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**Feedback of the**  
**Motor & Equipment Manufacturers Association**  
**to**  
**California Air Resources Board**  
**RE: Advanced Clean Cars II October 13, 2021 Workshop**  
**October 27, 2021**

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The Motor & Equipment Manufacturers Association (MEMA) submits this feedback to the California Air Resources Board (CARB) on the Advanced Clean Cars II (ACC II) workshop held October 13, 2021 and provides a summary of the feedback MEMA has provided to CARB in the past year. MEMA appreciates the agency's willingness to engage with stakeholders early on this rulemaking and looks forward to providing further feedback to CARB on the post-2026 program.

MEMA represents more than 900 companies that manufacture components, systems, and materials for light- and heavy-duty vehicle original equipment and aftermarket industries.<sup>1</sup> The vehicle supplier components manufacturing industry is the nation's largest sector of manufacturing jobs – employing more than 907,000 workers in all 50 states – more than 27,000 of those jobs are in the State of California.

MEMA members develop and produce a multitude of technologies and a wide range of products, components, and systems that make vehicles safer, more efficient, and reduce emissions. Suppliers are committed to providing innovative and accessible technologies needed to meet the Biden Administration's goal of economy-wide net-zero emissions by 2050.

Because suppliers are on the front line taking on substantial risks by developing innovative technologies, elements in the ACC II have significant implications for vehicle suppliers. MEMA strongly supports CARB coordinating and harmonizing these provisions as much as possible with the U.S. Environmental Protection Agency (EPA). Harmonization, consistency, and certainty are critical to suppliers as technology investments become more diversified into a broader spectrum of propulsion technologies.

### **Executive Summary of MEMA Comments**

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The following points summarize MEMA's feedback on the October 2021 workshop and previous feedback submitted to CARB within the last year:

- MEMA supports a CARB transition to a non-Zero Emissions Vehicle (ZEV), non-methane organic gases, and oxides of nitrogen (NMOG+NO<sub>x</sub>) fleet average emission standard of 0.03 grams per mile (g/mi) in model year (MY) 2028 with the proposed phase-in period in MYs 2026-2027. MEMA supports the proposed vehicles included in the combined fleet average, the proposed new emissions bins, and the elimination of bins.

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<sup>1</sup> MEMA represents its members via four divisions: Automotive Aftermarket Suppliers Association (AASA); Heavy Duty Manufacturers Association (HDMA); MERA – The Association for Sustainable Manufacturing; and, Original Equipment Suppliers Association (OESA).

- MEMA supports CARB's proposal requiring all light vehicles to certify to stand-alone US06 Supplemental Federal Test Procedure (SFTP) for NMOG+NO<sub>x</sub> standards to ensure vehicles are meeting the revised standard in all real-world driving conditions, including aggressive driving.
- MEMA supports phasing-in a particulate matter (PM) standard for US06 test cycle of 3 mg/mi with full phase-in in MY2030 to ensure all vehicles can meet this standard. Since CARB's research shows that greater than 80 percent of vehicles tested are currently below 3 mg/mi on US06, this proposed standard is achievable. MEMA supports an even more stringent PM standard that would drive best-in-class technology.
- MEMA is supportive of requiring NMOG+NO<sub>x</sub> cold-start emissions standards for intermediate soaks in testing procedures to require better control of these cold start emissions. Motor vehicle suppliers have technologies that address real-world emissions challenges, including cold start emissions.
- MEMA supports CARB requiring an 8 second idle on the FTP for NMOG+NO<sub>x</sub> cold-start emissions.
- MEMA is generally supportive of CARB setting a 0.10 g/mile NMOG+NO<sub>x</sub> US06 Plug-in Hybrid Electric Vehicle (PHEVs) high-power cold start emissions standard and certification test formulated from data on best performers of PHEV passenger cars, light trucks, minivans, and sports utility vehicles (SUVs). MEMA also supports CARB's proposed exemption for PHEVs that are all electric capable on US06.
- MEMA supports tightening the current evaporative hydrocarbon emissions running loss standard from 0.05 g/mi down to 0.01 g/mi. MEMA supports puff emissions controls and recommends that the puff emissions regulation aligns with the puff emissions standards in Europe and China to encourage technology alignment with these regions and provide global harmonization where possible.
- MEMA strongly supports CARB's goal of aligning corresponding stringency for medium-duty (MD) chassis certification to avoid inconsistency with the more stringent MD NO<sub>x</sub> engine certification. MEMA urges CARB to ensure the in-use testing standards for other criteria pollutants (CO, NMHC) are at least as stringent as current chassis requirements, to ensure there is no emissions backsliding. MEMA supports adoption of a standalone US06 standard for medium-duty vehicles (MDVs).
- MEMA supports CARB's proposed environmental justice (EJ) credit program for ZEVs and PHEVs. MEMA urges CARB to extend the credits beyond MY2031 and to eliminate the 5 percent cap on EJ credits that can fulfill the vehicle manufacturer obligation. MEMA strongly supports the 25 percent discount required. MEMA urges CARB to ensure there are similar policies in place that enable access to vehicle charging in these same disadvantaged communities.
- MEMA supports the durability and warranty requirements for FCEVs and BEVs and warranty requirements for batteries of 8 years and 100,000 miles. MEMA supports encouraging continuously improving battery performance, range requirements, durability requirements, and deterioration limitations. MEMA also supports CARB efforts to standardize data to address ZEV battery state-of-health metric, grid energy use, dynamometer testing, and battery repairs.

