

Date of Hearing: March 19, 2018

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 2145 (Reyes) – As Amended March 15, 2018

**SUBJECT:** Vehicular air pollution

**SUMMARY:** Modifies the Clean Truck, Bus, and Off-Road Vehicle and Equipment Program (Clean Truck Program) to fund additional technologies and expands the criteria for funding through the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). Specifically, **this bill:**

1) Modifies the Clean Truck Program as follows:

- a) Adds grid integration and integrated storage solutions, as well as charging management demonstration and analytics to the list of eligible projects that can be funded to support greater commercial motor vehicle and equipment efficiency.
- b) Requires the California Energy Commission (CEC) to advise the California Air Resources Board (ARB) on how to allocate money for vehicle charging infrastructure consistent with the CEC's investment plan strategies on charging infrastructure.
- c) Requires ARB to promote projects that assist the state in reaching its climate goals beyond 2030 consistent with SB 32 (de León) of 2016 instead of by 2020, per AB 32 (Núñez) of 2006.
- d) Requires ARB to prioritize funding for communities with a community emissions reduction program.

2) Expands the ARFVTP as follows:

- a) Adds infrastructure entities to the list of entities eligible for ARFVTP grants and other financial incentives.
- b) Requires CEC to emphasize the development and deployment of technology and infrastructure.
- c) Adds a project's ability to:
  - i) Deploy infrastructure not already deployed by other state agencies or utilities,
  - ii) Integrate fueling infrastructure and the grid, and;
  - iii) Match infrastructure to the deployment of advanced light-, medium-, and heavy-duty vehicles to the list on which CEC must base project prioritization.

**EXISTING LAW:**

- 1) Requires ARB, 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 adopt regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorizes ARB to permit the use of market-based compliance mechanisms to comply with GHG reduction regulations, once specified conditions are met.
- 2) Requires ARB to ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by 2030.
- 3) Establishes the Greenhouse Gas Reduction Fund (GGRF) and requires all moneys, except for fines and penalties, collected by ARB from the auction or sale of allowances pursuant to a market-based compliance mechanism (i.e., the cap-and-trade program adopted by ARB under AB 32) to be deposited in the GGRF and available for appropriation by the Legislature.
- 4) Establishes the Air Quality Improvement Program (AQIP), administered by ARB, to fund projects that reduce criteria air pollutants, improve air quality, and provide research for alternative fuels and vehicles, vessels, and equipment technologies.
- 5) Establishes the Clean Truck Program, administered by ARB in conjunction with CEC, to use GGRF funds for development, demonstration, pre-commercial pilot, and early commercial deployment of zero- and near zero-emission truck, bus, and off-road vehicle and equipment technologies.
- 6) Defines projects eligible for funding for the Clean Truck Program, to include, but not limited to, the following:
  - a) Technology development, demonstration, pre-commercial pilots, and early commercial deployments of zero- and near zero-emission medium- and heavy-duty truck technology, including projects that help to facilitate clean goods movement corridors.
  - b) Zero- and near zero-emission bus technology development, demonstration, pre-commercial pilots, and early commercial deployments, including pilots of vehicle fleets.
  - c) Zero- and near zero-emission off-road vehicle and equipment technology development, demonstration, pre-commercial pilots, and early commercial deployments, including vehicles and equipment in the port, agricultural, marine, construction, and rail sectors.
  - d) 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.
  - e) Projects that support greater commercial motor vehicle and equipment freight efficiency and GHG reductions, including, but not limited to, advanced intelligent transportation

systems, autonomous vehicles and other freight information and operations technologies.

