

## DOCKETED

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*Comment Received From: Clark Strategic Partners*  
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**on Docket No. 15-ALT-01**

*Additional submitted attachment is included below.*

## Clark Strategic Partners

February 5, 2016

California Energy Commission  
Docket Unit  
California Energy Commission  
Docket No. 15-ALT-01  
1516 9th Street, MS-4  
Sacramento, CA 95814

RE: Submit Comment on Docket No. 15-ALT-01

This letter is being prepared and sent to the CEC in Response to CEC Revised Staff Report titled: "2016-2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program" which was reviewed at the Workshop held in Long Beach, CA on January 21, 2016 from 9:30AM to mid-afternoon that day. While I was not able to stay for the afternoon session, I did hear the morning presentations and made a comment (not the content of this letter) to the Commission, staff, advisors who were present or online via conference number.

Basically my concerns (note my Book References below) are in three areas to which I have spent the last 3 decades working. I also have over 70 peer reviewed published articles as well and many conference Keynote speakers over this same period of time:

- 1) **Science** is both quantitative and qualitative. I learned that while being the Technology Transfer Energy Manager at Lawrence Livermore Laboratory (LLNL) during the 1990s. Basically it is important to define and understand the meaning of words, numbers and data. This includes sentences and even titles as well as articles and books. In short, science makes hypothesis that need to be tested and re-tested. In the beginning of the Report there is a section titled keywords. There are many problems with the words used in it.

Consider just a few that need to be defined: alternative, biofuels and different forms of diesel. Ethanol, natural gas and others. The fact is that while the word alternative was put in to the legislation that created the funding for this program, the use of alternative is misleading and not correct. In particular, the words renewable fuel are used too but not defined, eg solar, wind, water or other forms of energy that can be electrolyzed into hydrogen.

The result is that the program appears to be slanted to natural gas and other forms of fossil fuels. One case in point is diesel which I will not get into but everyone knows what happened to VW when the discovery was made that the software, data and conclusions from the VW analysis of diesel was “incorrect”. Many of use who worked in this area knew that decades ago but the “computer results” where quoted then and until recently as our being wrong. The list goes on.

**“Keywords:** California Energy Commission, Alternative and Renewable Fuel and Vehicle Technology Program, AB 118, AB 8, funding program, alternative transportation fuels, investment plan, electric vehicles, hydrogen, biofuels, biomethane, biodiesel, renewable diesel, diesel substitutes, gasoline substitutes, renewable gasoline, ethanol, natural gas, federal cost-sharing, workforce training, sustainability, fueling stations, fuel production, alternative fuel infrastructure.”

- 2) The **economics** of the daft Plan are questionable as well. I have done articles and books on this as there needs to be both life-cycle and externalities costs for the programs that are seeking funding. The best example is the need to look at natural gas not as it is reformed and converted into hydrogen at the pump, but also the money and time needed to find the NG, dig it up, pump it and the reform it. Those costs as well as the recent NG explosions and leaks will continue.

What is the price put on a person’s life?

Even more significant is the need to look at the Concluding chart below from the Plan. Clearly from this chart it can be seen that the most amount of funding is going to NG in more than one category. That both does not make sense and is also a problem in terms of the allocation of the funds themselves, let alone the message that this sends to the automobile, transportation and station businesses.

What happens to the new technologies that are being now commercialized let alone the need for on-site (in buildings and homes) for these hydrogen and other stations. The costs to repay the investors and lenders will be decades. Hence the use of fossil fuels will NOT allow the State of California to meet its goals as set by the Government and our Legislators.

**Chapter 7: (p.78)**  
**Summary of Funding Allocations**

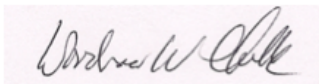
**Table 29: Summary of Proposed Funding Allocations for FY 2016-2017**

<b>Category</b>	<b>Funded Activity</b>	<b>Proposed Funding Allocation</b>
Alternative Fuel Production	Biofuel Production and Supply	\$20 million
Alternative Fuel Infrastructure	Electric Charging Infrastructure	\$17 million
Hydrogen Refueling Infrastructure		\$20 million
Natural Gas Fueling Infrastructure		\$2.5 million
Alternative Fuel and Advanced Technology Vehicles	Natural Gas Vehicle Incentives	\$10 million
Medium- and Heavy-Duty Advanced Vehicle Technology Demonstration and Scale-Up		\$23 million
Related Needs and Opportunities	Emerging Opportunities	\$3 million
Workforce Training and Development		\$2.5 million
Regional Readiness		\$2 million
<b>Total Proposed</b>		<b>\$100 million</b>

- 3) Ethics. Aside from meeting time frame in terms of technologies and costs that is the issue of how objective are the companies, academics and even policy makers toward the definitions of the terms above and the amount of money being allocated now and in the future. My recommendation is that there needs to be a requirement that everyone involved (including the senior staff as the Commissioners are already required to do so) file Form 700.

If you have any questions, let me know. I can be contacted at the email and telephone numbers below.

Thanks for your attention.



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## Book References:

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