



June 23, 2014

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

**Subject: Proposed FY14-15 Funding Plan for AQIP and GGRF**

Dear Chairman Nichols and Members of the Board,

CALSTART wishes to provide feedback and input on the proposed FY14-15 Funding Plan for Air Quality Improvement Program (AQIP) and Greenhouse Gas Reduction Fund (GGRF) investments. Staff should be commended for putting together a thoughtful plan on a tight timeline, particularly given the need to work with multiple funding pots and overlapping restrictions. We are writing today to provide support as well as suggestions on program implementation and potential modifications.

**Medium and Heavy Duty Vehicle (M/HDV) Investments**

The GGRF funds provide a very valuable opportunity to lay out a balanced and comprehensive strategy for moving toward cleaner M/HDVs. Investments are needed across all stages of innovation and commercialization, from research and development through early commercial deployment. Given this spectrum of needs, ARB must strike a balance between competing priorities: near-term deployment vs. longer-term development, incremental vs. transformational solutions, streamlined and open programs vs. more highly targeted and structured programs.

We provided extensive input to staff over the past several months and were pleased to see much of our input reflected in the proposed plan. We **support the increased per-vehicle incentives for zero emission M/HDVs** in the Hybrid and Zero Emission Truck and Bus Voucher Incentive Project (HVIP). This change is needed to move the market forward and support the nascent supply chain. We also **support the move to a two-year solicitation process for the HVIP administrator**, which should help to minimize program start-up delays and related costs. Finally, we **strongly support the inclusion of pilot and demonstration programs in the overall AQIP/GGRF effort**. The Zero Emission Bus (ZEB) pilots in particular have tremendous potential to drive technology advancement. We work with a large coalition of ZEB industry leaders, all of whom support this program.

We believe some program adjustments could strengthen the proposed plan by providing incentives for innovation, removing barriers, and making it easy for industry to be a partner on this important effort. This input draws from our manufacturer and supplier network, our research in this area, and our years of expertise with incentive programs. Specifically, these recommendations draw on the California Hybrid, Efficient, and Advanced Truck Research (CalHEAT) Roadmap, the E-Truck Task Force, and the I-710 Commercialization Study for Zero Emission Drayage trucks.

***Increase Program and Portfolio Flexibility*** – We recommend maintaining some flexibility in program and portfolio design to address the needs of this sector:

- **Maintain flexibility in providing benefits for disadvantaged communities:** The stated goal of directing 100% of the truck and bus funding to disadvantaged communities leaves little flexibility and may unintentionally slow the market. We support the goal of concentrating benefits in these communities and recognize that

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this is where investments are needed most. However, we are concerned that a 100% target, depending on how it is interpreted, could result in missed opportunities for clean vehicle deployment, emission reductions, and technology advancement.

- **Build in flexibility to adjust budgets to fit program needs:** The current proposal contains firm numbers for M/HDV project categories, with a heavy focus on earlier stage demonstration projects. We would recommend a more flexible breakdown with the authority for the Executive Officer to shift funds between programs to react to changes on the ground. If additional near-term deployment or pilot projects are available, it may make sense to capture these near term benefits.

***Expand and Simplify HVIP Program Eligibility*** – We recommend expanding HVIP eligibility to include several technology options that need support in order to transform the fleet. We also recommend a simpler process for certification and eligibility:

