known as Alternative and Renewable Fuel and Vehicle Technology Program, has been a critical tool to advance clean vehicle technology since its inception. However, the program has not been updated since its reauthorization in 2013. Since then, there have been a number of climate change goals and policies as well as developments in the clean transportation industry that necessitate a discussion on what the priorities for this program should be. AB 1389 will incorporate program changes that will focus investments in the emerging medium- and heavy-duty freight industry, dedicate funding to projects in and benefiting disadvantaged communities, align the program to meet newer climate goals, and provide project preferences for projects that reduce emissions and particulate matter in our most polluted areas. The pollutants emitted from the transportation sector leave communities like mine [Assembly District 47] with dirty air and public health hazards. Cleaning up the transportation sector is critical to demonstrating that environmental justice and economic development not only can co-exist but are complimentary to each other."

Related and previous legislation: The Governor's January 2021 budget proposal includes trailer bill language reauthorizing CTP. This proposal would extend the sunset on various vehicle-related fees—commonly known as AB 118 or AB 8 fees—from the end of 2023 through 2046. These fees support several different environmental programs, most of which are targeted at climate change and/or air quality. The proposal would also securitize a portion of the AB 8 revenue that goes to CTP to accelerate \$500 million for ZEV fueling infrastructure, with additional authority to securitize up to \$1 billion.

AB 2772 (Reyes) of 2020 would have revised CTP to no longer require CEC to provide certain project preferences and to additionally require CEC to provide preference to a project that has the ability to support advanced vehicle infrastructure needed to meet specified climate goals. The bill would have revise the list of projects that the commission is required to make eligible for funding to include, among others, medium- and heavy-duty vehicle research, pilot, demonstration, and deployment projects that reduce emissions from fleets in the goods movement and public transit sectors. AB 2772 was held in Assembly Transportation due to COVID-related bill limitations.

SB 44 (Skinner), Chapter 297, Statutes of 2019 requires CARB, no later than January 1, 2021, and every 5 years thereafter, in consultation with the Department of Transportation, CEC, and the Governor's Office of Business and Economic Development, to update CARB's 2016 mobile source strategy to include a comprehensive strategy for the deployment of MD/HD vehicles for the purpose of bringing the state into compliance with federal ambient air quality standards and reducing GHG emissions from the MD/HD sector.

AB 617 (C. Garcia), Chapter 136, Statutes of 2017 specifies several requirements for CARB related to the reporting of criteria air pollutants emissions and toxic air contaminants, air pollutant monitoring, a statewide strategy to reduce emissions, as well as related requirements for air quality control districts.

SB 32 (Pavley), Chapter 249, Statutes of 2016 requires CARB to ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030.

SB 1383 (Lara), Chapter 395, Statutes of 2016 requires CARB, no later than January 1, 2018, to approve and begin implementing the 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 350 (de Leon), Chapter 547, Statutes of 2015 enacts the Clean Energy and Pollution Reduction Act of 2015, which establishes targets to increase retail sales of renewable electricity to 50% by 2030 and double the energy efficiency savings in electricity and natural gas end uses by 2030.

AB 8 (Perea), Chapter 401, Statutes of 2013 extends increased vehicle registration fees, vessel registration fees, service fees for ID plates, and smog abatement fees to be deposited in ARFVT Fund, AQIF, and EFM subaccount until 2024. Requires CEC to allocate \$20 million annually from ARFTV fund to fund hydrogen fueling stations until there are at least 100 publicly available in the state.

SB 1275 (de Leon), Chapter 530, Statutes of 2014 establishes the Charge Ahead California Initiative, administered by CARB in consultation with CEC and the air districts, and states the

goals of the initiative are to place in service at least one million zero-emission and near-zero emission vehicles by January 1, 2023, and increase access for disadvantaged, low-income, and moderate-income consumers to these vehicles.

AB 118 (Nunez), Chapter 750, Statutes of 2007 creates ARFVT Program, AQIP, and EFMP. Creates ARFVT fund and allocates \$10 million to the fund from Public Interest Research, Development, and Demo Fund. Imposes increases, until January 1, 2016, on vehicle registration fees, vessel registration fees, service fees for ID plates, and smog abatement fees to be distributed to ARFVT fund, AQIF, and EFM subaccount.

REGISTERED SUPPORT / OPPOSITION:

Support

CALSTART (Sponsor)
ABB Inc.
AMPLY Power
Anaheim Transportation Network
Arrival
California Electric Transportation Coalition
Center for Sustainable Energy
Change Energy
Electric Transportation Community Development Corporation
eNow
GreenPower Motor Company
Mack Trucks
Momentum Dynamics Corporation
Motiv Power Systems
Nikola Corporation
Odyne Systems, LLC
Phoenix Motorcars
The Lion Electric Co.
Veloce Energy
Volvo Group North America

Opposition

None on file

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