- 7) Requires ARB, in consultation with CEC, to develop guidance through the existing AQIP funding plan process to implement the Clean Truck Program.
- 8) Requires ARB, for the Clean Truck Program, to promote projects that assist the state in reaching its climate goals beyond 2020, consistent with AB 32, and prioritize projects that benefit disadvantaged communities, leverage funds, and provide co-benefits.
- 9) Establishes the ARFVTP, administered by CEC, to provide grants and other financial incentives to accelerate the development and deployment of clean, efficient, low carbon alternative fuels and technologies.
- 10) Defines entities eligible for ARFVTP grants and other financial incentives as; public agencies, vehicle and technology entities, businesses and projects, public-private partnerships, workforce training partnerships and collaboratives, fleet owners, consumers, recreational boaters, and academic institutions.
- 11) Requires CEC to prioritize projects that maximize ARFVTP goals based on the following criteria, as applicable:
  - a) Ability to provide a measurable transition to a diverse portfolio of viable alternative fuels that meet petroleum reduction and alternative fuel use goals.
  - b) Consistency with state climate change policy and low-carbon fuel standards.
  - d) Ability to reduce criteria air pollutants and air toxics and reduce or avoid multimedia environmental impacts.
  - e) Ability to decrease the discharge of water pollutants or other substances known to damage health or the environment, as specified.
  - f) Lack of adverse impact on the sustainability of the state's natural resources, especially state and federal lands.
  - g) Provision of non-state matching funds.
  - h) Provision of economic benefits for the state by promoting California-based technology firms, jobs, and businesses.
  - i) Use of existing or proposed fueling infrastructure to maximize project outcome.
  - j) Ability to reduce GHG emissions by at least 10%, and higher percentages in the future, from current reformulated gasoline and diesel fuel standards established by ARB.
  - k) Use of alternative fuel blends of least 20% and higher blend ratios in the future, with a preference for projects with higher blends.

- l) Ability to drive new technology advancement for vehicles, vessels, engines, and other equipment, and promotion of deployment of that technology in the marketplace.
  - m) Ability to transition workers to, or promote employment in, the alternative and renewable fuel and vehicle technology sector.
- 12) Limits eligibility for ARFVTP funding to the following:
- a) Projects to develop and improve alternative and renewable low-carbon fuels, as specified.
  - 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 carbon footprint and increase sustainability.
  - e) Alternative and renewable fuel infrastructure, fueling stations, and equipment.
  - f) Projects to develop and improve light-, medium-, and heavy-duty vehicle technologies that provide for better fuel efficiency and lower GHG emissions, alternative fuel usage and storage, or emissions reductions.
  - g) Programs and projects that accelerate the commercialization of vehicles and alternative and renewable fuels.
  - h) Programs and projects to retrofit medium- and heavy-duty on-road and off-road vehicle fleets with technologies that create higher fuel efficiencies.
  - i) Infrastructure projects that promote alternative and renewable fuel infrastructure development connected with existing fleets, public transit, and existing transportation corridors.
  - j) Workforce training programs related to alternative and renewable fuel feedstock production and extraction; renewable fuel production, distribution, transport, and storage; high-performance and low-emission vehicle technology and high-tower electronics; automotive computer systems; mass transit fleet conversion, servicing, and maintenance; and other related sectors or occupations.
  - k) Block grants or incentive programs administered by public entities or nonprofit entities for projects, education, and program promotion within the state, and development of alternative and renewable fuel and vehicle technology centers.

- l) Life-cycle and multimedia analyses, sustainability and environmental impact evaluations, and market, financial, and technology assessments performed by a state agency to determine the impacts of increasing the use of low-carbon transportation fuels and technologies and to assist in the preparation of the investment plan and program implementation.
- m) A program to provide funding for homeowners who purchase a plug-in electric vehicle, to offset costs associated with modifying electrical sources to include a residential plug-in electric vehicle charging station.

13) Requires ARB to select locations around the state for preparation of community emissions reduction programs.

**FISCAL EFFECT:** Unknown

**COMMENTS:** AB 32 required ARB to develop a plan to reduce GHG emissions to 1990 levels by 2020 and, subsequently, SB 32 (Pavley) of 2016, requires ARB to ensure GHG emissions are reduced to at least 40 percent below 1990 levels by 2030. AB 32 also required ARB to ensure that GHG emissions reduction requirements and programs, to the extent feasible, directed public and private investment toward the most disadvantaged communities in the state. In addition, AB 32 authorized ARB to adopt a schedule of fees to be paid by GHG emission sources and to deposit those monies into the GGRF, which would then be available upon appropriation by the Legislature, to carry out AB 32 requirements.

