

Date of Hearing: July 5, 2021

ASSEMBLY COMMITTEE ON TRANSPORTATION

Laura Friedman, Chair

SB 589 (Hueso) – As Amended May 4, 2021

SENATE VOTE: 39-0

SUBJECT: Air pollution: alternative vehicles and vehicle infrastructure

SUMMARY: Adds projects, including a workforce development or training project, that develop in-state production of raw materials and manufacturing supply chain for zero-emission vehicle (ZEV) components as an eligible activity to be funded under the Clean Transportation Program (CTP). Specifically, **this bill:**

- 1) Adds the California Community Colleges, the certified community conservation corps, the California Conservation Corps, and the California Mobility Center to the list of potential collaborators, as a part of the Energy Resources Conservation and Development Commission's (CEC) requirement to work with entities that have expertise in workforce development to implement the workforce development components of the Clean Transportation Program.
- 2) Requires CEC, in consultation with stakeholders, to identify workforce development and training resources needed to meet the goals of putting at least 5 million ZEV on California roads by 2030, and of reducing greenhouse gas (GHG) emissions to 40% below 1990 levels by 2030. Resources shall include qualified apprenticeships, on-the-job training programs, and other training opportunities that build career pipelines in the zero-emission transportation sector and provide long-term employment in disadvantaged communities.

EXISTING LAW:

- 1) Creates the Alternative and Renewable Fuel and Vehicle Technology Program [(also known as the (CTP)], administered by CEC, to provide competitive grants, revolving loans, loan guarantees, or loans to various entities to develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies.
- 2) Requires CEC to provide preference to projects that maximize the goals of the CTP, based on specified criteria.
- 3) Requires CEC to rank applications for projects proposed for funding awards based on solicitation criteria developed and give additional preference to funding projects with higher benefit-cost scores.
- 4) Limits the activities funded under the CTP to only those explicitly named in statute.
- 5) Requires CEC, working with the State Air Resources Board (CARB) and the California Public Utilities Commission (CPUC), to prepare 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 5 million ZEVs on California roads by 2030, and of reducing emissions of GHGs to 40% below 1990 levels by 2030.

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 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.

Charging and refueling infrastructure needs: To meet the state's ZEV goals will require a significant increase in the number of light-, medium-, and heavy-duty 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.

Clean Transportation Program: Authorized under AB 118 (Nunez), Chapter 750, Statutes of 2007 and reauthorized by AB 8 (Perea), Chapter 401, Statutes of 2013, CTP invests up to \$100 million annually in a broad portfolio of transportation and fuel transportation projects throughout the state. CEC leverages public and private investments to support adoption of cleaner transportation powered by alternative and renewable fuels. The program plays an important role in achieving California's ambitious goals on climate change, petroleum reduction, and adoption of zero-emission vehicles, as well as efforts to reach air quality standards. The program also supports the state's sustainable, long-term economic development.

EV Charging Assessment: AB 2127 (Ting, Chapter 365, Statutes of 2018) requires CEC to conduct an assessment every two years of the electric vehicle charging 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. The 2021

assessment included a discussion of the workforce needed to support charging infrastructure deployment. It generally covered the work already ongoing at state agencies to ensure a robust workforce prepared to support ZEV infrastructure deployment and concluded that, “the state should evaluate the workforce needs for EV infrastructure in terms of workload capacity, training and certification, job quality, and regional differences... the state should also evaluate this workforce for applications beyond charging infrastructure that are relevant to implementing the above suite of aggressive zero-emissions measures.”

This bill would require CEC to evaluate workforce development and training needs as part of its regular EV charging infrastructure assessment.

Salton Sea/Lithium: Lithium is a critical material which can be found in pegmatitic ores, sedimentary materials, and brines around the world. Lithium is used to make lithium-ion rechargeable batteries. Historically, the supply and demand for lithium has been structured and scaled around non-battery products. Current demand growth, however, is rooted in lithium-ion batteries, used as the new mechanism for energy storage in electric vehicles. According to the U.S. Geological Survey in 2019 lithium-ion batteries made up 65% of global end-use markets for lithium.

