



California Energy Commission 2011-2012 Investment Plan 10-ALT-1

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Please allow us to share some comments with you and your team as the CEC progresses in its budgeting process. We hope that these thoughts, which are based on our expertise and current experiences, as well as those of our fleet customers, are helpful to your efforts. We see merit in your proposed budget and planning, as it is clearly supporting of California's reputation as a leader in air quality and clean tech sectors. However, we offer the following suggestions in an effort to provide a path to rapid and widespread adoption of the cleanest technology – zero emission.

Below find our comments regarding your budget process and suggested programs and policies. We draw these comments from our real-time experiences in dealing with vehicle and fleet purchasers and our status as the world's leading manufacturer of all-electric, zero emission medium duty trucks. These informal comments are, in short, factors that we see influencing a continued flow of these clean, not just cleaner, trucks into California markets. Please consider the Smith Electric Vehicles team a resource anywhere in the process. Here find nine key points we wish to share.

- 1) There is an irony related to incentives for zero emission trucks. If incented adequately now, zero emission trucks will be operating in an incentive-free world within five years. Fleet purchases have the gross purchasing power to bring down prices rapidly through economies of scale and by accelerating the decline in battery prices. With many times the battery power of a passenger electric vehicle, and a purchasing decision involving hundreds or thousands of vehicles, not just one, commercial fleets have the ability to bring parity between clean and dirty vehicle prices within five years. The proposed budget draft addresses charging stations. The draft proposes programs for medium duty trucks using propane and natural gas. The proposed budget puts funds towards demonstration and development. However, to ensure a mass adoption of zero emission vehicles we suggest incentive programs (vouchers) and policies clearly focused on zero emission medium duty trucks and for only a five year period.
- 2) We applaud the combined efforts of CEC and ARB, as well as the progress in how zeroemission medium duty trucks are addressed in the state's voucher programs. Yet inequities still exist in having these all-electric vehicles categorized along with hybrid vehicles. The cleanest technologies are not receiving the most incentives. A hybrid truck and a zero emission truck receive the same amount, causing more hybrids but fewer zero emission trucks to come to the state. We receive frequent feedback from our fleet buyers expressing confusion and frustration in this paradox. To correct this, we suggest that CEC funds be added to the HVIP program in this program year and be used as a "plus-up" to further incentivize the cleanest technologies.



- 3) California has experienced several key departures of green tech manufacturing facilities in the past year. Other states are increasingly aggressive as they try to establish their own green manufacturing zones. We applaud the inclusion of manufacturing incentives for clean tech companies in your budget to buttress the state's overall initiatives. However, based on our experience, the budgeted amounts in this line are insufficient to attract and secure more than one established, high-impact manufacturer. We suggest reallocating funds within the draft budget to double or triple the \$10 million allocation to manufacturing incentives and focusing such funds on several high-impact projects with established companies in the cleanest of technologies.
- 4) Smith's customers are looking for growth in states and areas where policies and incentives focus on zero emission medium duty vehicles. For medium duty trucks, we see bridge technologies as differentiated from zero emission. Put another way, one is just cleaner while the other is clean. States with programs that primarily or substantially focus on zero emission will see the greatest increase in zero emission truck fleets and as a result reap by far the most significant environmental benefits. States with programs that include multiple or all alternate fuels but focus most of the incentives for the cleanest technologies will at least keep pace regarding all-electric trucks. To the contrary, states and programs that categorize commercial zero emission fleets along with passenger vehicles or less-clean alternate fuels will not see significant increases in clean truck fleets in the foreseeable future. We suggest a re-examination of the proposed budget related to medium and heavy duty vehicles to ensure that it reflects a preference for zero emission technology in medium duty truck fleets over less-clean alternate fuels and reallocates funding accordingly.
- 5) Federal incentives exist for zero emission passenger vehicles, but not medium duty clean trucks. The purchasing decision for the majority of passenger electric vehicles does not heavily depend on incentives; these drivers are often going to buy these cars regardless of federal or state incentives. Demand is already outpacing supply. Furthermore, in contrast to passenger vehicles, fleets do not have range anxiety and charge in off-peak hours. Medium duty diesel trucks are the largest contributors of GHG on our urban roads. Because commercial fleets are far more concerned with ROI than the typical passenger vehicle purchaser, it is not ideal for passenger and commercial zero emission vehicles to share the same incentive pools and policies. Because of this, we suggest that such passenger incentives should be phased out and those monies reallocated towards commercial fleets, primarily zero emission fleets. To the extent those passenger vehicle incentives remain, commercial zero emission fleets should be targeted with funding and policies that are specific to commercial vehicles.
- 6) Our fleet customers are showing a strong preference for multi-year programs. They want to convert their large fleets in major urban areas. But this cannot happen in one move. They are looking for four and five year programs where they can change over to zero emission at a more natural pace. We suggest a focus on strategic programs that



extend over multiple years to reflect the nature of mass adoption by California fleets.

- 7) The investment in incentives for charging infrastructure has been almost exclusively related to passenger vehicles. In the budget, we suggest programming clearly include commercial fleets and reflect the different nature of commercial fleet infrastructure needs. For a truck fleet of less than ten trucks, the fleet's needs may mimic a passenger vehicle owner and cost only \$1,500 per vehicle. But when an entire fleet converts and new transformers are needed, these costs can exceed a quarter million dollars. We suggest incentive programming that has a targeted and differentiated focus on commercial truck infrastructure needs for zero emission fleets.
- 8) Workforce development programs are important to help train those who can manufacture and service these new technology vehicles. When manufacturers establish facilities in states, jobs are created and workforce training assistance is helpful. However, if sufficient, strategically awarded incentives are not first in place to attract manufacturers, there will not be this significant demand for a newly trained workforce. Given the Commission's limited resources, we suggest a shift from workforce training assistance to programs that provide incentives to help bring high-impact, proven manufacturers to California.

We hope you find these observations based on our experiences helpful in your process. If you would like additional information or have questions related to these topics or other issues, please do not hesitate to contact me and our team is ready to assist.

Regards,

The Smith Electric Vehicles Team

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