

Date of Hearing: April 22, 2019

**ASSEMBLY COMMITTEE ON TRANSPORTATION**

Jim Frazier, Chair

AB 1406 (O'Donnell) – As Amended April 11, 2019

**SUBJECT:** Alternative and Renewable Fuel and Vehicle Technology Program

**SUMMARY:** Requires the California Energy Commission (CEC), to allocate at least 10% of the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) funding for alternative fuel and advanced technology vehicles.

**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.
- 2) Requires ARB to ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by 2030.
- 3) 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 without adopting any one preferred fuel or technology type.
- 4) Requires CEC to allocate \$20 million annually to fund hydrogen fueling stations, not to exceed 20 percent of the moneys appropriated to the ARFVTP until there are at least 100 publicly available hydrogen-fueling stations in operation in California.
- 5) Defines “full fuel-cycle assessment” or “life-cycle assessment” to mean evaluating and comparing the full environmental and health impacts of each step in the life cycle of a fuel, including, but not limited to, all of the following: feedstock production, cultivation, extraction, transport, and storage; fuel production, distribution, transport, and storage and vehicle operation, including refueling, combustion or conversion, and evaporation.

**FISCAL EFFECT:** Unknown

**COMMENTS:** AB 118 (Núñez) Chapter 750, Statutes of 2007, 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 reduce GHG emissions and 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. Alternative and renewable low-carbon fuels include electricity, ethanol, dimethyl ether, renewable diesel, natural gas, hydrogen, and biomethane, among others, and certain feedstocks.

This program, along with several others, is funded through surcharges on vehicle registration fees, a portion of the vessel registration fee, a portion of the Smog Abatement Fee (paid to register vehicles less than six model years old and therefore exempt from smog check), and an increase in the fee for identification plates for various types of vehicles, such as logging vehicles operated on public roads. The ARFVTP is funded at about \$100 million annually. AB 8 (Perea), Chapter 401, Statutes of 2013, extended the fees that support the ARFVTP through January 1, 2024 and required CEC to allocate \$20 million annually, not to exceed 20% of the moneys appropriated, to hydrogen fueling stations until there are at least 100 publicly available stations in operation in California. As part of the ARFVTP, CEC prepares and adopts an annual investment plan that identifies the funding priorities for the coming fiscal year.

Now in its eleventh year, the ARFVTP has provided more than \$791 million to more than 600 agreements. ARFVTP funds various alternative fuels, ARFVTP funding (in millions) by fuel type as of December 1, 2018 has been:

- \$275.6 for electric,
- \$162.2 for hydrogen,
- \$119 for natural gas,
- \$72.3 for biodiesel,
- \$61.3 for biomethane,
- \$46.2 for ethanol,
- \$46.5 for multiple fuel/other
- \$6 for propane

In general, CEC awards these agreements based on four program categories. As of December 1, 2018, CEC has awarded 21% for Alternative Fuel Production, 35% for Alternative Fuel Infrastructure, 31% for Alternative Fuel and Advanced Technology Vehicles and 13% for Related Needs and Opportunities (such as, manufacturing, workforce training, and regional planning). This bill sets aside 10% of ARFVTP funding for alternative fuel and advanced technology vehicles.

Last year, Governor Brown issued Executive Order (EO) B-48-2018, which orders the deployment of 5 million zero-emission vehicles (ZEVs, i.e. electric and hydrogen fueled vehicles) on California roads by 2030. The 2018 EO also directed all state entities to spur the construction and installation of ZEV charging and fueling infrastructure, find ways to streamline ZEV infrastructure installation processes, and carry out additional programs and actions to reach the goal. As part of this goal, last year the administration proposed budget trailer bill language to re-structure the ARFVTP and re-focus the program to “develop and deploy technology in the marketplace to spur the accelerated development of ZEVs and related infrastructure.” The proposed trailer bill language was ultimately not adopted.

