



November 14, 2022

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Submitted online at: <https://ww2.arb.ca.gov/applications/public-comments>

Re: Proposed Fiscal Year 2022-23 Funding Plan for Clean Transportation Incentives

Rivian Automotive, LLC (“Rivian”) appreciates the opportunity to comment on the Proposed Fiscal Year (FY) 2022-23 Funding Plan for Clean Transportation Incentives. With its bold greenhouse gas (“GHG”) emissions reductions goals and ongoing commitment to incentives, California and the Air Resources Board (“CARB”) continue to demonstrate leadership in transportation electrification that is recognized across the country and around the world. Rivian applauds the state’s preparedness to invest billions of dollars in accelerating the zero-emission vehicle (“ZEV”) transition and we specifically welcome several of the proposed changes to the Clean Vehicle Rebate Project (“CVRP”). Nonetheless, Rivian continues to believe that high-impact ZEVs in the medium-duty vehicle category are worthy of incentive support that CVRP’s current design prevents. CARB should consider a dedicated MD vehicle category within CVRP. For the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (“HVIP”), we urge CARB to reconsider certain provisions that would severely restrict large fleet participation. Curtailing the ability of large fleets to access HVIP funding in 2023 risks blunting the medium- and heavy-duty (“MHD”) ZEV market’s growth just when it ought to accelerate as the industry and its customers prepare for new rules such as the Advanced Clean Fleets (“ACF”) regulation to come into force.

Keep the World Adventurous Forever

Founded in 2009, Rivian is an independent company headquartered in California where we maintain office locations in Irvine and Palo Alto, as well as customer-facing service centers in several cities. With approximately 5,000 employees across the state and more than 14,000 around the world, it’s Rivian’s mission to Keep the World Adventurous Forever. Rivian’s focus is the design, development, manufacture, and distribution of all-electric adventure vehicles, specifically pickups, sport utility vehicles, and commercial vans. Key to the success of our mission, these vehicles will displace some of the most polluting vehicles on the road today.

Rivian brought the first electric truck to market last year when we launched the R1T pickup from our manufacturing facility in Normal, Illinois, followed shortly thereafter by the R1S SUV and an electric delivery van built for Amazon. Our fleet-focused offering will also soon include the Rivian Commercial Van. All our vehicles are considered medium-duty (“MD”) for regulatory purposes and satisfy ZEV requirements under both the Advanced Clean Cars II and Advanced Clean Truck (“ACT”) rules. The R1T and R1S provide all-electric options in segments where added utility is a necessity. The R1T has an EPA-certified 314-mile range and 11,000lbs of towing capacity, while the R1S is a seven-passenger full-sized SUV with a 316-mile

range; both are more capable than the conventionally powered vehicles they are displacing. Rivian is also building a network of DC fast and Level 2 chargers across the country, including sites on public lands such as the Golden Gate National Recreation Area and Yosemite National Park.

Rivian Has Concerns About Proposed Restrictions on Large Fleet Participation in HVIP

Rivian’s mission to keep the world adventurous forever is made manifest in our commitment to the environment and addressing climate change. We strongly support bold regulatory programs to reduce GHG emissions and accelerate rapid ZEV adoption in the transportation sector, underpinned by highly resourced incentive and funding programs as critical enablers of California’s policy ambitions.

We applaud CARB’s continued demonstration of leadership in these areas. Not only does CARB continue to design groundbreaking new climate policies such as the ACT and pending ACF regulations, but the agency—supported by the Legislature and Governor in setting California’s budget—remains admirably committed to allocating robust financial resources to a comprehensive funding plan, including purchase incentives for MHD ZEVs. We also recognize that even with this commitment staff must balance many competing priorities and work within a limited budget. This is no easy task. Rivian appreciates the hard work that went into developing the funding plan for HVIP.