AB 118 (Núñez) of 2007 established the AQIP to be administered by ARB in consultation with local air districts. The AQIP is funded through various fees and surcharges on vehicles and provides competitive grants to fund projects that improve air quality. AQIP investments have concentrated on three main categories: commercial deployment of clean vehicles, pre-commercial advanced technology demonstrations, and financial assistance to small trucking fleets. AB 118 also established the ARFVTP, which is administered by CEC, and provides funding for development and deployment of alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change goals. Eligible projects include, for example, development, improvement, and production of alternative and renewable low-carbon fuels; improvement of light-, medium-, and heavy-duty vehicle technologies; and expansion of infrastructure connected with existing fleets, public transit, and transportation corridors. Additionally, as part of the ARFVTP, CEC prepares and adopts an annual investment plan that identifies the funding priorities for the coming fiscal year.

In 2014, the Clean Truck Program was established, to be administered by ARB in conjunction with CEC, with the intent to create a single, overarching program to develop and deploy zero- and near zero-emission heavy-duty vehicles. Specifically, the Clean Truck Program provides GGRF funds for projects that develop technology, demonstrate and pilot commercial and early-commercial deployment of zero and near zero emission medium- and heavy-duty truck technology, and facilitate clean goods movement. As part of the Clean Truck Program, ARB helped develop zero- and near zero emission technologies for specified vehicles and equipment not only for trucks, but also for off-road vehicles and equipment at the ports as well as in agricultural, marine, and rail sectors. Within the Clean Truck Program, funding priority is

generally given to projects that demonstrate benefit to disadvantaged communities, that have the ability to leverage additional public and private funding, and that provide the potential for co-benefits.

To help incentivize the adoption of new technologies and update program guidelines, the author has introduced this bill. According to the author, “AB 2145 modernizes two important clean transportation grant programs at these two agencies (ARB and CEC) to reflect the status of clean vehicle technology. It makes eligible for funding new types of clean vehicle projects – such as grid integration and integrated storage solutions, charging management demonstration and analytics – an area that requires further research if the state is going to help electrify the medium- and heavy-duty zero-emission vehicle sector. Furthermore, it encourages more coordination between the Energy Commission and the Air Resources Board on how they invest in charging infrastructure so that their efforts are not duplicative”.

Writing in support and as sponsor of the bill, CALSTART notes that making changes to both programs to reflect the latest technological developments and the status of the clean vehicle market is necessary so new project types are eligible for funding. In addition, they believe updating the programs’ guidelines and planning elements ensures better coordination of investments between agencies.

*Previous legislation:* AB 617 (Cristina Garcia), Chapter 136, Statutes 2017, required, among other things, ARB to identify and select locations around the state for the preparation of community emissions reduction programs.

AB 1697 (Bonilla), Chapter 446, Statutes of 2016, expanded the criteria for funding programs through the state’s ARFVTP to include workforce training.

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

AB 857 (Perea) of 2015, would have reserved 50% or \$100 million annually, whichever is greater, of GGRF monies that are allocated to the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program (SB 1204 Program) to support the commercial deployment of existing zero- and near-zero emission heavy-duty truck technology that meets or exceeds the ARB’s optional low NOx standard between 2018 and 2023. AB 857 was held on the Senate Appropriations Committee suspense file.

SB 1204 (Lara), Chapter 524, Statutes of 2014, created the Clean Truck Program to fund development, demonstration, pre-commercial pilot, and early commercial deployment of zero- and near-zero-emission truck, bus, and off-road vehicle and equipment technologies.

AB 8 (Perea), Chapter 401, Statutes of 2013, extended until January 1, 2024, the fees that support AQIP and AFRVTP.

AB 118 (Núñez), Chapter 750, Statutes of 2007, created the ARFVTP and AQIP to provide funding measures to specified entities to develop and deploy technologies and alternative and renewable fuels in the marketplace to help attain the state’s climate change policies

AB 32 (Núñez), Chapter 488, Statutes of 2006, required ARB to develop a plan of how to reduce emissions to 1990 levels by the year 2020.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

CALSTART (Sponsor)  
Silicon Valley Leadership Group

**Opposition**

None on file

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