



Build Your Dreams



June 17, 2016

California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812

**Re: Comments in Response to Air Resource Board's Proposed Fiscal Year
2016-2017 Funding Plan**

Dear Chairwoman Nichols:

BYD Motors and the Antelope Valley Transit Authority write to urge the Air Resources Board (ARB) to significantly increase its investments in the medium and heavy-duty vehicle sector.

It is important for us to start by acknowledging ARB's leadership in combating climate change. The ARB has done a commendable job in putting into place policies and programs that are allowing California to lay the foundation for a strong, sustainable, and vibrant green economy. Thanks to the ARB, our air is cleaner than ever before, our roads are increasingly filled with zero emission vehicles, and our economy is growing thanks to multiple green manufacturers and technology providers investing in the state.

Progress has been particularly pronounced on the light duty electric vehicle side thanks to large investments into programs like the Clean Vehicle Rebate Program. However, the medium and heavy-duty vehicle sectors have yet to see a similar level of progress. Market adoption rates remain troublingly low. And investments into medium and heavy-duty programs are a fraction of what is spent on light duty vehicle programs.

With this in mind, we believe it is time for ARB to begin investing in the medium and heavy-duty vehicle sector at levels comparable to expenditures made on the light duty vehicle sector. Only then can we expect to see similar levels of progress and market adoption in the medium and heavy-duty vehicle sector.

Although the Cap and Trade program saw weak auction revenues, the clear and urgent need for such investments remains. According to your recently released Truck and Bus Technology Assessment, heavy-duty trucks - defined as vehicles over 8,501 GVWR - represent nearly 33 percent of all NOx emissions, 26 percent of diesel PM 2.5 emissions, and emit approximately 21 percent of GHG emission from all

transportation sources. Plus, every new bus placed into service takes numerous cars off the road thereby providing an even greater return on investment than light duty vehicle programs. ARB must strategically target its curtailed resources into medium and heavy-duty vehicle programs if California is going to meaningfully reduce emissions in this sector in a manner that is responsive to the Governor's climate change goals.

Beyond the need to reduce emissions, though, it is worth stressing that investments into medium and heavy-duty vehicle programs have a higher likelihood of benefitting the most vulnerable. After all, our most disadvantaged populations often cannot afford a personal vehicle but instead depend on public transit services. This means it is programs like HVIP and the ARB's Zero-Emission Truck & Bus Pilot Commercial Deployment Projects solicitation that, by funding new zero emission transit buses, provide the most direct benefit to California's most fragile communities and populations. Programs that fund medium and heavy-duty trucks also provide direct impacts to socioeconomically disadvantaged communities and populations given that freight corridors often run directly through the heart of disadvantaged communities.

Bottom line, there is no better way to quickly lift up California's disadvantaged communities than to increase funding for medium and heavy-duty vehicle programs that put more zero emission transit buses into those communities and swap high-polluting freight vehicles traveling through those communities with zero emission equivalents.

The overwhelming demand for the limited Zero-Emission Truck & Bus Pilot Commercial Deployment Projects solicitation funds was a clear indication of the depth of demand for investment in medium and heavy-duty vehicles in every region of the state. Funding these types of projects and similar programs represents a clear avenue for improving the life of all Californians. And because the clean energy economy represents the economy of the future, California has the opportunity to become the manufacturing epicenter of the 21st century, both nationally and globally, if it can successfully spur rapid market adoption of zero emission vehicles and also put into place incentives that encourage zero emission manufacturers to invest in California.

In order to achieve these goals, we urge the ARB to, at a minimum, implement the following policy recommendations:

- **Readjust Internal Funding Allocations** — The ARB should reallocate a portion of funding currently slated for its light duty vehicle program and redirect that funding into medium and heavy-duty programs. Currently ARB's funding approach is skewed away from medium and heavy-duty vehicle allocations: \$175 million for medium-and-heavy-duty vehicles out of \$500 million in total funding. Even factoring in funding for the Very Low Carbon Fuels Production Incentive Project, there is still a significant funding

disparity between light duty vehicle programs and medium and heavy-duty vehicle programs. The individuals that benefit from medium and heavy-duty projects are often the most vulnerable in our society, such as transit-dependent economically distressed, elderly, and disabled populations, as well as those living in inner-urban areas and rural areas. ARB should reevaluate current and proposed funding allocations in light of the need to focus on lifting up transit-dependent communities. Investments in medium and heavy-duty vehicles also offer up a great value-proposition in that funding clean buses impacts far greater numbers of the population than, for example, single-use CVRP vouchers that often disproportionately benefit higher-income communities. The ARB should consider allocating equal funding between the light-duty programs and programs for medium and heavy-duty vehicles – in other words, \$250 million for light duty vehicle projects, and \$250 million for medium-and-heavy duty vehicle projects. ARB should also look at how it is proposing to allocate currently proposed medium and heavy-duty funding. For example, ARB’s latest funding plan proposal identifies \$23 million for a Low NOx Engine Incentives with Renewable Fuel program. ARB should consider prioritizing programs that bring about the greatest greenhouse gas reductions while also providing the most benefit to low-income communities.

- **Fund Additional Zero-Emission Truck & Bus Pilot Commercial Deployment Projects** — The ARB received around \$290 million in funding requests for its Zero-Emission Truck & Bus Pilot Commercial Deployment Projects solicitation, but only had a fraction of the funding available to meet the demand. What this means is that ARB has multiple high-quality, shovel ready projects in queue that could provide extensive societal benefits while helping the state meet its ambitious climate change goals. However, due to limited funding availability, ARB is unable to fund multiple outstanding projects that would benefit communities up and down California, increase market penetration of zero emission vehicles, and provide numerous corresponding benefits. We therefore urge the ARB to increase its overall allocation for the Zero-Emission Truck & Bus Pilot Commercial Deployment Project solicitation by a minimum of \$50 million in order to fund additional zero emission bus and truck projects.
- **Increase Funding for HVIP** — We strongly urge the ARB to increase funding for HVIP. It is worth noting that ARB has invested \$291 million into CVRP since 2010. ARB has invested a comparatively modest \$70 million into HVIP since 2010. What is more, ARB is proposing to invest a staggering \$233 million into CVRP for 2016, and yet only proposes to invest \$18 million into HVIP for 2016. This is a shocking and troubling disparity, particularly given the direct benefits HVIP-funded vehicles have on disadvantaged communities. HVIP also acts as a bridge to between the demonstration and full commercialization phases—a critical step to helping advanced technologies gain a foothold in the marketplace. ARB should dramatically increase HVIP funding through, for example, a doubling of HVIP voucher amounts. This would be an overall modest investment for ARB but would be

one that that could exponentially increase the rates of market adoption of zero emission trucks and buses in California by making zero emission trucks and buses significantly cheaper.

In conclusion, we urge ARB in the strongest terms possible to allocate additional funding into, at a minimum, the Truck/Bus Solicitation and into HVIP. Shortfalls in auction revenues will require belt-tightening across all GGRF programs, but a strategic focus on redirecting funds toward the medium and heavy-duty space will ensure that each GGRF dollar has maximal impact. These investments would prove transformative for numerous California communities desperate for such investments. We thank you for consideration of our comments and look forward to the opportunity to discuss these with you in more detail soon.

Sincerely,

A handwritten signature in black ink, appearing to be 'Stella Li', written in a cursive style.

Stella Li
President, BYD Motors, Inc.

A handwritten signature in black ink, appearing to be 'Len Engel', written in a cursive style.

Len Engel
Executive Director, Antelope Valley Transit Authority