



DATE: July 14, 2017

TO: Mr. Mark Williams, Mailstop 3E
California Air Resources Board (CARB)
P.O. Box 2815
Sacramento, CA 95812
[Submitted Electronically](#)

FROM: Center for Sustainable Energy®

RE: Response to Volkswagen's (VW's) Supplement to the California ZEV Investment Plan, Cycle 1

Dear Mr. Williams:

The Center for Sustainable Energy® (CSE) is pleased to provide these comments in response to Volkswagen's (VW's) *Supplement to the California ZEV Investment Plan, Cycle 1* (VW's Supplement),¹ which was filed in response to California Air Resources Board's (CARB's) request for additional information from VW on its first 30-Month ZEV Investment Plan.²

For the state of California, CSE administers the CARB Clean Vehicle Rebate Project (CVRP) and the California Energy Commission (CEC) Block Grant for Electric Vehicle Charger Incentive Projects. In addition, CSE manages a variety of CEC-funded alternative fuel vehicle (AFV) projects including ZEV readiness projects in the San Diego and San Joaquin Valley regions, and for research on driving the integration of plug-in electric vehicles (PEVs) to maximize grid benefits. CSE provides these comments based on its diverse experiences in support of the deployment of California's ZEVs and ZEV infrastructure as well as its in-depth knowledge of the AFV landscape, as well as its experience designing and administering similar programs in New York, Massachusetts, and Connecticut

CSE offers high praise of CARB's leadership on VW settlement matters, as well as CARB's broader goals of reducing greenhouse gas (GHG) emissions and improving air quality. CARB's request for additional information³ builds on CARB's previous direction, and seeks clarifications on key matters, including:

¹ VW's Supplement was submitted to CARB on June 29, 2017; Website Access:

https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/documents/california_zev_investment_plan_supplement_062917.pdf

² CARB'S Request for Additional Information from VW on Its First 30-Month ZEV Investment Plan; Website Access:

https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/documents/zip_supplement_request_052417.pdf

³ May 24, 2017, CARB requested additional information from Volkswagen (VW) on its first 30-month ZEV

Investment Plan; Website Access: https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/documents/zip_supplement_request_052417.pdf

- I). Investments in Disadvantaged and Underserved Communities;
- II). Transparency, Accountability and Coordination;
- III). Brand-Neutral Education, Including Fuel Cell Vehicles; and
- IV). Credible Cost and Data Requests

CSE reiterates its former position that the VW Cycle 1 Plan represents a sincere effort to facilitate effective implementation consistent with Appendix C of the 2.0-Liter Partial Consent Decree. In this regard, VW's Supplement seeks to further align with CARB's direction, and generally strengthens alignment with California's statewide and deeply robust ZEV policy ecosystem.⁴ Based on CARB's direction and efforts of Electrify America as illustrated in VW's Supplement, CSE attests that approval of the VW Cycle 1 Plan is an appropriate action at this juncture, and supports the expeditious approval of these funds to begin the deployment of its programs and services. CSE provides the following comments consistent with CARB's categorization as outlined in CARB's request for additional information, and in response to VW's Supplement:

I). Investments in Disadvantaged and Underserved Communities

1) Support for the 35% low income and disadvantaged community (DAC) threshold

CSE appreciates that VW's Supplement specifies that "Electrify America anticipates that more than 35 percent of the ZEV Investments proposed in the Cycle 1 CA ZEV Investment Plan will be in census tracts that CARB specified as low-income or disadvantaged in April 2017."⁵ Additionally, CSE encourages the State, and the Trustee managing the VW Settlement Beneficiary Mitigation Plan, to invest the maximum possible of the Trust investments in EV charging stations. Of this funding invested in EV charging stations, CSE urges the State and Trustee to direct those investments to be focused in low income and disadvantaged communities, and far exceed the 35% threshold.