- MEMA supports CARB requiring the existing qualifications for PHEVs and requiring the 50 miles all-electric range and US06 all electric capable throughout charge depleting mode. MEMA supports CARB's proposed transitional credit for PHEVs in MYs 2026-2028. MEMA strongly recommends that CARB eliminate the cap on the limit of PHEVs that can contribute to vehicle manufacturers ZEV obligation. At a minimum, CARB should consider making the PHEV cap a function of how clean the PHEVs are.

### **Non-ZEV Fleet Average NMOG+NOx Emission Standard**

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CARB proposes to transition to a non-ZEV NMOG+NOx fleet average emission standard by removing ZEVs from the NMOG+NOx fleet average. The MY2025 non-ZEV fleet would be set at 0.03 g/mile, proposing a transition of ZEVs in fleet average in MYs 2026 (at 50 percent) and 2027 (at 25 percent) with a full phase out in MY2028. CARB is no longer considering reducing the non-ZEV fleet average standard to 0.020 g/mile. CARB proposes to phase out ULEV125 and LEV160 and proposes to add SULEV15, SULEV25, ULEV40, and ULEV60.

MEMA supports CARB's proposal to transition to a non-ZEV NMOG+NOx fleet average emission standard in post-2025 model years. MEMA also supports the proposed non-ZEV NMOG+NOx fleet emission standard of 0.03 g/mi in MY2028 with the proposed phase-in period in MYs 2026-2027 tapering down the percentage of ZEVs calculated in the fleet average.

MEMA supports CARB's non-ZEV NMOG+NOx fleet average proposal because the policy will encourage continued improvements to conventional vehicles for NMOG+NOx emissions and will incentivize and sustain investments in the best available control technology and will prevent stagnation of conventional vehicle technology deployment. This two-year transition period seems appropriate and will provide more certainty for the non-ZEV fleet technologies needed. Since California will have ambitious ZEV targets through 2035 in the ACC II, it is reasonable to create a non-ZEV NMOG+NOx fleet standard. MEMA supports CARB's clarification that the combined fleet average will include passenger cars, light-duty trucks, and medium-duty passenger vehicles.

MEMA supports the elimination of the LEV160 and ULEV125 to transition the fleet to lower emission bins. MEMA supports adding ULEV60, ULEV40, SULEV25, and SULEV15. MEMA also supports CARB no longer considering SULEV10 bin. Eliminating the highest bins and creating these lower bins is consistent with requiring the best available emissions control technology and preventing NMOG+NOx emissions backsliding for conventional vehicles. As always, MEMA encourages CARB and U.S. EPA to align, harmonize and collaborate on these new bins.

Additionally, since the ACC II will go through at least MY2030, MEMA encourages CARB to continue considering a lower non-ZEV NMOG+NOx standard as emissions control technologies evolve and are improved.

### **US06 NMOG+NOx Emissions Standards (Aggressive Driving Standards)**

CARB proposes to require certification to new stand-alone US06 SFTP NMOG+NOx standard where the US06 standard is set to an identical numerical value as the FTP standard down to 0.030 g/mi (for SULEV30-SULEV15). CARB's concern is that the composite standards may not ensure the most robust control of emissions. CARB proposes a phase-in schedule starting with a 30 percent phase-in by MY2026 with a 100 percent phase-in by MY2028.

