
**SENATE COMMITTEE ON ENERGY, UTILITIES AND
COMMUNICATIONS**

Senator Ben Hueso, Chair

2021 - 2022 Regular

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| Bill No: | SB 589 | Hearing Date: | 4/12/2021 |
| Author: | Hueso | | |
| Version: | 3/25/2021 Amended | | |
| Urgency: | No | Fiscal: | Yes |
| Consultant: | Sarah Smith | | |

SUBJECT: Air pollution: alternative vehicles and vehicle infrastructure

DIGEST: This bill expands the types of projects eligible for funding from the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) to include projects that develop in-state supply chains and the workforce for raw materials and components needed for zero-emission vehicle (ZEV) manufacturing. This bill expands the groups the California Energy Commission (CEC) must consult as part of ARFVTP workforce development efforts to include the California Conservation Corps and California Community Colleges. This bill also incorporates workforce development as a resource the CEC must evaluate part of its regular assessment of resources needed to meet state ZEV deployment goals.

ANALYSIS:

Existing law:

- 1) Establishes the ARFVTP at the CEC to fund projects that develop and deploy technology and alternative and renewable fuels in the marketplace. Existing law establishes the criteria by which the CEC must prioritize projects, including a project's ability to reduce certain air pollutants and provide in-state economic benefits. The CEC must rank projects based on each project's ability to meet statutory prioritization criteria. (Public Resources Code §44272 (a-d))
- 2) Specifies 13 different types of projects are eligible for funding, including, but not limited to the following: projects that develop and deploy alternative and renewable fuels, ZEV infrastructure, ZEV and alternative fuel vehicle technologies, programs that help commercialize ZEV and alternative fuel vehicles (including supply chain development), funding for nonprofits and public entities that advance ZEV and alternative fuel transportation development, and workforce development projects that transition workers from fossil fuel industries to clean transportation jobs. (Public Resources Code §44272 (e))

- 3) Requires the CEC to collaborate with the following entities to implement the workforce development components of the ARFVTP: the California Workforce Development Board (CWDB), the Employment Training Panel, the Employment Development Department, and the Division of Apprenticeship Standards. (Public Resources Code §44272 (h))
- 4) Requires the CEC to conduct a statewide assessment of the electric vehicle (EV) charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least five million ZEV on California roads by 2030, and of reducing emissions of greenhouse gases to 40 percent below 1990 levels by 2030. (Public Resources Code §25229 (a))
- 5) Specifies that the CEC's statewide assessment of EV charging infrastructure must be updated every two years and must consider all needed charging infrastructure, including, but not limited to, chargers, make-ready electrical equipment, and supporting hardware and software, all vehicle categories, road, highway, and off-road electrification, port and airport electrification, and other programs to accelerate the adoption of EVs to meet the state's EV deployment goals. This assessment shall examine existing and future infrastructure needs throughout California, including in low-income communities. (Public Resources Code §25229 (b))

This bill:

- 1) Expands the types of projects that are eligible for funding from the ARFVTP to include projects, including workforce development projects, which develop in-state production of raw materials and the manufacturing supply chain for ZEV components.
- 2) Expands the entities with which the CEC must consult regarding ARFVTP workforce development activities to include the community colleges, the California Conservation Corps, and local conservation corps.
- 3) Requires the CEC to evaluate the workforce development and training resources needed to meet the state's ZEV deployment goals as part of the CEC's regular assessment of the resources needed to meet ZEV transportation goals. These workforce development and training resources must include, but are not limited to, qualified apprenticeships, on-the-job training programs, and other training opportunities that build career pipelines and provide long-term employment in disadvantaged communities.

Background

California's clean transportation goals and the ARFVTP. In 2017, the Legislature passed SB 2127 (Ting, Chapter 365, Statutes of 2017), which codified California's goal of putting at least five million ZEVs on California roads by 2030 and required the CEC to conduct an assessment every two years of the infrastructure resources needed to meet the state's ZEV deployment goals. In September 2020, Governor Newsom signed Executive Order N-79-20, which established a goal that 100 percent of in-state sales of new passenger cars and trucks will be ZEVs by 2035. To support this goal, the Governor's proposed budget includes an extension of the vehicle registration fees that fund the ARFVTP and an additional \$1 billion in funding for the ARFVTP through the securitization of future revenues. This increase in funding is intended to accelerate deployment of ZEV infrastructure.

This bill incorporates workforce needs and training as resources necessary to accelerate ZEV deployment. Existing law requires the CEC to conduct an assessment every two years of the infrastructure needed to meet California's ZEV deployment goals. Under existing law, this assessment must consider all the charging infrastructure and other technologies needed to meet these goals. This bill would require the CEC to also evaluate workforce development and training needs as part of the CEC's regular assessment of the resources needed to meet the state's ZEV deployment goals.

While the CEC has long consulted with community colleges and included workforce development as an element of the ARFVTP, this bill codifies consultation with the community colleges and requires the CEC to consult with the California Conservation Corps as part of its ARFVTP workforce development efforts. Expanding the consultative workforce entities to include the community colleges and Conservation Corps reflects could support efforts to develop workforce development programs that help diversify the ZEV transportation sector and create early career pathways to clean transportation jobs in communities that have not historically had significant exposure to well-paid jobs that support climate goals. In-state companies developing ZEVs and other clean transportation options have consistently identified trained workforces as a necessary element for accelerating the commercialization of clean transportation technologies and businesses.

