

April 10, 2017

Chairman Mary Nichols  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**RE: VW Proposed California ZEV Investment Plan: Cycle 1**

Dear Chair Nichols and Members of the Board:

The deception by Volkswagen (VW) to intentionally avoid compliance with clean air laws is an unprecedented action by a company to undermine clean car standards. The settlement agreements are a critical part of repairing the damage to California's public health and air quality.

The Union of Concerned Scientists and American Lung Association in California thank the board and VW for moving quickly to propose and finalize the ZEV investment plan for the first installment of funds. While it is important to ensure the investments are made with significant oversight from the Board, it is also critical to invest expeditiously in infrastructure, education, and awareness efforts to accelerate the market for ZEVs.

The focus of charging infrastructure such as multi-unit dwellings, workplaces, and intercity DC fast charging is logical and we support these efforts. However, we believe that the investment plan lacks commitment to serving disadvantaged communities. The plan is vague on the proposed locations of charging infrastructure investments, but appears to call out highway DC fast chargers as the primary means to place charging in disadvantaged communities. While these chargers very well may be technically located in designated disadvantaged areas, they are not designed primarily to serve residents living near the chargers. The role of highway fast chargers is to allow long-distance travel between urban areas. It would be expected that the pricing of recharging at these stations would be set high enough to allow the stations to be available primarily to the subset of ZEV drivers that require the station to complete their trip and discourage use

by those that have other local charging options available. We believe that these highway fast chargers with non-proprietary connections are critical and should receive funding in the plan. However, the Board should require investments in the other types of charging infrastructure proposed. The community-based charging (multi-family homes, workplace, commercial/retail, community, and municipal lots/garages) should be required to meet disadvantaged community investment metrics, in addition to any other investments in disadvantaged communities. Concentrating the disadvantaged community investments only in highway-based DC fast chargers should be strongly discouraged.

The charging investments planned also lack geographic diversity, as the plan calls out five metro areas for focus (Los Angeles, San Francisco, San Jose, San Diego, and Sacramento). Investments should be made in these areas, but this plan excludes the San Joaquin Valley, an area with 4 million residents that are burdened with severe air quality issues. The VW investments should begin to be made in this area despite current lower EV sales rates as greater visibility of ZEV infrastructure could help spur sales. The advent of longer range EVs may also be attractive to drivers in less urbanized areas like the Central Valley. Also, VW should consider groups of smaller cities in the screening criteria for metro area investments. Smaller urban areas in locations like the San Joaquin Valley may have advantages compared to San Francisco and Los Angeles such as lower development costs and greater needs for personal transportation.

The investment plan can also be used to provide jobs and economic opportunity for Californians. ARB should consider requiring skills development and training for the EVSE installation and the servicing and maintenance of both the vehicles and infrastructure.

The investment plan also lacks support for hydrogen refueling infrastructure and marketing of hydrogen fuel cell vehicles. We support the electrification of transportation using both battery and hydrogen fuel cell drivetrains. The current plan does not acknowledge the role of fuel cell ZEVs in the state's air pollution reduction plans. Hydrogen fuel has qualities that make it an attractive complement to battery electric technologies. For example, hydrogen can provide long-range driving and quick refueling at shared infrastructure, similar to gasoline or diesel. Given current state and automaker investments in fuel cell vehicles and hydrogen infrastructure, there is no reason to exclude these ZEVs from the brand-neutral awareness campaign and infrastructure investments. However, the current language in the plan appears to be targeted at plug-in electric vehicles only.

Finally, we note that this VW investment in infrastructure is only a fraction of the public and private investments needed to support the growing ZEV market in CA. We believe that there is ample need for infrastructure and enough locations needing access to

refueling that existing providers will not be unduly harmed by the proposed investments. There are also public and utility company investments in ZEV infrastructure occurring concurrently with these proposed investments. It is critical that the VW activities complement these other projects and not displace or weaken them.

Thank you for the opportunity to comment on the first cycle of the VW investment plan and we look forward to further dialog to address the concerns raised in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "David Reichmuth".

David Reichmuth  
Senior Engineer  
Clean Vehicles Program  
Union of Concerned Scientists

A handwritten signature in black ink, appearing to read "Bonnie Holmes-Gen".

Bonnie Holmes-Gen  
Senior Director, Air Quality and Climate Change  
American Lung Association in California