

January 21, 2020

Clerks' Office, California Air Resources Board
1001 I Street, Sacramento, California 95814

**Comments of the Center for Sustainable Energy® on the California Air Resources Board's (CARB's) Draft
Assessment of Zero-Emission Vehicle (ZEV) Programs Per Senate Bill 498**

The Center for Sustainable Energy® (CSE; www.energycenter.org) appreciates the opportunity to offer comments informing the development of CARB's Draft Assessment of ZEV Programs (the Draft Assessment). CSE commends CARB's leadership in developing, assessing, and improving ZEV programs that will help California meet its ambitious clean transportation and decarbonization goals.

CSE is a 24-year-old national nonprofit dedicated to decarbonizing transportation and the built environment. We provide program administration, technical assistance and policy advisement to a wide variety of stakeholders including state, regional, and local governments; vehicle consumers; dealers, automakers and auto associations; charging suppliers and utilities; and others to support the deployment of electric vehicles (EVs). As a nonprofit administrator and advisor, CSE serves as a trusted and objective resource helping government agencies implement successful clean technology programs.

CSE provides the following comments based on our experience administering statewide incentive programs in California, Oregon, New York, Connecticut and Massachusetts. In California, CSE implements the Clean Vehicle Rebate Project (CVRP) on behalf of CARB, and as well as the California Electric Vehicle Infrastructure Project (CALeVIP) on behalf of the Energy Commission. CSE's program administration experience includes expertise on rebate processing and payment; consumer research and surveys; consumer education and outreach; and program design, tracking, and evaluation (including assessment of CVRP's emission-reduction impacts for CARB's SB 498 reporting).

With respect to CARB's Draft Assessment, CSE offers comments in the following areas:

- 1) Incentives and Pricing Strategies;
- 2) ZEV Refueling Infrastructure;
- 3) Outreach and Education;
- 4) Program Flexibility; and
- 5) Comparison of Cost-Benefit Results Across Programs.

Incentives and Pricing Strategies

CSE strongly supports CARB's recommendation in the Draft Assessment to provide predictable and sufficient funding for CARB's ZEV incentive programs. Undisrupted incentive funding for ZEVs is critical to bolstering consumer and dealer confidence in EVs, lowering total vehicle costs, and catalyzing the manufacturing market for new technologies. CSE also agrees with CARB's assertion that certainty over program funding is critical. Unlike incentive funding in some other states, CVRP is funded by the Legislature on a year-by-year

basis, and the program experiences high levels of uncertainty regarding future funding availability,¹ which can impact incentive uptake, disengage dealers, and reduce overall program efficacy.

Moreover, the Governor's recently issued budget proposal for 2020–2021 seeks to limit CVRP's funding for this budget year to \$125 million, which constitutes a 52% reduction from the previous year.² This budget cut will likely limit California's ability meet the target of deploying 5 million ZEVs by 2030. Analysis by CARB and CSE indicate that California may not be on track to meet this target,^{3 4} and reducing incentive funding for CVRP would further jeopardize the state's effort to transform the EV market. CSE recommends that CARB and the Legislature seek to increase and stabilize funding for CVRP and other ZEV incentive programs. Doing so will provide market certainty to consumers, dealers, and industry, and will ensure that California maintains progress towards its long-term EV deployment goals.

ZEV Refueling Infrastructure

CSE supports the recommendations in the report to extend funding for the California Energy Commission's Clean Transportation Program beyond 2023. This program has funded several effective programs to deploy alternative fuels and clean transportation technologies, including CALeVIP, which has issued or reserved nearly \$40 million in incentive funding in just over two years of program operation.⁵ Despite the success of this program, additional resources will be necessary to meet the state's targets of deploying 250,000 ZEV charging stations by 2025. As indicated the Energy Commission's 2019-20 Investment Plan Update for the Clean Transportation Program, there is a gap of approximately 80,000 chargers between the state's 2025 target and the number of chargers expected to be deployed under current funding projections.⁶ Extending the Clean Transportation Program beyond 2023 and continuing to invest in ZEV charging infrastructure will help maintain progress towards California's 2025 goals.

CSE also supports the recommendations to provide additional support for deploying ZEV infrastructure in disadvantaged communities, low-income communities, and schools. Individuals in these communities have less access to clean transportation technologies and should be prioritized in the disbursement of incentive funding. In addition, schools represent an effective use case for ZEVs and ZEV infrastructure given their high visibility and importance within communities.

CSE also agrees with CARB's recommendation to research next generation ZEV technologies. However, CSE contends that this research may be less applicable to disadvantaged communities. Rather, CSE recommends that CARB direct its efforts at implementing strategies that have already proven effective at benefitting

¹ Clean Vehicle Rebate Project (CVRP). Summary of CVRP Rebate Eligibility and Funding Availability Over Time, October 2019. <https://cleanvehiclerebate.org/eng/content/summary-cvrp-rebate-eligibility-and-funding-availability-over-time>

² State of California. Governor's Budget Summary 2020-2021. <http://www.ebudget.ca.gov/FullBudgetSummary.pdf>

³ California Air Resources Board (CARB). Appendix C: Updated Three-Year Plan for CVRP, the ZEV Market, Clean Transportation Equity Investments, and Outreach, Figure 5, page C-14.

