

Date of Hearing: April 25, 2022

ASSEMBLY COMMITTEE ON TRANSPORTATION

Laura Friedman, Chair

AB 2358 (O'Donnell) – As Amended April 18, 2022

SUBJECT: Alternative vehicle and vessel technologies: funding programs: commercial harbor craft

SUMMARY: Adds commercial harbor craft to the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology (Clean Truck and Bus) Program. Specifically, **this bill:**

- 1) Adds zero- and near-zero-emission commercial harbor craft technology development, demonstration, precommercial pilots, and early commercial deployments, including pilots of multiple vessels at one site or region, as a project eligible for funding under the Clean Truck and Bus Program.
- 2) Adds commercial harbor craft purchase incentives as a project eligible for funding under the Clean Truck and Bus Program.

EXISTING LAW:

- 1) Creates the Clean Truck Program administered by the California Air Resources Board (CARB) in conjunction with the State Energy Resources Conservation and Development Commission (CEC) and upon appropriation of funding requires the program to develop, demonstrate, pilot, and deploy zero- and near-zero-emission truck, bus, and off-road vehicle and equipment technologies.
- 2) Lists the types of projects eligible for funding under the Clean Truck and Bus Program, but does not limit funding to only those projects listed in statute.
- 3) Under the Clean Truck and Bus Program, includes as a project eligible for funding purchase incentives, which may include point-of-sale, for commercially available zero- and near-zero-emission truck, bus, and off-road vehicle and equipment technologies and fueling infrastructure to support early market deployments of alternative technologies and to increase manufacturer volumes and accelerate market acceptance.
- 4) Establishes the Greenhouse Gas Reduction Fund (GGRF) in the State Treasury and requires all money collected pursuant to cap and trade, with limited exceptions, to be deposited into the fund.
- 5) Establishes the Air Quality Improvement Program (AQIP), administered by CARB, with the primary purpose of funding, upon appropriation by the Legislature, air quality improvement projects relating to fuel and vehicle technologies.
- 6) Requires CARB, in consultation with CEC, to develop guidance through the existing AQIP funding plan process, which includes public workshops, for the implementation of the Clean Truck and Bus Program.
- 7) Requires CARB to include a three-year investment strategy for heavy-duty vehicles with each AQIP funding plan.

- 8) Defines “zero- and near-zero-emission” as vehicles, fuels, and related technologies that reduce GHG emissions and improve air quality when compared with conventional or fully commercialized alternatives.

FISCAL EFFECT: Unknown

COMMENTS:

ZEV climate goals: Transitioning California’s transportation system away from gasoline to ZEVs is a fundamental part of the state’s efforts to meet the state’s goals to reduce GHG emissions 40% below 1990 levels by 2030. Governor Newsom’s Executive Order (EO) N-79-20, dated September 23, 2020, establishes the goal that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035. The EO further requires that 100% of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible.

Ferry vessel emissions and regulations: Ferry vessels are one of the largest emitting categories of commercial harbor craft in the state according to CARB. While ferries only represent 2% of the harbor craft population, they emit 11% of total commercial craft particulate matter emissions, and 15% of total commercial harbor craft nitrogen oxides emissions. In 2018, CARB estimated that ferries powered by diesel engines in the Bay Area emitted more than 88,000 short tons of carbon dioxide (CO₂), equivalent to 17,400 cars worth of yearly driving.

CARB adopted the Airborne Toxic Control Measure for Diesel Engines on Commercial Harbor Craft in 2008 to reduce emissions of diesel particulate matter, oxides of nitrogen, and reactive organic gases from diesel engines used on commercial harbor craft operated in regulated California waters. CARB amended the original regulation in 2010 to include additional vessel categories, including crew and supply, barge, and dredge vessels. The current regulation will be fully implemented by the end of 2022. At the end of 2021, CARB proposed to amend the current regulation to further reduce emissions from harbor craft in impacted communities.

Zero- and near-zero-emissions ferry technologies and deployment: Currently, alternative technologies to traditional diesel engines include battery electric and hydrogen fuel cell technologies. For ferries, these technologies are relatively new, carrying a significant cost to operate at the scale necessary to power large vessels such as ferries. Pacific Environment estimates the number of zero-emissions ships currently in operation around the world is over 400 with another 182 on order. California deployed the first hydrogen fuel cell-powered ferry in the Bay Area in 2021. The project received a \$3 million grant from CARB, administered by the Bay Area Air Quality Management District (BAAQMD), with funds coming from the California Climate Investments initiative.

The Clean Truck and Bus Program: SB 1204 (Lara), Chapter 524, Statutes of 2014 created the California Clean Truck and Bus Program to guide CARB’s heavy-duty investments funded with Cap-and-Trade auction proceeds. The purpose of this program is to help accelerate the introduction of the next generation of cleaner heavy-duty vehicles and engines with a priority on projects that benefit disadvantaged communities. SB 1403 (Lara), Chapter 370, Statutes of 2018 further modified the Clean Truck and Bus Program by requiring CARB to develop and include a three-year investment strategy for zero- and near zero-emission heavy-duty vehicles and equipment as part of the annual Low Carbon Transportation and AQIP Funding Plan.

This bill allows zero- and near-zero emission commercial harbor craft to be funded under the Clean Truck and Bus Program which is allowed under, but not explicitly stated in, existing law.

According to the author, “[This bill] will help harbor craft operators comply with forthcoming amendments to the Commercial Harbor Craft Regulation by providing funding for the development, demonstration, and deployment of zero- and near-zero-emission harbor craft technologies. This will ensure that California’s maritime businesses can continue their vital services and significant contributions to our state and local economies.”

Related and previous legislation: AB 2056 (Grayson) of this session would define the cost of obtaining new pilot boats to include the cost of repowering existing pilot boats or acquisition of new pilot boats to meet emission regulations on harbor craft set by CARB. AB 2056 is pending on the Assembly Floor.

AB 2690 (Boerner Horvath) of this session would require CARB to identify all sources of state funding available to provide commercial rebates and other financial incentives to an owner or operator of a small passenger vessel to replace or upgrade the vessel to comply with CARB’s 2022 amendments to the Commercial Harbor craft Regulation. AB 2690 is pending in this committee.

AB 2807 (Mia Bonta) of this session would expand existing program eligibility for various programs that provide moneys for zero- and near-zero-emissions transportation technologies to include public transportation ferries. AB 2807 is pending in this committee.

AB 214 (The Budget Act) of 2021 appropriates \$150 million from GGRF for clean trucks, buses, and off-road freight equipment including the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project and advanced technology freight demonstration and pilot commercial deployment projects.

SB 1204 (Lara), Chapter 524, Statutes of 2014 creates the Clean Truck and Bus Program, funded from cap and trade revenues, to fund zero- and near zero emission truck, bus, and off-road vehicle and equipment technologies and related projects, with priority to be given to certain projects, including those that benefit disadvantaged communities.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file

Opposition

None on file

Analysis Prepared by: Christine Casey / TRANS. / (916) 319-2093