

April 4 , 2022

California Air Resources Board (CARB)
Board 1001 I Street
Sacramento, CA 95812

Submitted to on-line portal sp22-modelresults-ws

Re: March 15 workshop on the initial 2022 scoping plan model results

Dear California Air Resources Board:

The Strong Plug-in Hybrid Electric Vehicle (SPHEV) Coalition's advocacy team appreciates this opportunity to comment on the March workshop on the initial model results of Scoping Plan. Established in July 2019, the Strong PHEV Coalition represents an independent group of over 40 electric transportation experts with many years of collective professional experience. We possess expertise throughout the EV industry including research and academia, vehicle manufacturing and deployment, policymaking, utilities, NGO advocacy, consumer education, EV fleet management, and charging infrastructure development. With the specific goal to support California's and the United States' efforts to reduce GHG and criteria emissions, improve the environmental and social sustainability of transportation, and improve the economic value of transportation, our coalition educates and advocates regarding PHEVs, especially Strong PHEVs. See www.sphev.org for our previous advocacy on Strong PHEVs.

The Strong PHEV Coalition concerns about the workshop presentation on the PATHWAYS initial model results focus on slide 14 and comments made by the presenters that PHEVs will use substantial amounts of gasoline fuel in 2035 and 2045. We recognize that this model is very high level, and that time likely does not permit examining sensitivities. That said, we believe it is important to mention to the Board and in future written documents and presentations that PHEVs called for in Advanced Clean Cars II¹ could use E-85 (or similar biofuel) instead of gasoline in spark-ignited engines. The ethanol industry supplies E-10, E-15 and E-85 blends for gasoline but is not used in diesel because E-85 fuel is sourced from corn which, with very few exceptions, is not a feedstock for fuel used in ships, trucks, planes and trains. Given the size of the current ethanol industry, we do not believe it is realistic to have scenarios that imply this industry will go away. Strong PHEVs can electrify 70 to 80% of their miles and by using E-85 for their remaining miles even greater reductions in GHGs can be achieved (ethanol from corn can be as low as 30 gCO₂e/MJ carbon intensity which is considered a low number). Strong PHEVs even with gasoline can have GHG emissions comparable to Battery EVs with 300-mile ranges² (BEV 100s have substantially less GHG emissions compared to BEV 400s due to fewer battery manufacturing emissions and the improved efficiency due to less mass.)

CARB should take advantage of the existing ethanol industry because it can supply E-85 for future strong PHEVs rather than its current role which is mainly supplying E-10 for gasoline vehicles. Unintended consequences should be avoided and other non-corn, low carbon fuels for spark ignited engines should

¹ Advanced Clean Cars II is proposing 50 mile All-Electric Range in 2029 and beyond which we consider to be a Strong PHEV.

² See [GitHub - khamza075/PVC: A software for assessing the efficacy of various vehicle powertrains at mitigation of greenhouse gas emissions.](#)

be considered. Moreover, the cost of having an E-85 engine is not significant and California already has over 1.1 million flex fuel vehicles that can use E-85.³

We believe the above recommendations are a relatively simple way to strengthen future presentations on slide 14, related materials and future reports on the scoping plan. We believe that PHEVs can be modernized to be a participating member of ZEV marketplace so as to drive consumer confidence nationally and the CARB staff proposal in the Advanced Clean Cars II rulemaking agrees. We have provided many letters on the docket for the Advanced Clean Cars II rulemaking which detail the many benefits of Strong PHEVs. We look forward to more dialogue with staff and data from automakers and other stakeholder and will be responsive to any new information.

Sincerely

Bob Graham
Co-Chair of the Strong PHEV Coalition

³ <https://www.energy.ca.gov/data-reports/energy-insights/zero-emission-vehicle-and-infrastructure-statistics/vehicle-population>