2) Support for Fresno Coordination and Prioritization

CSE supports Electrify America's inclusion of Fresno as a metropolitan area prioritized for community charging investment.⁶ As highlighted by the San Joaquin Valley Electric Vehicle Partnership (SJVEVP), the Central Valley may be a more rapidly emerging ZEV market than

⁴ This 'ZEV policy ecosystem' includes the 2013, 2015 (Draft), and 2016 ZEV Action Plans; SB 350 Transportation Electrification Policy per SB 350; California Sustainability Freight Action Plan; CARB's Advanced Clean Transit Rulemaking; and other key transportation policy frameworks which provide policy tools to accelerating ZEV adoption and transportation electrification across California.

⁵ VW Supplement, Page 16.

⁶ VW Supplement, Page 17.

Electrify America previous assessed.⁷ CSE agrees with SJVEVP's assessment. Moreover, Fresno contains a very high proportion of DACs, making this prioritization a win-win as an investment. CSE provides the following recommendations to strengthen coordination with Fresno:

- Leverage Existing Readiness Plans.** A recent Idaho National Lab study demonstrates the value of such planning, indicating that PEV charging in 'planned' vs 'non-planned' areas experienced an 87% increase in utilization.⁸ As demonstrated by the *San Joaquin Valley (SJV) Plug-In Electric Vehicle Readiness Plan*, Fresno has a strong PEV planning policy framework from which to build. This plan includes in-depth tools and detailed assessments of a diverse range of topics specifically designed to accelerate PEV adoption in the SJV region.⁹ Moreover, Fresno has a range of innovative policy initiatives, including *Fresno's US-DOT Smart City Challenge Proposal*,¹⁰ which could be leveraged to support Fresno's ZEV market expansion. Moreover, there are a wide range of stakeholders, additional support from the regional air district, as well as additional incentives that will bolster ZEV adoption across the Fresno region. Electrify America should also seek to leverage Fresno's Strategic Growth Council (SGC)¹¹, Transformative Climate Communities (TCC) Program planning initiatives, which are discussed later.¹²

3) Support for ZEV car-sharing programs, especially in support of communities that have limited public transportation options and/or no local car-sharing operations

CSE is pleased that Electrify America assumes that ZEV car sharing would be one of the primary initiatives developed over the first and second 30-month investment cycles,¹³ and agrees with this focus. CSE encourages Electrify America to expand its considerations regarding basic access and mobility, as many disadvantaged areas of California face additional challenges with access to basic transportation infrastructure and thus are ideal for ZEV car sharing investments. To best support the daily and practical needs of those living in these areas, CSE encourages

⁷ *San Joaquin Valley Electric Vehicle Partnership, April 10, 2017; Website Access: <https://www.arb.ca.gov/lists/com-attach/87-vwzevinvestplan-ws-USIAbFUiWG5SlgV1.pdf>*

⁸ *How Does Utilization of Non-Residential EVSE Compare Between those Installed in Oregon in Planned versus Unplanned Locations?; April 2015; Website Access: <https://avt.inl.gov/sites/default/files/pdf/EVProj/UtilizationOfNonResEVSEInstallationVsPlan.pdf>*

⁹ *San Joaquin Valley Plug-In Electric Vehicle Readiness Plan; Website Access: https://energycenter.org/sites/default/files/docs/nav/programs/pev-planning/san-joaquin/san_joaquin_valley_pev_readiness_plan-web.pdf*

¹⁰ *Smart City Challenge: Fresno, CA Vision Statement; Website Access: <https://www.transportation.gov/smartcity/visionstatements/fresno-ca>*

¹¹ *The Strategic Growth Council is comprised of agency secretaries from the California Business Consumer Services and Housing Agency (BCSH), California Health and Human Services (CHHS), California Environmental Protection Agency (CalEPA), California State Transportation Agency (CalSTA), the California Department of Food and Agriculture (CDFA) and the California Natural Resources Agency (CNRA); the director of the Governor's Office of Planning and Research (OPR); and three public members - one each appointed by the Governor, Senate Committee on Rules, and Speaker of the Assembly.*

¹² See: "Expand coordination efforts with sister agencies responsible for California's transportation electrification"

¹³ VW Supplement, Page 23.