In 2017 the Legislature passed AB 398 (E. Garcia, Chapter 135, Statutes of 2017), which made a number of changes to California climate change policies, including updating the Cap and Trade program administered by the Air Resources Board. The bill also required the CWDB to submit a report to the Legislature on the need for increased education, training, and workforce development resources needed to

help transition to clean economies. The CWDB's report recommends supporting the development of high-road industry training partnerships for the clean transportation sector, including partnerships that collaborate with community-based organizations that have ties to disadvantaged communities. Expanding the consultative organizations for the ARFVTP and requiring the CEC to assess workforce needs as part of the resources necessary to meet clean transportation goals could better identify opportunities to support high-road partnerships that incorporate workforce development elements that benefit disadvantaged communities while growing the workforce for in-state clean transportation companies.

This bill adds projects that could support the development of the Lithium Valley to the list of projects eligible for funding from ARFVTP. In addition to expanding the workforce consultative entities for the ARFVTP and requiring the CEC to assess workforce needs for meeting clean transportation goals, this bill specifically makes projects that develop an in-state supply of the raw materials and components needed for ZEVs eligible for funding through the ARFVTP. This bill also clarifies that these projects may include workforce development projects. These changes would enable the CEC to leverage ARFVTP funding to support the development of a "Lithium Valley" in California, which could help grow the clean transportation economy in California by providing a domestic supply chain for lithium from the Salton Sea and battery electric vehicle components.

ZEVs have become one of California's largest exports; however, many of the components of those vehicles rely on raw materials and resources obtained and assembled out of the state and in foreign countries. Currently, most of the lithium in the world is resourced from Australia, Chile, China, Argentina, and Zimbabwe. According to 2020 data from U.S. Geological Survey mineral commodities analysis, the demand for lithium for battery development has risen, and Australia supplies over 50 percent of the lithium used in the United States. California and the United States are highly reliant on these foreign sources of lithium because domestic lithium sources have not been sufficiently developed. California's Salton Sea is the location of multiple geothermal brines, which can be a rich source of lithium. Similar brines are currently the largest sources of lithium in the world.

In addition to relying on foreign sources of lithium, California and the United States are also reliant on a foreign supply chain for many of the components of battery electric vehicles. Developing a domestic supply chain for these raw materials and components could improve access to resources that would help accelerate in-state development of ZEVs and clean transportation and energy resources while also providing in-state economic benefits, including new jobs in some of the most economically disadvantaged parts of the state. Several

companies within the Imperial Valley are working with local community colleges and other organizations to develop high-road education and training courses to build the workforce needed to support geothermal lithium extraction in the Salton Sea area. This bill would make those high-road partnerships eligible for support from the ARFVTP.

Prior/Related Legislation

SB 726 (L. Gonzalez, 2021) makes various modifications to the ARFVTP, including reducing the types of projects that the CEC must prioritize when making grants. The bill would remove specified workforce development programs from mandatory consideration for funding opportunities. The bill is currently pending in the Senate.

AB 111 (Boerner Horvath, 2021) makes various changes to existing law to encourage the deployment of zero-emission medium and heavy-duty vehicles and requires the CEC to include an assessment of hydrogen refueling infrastructure in its regular assessment of ZEV resources.

AB 1657 (E. Garcia, Chapter 271, Statutes of 2020) authorized the CEC to convene a blue ribbon commission on lithium extraction in California and submit a report to the Legislature by October 1, 2022, which must include findings and recommendations from the blue ribbon commission regarding actions to develop lithium extraction from geothermal brines.

AB 2127 (Ting, Chapter 365, Statutes of 2017) required the CEC to conduct a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and of reducing emissions of greenhouse gases to 40 percent below 1990 levels by 2030.

AB 1697 (Bonilla, Chapter 446, Statutes of 2016) added prioritization criteria for the ARFVTP to prioritize projects that transition workers to the alternative and renewable fuel and vehicle technology sector. The bill also added criteria for workforce development programs eligible for ARFVTP funding.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

SUPPORT:

California Mobility Center
EnergySource Minerals LLC

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: According to the author:

California has ambitious climate goals, which include the goal of putting at least five million zero emissions vehicles on the state's roads by 2030. As California seeks to accelerate the deployment of clean vehicles and fueling infrastructure, statewide assessments of resources needed to meet the state's ZEV goals do not currently include an assessment of workforce development needs. Despite its absence from statewide evaluations, local governments and clean transportation companies have identified new job pathways and training needs to support in-state development and deployment of clean transportation options.

SB 589 is needed to better integrate workforce development into California's ZEV plans and ensure that organizations working to help grow an inclusive, diverse clean transportation sector are included in the state's plans. The clean transportation sector has become one of California's biggest exports, and as we create new incentives to grow and accelerate ZEV deployment, we must ensure that those efforts incentivize diversity. Just as our investments in clean transportation technology and infrastructure must be deployed in diverse communities, our investments in the workers for the infrastructure must be similarly diversified. SB 589 is a step towards building the clean transportation job pathways that will help grow our economy just and equitably.

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