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Re: Comments of CHBC Regarding the Discussion Document for the  
Volkswagen Environmental Mitigation Trust for California

The California Hydrogen Business Council (CHBC) appreciates the opportunity to provide input to the Air Resources Board’s (ARB’s) Discussion Document for the Volkswagen Environmental Mitigation Trust for California. We applaud the ARB staff’s work on the development of this plan and offer a few additional comments. The CHBC is a California industry trade association with the mission to advance the commercialization of hydrogen in the energy sector, including transportation, goods movement, and stationary power systems to reduce emissions and dependence on oil. The CHBC provided an array of comments on Appendix C of the VW Consent Decree and proposed plan by Electrify America (EA), and we gladly comment on ARB’s Discussion Document under Appendix D of the Consent Decree.

As expressed in our previous comments on the plan addressing Appendix C, submitted in 2016 and 2017, we see VW and EA as doing too little to substantially decrease NOx and SOx emissions in California. EA solely relies on investments in battery technology under the Cycle 1 Investment Plan, and ignored ARB Board members’ guidance “that Plan investments, to meet the terms and goals of the Consent Decree, must be technology-neutral, thus supporting Hydrogen infrastructure.”

The main sources of NOx, SOx, and particulate matter are diesel engines, which tend to be concentrated in the medium and heavy duty transportation sector. Therefore, the CHBC encourages the ARB to specifically support hydrogen fuel cell vehicles as a key technology option in order to reduce criteria pollutant emissions in the State. With initial investment under this Mitigation Plan, the hydrogen industry, including many of CHBC’s members, will be able to deliver results. Fuel cell electric buses have already been operating in California for decades and can seamlessly replace diesel buses. Heavy duty hydrogen fuel cell trucks are undergoing robust testing in real world operations in California. Several recent announcements have focused on medium and heavy-duty vehicles from US Hybrid, Toyota, Kenworth, GM, Loop Energy, Nikola Motor Company, FedEx, and UPS, with promising results.

Specifically, we propose ARB to take the following items under consideration in the development of the plan:
Implementation of ARB’s proposed initiative to direct one third of the mitigation trust towards public transit. This will benefit disadvantaged communities immediately, and improve the health and lives of people most directly affected by particulate emissions.

Allow for pre- or near-commercial ZEV projects to compete in the same playing field as commercial low NOx projects:

- Consider these ZEV project investments as a part of a sustainable technology development project for California, in which near-commercial ZEV technologies are treated not only for their emission reduction potential over the lifetime of each project, but also the cost-reduction value gained for future projects. Hydrogen fuel cell technology can become cost competitive if applied at scale, which will then be a strong force for reducing NOx emissions in the entire State.

Support proposals that cross over different sector and categories:

- Support of fuel-cell related proposals that address several applications, e.g. railyards/freight switchers, local freight Class 4-7 and Class 8 trucks, and Light-Duty Zero-emission Vehicle Supply Equipment, even if some of the technology options are not fully commercialized yet.
- Consider investment in the rail sector, which in certain areas can cause some of the worst local air pollution. Examples from Europe, China and Canada show that hydrogen rail is a viable option. Light and passenger rail currently relying on diesel-electric technology should also be considered as a category. However, it is vital to include funding for hydrogen infrastructure in those proposals. The ability for hydrogen infrastructure to support multiple applications and technologies, including potential public FCEV fueling near railyards should also be considered to increase the value of project funding.

Set aside enough funding for fueling infrastructure to support vehicle and fleet rollout

- Consideration of larger scale projects that can reduce NOx emissions at lower cost per unit, e.g. conversion of several dozen buses in one fleet. Hydrogen fuel cell technology allows for large scale conversions without impacting grid stability or grid upgrades paid for by electric rate payers, while providing similar power, fueling, durability and range characteristics to existing diesel fleets. Hydrogen infrastructure cost, while significant for initial vehicle deployment, does not increase significantly when adding more units to a fleet.

Since up to 15% of the funds can support Light-Duty ZEV infrastructure, we request increasing the $10M investment to at least 10% of the proposed $423M and allocate the entire amount to be exclusively applied to hydrogen dispensing equipment as a means to address the massive imbalance in investment in charging infrastructure by several organizations, including the $200M from Appendix C funding that is already exclusively allocated to charging infrastructure buildout, plus the investment by the electric utilities that are subsidizing electric charging and BEV infrastructure expansion through SB 350, which does not support any hydrogen infrastructure expansion.

Thank you for your consideration.

Sincerely,

Emanuel Wagner
Assistant Director
California Hydrogen Business Council

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