

Memo

To: Cap-and-Trade Committee

From: Abas Goodarzi

CC: Justin Chow (Justin@ushybrid.com)

Date: 8/12/2015

Re: US Hybrid Cap-and-Trade Investment Plan Comments

Dear Cap-and-Trade committee,

Thank you very much for inviting US Hybrid to attend the Los Angeles workshop for the Second Investment Plan for Fiscal Years 2016-17 through 2018-19. We appreciate the state focusing appropriations towards vehicle projects through CARB and CEC. The combined efforts by both state entities have rightly been directed towards curbing environmental pollution in disadvantaged communities through zero emission (ZE) technologies. However, US Hybrid feels there are several issues that need to be addressed by Cap-and-Trade allocations.

Challenges posed by how the Cap-and-Trade funding is allocated:

1. Much of the ZE focus today is on light-duty vehicle (LDV) projects still and not enough on medium- and heavy-duty vehicles (MDV/HDV) in spite of the fact that that more than 23% of the global warming pollution is attributed to MD/HD vehicles.¹
2. Any ZE vehicle projects that are successfully funded by the limited MDV/HDV pots are immediately handicapped by lack of funding for MDV/HDV infrastructure.
3. Presently, OEMs are not fully committed to resources and planning to support pre-commercial deployment of ZE technology. State should be aware of this fact in ZE planning.
4. ZE goals for MDVs/HDVs are not clear enough. There is a lack of state pressure through powerful mandates such as executive orders for MDVs/HDVs.

Proposed solutions to meet above challenges:

1. State should push for greater emphasis on the potential for ZE MDVs/HDVs to solve emission problems throughout all communities, especially those with high local pollution concentration. Such areas have been identified by CalEnviroScreen.
2. State should consider widening the breadth of mandates for ZE MDV/HDV targets.
3. State should consider allocating higher amounts to ZE vehicle projects routes so that they can include funding for ZE MDV/HDV infrastructure. This lack of funding limits the ability of ZE MDV/HDVs of becoming widely adopted and re-introduces the "chicken-and-egg" problem previously and still being faced by the ZE LDV industry.
4. State should consider the 3rd party vehicle integrator model instead of the OEM model for technology development. 3rd party integrators can bridge this gap in both experience and their own relationships with OEMs. This model would provide confidence for OEMs and limit their fear of liability.
5. State should consider adding more language stating that ZE projects will be support of local supply chain for emerging technology companies and that such projects will ensure sustainable products. The projects will service and support and growth of local economy. This language becomes more important when considering smaller 3rd party vehicle integrators and their supply chain partners.

¹ Annual Energy Outlook 2014 (AEO2014)." U.S. Energy Information Administration (EIA). 1 Apr. 2014. Web. <[http://www.eia.gov/forecasts/aeo/pdf/0383\(2014\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2014).pdf)>.

6. State should provide more language on service and support of technology. Such activities are critical to new technologies. State should have funding allocations devoted to such needs as either explicitly called out in projects or in a distinct Operation and Maintenance (O&M) pot, the latter of which is similar to what state funding has provided for hydrogen station development.

Sincerely,

A handwritten signature in black ink, appearing to read "Goodarzi GA". The signature is fluid and cursive, with the initials "GA" being particularly prominent at the end.

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