Critics of the change argued that the preference to one technology undermined the integrity of the ARFVTP and the current potential of biofuels (such as, biodiesel, biomethane (renewable natural gas), ethanol and renewable diesel) and other innovative fuels to reduce emissions on a near-term (especially for heavy-duty applications) and “full fuel-cycle assessment” basis. When considering a “full fuel-cycle assessment,” some biofuels, depending on how they are made can have lower or comparable carbon intensity scores to hydrogen and electricity. Supporters of ZEVs, however, believe that hydrogen and electricity are preferred fuel pathways because vehicles using this type of fuel produce no-tailpipe emissions and under current law, electricity will ultimately become “100% clean” via our aggressive renewable energy goals.

The state has advanced both the goals of reducing carbon intensity of fuels and the promotion of ZEVs through various state efforts, including the Low Carbon Fuel Standard (requires the reduction of carbon intensity of fuels), the Clean Car Standards (state and federal regulations to

increase fuel efficiency of vehicles), the ZEV mandate (requires auto manufacturers to increase ZEV sales) and substantial alternative fuel and ZEV fueling infrastructure funding.

These bill “carves out” 10 % of ARFVTP monies for alternative fuel and advanced technology vehicles. The author has introduced this bill to ensure ARFVTP remains fuel and technology neutral, and notes “California continues to face significant challenges in attaining state and federal air quality standards...Thankfully, the state has a variety of carbon-neutral fuels and advanced vehicle technologies available for deployment. AB 1406 ensures all of these alternative fuel options and technology incentives are considered for the ARFVTP. This technology-neutral strategy is consistent with the state’s climate policies, and will maximize air pollution reductions that can be achieved by the program today.”

Writing in support, Clean Energy states, “Despite statutory language already in place protecting the program as technology neutral, there have been continuous attempts to undermine the program by diverting funds toward one technology. Not only does this bill strengthen and reinforce the intent of the program to maintain it as technology neutral, but it emphasizes that further misguided attempts to raid it for one technology will no longer be viable.”

In opposition, California Electric Transportation Coalition writes. “Stakeholder involvement is critical to inform the ARFVTP allocations, as indicated by current law. These allocations have evolved every year to reflect the state’s priorities, both legislative and administrative. These allocations are also informed by the state’s goals to protect vulnerable communities, reduce GHGs, reduce short-lived climate pollutant emissions, and achieve a carbon-neutral economy. Although we support the diversity of alternative fuel and vehicle projects funded by the ARFVTP, we do not believe it is appropriate to carve out funding for particular projects or for a particular fuel via legislation.”

*Committee comments:* The current investment strategy for CEC’s ARFVTP is informed by stakeholder input and is developed based on various climate priorities. Additionally, CEC, through the ARFVTP, helps transform California’s fuel and vehicle types by developing and deploying technology and alternative and renewable fuels in the marketplace, without adopting any one preferred fuel or technology type.

By setting aside funding for specified purposes, this bill may be limiting the ability for CEC to respond to market changes, advance the most cost-effective projects, and/or constrain them in the future to limited pots of monies. However, the author contends that the investment needed for alternative vehicles is great and is consistent with meeting our ambitious climate goals.

With the recent intent to revamp the ARFVTP and with ongoing interest from certain alternative fuel advocates to “carve out” portions of the ARFVTP to ensure the program remains “fuel-neutral,” there have been two bills introduced this year on the matter, this bill and AB 753 (E. Garcia). The legislature may need to consider how best to consolidate these efforts and still provide the state with “enough” flexibility.

*Related Legislation:* AB 753 (E.Garcia) would require ARB and CEC to allocate specified percentages of moneys from the ARFVTP and Low Carbon Transportation investments (which come from cap-and trade funds) to provide incentives for the production, fueling infrastructure, research and development of specified fuels.

*Previous legislation:* 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.

SB 350 (de León), Chapter 547, Statutes of 2015, set GHG reduction targets to be achieved by 2030 through a variety of measures, including supporting electrification of the transportation system and established requirements of California Public Utilities Commission in adopting electric vehicle charging proposals from the investor owned utilities.

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

AB 118 (Núñez), Chapter 750, Statutes of 2007, created the ARFVTP 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**

California Natural Gas Vehicle Coalition (Sponsor)  
California Refuse Recycling Council- The Northern District  
Clean Energy  
CR&R Environmental Services  
Western Propane Gas Association

**Opposition**

California Electric Transportation Coalition  
Sierra Club

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