However, **we are concerned that in key respects the proposed program guidelines for HVIP work against CARB’s own goals.** Specifically, the Plan proposes to reduce voucher amounts by half for fleets with more than 500 vehicles. Additionally, those same fleets would need to meet a 30-vehicle minimum purchase requirement and deploy their vehicles in a disadvantaged community (“DAC”) to be eligible for voucher support. While these proposals technically allow for large fleets to apply for vouchers, as a practical matter we believe that when taken together these restrictions amount to a de facto exclusion of fleets with more than 500 vehicles from HVIP. Fleets of 500 or more vehicles account for more than two-thirds of the MHD vehicles on California’s roads and often cycle through vehicles relatively quickly, seeding the used vehicle market from which many smaller operators populate their fleets. **A program that all but excludes large fleets from participating next year therefore risks slower ZEV uptake among larger operators, less available used ZEV inventory in the near term, and avoided emissions benefits.** Major barriers to participation in HVIP in 2023 could even encourage large fleets to use whatever procurements are planned for next year to “pre-buy” relatively less expensive conventional MHD vehicles before ACF’s requirements come into force. This serves neither California’s climate goals nor communities burdened with excessive air pollution. Moreover, it seems inconsistent with the intent of budget control language attached to the Legislature’s appropriation of funds for HVIP in the 2022 budget, which directed CARB to administer the funds “in a manner that enhances market development of medium- and heavy-duty vehicles and benefits disadvantaged communities and small businesses.”¹

To put our concerns in practical terms, consider a hypothetical large fleet that is willing and able to purchase 35 new Class 2b ZEV vans. Under the existing proposal, and assuming the DAC deployment requirement is met, that fleet would be eligible to apply for four vouchers worth \$3,750 each—an

¹ Assem. Bill 179, 2021-2022 Reg. Sess., ch. 249, 2022 Cal. Stat.

incentive worth just \$429 per van across the entire vehicle order. We do not believe that the economics of ZEV procurement are so improved for large fleets as to justify such a small incentive that becomes essentially insignificant when considered in the context of the bulk purchase requirement.

Therefore, Rivian respectfully urges CARB to reconsider key provisions governing HVIP to maximize the project's environmental and market transformation benefits in this last year prior to ACF's implementation.

- **Remove the minimum purchase and DAC deployment conditions for large fleets wishing to apply for HVIP support.** The proposed funding plan presumes that all fleets of 500 or more vehicles have the financial wherewithal, technological capability, and sustainability commitment to make bulk purchases of ZEVs. While some very large, brand name fleets have made public announcements about their plans to transition to ZEV vehicles quickly and en masse, many fleets will likely introduce ZEVs incrementally as they retire existing vehicles, which allows time for learning, facility upgrades, and to gather in-use data on the cost of ownership. At the same time, the DAC deployment requirement is poorly defined. While potentially more flexible than prior proposals to require *domiciling* vehicles in DACs, the proposed funding plan does not specify by what metrics CARB would determine compliance with the deployment requirement. More fundamentally, we still foresee challenges with such a requirement, even if well defined. Fleets cannot necessarily freely choose where they deploy their ZEVs in the short term. They face many constraints including how duty cycles fit with their dispatch locations, the availability of suitable electrical service for depot charging, timelines for service upgrades and charger buildout, and so on. Even with the best intentions, it simply might not be possible to meet the deployment requirement in the short term. Rivian shares CARB's concern for addressing local air pollution but believes this approach is unlikely to be effective. Rather, local air pollution concerns call for direct regulatory responses including zero-emission zones and initiatives like the South Coast Air Quality Management District's Warehouse Indirect Source Rule. CARB should remove the special conditions proposed for large fleets in the funding plan.
- **Apply a more reasonable discount of 30 percent to vouchers for fleets with 500 or more vehicles.** Relative to smaller peers, large fleets might enjoy some advantages in terms of access to capital, appetite for taking on risk, and so on, that warrant reduced incentives to purchase MHD ZEVs. Rivian has long supported reasonably reduced voucher amounts for larger applicants if those reductions would allow for greater certainty and availability of funding, including in our comments on last year's funding plan. However, the proposed 50 percent reduction—especially when coupled with other proposed restrictions—is unreasonable. Instead, Rivian would support a 30 percent reduction in voucher funding for fleets of 500 or more vehicles.

Rivian Welcomes Changes to CVRP but Encourages Additional Reforms

To maximize CVRP's climate and air quality benefits while stretching the available funding as far as possible, Rivian supports CARB making strategic choices in how it supports advanced vehicle technologies through the program. We specifically welcome steps taken by CARB in this proposal to:

- equalize the base rebate available to both battery electric and fuel cell electric vehicles ("FCEVs"), ending preferential treatment for FCEVs.
- phase out plug-in hybrid electric vehicles ("PHEVs") from CVRP by 2025.

- enhance the rebates available to income-qualified applicants. California leads the nation in providing substantial financial support to low- and middle-income EV buyers with up to \$15,000 available in stacked incentives (and more if buyers scrap their existing conventional car).
- provide a \$2,000 prepaid charge card for charging costs to certain income-qualified rebate recipients.

