

August 25, 2022

Honorable Chairman Liane M. Randolph and  
Honorable Board Members California Air Resources Board  
1001 I Street  
P.O. Box 2815  
Sacramento, CA 95812

Submitted via public comment docket

[https://www.arb.ca.gov/lispub/comm/iframe\\_bcsbform.php?listname=accii2022&comm\\_period=A](https://www.arb.ca.gov/lispub/comm/iframe_bcsbform.php?listname=accii2022&comm_period=A)

Re: SUPPORT Proposed Advanced Clean Cars II Regulations (accii2022)

Dear Chair Randolph and Honorable Board Members:

The Strong Plug-in Hybrid Electric Vehicle (PHEV) Coalition's advocacy team appreciates this opportunity to comment on the Advanced Clean Cars workshop. 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, ensure affordability for all automotive consumers, and improve the economic value of transportation, our coalition educates and advocates regarding PHEVs, especially Strong PHEVs with a minimum of 50 miles all electric range. See [www.sphev.org](http://www.sphev.org) for our previous education and advocacy efforts including letters to CARB staff. We very much appreciate the access we have had to CARB staff on PHEV issues and our constructive dialogues we've had with them.

**Summary:** While we have previously advocated that staff require stronger PHEVs than the current Advanced Clean Cars II (ACC II) proposal (e.g., greater all electric range and more stringent cold start and aggressive driving emission tests), we support staff's proposal for PHEVs in the 45-day notice version of the regulation with the 15-day change modifications for the reasons listed below. We oppose proposals to remove PHEVs from ACC II or to make PHEV requirements in ACC II less stringent.

We supported the staff proposal in our May 31 letter and June 9 testimony. Regarding the recently posted board resolution, we very much appreciate that the Board resolution has been modified to have a report back to the board every three years on market conditions, progress in advancing ZEV adoption and meeting emission reduction goals. However, the Strong Plug in Hybrid EV coalition respectfully asks that the resolution in the progress review section of the resolution be slightly modified to mention cost reduction, bidirectional charging and consumer protection and the needs to accelerate these goals. Specifically, we request the following edits to the Board resolution:

*Be it further resolved that the Board directs the Executive Officer to monitor the implementation of the ACC II Regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the Regulations as warranted to achieve reductions anticipated by the Regulations and to achieve other goals including improving the consumer experience, technology-neutral bidirectional charging, cost reductions, cybersecurity, and battery recycling.*

No one knows how to reach 100 percent sales of Battery, fuel cell and plug in hybrid EVs. So, it is very wise for CARB to hedge its bet on the future by including PHEVs in the proposed ACC II. PHEVs will be needed by many types of consumers, including low-income drivers, people who change residences often, change jobs often or work two jobs, drivers in rural and cold weather regions, drivers who are skeptical of BEVs and fuel cell EVs, drivers that tow campers, boats and trailers and those who need back-up power or to use vehicles during catastrophes. PHEVs are especially needed in the other ZEV states. Recently critical minerals and supply issues have been in the news. Our coalition has recently looked into this issue and found that Strong PHEVs use three or more times less critical minerals to deliver electric-only miles than a long-range BEV and wanted to add this to reasons why Strong PHEVs are needed.

While we do not expect the following detail to be added to the Board resolution, below are the topics that we believe merit additional review as potential ways to improve the ACC II regulation:

- Conduct a new comparative analysis on PHEV and BEV costs (with recommendations).
- Conduct an analysis on how CARB can advance bidirectional charging in PHEVs and BEVs in light-, medium- and heavy-duty vehicles (with recommendations for incentives or regulations).
- Determine whether the new ACC II needs to be adjusted for class 1 or 2a PHEVs and ZEVs .
- Pursue the value of PHEVs as a platform for low-carbon alternative fuels including whether to allow PHEVs with 85% or more low carbon liquid biofuels blended with gasoline to be treated as zero-emission vehicles (ZEVs).
- Conduct other analysis as determined by CARB staff.

Please see our May 31 letter for additional reasons for a technology and market review on PHEV topics.

In this and our previous correspondence with CARB, the Strong PHEV Coalition sought to share our data driven approach to understanding the future of PHEVs. We seek to be a resource to CARB to connect policy making to the resources and expertise that we have available in our diverse team. We look forward to more dialogue with staff that we might collectively improve the sustainability, justice, and economy of transportation for all stakeholders.

Sincerely,

Thomas Bradley, PhD  
Woodward Professor of Systems Engineering, Colorado State University  
and  
co-Chair, Strong PHEV Coalition