MEMA continues to support CARB's proposal of requiring all light vehicles to certify to stand-alone US06 SFTP NMOG+NOx standards and the proposed phase-in. MEMA supports requiring the supplemental test standard to ensure vehicles are meeting the revised standard in all real-world driving conditions including aggressive driving.

## **PM Standard**

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CARB proposes phasing-in a more stringent PM standard for US06 test cycle from 6 mg/mi to 3 mg/mi with a continuing PM standard for FTP of 3 mg/mi to 1 mg/mi. CARB proposes a phase-in starting with 25 percent in MY2027, 50 percent in MY2028, 75 percent in 2029, and 100 percent in 2030.

MEMA supports phasing-in a PM standard for US06 test cycle of 3 mg/mi with full phase-in in MY2030 to ensure all vehicles can meet this standard. Since CARB's research shows that greater than 80 percent of vehicles tested are currently below 3 mg/mi on US06, this proposed standard is achievable.

However, since 3 mg/mi would be required in five years and the standard could continue until 2035, MEMA encourages an even more stringent PM standard that would drive best-in-class technology, for example, gasoline particulate filters (GPFs). GPFs are currently not needed for PM emissions compliance in either test cycle. Similar best-in-class technology is needed for light vehicle PM standard compliance in China and Europe. MEMA urges global alignment of vehicle emissions technology solutions whenever possible, harmonized technology approaches provide the domestic supplier industry with stability of long-term planning and investing.

## **Intermediate Soak-Cold-Start Emissions**

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CARB proposes requirements that would ensure that vehicles not exceed overnight soak emissions for soaks greater than three hours. CARB is proposing requiring cold-start emissions linearity between 10 minutes soak and a three-hour soak (i.e. 10 minutes at 0.50xFTP standard, 40 minutes at 0.767xFTP standard, 180 minutes, and over at FTP standard). CARB proposes a phase-in of 30 percent by MY2026, 60 percent by MY2027, and 100 percent by MY2028. CARB suggests that there should be cost-effective emissions reductions gained with this requirement.

MEMA is supportive of requiring NMOG+NOx cold-start emissions standards for intermediate soaks in testing procedures to require better control of these emissions. Vehicle suppliers have technologies that address real-world emissions challenges, including cold start emissions. These proposed changes that could better represent real-world, in-use conditions of light vehicles and will drive additional criteria pollutant emissions reductions on the road and encourage best-in-class technologies. Vehicle manufacturers and industry are generally moving in this direction. MEMA encourages CARB collaboration and harmonization with U.S. EPA on cold-start emissions standards.

## **Cold Start Quick-drive Away Emissions (Initial Idle)**

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CARB proposes to require cold-start emission certification for the FTP with a 8 second idle coupled with the existing FTP with 20 second idle. CARB is proposing to phase-in at 30 percent in MY2026, 60 percent in 2027, and 100 percent in 2028.

MEMA supports CARB requiring an 8 second idle on the FTP for NMOG+NOx cold-start emissions and the phase-in period proposed. MEMA supports testing procedures representative of real-world that encourage additional criteria pollutant reductions and deployment of best available technologies. As always, MEMA encourages CARB collaboration and harmonization with U.S. EPA with any testing procedures.

## **PHEV High Power Cold-Start Emissions**

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Since high cold-start emissions are observed on nearly all high-power cycles, CARB proposes to develop a US06 cold-start emissions standard and certification test based on best performers of 0.10 g/mile for all PHEVs. CARB proposes that PHEVs with all electric capable on US06 are exempt.

MEMA is generally supportive of a 0.10 g/mile NMOG+NO<sub>x</sub> PHEVs high-power cold start US06 emissions standard and certification test formulated from data on best performers of PHEV passenger cars, light trucks, minivans, and SUVs. The proposal seems reasonable and feasible with the current data. MEMA also supports CARB's proposal of providing an exemption for PHEVs with all electric capable on US06. The PHEV exemption should be based on full useful life. MEMA supports a sales volume-based phase-in.

### **Evaporative Emissions Standards**

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CARB proposes to tighten the running loss standard from 0.05 g/mile to 0.01 g/mile. This standard will eliminate remaining high emitters and ensure good designs remain the norm, but still provides some flexibility. CARB proposes to phase-in the standard at 30 percent in MY2026, 60 percent in MY2027, and 100 percent in 2028.