<https://ww2.arb.ca.gov/sites/default/files/2019-09/fy1920fundingplan-appc.pdf>

⁴ Clean Vehicle Rebate Project (CVRP). "Proposed FY 2019–20 Funding Plan: Final CVRP Supporting Analysis," October 2019 update, slide 27.

<https://cleanvehiclerebate.org/eng/content/proposed-fy-2019%E2%80%9320-funding-plan-final-cvrp-supporting-analysis>

⁵ The California Electric Vehicle Infrastructure Project (CALeVIP). Available Funding.

<https://calevip.org/available-funding>

⁶ California Energy Commission. 2019-2020 Investment Plan Update for the Clean Transportation Program.

<https://efiling.energy.ca.gov/getdocument.aspx?tn=231247>

individuals in these communities, such as supporting the deployment of affordable EVs and ensuring that charging infrastructure is available and accessible.

Finally, CSE supports the recommendation to direct additional funding towards regional readiness planning. Readiness plans can be an effective tool in highlighting local barriers, proposing best practices, and identifying optimal charger sites. The process of developing these readiness plans can also be used as a way to solicit interest from industry stakeholders and raise consumer awareness of forthcoming incentive programs for both EVs and EV charging infrastructure.

Outreach and Education

CSE strongly supports the recommendations in the Draft Report to increase consumer outreach on ZEV incentive programs. The “Electricity Rate Ombudsman” proposed in Report could be an effective way to disseminate information on electricity rates. However, CSE recommends that this Ombudsman be supported with a dedicated staff who can provide more precise, relevant, and actionable information on the wide variety of electricity rates offered across California’s investor-owned utilities, publicly-owned utilities, and community choice aggregators. CSE also supports the recommendation to increase funding for ZEV outreach and education for priority populations, and recommends that this outreach identify and advocate for community-specific solutions, including the promotion of affordable, new and/or used EVs. Finally, CSE supports the recommendation to fund training for local government officials to plan for and inspect ZEV infrastructure and streamline the permitting process. This funding and the subsequent trainings could be incorporated into future regional readiness planning efforts.

Program Flexibility

CSE supports CARB’s recommendation to remove statutory barriers which inhibit consumer access to ZEV incentives. Agencies and administrators can benefit from increased program flexibility and adaptability, particularly as the ZEV market evolves and funding priorities change over time. This increased flexibility will also allow for program simplification, which can increase consumers’ understanding of and timely access to ZEV incentives. Any proposed changes should still be subject to a public process to solicit feedback from key stakeholders and ensure that incentive funding is being distributed in an equitable and effective way.

Comparison of Cost-Benefit Results Across Programs

CSE commends CARB’s efforts to compare the cost-effectiveness and emissions reduction potential of ZEV programs and has supported CARB’s efforts to calculate CVRP’s emissions reductions.⁷ However, CSE contends that these comparisons should be calculated using standardized quantification periods. As indicated in footnote 181 of the Draft Assessment,⁸ the quantification periods over which the comparison was conducted varied substantially by program. CVRP and the Clean Cars 4 All program were evaluated on approximately 3-year timeframes (based on program minimum ownership requirements), whereas the

⁷ Pallonetti and Williams, 2019. “Preliminary Estimation of Emission Reductions Associated with California’s Clean Vehicle Rebate Project (CVRP).” July 2019 update to N. Pallonetti and B. Williams, “Exploratory Estimation of Greenhouse-Gas Emission Reductions Associated with California’s Clean Vehicle Rebate Project,” proceedings of the 2019 Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.

⁸ California Air Resources Board (CARB). Draft Assessment of CARB’s Zero-Emission Vehicle Programs per SB 498, footnote 181, page 60.

<https://ww2.arb.ca.gov/sites/default/files/2019-12/SB%20498%20Report%20Draft%20121719.pdf>

Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) and the Zero-Emission Truck and Bus Pilot Project were evaluated on a 15-year timeframe (based upon assumed vehicle life). The discrepancy between these quantification periods can impact the assessment and comparison of these programs and provide unclear conclusions regarding the emissions reductions provided by these vehicle classes. In addition to taking a conservative approach to light-duty in-state operation, CSE suggests the use of, and has provided for CVRP, one or more additional metrics using a consistent approach (such as assumed vehicle life) and/or calculated based upon a standardized period (such as benefits provided over the first year of use) to provide greater context and insight into these programs and their supported technologies. Supplemental information providing a more consistent and/or standardized approach will inform strategic policymaking and cost-effectively support the state's efforts to meet its ambitious goals.

Conclusion

CSE appreciates the opportunity to provide comments on the Draft Assessment Report prepared by CARB. CSE applauds CARB's efforts to strengthen and improve access to ZEV programs, and is excited to continue working with CARB, the Energy Commission, and other stakeholders in ensuring progress towards California's clean transportation and decarbonization goals.

Sincerely,



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