

Edward Follow PHO XL Hybrids, Inc. 145 Newton Street Boston, MA 02135

June 25, 2015

ARB Mobile Sources Staff and Board 1001 I Street, P.O. Box 2815 Sacramento CA 95812

RE: Comments on 2015-2016 AQIP Funding Plan; specifically HVIP and Van Pooling Pilot

Dear Board Members and ARB Mobile Sources Team,

At XL Hybrids we are very appreciative of the efforts of the ARB team in developing an AQIP funding plan for the 2015-2016 year and agree with the basic principles and structures that have been proposed. In particular, we enthusiastically support the proposed changes to the HVIP program.

XL Hybrids is currently the leading fleet electrification company in the U.S. with, as of May 2015, over 12 Million fleet customer miles per year driving our products across North America. Our core hybrid electric upfit product for Class 2 to 6 vehicles provides 20% fuel and proportional CO2 savings. This is because of two important factors:

- 1. XL Hybrids does not significantly alter the major OEM vehicle and powertrain, and so major fleets can buy and service major OEM vehicles without any changes
- 2. XL Hybrids price point is under \$10,000 for a Class 2B hybrid electric full size van, and under \$20,000 for larger vehicles which has attractive payback for fleets that considerable lifetime vehicle mileage

This is because XL Hybrids has analyzed the market and failures before us and taken a different approach to fleet electrification that

- 1. does not compromise fleet operations for widespread fleet adoption
- 2. does not constitute a big financial risk for widespread fleet adoption
- 3. works without government incentives for high mileage fleets; but needs incentives for lower mileage, low capital resource fleets

Regarding the AQIP and HVIP programs, ARB staff now has 2 consecutive years of data that show:

- 1. there have been very few full EV commercial vouchers
- 2. one company for one vehicle type has received over 90% of the vouchers

This cannot possibly best satisfy the HVIP and AQIP goals of ARB and we observe the marketplace and recognize that

- the commercial fleet marketplace is generally a multi-stage manufacturing process and so an HVIP program organized around vertically integrated manufacturers does not take into account the primary way the U.S. market actually works; Ford for example has sold over 50,000 vehicles which have then been modified subsequently by 3<sup>rd</sup> party alternative fuel vehicle upfitters
- 2. incremental improvement fleet electrification aftermarket solutions are a method that is gaining acceptance with major fleets across the country and potentially provides an enabling path towards long term GHG goals

So, this year, the ARB staff has made a significant shift and proposed to allow aftermarket fleet electrification solutions into the HVIP program. If the goal is to get to 2050 80% GHG reduction targets, this recognizes that "swing for the fences" solutions are not the only solution and that a portfolio approach supports a more robust program that doesn't assume we know the exact paths that will yield long term results. It recognizes the value of more gateway solutions that can achieve near term widespread adoption and then be later phased out for incentives. If XL Hybrids is able to deploy five times as many vehicle-miles in California as a full electric solution then we will have saved as much fuel and CO2, and deployed kWhr of advanced batteries hopefully more cost effectively into the marketplace then doesn't that contribute to advancing us on the path to an 80% lower carbon future?

In addition, we hope the van pooling pilot program will be re-opened to aftermarket conversion/upfit solutions as it was originally considered last year. We are not sure why it was contracted when released in 2015.

Most of us technology provider companies need to get to the 1000's per year or more annual volumes to be self-sustaining and HVIP has the potential to get us through the 100's to 1000's transition. That is, as long as HVIP and associated regulations avoid adding too many barriers to widespread adoption by fleets because of course, absent mandates, fleets always have the option to do nothing.

Sincerely,

Edward Lovelace

Chief Technology Officer

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elovelace@xlhybrids.com

617-335-8162