However, as we noted in our comments on the 2021-22 Funding Plan, certain high-impact vehicles fall into an incentive gap in the state. Specifically, the Rivian R1T and R1S do not qualify for CVRP due to their Manufacturer’s Suggested Retail Price (“MSRP”). And because both vehicle’s gross vehicle weight ratings (“GVWRs”) slightly exceed 8,500lbs due to long-range battery packs and towing capability—both high-demand features customers of electric pick-ups and SUVs expect—the R1T and R1S are currently ineligible for the Clean Fuel Reward (CFR). (The state’s electric utilities, who administer the CFR and fund it using credit revenue generated under the Low Carbon Fuel Standard, point to provisions in the enabling regulation, promulgated by CARB, in determining eligibility for the rebate.² CARB’s regulation currently defines the CFR as a rebate for “light-duty” vehicles only, which in turn are defined by the regulation as vehicles with a GVWR at or below 8,500lbs.³ We recognize that the Clean Fuel Reward is currently suspended.)

Consequently, a critical class of widely appealing, high-impact vehicles are excluded from state funding opportunities intended expressly to both accelerate the pace and broaden the reach of transportation electrification. We believe this undermines the state’s own goals. Rivian’s R1T and R1S compete directly with and displace some of the most polluting passenger vehicles on California’s roads today.⁴ In doing so, they also have the potential to reach a market segment that is more rural and concerned with vehicle capability and performance and not well served by many of the current EV market’s offerings. To ensure the quickest and most widespread transition to EVs, and by extension the deepest and most accelerated emissions reductions in the transportation sector, California should think strategically about the program parameters and eligibility criteria that govern its full suite of incentives. As we recommended last year, Rivian continues to believe that CARB should consider the benefits of extending consumer ZEV incentives to the medium-duty vehicle category.

Establish a Medium-Duty Vehicle (“MDV”) Category within CVRP

Rivian recommends establishing an MDV category in CVRP for vehicles exceeding 8,500lbs GVWR and not exclusively designed for commercial use. This category should be subject to an appropriately scaled MSRP cap of at least \$90,000, or double the cap applied to cars and 50 percent greater than that applied to conventional trucks and SUVs.

² California Clean Fuel Reward/Southern California Edison, *Annual Report 2020* (2021), 4, available at https://cleanfuelreward.com/sites/default/files/2021-05/CCFR_2020_Annual_Report_043021_Public_0504version.pdf.

³ 17 C.C.R. § 95481.

⁴ One recent study found that replacing a fossil-fuel powered pickup with a battery electric version delivers approximately two-thirds more lifetime greenhouse gas emissions benefits than the same replacement of a sedan, per Maxwell Woody et al., “The Role of Pickup Truck Electrification in the Decarbonization of Light-Duty Vehicles,” *Environmental Research Letters* 17, no. 3 (January 2022): 034031, www.doi.org/10.1088/1748-9326/ac5142.

Large, highly capable EVs like Rivian’s R1T and R1S do come at a price premium. This is driven in large part by significantly larger battery packs designed to deliver the range customers expect across a variety of demanding applications such as towing and off-road driving. And for new market entrants, additional upward pressure on prices can exist until production and delivery reaches mass-market scale. Early models—especially in nascent market segments such as EV pickups and SUVs—carry the weight of large upfront investments and overhead. The R1T and R1S currently feature a 135kWh battery pack—more than twice the size of the battery pack in the widely sold Chevrolet Bolt and approximately 75 percent larger than the packs offered in newly developed passenger EVs such as the Kia EV6, Hyundai IONIQ 5, and Ford Mach-E. This represents significant added cost that incentive programs should account for. **Making MD ZEVs eligible under an MSRP cap of \$90,000 would reasonably reflect differences in vehicle capability, battery size, and emissions reductions.**

Conclusion

As we have noted, Rivian applauds the state’s preparedness to invest billions of dollars in accelerating the EV transition and we thank the agency again for the opportunity to comment on the funding plan. Unfortunately, we are concerned about proposed restrictions on large fleet participation in HVIP and urge CARB’s reconsideration. Changes proposed to CVRP would improve that program, though Rivian continues to believe that the potential benefits warrant extending incentive support under CVRP to costlier MD ZEVs. We believe that with the changes we recommend above, CARB can maximize the impact of its incentives. We look forward to the upcoming hearing and CARB’s consideration of staff’s proposals.

Sincerely,



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