Electrify America to target its support to travel to-and-from-work, carpooling and vanpooling activities, and activities that support travel to-and from basic amenities and services (e.g., education, grocery store, laundry, hospital, banks, etc.).

II) Transparency, Accountability and Coordination

4) *Expand coordination efforts with sister agencies responsible for California's transportation electrification*

While CSE is appreciative of Electrify America's expanded discussion regarding agency coordination, there remains a major opportunity to provide clearer descriptions of Electrify America's activities and coordination efforts, identifying specific collaborating agencies responsible for transportation electrification. Strengthening coordination with key agencies will reduce duplicative processes, and will promote resource and knowledge sharing which will increase the likelihood of program success. CSE recommends expanded coordination with the following agencies:

- **California Public Utility Commission (CPUC).** CSE appreciates that "Electrify America has discussed with investor-owned utilities (IOUs) their investments in Level 2 charging."¹⁴ However, these investments are only part of the emergent transportation electrification ecosystem. Specifically, in addition to the approved IOU investments,¹⁵ there is an opportunity for Electrify America to clarify and elaborate regarding project collaboration activities per SB 350, where the three large IOUs,¹⁶ and three smaller IOUs,¹⁷ have pending transportation electrification proposals. To avoid duplicative processes, CSE recommends that Electrify America identify the potential to collaborate in these emergent projects.
- **California Energy Commission (CEC).** CSE appreciates that Electrify America plans to have regular information exchanges with the CEC regarding charging infrastructure."¹⁸ However, there is a need for specific data and information coordination specifically

¹⁴ VW Supplement, Page 21.

¹⁵ The IOUs have authorization to install the infrastructure to support up to 12,500 charging stations with total budgets up to \$197 million; CPUC_Website_Zero_Emission_Vehicles_Infrastructure_ProgramsWebsite_Access: http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy/Energy_Programs/Infrastructure/RDD_and_Emerging_Programs/Alternative_Fuel_Vehicles/IOUInfrastructurePrograms.pdf

¹⁶ The CPUC is currently considering several charging infrastructure programs proposed by the state's investor-owned utilities as required under Senate Bill 350; Website Access: http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy/Energy_Programs/Infrastructure/RDD_and_Emerging_Programs/Alternative_Fuel_Vehicles/SB350Applications.pdf

¹⁷ Consistent with CPUC directive, the three smaller IOUs (Liberty Utilities (Calpeco Electric) LLC, Pacificorp, and Bear Valley Electric Service) have filed their respective TE Applications.

¹⁸ VW Supplement, Page 22.

around the CEC's Electric Vehicle Charger Incentive Project,¹⁹ which will deploy \$200 million in infrastructure grant funds through various incentive projects across California during the next five years, a timeline which overlaps with the VW Phase 1 Investment Plan. CSE encourages Electrify America share planned investment and associated data with the CEC to ensure reduced duplication of efforts (see below for more detail).

- **SGC's TCC Program,²⁰ non-funded projects.** CSE stresses the value and opportunity to establish Electrify America's support for a first-of-kind initiative being spearheaded by the SGC and other collaborating agencies. Through the TCC Program, three geographic areas, including Fresno and Los Angeles, will soon be the center of investment for \$140 million in program funding.²¹ It is highly likely that this high-profile program will be oversubscribed, with a diverse array of 'shovel ready' community-level projects. Many of the unfunded projects will have clean technology touchpoints related to green infrastructure, ZEV transportation, smart grid technologies, and energy storage.²² The TCC Program also addresses air pollution and GHG emissions reductions directly in DACs, thus presenting the opportunity to showcase targeted programs in support of these communities. As such, CSE encourages Electrify America to prioritize collaboration with the SGC, the lead agency of the TCC Program.
- **Data Sharing with Agencies.** CSE also recommends that Electrify America share data, not otherwise publicly available, on the status of their investments directly with relevant state agencies (e.g., CPUC, CEC, SGC, the Department of Governmental Services), to ensure minimal duplication and to encourage coordination. This coordination will create advanced awareness and expanded insight into all state and Electrify America investments. Coordination could take place via the establishment of an inter-agency working group and/or the creation of a third-party statewide ombudsman to facilitate coordination. Additionally, this activity should support Electrify America's data sharing and reporting requirements established in Section 3.6 of Appendix C.