MEMA supports tightening the current evaporative hydrocarbon emissions running loss standard of 0.05 g/mi down to 0.01 g/mi. Since most light vehicles are well below the 0.05 g/mi standard, this revision of the running loss standard will protect against any backsliding, eliminate any remaining high emitting vehicles, and ensure good design is continued in light vehicles. CARB should account for the needs to develop targets before finalizing the 0.01 g/mile standard.

CARB outlines specific problems with puff emissions where the current test procedures do not capture this worst-case event when undersized canisters let vapors break through during refueling. CARB proposes to specify minim canister size in regulation. Vehicle manufacturers would demonstrate compliance using CARB-defined evaporative model/calculation with vehicle specific parameters starting in MY2028.

MEMA supports puff emissions controls and recommends puff emissions standards align with the puff emissions regulation in Europe and China to encourage technology alignment with these regions providing global harmonization where possible.

### **Robust Emission Control for Heavier Vehicles**

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CARB proposes to align all MDV to the same in-use testing procedures and standards from the HD Omnibus rulemaking for both engine and chassis certified products. CARB proposes to reduce non-ZEV NMOG+NO<sub>x</sub> MDV fleet average standards starting in MY2026 (0.175 g/mi for class 3 and 0.150 g/mi for class 2b) and add new lower emissions bins and eliminate the higher emissions bins. CARB is proposing a phase-in period of 30 percent by MY2026, 60 percent by MY2027, and 100 percent by MY2028. CARB proposes to adopt new standalone US06 standard for MDVs to ensure robust control under broader conditions.

MEMA supports the CARB proposed standalone US06 standard for non-ZEV NMOG+NO<sub>x</sub> MDV fleet of 0.175 g/mi for class 3 and 0.150 g/mi for class 2b. MEMA supports CARB's phase-in period and proposed changes to the emissions bins for the MDV standards. MEMA strongly supports CARB's goal of aligning corresponding stringency for MD chassis certification to avoid inconsistency with the more stringent MD NO<sub>x</sub> engine certification and CARB using HD-like in-use standards for the MD category such as the 3B-MAW. MEMA urges CARB to ensure the in-use testing standards for other criteria pollutants (CO, NMHC) are at least as stringent as current chassis requirements, to ensure there is no emissions backsliding. MEMA supports CARB establishing a PM composite standalone standard for MDVs.

## **Environmental Justice Credits for the ZEV Regulation**

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CARB proposes to provide EJ credits to manufacturers who take action to help increase affordable access to ZEVs in priority communities in MYs 2026-2031 and expire thereafter. CARB proposes a limit to EJ credits allowed to fulfill a manufacturer's obligation in any year to 5 percent. ZEVs and PHEVs eligible for community program EJ credits must be offered at a minimum 25 percent discount based on vehicle manufacturer suggested retail price (MSRP).

MEMA supports CARB's proposed EJ credit program for ZEVs including PHEVs. MEMA supports this program that would better allow access to clean mobility regardless of age, race, gender, or economic status. This program recognizes that while everyone is impacted in some way by air quality issues and climate change, not all communities are impacted equally, and some have been disproportionately impacted. The supplier industry takes sustainability of their products and impacts of their products seriously and strives to continuously evaluate our products emissions impacts to all communities and all members of society while also ensuring innovation.

Consequently, MEMA urges CARB to extend the credits to beyond MY2031. Further, since the CARB proposed 5 percent cap is not based on data or any justification, MEMA urges CARB to eliminate the 5 percent cap on the amount of EJ credits that can fulfill the manufacturers' ZEV obligation. MEMA strongly supports the 25 percent discount required. MEMA urges CARB to ensure there are similar policies in place that enable access to vehicle charging in these same disadvantaged communities. The rates for charging PHEVs and BEVs may not always be affordable for these communities, the program should ensure subsidizing the use of these vehicles as well as vehicle purchase.

## **ZEV Assurance and Durability Requirements**

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CARB proposes that MY2026 and subsequent model years that BEVs and FCEVs durability requirements require these vehicles to maintain 80 percent of certified 2-cycle range for full useful life defined as 10 years/150,000 miles. CARB also proposes that warranty requirements for batteries of BEVs are 8 years and 100,000 miles and warranty failure when battery is less than 80 percent state of health (SOH). Requirements will emulate warranty reporting requirement for BEVs and FCEVs through the warranty period for powertrain components only. Verified warranty claims of more than 4 percent of vehicles on a component trigger corrective action plan. This warranty requirement is the same as internal combustion engines (ICE) and PHEVs.

