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Clerks' Office  
California Air Resources Board  
1001 I Street  
Sacramento, California 95814

**Subject: Low Carbon Fuel Standard – Light-Duty Vehicle Residential Base Credits**

The Alliance for Automotive Innovation (Auto Innovators) and our members appreciate the opportunity to comment on the proposed changes to the Low Carbon Fuel Standard (LCFS).<sup>1</sup> Automakers and this association have long supported reductions in the carbon content of liquid fuels. Low carbon liquid fuels are an additional pathway for reducing transportation GHG as they are (1) technically feasible today, (2) the only viable decarbonization solution for the legacy vehicle fleet, (3) an important complement to vehicle electrification over a long transition, and (4) affordable for consumers whose needs or budgets require different solutions. Since the vast majority of the 280 million vehicles on U.S. roads today have an internal combustion engine, decarbonizing liquid fuels on a well-to-wheel basis would yield immediate benefits for lowering the carbon intensity of transportation energy.

While we support the LCFS, we do not support the changes that would take revenue generated by light-duty (LD) electric vehicle (EV) residential charging and use it to subsidize utilities and businesses operating medium- and heavy-duty vehicles. Instead, this funding should be used exclusively to develop the light-duty and residential EV market through infrastructure, vehicle incentives, and public education.

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<sup>1</sup> California Air Resources Board. (2024). Notice of Public Hearing to Consider Approving for Adoption the Proposed Low Carbon Fuel Standard Amendments. Retrieved January 26, 2024, from [https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/lcfs\\_notice.pdf](https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/lcfs_notice.pdf)

## 1. Light-duty EV market

The transition to zero emission vehicles (ZEVs)<sup>2</sup> for light-duty vehicles (LDVs) is far from complete. Despite a 25% market share for LD EVs in 2023, substantial progress is needed to meet the Advanced Clean Cars (ACC) II requirements of 51% ZEV in 2028, 68% ZEV in 2030, and 100% ZEV in 2035. Without vastly improved LD residential and public infrastructure, there is a high probability the LD EV market growth will stall long before these levels are met.

Current new EV buyers are far more likely to be affluent single-family homeowners who can both afford the higher cost of EVs and have ready access to reliable, low-cost, and convenient home charging. While most new car buyers might be affluent single-family homeowners, the transition to 100% ZEVs in ACC II requires not just “most new car buyers” but “all new car buyers.”

Moreover, meeting the ACC II ZEV sales mandate also requires used car buyers (including the third, fourth, and fifth vehicle owners, who are less likely to have access to home charging) to embrace ZEVs. Access to home charging that most current ZEV buyers enjoy dramatically lowers the need for public charging. As the ZEV requirements increase under ACC II in the next few years, the portion of drivers that do not have home charging increases and these drivers will be forced to rely on public charging, which is currently inadequate, unreliable, inconvenient, and expensive compared to home charging.

Thus, to ensure the successful full transition to EVs outlined and required under ACC II, funding generated by residential EV charging should be used exclusively to develop the LDV EV market through infrastructure, vehicle incentives, and public education.

## 2. Reestablish California Clean Fuel Rewards administered by automakers for LD EVs

Auto Innovators recommends reestablishing the California Clean Fuels Reward (CCFR) program as a point of purchase incentive. Less than four years ago, this program was established with unanimous support from automakers, utilities, and CARB to provide a point of purchase reward of up to \$1,500 for new EVs. The CCFR was reduced to \$750 and then eliminated altogether on September 1, 2022. This program incentivized residential customers – *the very customers who generate the LCFS credits that fund this program* – to choose electricity rather than gasoline to fuel their vehicles. Moreover, the CCFR was provided at the time of purchase, avoiding the weeks- or months-long wait associated with other rebate programs. It also provided an ongoing

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<sup>2</sup> ZEVs include battery, plug-in hybrid, and fuel cell electric vehicles (BEV, PHEV, and FCEV, respectively).

revenue stream, rather than dependency on the annual state budget allocation. Lastly, it was one of the last remaining financial incentives in California for LDVs. Its demise came at a time when ZEV sales were becoming more dependent on purchases by mainstream consumers. These consumers need more encouragement to purchase an electric vehicle than early adopters.

