



January 21, 2020

Honorable Chairman Mary D. Nichols and Honorable Board Members California Air Resources
Board 1001 I Street
P.O. Box 2815
Sacramento, CA 95812

Re: 20-2-6, Public Meeting to Consider Policy Recommendations to Increase the Use of
Zero-Emission Vehicles Per Senate Bill 498

Dear Chair Nichols and Honorable Board Members:

CalEtc appreciates this opportunity to provide comments on the Draft Assessment of CARB's Zero-Emission Vehicle Programs Per Senate Bill 498 (draft assessment), Skinner. This letter largely supports the draft assessment and provides some suggested modifications for consideration.

CalEtc is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation including plug-in electric vehicles of all weight classes, transit buses, port electrification, off-road electric vehicles and equipment, and rail. Our board of directors includes Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, Southern California Public Power Authority and the Northern California Power Agency. Our membership also includes major automakers, manufacturers of zero-emission trucks and buses, and other industry leaders supporting transportation electrification. CalEtc supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, ensure clean air, and combat climate change.

CalEtc supports CARB's ongoing efforts to expedite the transition to zero-emission vehicles. California leads the nation in zero-emission cars, trucks, buses and equipment and CARB, this Governor, other state agencies and our Legislature continually strive to overcome the barriers to transportation, many of which are outlined in the draft assessment. CalEtc provides the following feedback and suggestions on the draft assessment to strengthen the assessment and support the transition to zero-emission vehicles:

- 1) Incentives and pricing strategies: CalEtc strongly agrees with the first recommendation included in the report, adequate and reliable funding for incentives are essential. **The Governor's budget as proposed for 2020/21 does not adequately or reliably fund essential incentive programs.** CalEtc and its members are committed to working with other stakeholders to ensure that the Governor's budget more accurately reflects his clear commitment to zero-emission transportation by including adequate and reliable funding for the incentive programs at CARB and CEC in his May revised budget.

- 2) ZEV refueling infrastructure. A substantial and concerted investment in infrastructure is critical to ensuring the State can achieve its ZEV deployment and climate goals. The draft assessment correctly calls for the creation of a multi-agency working group to accelerate heavy-duty and off-road ZEV infrastructure, CalETC believes such a working group is essential and must convene immediately as California is lagging behind where it must be to support electric vehicles, light-, medium- and heavy-duty. CARB has also launched or plans to launch numerous medium- and heavy-duty vehicle and equipment regulatory proceedings, without the tools or analysis of infrastructure needed to support these regulatory requirements. The draft report highlights the important ongoing collaboration between the CEC, CPUC, and CARB, focused on assessing the electric vehicle infrastructure needs across all transportation applications. We agree that continuing those efforts should be a key function of the working group, because infrastructure investment decisions must be informed by a comprehensive and consistent interagency view of infrastructure and system planning needs – a view that must be forward looking and incorporate all of CARB’s mobile source rules and the State’s climate and air quality goals and policies. And this comprehensive perspective of infrastructure needs should shape and inform utility programs and investments for the future. **The assessment may have inadvertently left out the need for the working group to accelerate infrastructure to support light- and medium-duty ZEVs. California lags well behind in the need for ZEV infrastructure for all types of ZEVs, light-, medium- and heavy-duty. The report suggests the infrastructure needs for heavy-duty ZEVs be “on par” with light-duty ZEV infrastructure; in reality the infrastructure needs for all vehicles are inadequate and the infrastructure needs for light-, medium- and heavy-duty vehicles and equipment are substantively different across the vehicle segments.** The draft assessment’s recommendation that the working group focus its efforts on hydrogen ZEV infrastructure is inappropriate given the lag in both electricity and hydrogen infrastructure across all vehicle segments. Thus, it is critical that the working group focus on all ZEV infrastructure for all vehicle classes, because all are needed to achieve the State’s climate goals. We respectfully suggest that the **focus of this working group must be to:**
- a. **ensure the state is on track building enough ZEV infrastructure to support all vehicle classes, light-, medium- and heavy-duty, and equipment;**
 - b. **consistent with 1) above, work to ensure adequate and reliable funding for the infrastructure, both public incentive funding and private-sector investment; and**
 - c. **help quantify the amount of infrastructure needed across all vehicle classes, financing and funding needed support this infrastructure and workforce training and development needed to build out the infrastructure, further focusing on good jobs in disadvantaged and economically challenged communities.** The assessment does not yet adequately address the need for a workforce to construct, install, permit, inspect, operate and maintain the amount of infrastructure that will be needed to support all classes of vehicles. CWDB would benefit from funding. However, the scope of this infrastructure build out, financing, funding and workforce development will require CWDB to be a member of the new working group so they can understand the scope of the need and opportunity;

d. **permitting challenges and other barriers that add time and cost to infrastructure deployment.**

We respectfully suggest many of the working group tasks identified in this assessment are largely already being done and/or are not essential for this working group effort:

- The focus on heavy-duty ZEV infrastructure “on-par” with light-duty infrastructure is insufficient and too narrow;
- It is not clear what is meant by a “level playing field” between hydrogen and electricity -- the fueling infrastructure needs for electricity and hydrogen are quite different and both fuels lack adequate fueling infrastructure across all vehicle classes;
- Defining cost-effectiveness for investment strategies is very challenging, it is unclear what CARB staff means in this section of the assessment;
- CARB will presumably track numbers and types of ZEVs in California as do organizations such as Veloz.

- 3) Workforce development and training. CalETC suggests the jobs and economic opportunities created by the transition to ZEVs and the need to develop and train California’s workforce, should be a higher priority policy issues in the draft assessment. CalETC and NRDC, along with other non-government and academic organizations hired ICF International to conduct an environmental and macro-economic assessment of medium- and heavy-duty transportation electrification (electricity fuel) relative to diesel and natural gas. The [Full Report](#) and [Summary for Policy Makers](#) were publicly released December 2019. This report and the electricity light-duty ZEV infrastructure assessment CalETC conducted indicate the economic and jobs implications of a ZEV future are substantial. **The jobs and economic opportunities in California as we transition the entire vehicle fleet to ZEVs are transformative. California can lead the nation in creating the future of work, inclusive of good jobs for Californians currently unemployed or underemployed.** The need for construction workers, manufacturing workers, engineers, local planners, electricians and inspectors to construct, install, inspect, operate and maintain the infrastructure supporting ZEVs provides a challenge and a tremendous opportunity for all Californians.

Thank you again for the opportunity to provide CalETC’s feedback on this important program.

Regards,



Eileen Wenger Tutt, Executive Director
California Electric Transportation Coalition