MEMA supports the durability and warranty requirements for FCEVs and BEVs and warranty requirements for batteries of 8 years and 100,000 miles. MEMA appreciates CARB is committed to finding the right mix of policy initiatives needed to support wide-scale adoption of ZEVs. MEMA supports California setting performance standards and goals that encourage continuously improving battery performance, durability and warranty requirements, emissions over the full lifecycle, range requirements, and deterioration limitations that will encourage continuous improvements to ZEV technologies. Setting performance standards will provide protections and incentives for consumers that invest in the technology. It is important that as the market for BEVs and FCEVs continues to grow, the technologies also continue to improve, innovate, and provide cost-efficient emission reduction solutions.

However, MEMA is unclear as to whether the 8 years and 100,000 miles will also apply to the BEVs and FCEVs powertrain components *or* whether the BEVs and FCEVs powertrain components are subject to 3 year/50,000 miles (7 year/70,000 high-priced) as discussed in the May 2021 workshop. An increase in warranty to all powertrain components (if 8 years and 100,000 miles) would increase cost risk to industry and consumers as it would close to double current coverage. MEMA requests that CARB confirms the BEVs and FCEVs powertrain components are subject to the

3 year/50,000 miles warranty. MEMA supports durability and warranty requirements for BEVs and FCEVs comparable to ICE requirements but increased requirements on all powertrain components would need a more phased-in process. MEMA looks forward to continuing the discussion on these proposed requirements for BEVs and FCEVs.

MEMA encourages CARB to consider setting an electric range as a performance standard, set a standard for miles/kilowatt hour (kWh), then an equivalent of miles per hour then with an average power grid's CO<sub>2</sub> emission/kWh thereby providing a well to wheel metric performance standard.

MEMA is generally supportive of standardization of battery SOH requirements, so consumers/owners understand battery health information. MEMA agrees this helps build transparency and builds consumer confidence. Phased in requirements could be helpful as the industry may need time to meet these requirements and could increase costs to consumers. MEMA encourages CARB to evaluate whether any or a combination of these minimum criteria will impact CARB's battery cost forecasts.

### **PHEV Qualifications and Treatment**

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CARB proposes in post-2026 PHEVs will be required to have: (1) 50 miles all-electric range; (2) US06 all electric capable throughout depleting mode; and, (3) maintain existing qualifications (SULEV 30, zero evaporative emissions, 15-year/150,000 mile warranty on emission related parts and 8 year/100,000 mile, 80 percent SOH on traction battery) to be counted towards the vehicle manufacturers ZEV requirement. PHEVs will have a five-year credit life and PHEV credits will continue separate tracking of PHEV credits and limit usage. Further, PHEVs will be capped at 20 percent of the ZEV requirements per year per vehicle manufacturer.

CARB is also proposing a transitional partial credit (<1) for MYs 2026-2028 for PHEVs that cannot hit both the US06 all-electric drive cycle and 50-mile all-electric range but can meet at least a 30-mile electric range (even if the vehicle can not complete US06 in all-electric mode).

MEMA supports requiring the existing qualifications for PHEVs and requiring the 50 miles all-electric range and US06 all electric capable throughout charge depleting mode. MEMA strongly supports CARB's transitional partial credit in MYs 2026-2028 for PHEVs that meet only a portion of the PHEV requirements. This transition enables more vehicle configurations (vehicle size, battery size, etc.) to be eligible for at least partial PHEV credit. This will allow industry a reasonable transition time to improve and ensure CARB proposed technology requirements by MY2029 will be deployed on PHEVs.

However, MEMA encourages CARB to continue to analyze whether any of these minimum criteria or a combination of these requirements would contribute to cost barriers for ZEVs or PHEVs for consumers.

MEMA appreciates CARB's proposed provisions around PHEVs, generally CARB's treatment of PHEVs is reasonable and balanced. However, MEMA continues to strongly recommend that CARB reevaluate the 20 percent cap on the number of PHEVs that can contribute to vehicle manufacturers ZEV obligation in the post-2026 program. MEMA strongly supports recognizing PHEVs as an important transitional technology for both emissions reduction and consumer acceptance beyond 2026. Because PHEVs are an important transitional technology and because of the proposed stricter criteria for PHEVs in ACC II, PHEVs should not be unnecessarily restrained in the ACC II.

