

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

July 17, 2026

Submitted via Drive Forward Light- and Medium-Duty Vehicle [comment docket](#)

Re: June 22, 2026 workshop on the Drive Forward Light- and Medium-Duty Vehicle Regulation

Dear Chair Sanchez, members of the Board and Staff:

The Strong Plug-in Hybrid Electric Vehicle (PHEV) Coalition's advocacy team appreciates this opportunity to comment on the Drive Forward Light- and Medium-duty Vehicle regulation workshop on June 22. Established in 2019, the Strong PHEV Coalition represents an independent group of over 40 electric transportation experts with many years of collective professional experience in 10 different professions. For seven years our advocacy team has provided information to CARB and supported regulations to enable PHEVs with 50 miles, or greater all-electric range (AER) based on USEPA's label. Please see www.sphev.org. As of late 2025, there are about 27 million PHEVs and 91 million BEVs globally [1] and the strong trend is toward longer-range versions.

Our main request is that the next light-duty portion of the new Drive Forward regulation should be technology forcing so that the US can have long-range PHEVs with 80 to 200 miles of realistic all electric range (AER), flex fuel vehicle (FFV) technology for E-85 (85% ethanol), bidirectional charging (V2G), reminder requirements on carmakers to increase plugging in, and strong controls on NOx, ROG and PM. Justification for this request is in our November letter [1]. Our request for class 2b and 3 vehicles is similar. Why? As of early March 2026, our market research shows that PHEVs with over 80-mile AER already exist (or are pending near-term) with 68 makes and models available globally, but none are available in the US [2]. There are 29 PHEVs available in China, Europe, Latin America, Australia, Southeast Asia and other countries outside of the US with over 120 miles estimated AER [2]. There are 12 PHEVs outside of the US with over 160 miles AER and five with over 200 miles AER [2]. Over 120 more medium range PHEVs (AER of between 40 to 79.9 miles) are available worldwide including seven existing or near-term pending in the US. Typical brands for these long-range PHEVs include AITO, BYD, Changan, Chery, Denza, Dongfeng, Ford, GAC, Geely, GWM, IM Motors, Leapmotor, Li Auto, Lotus, Nissan, Renault, Smart, Volvo, Voyah, VW, Xpeng, and Zeeker. They typically have both level 2 and DC fast charging and use either lithium iron phosphate (LFP), Li-NMC or hybrid Freevoy batteries with pack sizes between 18 and 50 kWh. The non-luxury models have prices between \$15,000 and \$45,000 USD with 40 models priced at less than \$35,000.

Importantly, Strong PHEVs along with BEVs reduce the cost of electricity due to increased grid utilization and flexible managed charging capabilities. A CARB focus on electricity cost reduction via electrification can make a significant contribution to CARB's overarching goals.

Recommendations:

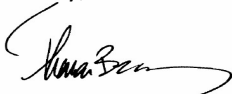
- If staff keeps the June 2026 proposal
 - **PHEVs with 120-mile AER and that meet the points in bold above (FFV, V2G, etc) should be eligible for the ZEV minimum requirementⁱ**
 - The fleet UF curve for PHEVs should go out to 250 miles AER and be today's SAE J2845 UF curve for 80-to-250-mile AERs plus allow, as staff proposed, an alternative fleet UF curve point for compliance provided by the automaker based on their reasonable data. Having these two options for the UF curve (and NMOG+ROG contribution curves) will make it more likely that automakers will produce and sell long-range PHEVs. In the 2030s, the SAE J2845 UF curve can be changed if collected data justifies it.
 - For PHEVs with 20 to 79.9 miles AER two UF curves should be allowed: 1) a default curve based on an updated SAE J2845 data and 2) an alternative fleet UF curve provided by the automaker based on their reasonable data.