Beyond California’s need for ZEVs and ZEV components, projections show that the global demand for ZEVs will grow exponentially in the coming decades, changing the market for lithium going forward, and prompting California to determine how to develop an in-state domestic supply of lithium. Recent efforts in this space include a Blue Ribbon Commission on Lithium Extraction in California, established under AB 1657 (E. Garcia), Chapter 271, Statutes of 2020, which will review, investigate, and analyze certain issues and potential incentives regarding lithium extraction and use in California.

This bill adds projects that develop in-state production of raw materials and manufacturing supply chain for ZEV components as an eligible activity to be funded under CTP.

According to the author, “California has ambitious climate goals, which include the goal of putting at least 5 million ZEVs 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. Existing law also is not helping us grow the in-state supply chain for the raw materials and parts needed for electric vehicles. Even as clean transportation has become one of California’s biggest exports, our state remains reliant on a largely foreign supply chain for components needed in ZEV manufacturing. SB 589 is needed to better integrate workforce development into California’s ZEV plans, support projects that develop in-state supply chains for ZEV materials, and ensure that organizations working to help grow an inclusive ZEV workforce are part of our clean transportation planning. This bill will support high-road partnerships between in-state clean energy and transportation companies while encouraging workforce development in historically disadvantaged communities. SB 589 is a step towards building the clean transportation job pathways that will help grow our economy just and equitably.”

In support, East Bay Community Energy writes “SB 589 would support additional funding for in-state zero-emission vehicle component manufacturing. This will increase economic investment in our local communities while supporting zero-emission transportation which enables achievement of the state’s decarbonization goals as well as reduction in local air pollutants”

Double referral: This bill was heard by the Assembly Communications and Conveyance Committee on June 23, 2021 and passed out 12-0.

Related and previous legislation: AB 1389 (Reyes) would revise and recast the Clean Transportation Program to expand the purpose of the program to include developing and deploying innovating technologies that transform California's fuel and vehicle types to help reduce criteria air pollutants and air toxics. The bill would no longer require CEC to provide certain project preferences and to additionally require CEC to provide preference to projects that provide GHG and criteria air pollutant reductions in areas classified as nonattainment areas. AB 1389 is currently pending in the Senate Energy, Utilities, and Communications Committee.

SB 726 (Gonzalez) of this session would revise and recast CTP to expand the purpose of the program to include developing and deploying innovating technologies that transform California's fuel and vehicle types to help reduce criteria air pollutants and air toxics. The bill would no longer require CEC to provide certain project preferences and to additionally require CEC to provide preference to projects that provide GHG and criteria air pollutant reductions in areas classified as nonattainment areas. SB 726 is pending in this committee.

AB 1657 (E. Garcia), Chapter 271, Statutes of 2020 requires CEC to establish and convene the Blue Ribbon Commission on Lithium Extraction in California to review, investigate, and analyze certain issues and potential incentives regarding lithium extraction and use in California. The Blue Ribbon Commission must submit, on or before October 1, 2022, a report to the Legislature documenting findings and recommendations.

AB 1697 (Bonilla), Chapter 446, Statutes of 2016 adds a project's ability to transition workers to, or promote employment in, the alternative and renewable fuels and vehicle technology sector as additional criteria on which preference under the program shall be provided.

AB 8 (Perea), Chapter 401, Statutes of 2013 extends until January 1, 2024, extra fees on vehicle registrations, boat registrations, and tire sales in order to fund the Clean Transportation Program, the Carl Moyer Program, and Air Quality Improvement Program.

AB 118 (Nunez), Chapter 365, Statutes of 2007 establishes the Fleet Modernization Program, the Clean Transportation Program, and the Air Quality Improvement Program.

REGISTERED SUPPORT / OPPOSITION:

Support

California Association of Local Conservation Corps
East Bay Community Energy (EBCE)
Sacramento Municipal Utility District

Opposition

None on file

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