III) Brand-Neutral Education, Including Fuel Cell Vehicles

5) Strong Support for the inclusion of multilingual and culturally-sensitive education and outreach

CSE appreciates that VW's Supplement states the goal to explore "through these partnerships a culturally appropriate awareness campaign (in a language other than English where

¹⁹ Energy Commission; Block Grant for Electric Vehicle Charger Incentive Projects; Website Access: <http://www.energy.ca.gov/contracts/GFO-16-603/>

²⁰ Strategic Growth Council; Transformative Climate Communities Program; Website Access: <http://sgc.ca.gov/Grant-Programs/Transformative-Climate-Communities-Program.html>

²¹ Ibid.

²² Transformative Climate Communities Draft Scoping Guidelines, page 6. Website Access: <http://sgc.ca.gov/resource%20files/20161123-TCCDraftScopingGuidelines.pdf>

appropriate) which could incorporate the activities recommended by CARB's report."²³ This is aligned with CARB's direction to create such a campaign.²⁴ CSE encourages Electrify America to leverage existing data resources, such as CVRP Rebate Statistics,²⁵ CalEnviroScreen 3.0,²⁶ Census data, and other data sources which can be combined and leveraged to identify cultural, social, and economic demographics, and languages specific to individual California regions. Moreover, to promote transparency, CSE encourages Electrify America to make this data available on the Electrify America website, or another public forum, and to specify the public data sources that it uses. CSE also encourages Electrify America to partner with community-based organizations, which are trusted sources of information in DAC and low-income communities, to ensure that meaningful outreach that meets the language and cultural needs of these communities is conducted. These partnerships should start at the design stage of any education and outreach plan, not just during the implementation phase.

6) Support for education and outreach, with request for expanded coordination

CSE agrees with Electrify America that the gap between the perceived and actual affordability of ZEVs are considerable, and present a very meaningful opportunity for an effective, targeted education effort."²⁷ CSE supports Electrify America's proposed approach to initiate a 12-month, broad education plan on the benefits of driving ZEVs through mass, digital, and experiential marketing,²⁸ and the proposed 13-22 month plan, which will "explore more targeted awareness initiatives, as well as potential education partnerships, targeted awareness initiatives, education partnerships, development materials, ride-and-drive events, and other awareness strategies."²⁹ To strengthen these activities, CSE encourages the following:

- **Ensure expanded coordination with existing activities.** CSE reiterates its stated position that to minimize duplicative efforts, encourage resource sharing, promote economies of scale, and ensure message uniformity and alignment with statewide transportation policy objectives, any ride-and-drive activities undertaken in VW's Cycle 1 Plan should be coordinated with existing efforts that deploy test drive events. These include CVRP's E&O, Charge Ahead Campaign, and the emergent Veloz 'Best.Drive.Ever' campaign E&O activities.³⁰

²³ VW Supplement, Page 18.

²⁴ CARB Guidance; Page 15 States: "some marketing materials and products should be produced that are multi-lingual and culturally sensitive"

²⁵ CVRP Rebate Statistics; Clean Vehicle Rebate Project; Website Access: <https://cleanvehiclerebate.org/eng/rebate-statistics>

²⁶ Office of Environmental Health Hazard Assessment (OEHHHA); CalEnviroScreen 3.0; Website Access: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>

²⁷ VWs Supplement, Page 18.

²⁸ VWs Supplement, Page 13.

²⁹ VWs Supplement, Page 14.