Auto Innovators continues to support CCFR directed to LD EVs. However, rather than providing the LCFS credits to utilities, participating EV automakers and a third-party administrator selected by CARB (CFR Program Administrator) should administer the program and provide the EV Purchase reward. Automakers have decades of experience administering vehicle rebates and can do so far more efficiently than utilities.

To provide a stable and predictable EV incentive, CARB and automakers should set the CCFR EV purchase reward annually based on estimated revenue from LCFS credit generation from residential EV charging. Unlike utilities that require minimum cash reserves (around \$10 million) and thus needed to quickly change the CCFR program, participating automakers could continue the CCFR throughout the year and then adjust the CCFR reward in subsequent years.

### **3. Equity programs should receive 45% of residential EV charging revenue**

Automakers recognize the transition to an all-electric future will not happen without the full participation of equity communities. In fact, equity communities represent the most difficult segment in the transition to all LD EVs due to historically lower incomes, lack of reliable, low-cost, convenient residential charging, need for reliable transportation, and potentially longer commutes. Ironically, these communities stand to benefit the most from LD EVs, with the proper support in place. CARB should revise the regulation to ensure that at least 45% of residential EV charging LCFS credit revenue is directed to equity community LD EV projects, including:

- LD EV multi-family residential and public infrastructure.
- Workforce development related to LD EV market development, including LD EV residential and public infrastructure installation, operation, maintenance, and repair and LD EV sales, maintenance, and repair.
- Additional rebates for new and used LD EVs in equity communities.
- Rebates for residential charger installation in equity communities.

- Vouchers for public charging to equity community members.

#### **4. Automakers Producing EVs Should Receive Base Residential Charging Credits**

No industry is investing more than automakers to develop the EV market. By 2030, the auto industry will invest more than \$500 billion globally in everything from critical minerals and critical mineral processing, to battery cell and pack production, to vehicle development, certification, and production, to charging stations and consumer education. Moreover, automakers are developing telematics, vehicle-to-home (V2H), and vehicle-to-grid (V2G) technologies that benefit the electric grid. Nonetheless, automakers are excluded from receiving any of the base residential charging credits generated by their investment.

CARB regulations should provide automakers “pre-approved” uses for the credit proceeds like those provided to the utilities. For example, the following pre-approved projects parallel those provided for non-equity utility holdback credits (c)(1)(A)5.b.:

- i. Investments to improve EV efficiency, charging time, and EV charging convenience.
- ii. Investments in V2H and V2G technology development including
  1. Encouraging the optimization of EV charging through education and technology to improve the ability of customers to charge at times of lowest cost.
  2. Providing incentives to encourage drivers to participate in managed charging, demand response, V2H, or V2G programs.
  3. Supporting the development and use of vehicle bidirectional charging.
  4. Other innovative approaches to promote and manage EV charging and discharging to benefit customers and the grid, including methods to reduce battery degradation from V2H, V2G, and fast charging events.
- iii. Hardware and software that reduces the cost of EVs.

#### **5. Revenue FROM light-duty EV owners TO light-duty EVs**

As noted above, rather than subsidizing electric utilities or businesses operating medium- and heavy-duty vehicles, revenue generated from LD EV residential charging should be used to grow the LD EV market. Thus, we recommend eliminating “pre-approved projects” in the proposed regulations that provide funding for changes not related to the LD EV market. Specifically, we

recommend eliminating the following pre-approved projects recognizing that utilities could still propose and seek approval of these projects.

- Electrification of drayage trucks and other M/HD EVs or off-road vehicles, including school and transit buses.
- Incentives for using public transit, including car and ride share, public transit and school bus (including battery swap programs).
- Micro-mobility solutions (eBikes, eScooters, eMotorcycles, etc.).
- Investments in grid-side distribution infrastructure for M/HD EVs.
- VGI projects (EV charging education, incentives to encourage drivers to participate in managed charging, deployment of bi-directional charging equipment, or other innovative approaches to promote managed charging).
- Hardware and software that reduces the costs or avoids updates to infrastructure.

## 6. Conclusion

Again, we sincerely appreciate the opportunity to work with CARB on proposed changes to the LCFS regulations. Please don't hesitate to contact me if you have any questions or need additional information.

Sincerely,



Dan Bowerson  
Vice President, Energy & Environment  
[dbowerson@autosinnovate.org](mailto:dbowerson@autosinnovate.org)