



BYD North America
1800 S. Figueroa St.
Los Angeles, CA 90015

October 22, 2018

California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Comments on the FY 2018-19 Funding Plan for Clean Transportation Initiatives

Dear Chair Nichols and Members of the Board:

BYD North America (BYD) appreciates the opportunity to submit comments regarding the California Air Resources Board's FY 2018-19 Funding Plan for Clean Transportation Initiatives. This plan represents an important next step for large-scale zero-emission commercialization efforts in on-road, off-road, and freight markets. BYD is strongly supportive of CARB's prioritization of significant funding for deployment-oriented vouchers. We believe this approach will have a critical impact on zero-emission commercialization.

BYD is a global company that is changing what is possible in zero-emission transportation. Our commitment to "solve the whole problem" has made BYD an industry pioneer and leader in not only the transportation sector, but also high-efficiency energy storage, solar power, LED lighting, and information technology. BYD believes early-market incentive funding is critical to achieving more favorable upfront economics and that increasing sales will lead to cost-competitive purchase prices and economic development in California. We have committed to and successfully delivered substantial price reductions from our first generation of products, which have been supported by incentives through CARB and other forward-thinking agencies, and we expect to see ongoing reductions with new funding program support.

HVIP

In particular, BYD wants to thank CARB for the allocation of \$125M to HVIP this year, which will help drive large-scale adoption and improve market acceptance, manufacturing, economies of scale, and long-term pricing for end users. HVIP is the state's premiere program focused on fast, efficient zero-emission deployments and has had a measureable impact on adoption of advanced technologies. We believe that the proposed funding levels – particularly if they are sustained over the next several years – will achieve meaningful market maturity and cost reductions for zero-emission technologies.

While BYD is supportive of the overall direction and approach proposed for HVIP, we feel a few small changes could help strengthen opportunities for technology deployment across all market segments. With respect to voucher amounts, BYD strongly supports including over-the-road coaches in the same category as articulated buses at a voucher amount of \$175,000. Like articulated buses, over the road coaches are high capacity transit vehicles that will be taking numerous and higher polluting vehicles off the road. Both products are also relatively new to the market in zero-emission options, and could use the additional incentive to gain traction. In addition, both are three-axle buses, like articulated buses, with similar battery, weight, and optimization challenges for zero-emissions. For all these reasons, similar incentive levels are warranted. Additionally, BYD supports granting the Executive Officer flexibility to adjust voucher amounts in order to compensate for cost fluctuations associated with tariffs.

With respect for rules for fleets, BYD strongly supports the removal of the reduced voucher amounts for more than 100 vehicles per fleet. This change will be significant for many transit agencies, as well as freight fleets. Additionally, BYD encourages CARB to retain the “first three” voucher enhancement. In our experience, the increased voucher amount has been a strong driver for fleets to begin the transition to zero-emission, especially in the freight sector. If CARB does not believe the enhancement moves the needle, BYD suggests that instead of eliminating the enhancement, CARB should double the incentive so that it encourages fleets to purchase their first electric buses or trucks. BYD would support this enhancement only for a customer’s *first* order (covering up to three vehicles in that order). With this limitation in place, a customer buying its first two trucks would get enhancements on each that are double the current amount, but when that customer buys its third vehicle at a later date, it would no longer qualify for the enhancement. This would encourage first time purchasers to look at more than one or two vehicles for its first deployment.

Freight Equipment Advanced Demonstration and Pilot Commercial Deployment Project

BYD would like to suggest using the \$55M allocated for Freight Equipment Advanced Demonstration and Pilot Commercial Deployment Project as voucher enhancements for trucks in both the HVIP and Off-Road Voucher Programs – essentially allowing truck operators to get funding beyond a single voucher per vehicle. It is critical that the state make every effort to rapidly push the freight sector to zero-emission. For this fiscal year, BYD would like to suggest this voucher enhancement in order to catalyze the freight sector’s transition: for the first 100 trucks, we suggest that CARB provide an enhancement of 100% of the base voucher amount, i.e. the first 100 trucks would receive a base voucher (e.g., \$150,000 for a class 8 tractor trailer) and an enhancement equal to that amount (in this case, an additional \$150,000). The next 200 trucks would receive 75% of the base (e.g., \$150,000 base voucher + \$112,500 enhancement voucher) and any trucks above that amount would receive a 50% enhancement (e.g., \$150,000 base voucher + \$75,000 enhancement voucher). This scheme will incentivize fleets to move quickly to lock down the largest vouchers, and while the vouchers would more than cover incremental costs, it would allow operators to fund some of the infrastructure improvements that they need. We think this will result in impressive gains in a short period of time, especially in the state’s ports and freight corridors.

Overall, we appreciate the significant investments and thoughtful program CARB has developed under this funding plan and we believe it will have an immense public health, environmental, technology, and economic benefit for the state of California. We look forward to continuing to working with CARB on zero-emission deployments, and appreciate the opportunity to submit these comments.

Sincerely,



Zachary S. Kahn
Director of Government Relations
BYD North America