³⁰ PEV Collaborative, Annual 2016 Report; Website Access:

http://www.pevcollaborative.org/sites/all/themes/pev/files/2016_AR_web.pdf

- **Align E&O with the 2015 ZEV Action Plan's ride and drive targets.** To directly align Electrify America's efforts with California's ZEV policy, CSE encourages Electrify America's campaign to leverage the 2015 ZEV Action Plan, which has set clear goals to hold 20 million test drives of ZEVs by Californians in all regions of the state by 2025, which essentially would expose nearly 2 million people a year to ZEVs.³¹ CSE encourages Electrify America to benchmark its efforts against this already-established statewide goal. Moreover, to support expanded ZEV deployment in DACs, CSE also encourages Electrify America to focus education and outreach activities in areas of underutilization of the proposed charging infrastructure.

7) Support for hydrogen-focused hydrogen E&O in immediate plan, with expectation of infrastructure deployment by next plan

CARB 'strongly encourages VW to include hydrogen investment, if not now, in a subsequent 30-month investment plan'.³² Electrify America proposes the inclusion of hydrogen E&O in the first plan.³³ CSE sees hydrogen-focused E&O as an agreeable first step, however CSE strongly encourages Electrify America to have clear infrastructure-focused hydrogen investments in the subsequent 30-month investment plan in order to meet CARB's request.

IV) Credible Costs and Data Requests

8) Prioritize the release of anonymous and aggregated data that is updated frequently to encourage independent stakeholder analysis

CARB has requested a commitment to provide CARB information and data regarding the cost, utilization, and performance of each of the approved projects within each eligible Investment category.³⁴ Previously, CARB stated that data should be provided "through a public website for members of the public."³⁵ In this regard, CSE appreciates that "Electrify America fully intends to share data with CARB regarding cost, utilization, and performance of ZEV investments,"³⁶ that "Electrify America continues to refine and add new data to its model based on internal and external feedback, as well as updated forecasts,"³⁷ and that "Electrify America will ensure that

³¹ 2016 ZEV Action Plan at 16, Website Access: https://www.gov.ca.gov/docs/2016_ZEV_Action_Plan.pdf

³² California Air Resources Board's Guidance to Volkswagen on First 30 Month Electric Vehicle Infrastructure Investment Plan of the 2.0 Liter Diesel Engine Partial Consent Decree Settlement (CARB Guidance); February 2017; Page 11.

³³ VW Supplement, Page 29.

³⁴ CARB'S Request for Additional Information from VW on Its First 30-Month ZEV Investment Plan; Website Access: https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/documents/zip_supplement_request_052417.pdf

³⁵ CARB Guidance, Page 4.

³⁶ VWs Supplement, Page 31.

³⁷ VWs Supplement, Page 31.

private customer data and confidential business information are not released in these reports.”³⁸ CSE attests that Electrify America is in the position to strengthen alignment with stronger data reporting activities by releasing anonymous and aggregated data.

To inform and develop a competitive marketplace, and to maximize learning from these activities, anonymous and aggregated data from VW's Cycle 1 Plan should be made public and widely available while ensuring confidentiality and privacy where needed. CSE stresses that the data gathered under VW's Cycle 1 Plan would be beneficial to regulators, academics, and a diverse array of ZEV stakeholders. It has been CSE's experience that public-facing data has value in – among other things – providing key feedback on program success, informing policy decision-making processes, and providing ancillary data for evaluation and research purposes. As administrator of the CARB's CVRP, CSE has worked closely with CARB and other stakeholders to provide data to the public in both comprehensive and easily accessible formats, while maximizing the amount of data made available to the public and ensuring confidentiality and privacy protections. As such, CSE encourages Electrify America to publicly release:

- Monthly or bi-monthly data (i.e., in more frequent intervals);
- uniform data;
- geographical data, as deeply granular as possible (e.g., census-tract level);
- categorical data;
- easily disseminated data.

Conclusion

CSE appreciates the opportunity to provide these comments in response to VW's Supplement. Electrify America's response has strengthened alignment with Appendix C of the 2.0-Liter Partial Consent Decree, and continues to harmonize per CARB's instructions.

Please continue to consider CSE a resource on these and other matters, please feel free to contact Paul D. Hernandez, CSE's Transportation Electrification Policy Manager to clarify these comments or with any questions you may have.

Respectfully Submitted,



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³⁸ VWs Supplement, Page 31.