MEMA understands, however, that CARB may want to have some restriction on the proportion of PHEVs in post-2025 years counting toward the ZEV obligation. As a result, CARB should consider having the cap rate as a function of how clean the PHEV is. If a manufacturer's PHEVs meet all of the proposed criteria and existing qualifications but also meets SULEV15 certification bins, then there

should be no cap on the proportion of PHEVs. Further, if the manufacturer's PHEVs meets all of the proposed criteria and existing qualifications but also meets SULEV20 and SULEV25 certification bins, then the cap should be no less than 50 percent. However, if the fleets PHEVs meet the minimum required SULEV30 certification bin, then MEMA encourages a cap of no less than 30 percent.

PHEVs will facilitate the transition to higher vehicle electrification while concurrently contributing to lower emissions and promoting consumer acceptance of electrified powertrains. Moreover, this transition also helps to reduce tensions in the supply chain, workforce, and needed U.S. charging infrastructure. Industry-based projections show PHEVs are expected to represent at least 20 percent of ZEV sales for the next five years. That percentage is not expected to take a general downward trend over that period.<sup>2</sup> CARB also acknowledges that "PHEVs may remain an important choice among lower income consumers" for the foreseeable future.<sup>3</sup> However, these projections could increase further given the new scenarios and new criteria for PHEVs.

Data shows that at least 30 percent of California's citizens are unlikely to have a consistent dedicated charging point at home because their housing units are part of structures with at least two units.<sup>4</sup> Further, CARB's data shows that, over time, the percentage of first-time ZEV buyers with access to reliable home chargepoints will decrease.<sup>5</sup> This data makes it clear that PHEVs need to be allowed to be a larger part of the equation and that importance will become even more important over time. In the period between 2026-2035, 80 percent of California's 80 percent of the first-time ZEV-buying population will have reliable access to home charging. PHEVs offer important flexibility for Californians who may be able to charge at work or elsewhere, but not at home.

For these reasons, MEMA requests CARB eliminate the proposed cap on the number of PHEVs allowed to contribute to the ZEV obligation. No cap on PHEVs is justified if the PHEVs meet all the proposed criteria and existing qualifications. MEMA urges that if CARB places a cap on PHEVs, that the cap be set at a reasonable level in ACC II – and at a sliding scale of no less than 50 percent cap if the PHEVs meet SULEV20 and SULEV25 and no less than 30 percent if the PHEVs meet the existing criteria of meeting SULEV30 certification bin. Fully eliminating a cap on PHEVs will provide a healthy transition period while charging infrastructure is further developed.

With this same reasoning, CARB should consider including hydrogen ICE (HICE) as a transitional ZEV technology in ACC II, as it was in ACC I, as it adds flexibility in use cases and consumer preference such as higher load, towing, and longer range. Broadening the definition of ZEVs to include HICE vehicles and other potential clean technologies would encourage further technology innovation that could accelerate attaining net-zero carbon emission goals. HICE would continue to rely on current ICE manufacturing technology and would reduce tensions in industry manufacturing capacity and retooling needs.

## **Conclusion**

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MEMA appreciates CARB's consideration of these comments and understands that California has unique air quality challenges and, as a result, stringent air quality goals. MEMA encourages CARB to allow more opportunities for PHEVs to count towards vehicle manufacturers ZEV requirement given the valuable flexibility PHEVs provide to consumers as technology and infrastructure develop. As always, MEMA urges U.S. EPA and CARB to coordinate their emissions programs where

<sup>2</sup> [CARB May 6, 2021 ACC II Workshop](#) slide 38.

<sup>3</sup> CARB May 6 Workshop slide 47.

<sup>4</sup> <https://data.census.gov/cedsci/table?q=california%20housing%20data&tid=ACSDP1Y2019.DP04>

<sup>5</sup> CARB May 6, 2021 Workshop, slide 70



possible for the post-2026 program. Harmonization of programs with aligned, long-term targets provides the domestic supplier industry with the stability for long-term planning and investments and would lower the cost of compliance for vehicle manufacturers. MEMA also encourages global alignment of vehicle emissions technology solutions as much as possible. Global harmonization of technology approaches provides the domestic supplier industry with significant economic and technology development opportunities.

MEMA appreciates consideration of these comments. For more information, please do not hesitate to contact Laurie Holmes, MEMA senior director of environmental policy at [lholfmes@mema.org](mailto:lholfmes@mema.org).