# Concerned Scientists

October 21, 2019

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

## RE: Proposed Fiscal Year 2019-2 Funding Plan for Clean Transportation Incentives

Dear Chair Nichols and Members of the Board:

Thank you for the opportunity to comment on the *Proposed Fiscal Year 2019-20 Funding Plan for Clean Transportation Incentives*. California has designed ambitious greenhouse gas reduction goals and climate policies. These policies, when fully implemented, will help reduce California's GHG emissions to 40% below 1990 levels by 2030 as well as bring much needed investment and equity to environmentally impacted and lowincome communities within the state.

However, California will not meet its climate or equity goals without transforming its transportation system. According to CARB's most recent emissions inventory, in 2017 transportation was responsible for 40 percent of the state's GHG emissions, and the overwhelming majority of those emissions are from on-road light and heavy-duty vehicles. Not only is transportation the largest contributor to GHG emissions, but it's also the only sector in which GHG emissions are growing.

Furthermore, GHGs are only part of the problem: the transportation sector is also a leading contributor to criteria air pollutants, such as smog-forming pollutants, particulate matter and other toxic emissions. While all Californians are exposed to air pollution from transportation, recent Union of Concerned Scientists (UCS) analysis has shown that these burdens are inequitable. For particulate matter from on-road vehicles, African American, Latino, and Asian Californians are exposed to PM2.5 pollution 43, 39, and 21 percent higher, respectively, than white Californians. Therefore, it is vital that we not only move quickly to reduce climate-changing emissions, the state

<sup>&</sup>lt;sup>1</sup> Reichmuth, D., *Inequitable Exposure to Air Pollution from Vehicles in California*. January 2019. Online at <a href="https://www.ucsusa.org/resources/inequitable-exposure-air-pollution-vehicles-california-2019">https://www.ucsusa.org/resources/inequitable-exposure-air-pollution-vehicles-california-2019</a>

also needs to accelerate the adoption of technologies to reduce air pollution, especially in identified disadvantaged communities.

#### **Heavy Duty Incentives**

We continue to support the proposal to limit the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) to only zero-emission trucks and buses. Since HVIP was created a decade ago, the mission has been to accelerate the purchase of cleaner, more efficient-trucks and buses in California. HVIP has historically supported the advancement of hybrid, natural gas, and other emerging vehicle technologies of their time. Hybrid and natural gas technologies are now in the early stages of commercialization and therefore, ready to be graduated from HVIP eligibility. Zero-emission trucks and buses are the next wave of advanced technologies and need more financial support now to continue their scale-up.

### **Clean Mobility Projects**

UCS supports the Clean Mobility Projects proposed for the next fiscal year, including the addition of the Sustainable Transportation Equity Project. While the \$65 million funding in this plan is sufficient, it is likely that future needs for these programs will be far higher.

We also support the scrappage requirement for the Rural School Bus Pilot, but CARB should consider eliminating internal combustion engine buses from future incentive programs and only incentivize true ZEVs.

#### **Clean Vehicle Rebate Project**

UCS supports the proposed changes in the CVRP incentive to help ensure that the program is available through the end of the fiscal year. We also support the decision to not change the rebate levels for qualified low-income applicants. However, CARB should consider modifying the PHEV range requirement. Specifically, the use of the Urban Dynamometer Driving Schedule (UDDS) range should be replaced by the combined city and highway range, as shown on a vehicle's window sticker. The UDDS range of electric vehicles is difficult to locate without inspection of a vehicle's certification data, while the combined range is easily found both online and at a dealership. A consumer program like CVRP should use eligibility criteria that are easy to understand for both dealerships and car buyers. Additionally, because the combined range is lower than the UDDS range for all current PHEVs, the change would exclude more short-range PHEVs from CVRP eligibility. Requiring a minimum 20-mile combined range would be approximately equal to a 29-mile UDDS range, or slightly higher than the proposed requirement.

CARB should be encouraging more-capable, longer-range PHEVs. Recent research from UC Davis has shown that long-range PHEVs have lower emissions than short-range PHEVs<sup>2</sup>, so incentive funds should be used to encourage longer range PHEVs.

We also support the addition of an MSRP cap of \$60,000 for base model vehicles. CARB should also consider a mechanism to prevent gaming of this requirement. Because it is defined as 'base model', it is possible for a manufacturer to offer a base model in very low volumes and/or a model that is software-limited<sup>3</sup> to gain CVRP eligibility for a model that is otherwise too expensive to qualify for CVRP.

Finally, we urge the board to be more specific on the criteria and process for determining the availability of a waitlist in the event that FY19-20 CVRP funds are exhausted prior to the end of the year. Uncertainty in the program availability could negatively affect ZEV purchase decisions, contrary to the intent of the CVRP.

UCS thanks CARB and the CARB staff for producing a robust plan for supporting the implementation of cleaner light-duty and heavy-duty vehicles. The plan will provide air quality and climate benefits for the entire state and provides specific benefits to disadvantaged communities. Thank you for the opportunity for comment.

Sincerely,

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<sup>2</sup> Tal, G., *Advanced Plug-in Electric Vehicle Travel and Charging Behavior*, CARB Research Seminar, September 2019. Online at https://ww3.arb.ca.gov/research/seminars/tal/tal2.htm

<sup>&</sup>lt;sup>3</sup> Lambert, F., "Tesla launches cheaper Model 3 with 150km range in Canada to get \$5,000 incentive", Electrek.co, May 2019. Online at <a href="https://electrek.co/2019/05/01/tesla-cheaper-model-3-canada-incentive/">https://electrek.co/2019/05/01/tesla-cheaper-model-3-canada-incentive/</a>