- The research community should be allowed access to all UF curve and NOx + ROG contribution curve data provided by automakers at an aggregate level.
- The PHEVs with 50-mile AERs and higher for MY 2029 to MY 2030 should be provided with some type of early action credit as we expect about 15 of these PHEV models in those years [1] [3].
- We reiterate our recommendations on conformance testing, battery passports and stickers for the window, door sill, charge and gas ports from our prior letter and our recommendation to require automakers to provide at least one reminder to plug in the PHEV from a menu of options (e.g., an app, voice, game or dashboard visual) [1].
- CARB's policies for ZEV minimums should develop separate realistic minimums for cars (12.98 million in CA), class 1& 2a trucks (12.15 million in CA), class 2b trucks (0.98 million in CA) and class 3 (about 0.28 million in CA) because according to CARB's EMFAC model, BEVs account for just 1.5% of Class 2b and 0.2% of Class 3 vehicles in CA, compared to 6.9% of passenger vehicles in CA [4 and 5]. PHEVs percentages are much lower. The fleet average curve requirements should similarly take this ZEV commercialization issue for the different vehicle classes into account for the categories above.

Rationale for requiring V2G, FFV, PHEVs with realistic 120- to 200-mile AERs in a ZEV minimum

- CARB has a long, distinguished history of technology forcing regulations. CARB should think about a regulation that reaches 50% or more of US sales (CA plus even more section 177 states)
- Long-range PHEVs are needed to help ZEV commercialization of class 2 and 3 vehicles which is lagging. LR-PHEV outside the US are typically in class 2 and 3 vehicles, and will help meet market demand in cold weather regions and rural areas and for those who need vehicles for towing trailers, boats and campers [1]
- Long-range PHEVs help with the affordability issue (put downward pressure on electric rates, are less costly than BEVs, will soon offer V2G savings on electric bills, require less need for expensive charging and grid upgrades and appeal to low-income drivers who often late adopters [1]
- Long-range PHEVs are a better solution for hard-to-reach markets including [1]
 - personal EV drivers and commercial fleets that are renters and change residences or business locations relatively often
 - for people to survive long-term catastrophes and daily emergencies (e.g., wildfires, earthquakes, windstorms, hurricanes, tsunamis, power outages, vandalism, tornadoes, floods)
 - for owners of used cars and trucks who are often low-income residents or commercial operators
 - late adopters and drivers who are sceptical of or opposed to battery EVs or fuel cell EVs
- Long-range PHEVs can realize the same GHG reduction benefits of a comparable long-range BEV when considering battery mining and manufacturing emissions, E-85 fuels, active control of high-power cold start emissions, and other factors [1][2]
- Long-range PHEV cars and trucks use substantially less critical minerals (due to their smaller batteries compared to battery EVs), and thus reduce pressure on the need to rapidly scale supply chains for these minerals and hedge against supply chain disruptions [1][2]
- A combined transportation electrification strategy inclusive of Long-range PHEVs, BEVs and fuel cell EVs is a faster path for the world to adopt light-duty vehicles with extremely low GHG emissions. As mentioned above, the 27 million PHEVs and 91 million BEVs today in the world, illustrate that [1] [2].

Sincerely,



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- [1] https://ww2.arb.ca.gov/system/files/webform/public_comments/55046/strong-plug-in-hybrid-ev-coalition-letter-to-carb-nov-21-2025-vf.pdf
- [2] https://ww2.arb.ca.gov/system/files/webform/public_comments/58241/strong-phev-coalition-letter-to-carb-on-dec-2025-drive-forward-medium-and-heavy-duty-vehicle-workshop-vf.pdf See appendix E for the 68 long-range light-duty PHEVs with over 80 miles all electric range.
- [3] [16 Range-Extender \(EREV\) vehicles expected in the U.S. \(2026-2029\)](#) and others such as the next gen Toyota RAV4 PHEV
- [4] [Delivery Vans, Large Pickups, and Work Trucks Drive More, Pollute More but Remain the Least Electrified](#)
- [5] [Fleet Database Result | EMFAC](#)

ⁱ Assuming that credits for meeting the ZEV minimum are not tradeable