- **Include aftermarket solutions:** The current HVIP program does not provide funding for aftermarket solutions. This approach leaves out many promising technologies and companies, including several with vehicles that are essentially “new.” Providing incentives for aftermarket solutions would support innovation and scale in the supply chains for crucial technologies such as batteries and electric drive systems.
- **Streamline regulations and certification requirements to encourage innovation:** Emissions and OBD certification issues for innovative technologies such as hybrid trucks and buses create a very real market barrier given current market volumes. This is relevant for HVIP eligibility, but it is also a broader issue relating to the ability to sell innovative technologies in California. The processes are time-consuming, costly, and high in uncertainty for manufacturers. Given the need for innovation in this space and the extremely low volumes of vehicles in question, we recommend streamlined, low-cost processes for low-volume innovative technologies. Higher levels of regulation could be required once specified volume points are reached.
  - For OBD, we strongly recommend a tiered approach based on volumes, with a waiver for low volume manufacturing and full OBD at high volume. There may also be some intermediate steps. Learning from deployments with data collection to help shape future actions would be useful.
  - For HVIP, the proposal to allow for simplified in-use testing or chassis dynamometer testing for eligibility, while expensive, is a step forward and we support this as it provides an alternative to full certification. Based on member discussions, we recommend allowing flexibility of approach including “powerpack” testing as an option for those who desire.
- **Include Class 2b Hybrid Vehicles:** California does not currently provide incentives for class 2b hybrid vehicles (8,500-10,000 lbs). We believe these vehicles are a necessary bridge to getting more zero emission trucks on the road. They support the growth of the supply chain for batteries, electric motors, and power electronics. They also provide an incremental step toward full electric for fleets, and they do so in an extremely high-volume segment of the industry. So long as they provide real emissions reductions, we believe class 2b hybrids should be included in the program.

***Leverage Existing Program Structures and Outside Resources*** – We recommend leveraging the simple, streamlined HVIP program structure and the HVIP administrator role to achieve program objectives:

- **Use HVIP “tool” for targeted deployment:** HVIP can and should do more to drive concentrated deployments of zero emission trucks and buses. With additional flexibility, the HVIP administrator could act as a “deal broker” that brings together



partners for larger deployments. HVIP-style incentives for charging infrastructure could also be run through the same simple program. This would provide a more streamlined alternative to the zero emission pilots, which may help some applicants.

- **Leverage outside technical expertise:** We recommend considering a “technical assistance” role to support the broader AQIP/GGRF implementation. This could be structured as an overarching consultant role or it could be an embedded part of pilot deployments and demonstrations. Roles could include project vetting and prioritization, data collection and dissemination, etc.

### Light Duty Vehicle Investments

The Clean Vehicle Rebate Project (CVRP) has been wildly successful in accelerating the market for zero emission vehicles. We recognize that resource limitations and questions about how to expand access to cleaner vehicles have been real issues for this program, but we also believe it is too early to cut rebates at this point in the market.

Erik White and other program staff provided a briefing on Friday indicating that staff is now recommending that rebate levels remain unchanged, subject to a mid-point review of program demand. Given this new information, **we support the modifications to the written staff proposal, maintaining existing CVRP rebate levels and eligibility.** We also support the idea of revisiting CVRP later in the year and making more strategic modifications if necessary. Smaller rebate reductions or other modifications could be made at that time.

Looking beyond rebate levels and eligibility for “CVRP Classic” in FY 14-15, we think it is important to continue long term planning and to explore options for increasing access to the market:

- **Create a long term plan based on market penetration and acceptance:** As the market matures and the value proposition to the customer reaches parity with the cost of the vehicle, the rebate amounts should decrease. Incentive levels should ramp down over time, based on market penetration and cost reductions. We look forward to working with you on this longer term vision.
- **Move forward with pilot programs for disadvantaged communities as a complement to the simple CVRP program:** While we maintain that zero emission vehicles provide widespread clean air and public health benefits for all, we do see a need to design and test programs aimed at increasing access to zero emission options in disadvantaged communities. We support the staff proposal on this front.

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Overall, we recommend stressing simplicity, inclusiveness, and flexibility in program design. We need widespread innovation and rapid market deployment in this space, but the markets are fragile. It is therefore important to ensure that programs are not too burdensome in their requirements, too narrow in their scope, or too rigid in their structure. We commend staff for their work to date in designing and implementing these programs, and we look forward to working with ARB on implementation details.

Sincerely,

Jamie Hall

Policy Director