DOCKETED	
Docket Number:	19-TRAN-02
Project Title:	Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure
TN #:	242482
Document Title:	Element Resources Comments to CEC Funding Allocations for MDHD Trucks
Description:	N/A
Filer:	System
Organization:	Element Resources Inc.
Submitter Role:	Public
Submission Date:	3/28/2022 2:47:22 PM
Docketed Date:	3/28/2022

Comment Received From: Element Resources Inc.

Submitted On: 3/28/2022 Docket Number: 19-TRAN-02

Element Resources Comments to CEC Funding Allocations for MDHD Trucks

Additional submitted attachment is included below.



March 28, 2022

California Energy Commission Docket Unit, MS-4 715 P Street Sacramento, California 95814

Re: Docket No. 19-TRAN-02 - Funding Allocations for Future MD/HD Charging and Refueling Infrastructure Projects.

Element Resources Inc. (Element) appreciates the opportunity to participate within the commenting process in response to the California Energy Commission's (CEC) February 28, 2022 workshop which discussed concepts for grant funding, debt funding and allocations thereof for future medium duty and heavy duty (MHD) charging and refueling projects. We acknowledge that the CEC continues to play a pivotal role in accelerating the adoption of zero emission vehicles through grants and perhaps debt funding these valuable infrastructure projects.

Element, as an up and coming producer of 100% Green Hydrogen, believe that regarding all Battery Electric Vehicles (BEV) and Fuel Cell Electric Vehicles (FCEV) and related infrastructure that receives or could receive Government support through the CEC or any other publicly funded entity that:

• The basic fundamentals as to the origin of the base energy must be observed

All of these programs that are ultimately funded by the public are designed for emissions reductions, to achieve a ZERO EMISSIONS paradigm; using public funds under such an auspice and then provide infrastructure that dispenses high carbon density electricity / hydrogen is simply disingenuous and misuse of public funds. Zero Carbon must be measured from the origin of the electron or molecule.

Contrary to Nikola's statement that the intended goal is to reduce CO₂ emissions, we somehow understand the goal of a Zero Emissions Vehicle is elimination of emissions

Regarding all Concepts

- Are Grants or Low Interest Loans or Loans the preferred funding vehicle?
 - o Grants the so called 'free money' is most often preferred, we believe that they should be limited to no more than 15-20% of any project; Projects solely reliant upon high levels of grants seldom make "good economic sense", the Energy Transition to be successful must make "good economic sense" at some point and end the reliance on the "free money"; in this regard low interest loans and loan guarantees seem preferred.
 - Loans and Loan Guarantees we believe loans and /or guarantees up to 75% of valuable transitionary energy / infrastructure projects should be a preferred methodology for 'kick starting' these valuable infrastructure projects... Why? The monies utilized are recycled through repayments and have a larger, longer net effect; these loan funds may also be



- combined with other agencies funds such as the Department of Energy Loan Projects Office which has common and similar goals.
- Loans create fiscal responsibility, whereas pure Grants may distort economics, and thereby impinge fiscal responsibility.
- o In all cases Public funds should only be used for the establishment of the refueling infrastructure, the project proponent may be an infrastructure owning firm (station owner) and or a fuels provider; the addition to this group of the vehicle manufacture, where Mobility as a Service (Maas) in the coffers of Public Funds blurs the competition and adds the probability that Public Funds for infrastructure become blurred and are in part utilized for other activities.

Regarding Hydrogen Refueling Infrastructure

Element by the shear nature of our business model, production of 100% Green Hydrogen, and sees the absolute need for additional Hydrogen fueling stations of all natures, Passenger Vehicles, Medium Duty trucks and Heavy Duty Trucks. Without sufficient demand, green energy will struggle.

We applaud the CEC for the proactivity in the establishment of the Hydrogen re-fueling network this far, however for that network to reach 1,000 passenger vehicle hydrogen refueling stations and 200 Medium / Heavy Duty refueling stations support is essential.

Are routes important: YES

Circular Routes – School buses, waste haulers, and other 'circular' route vehicles require less infrastructure than long haul routes, as such delivery of "bang for buck" is high.

Interstate / Highway Routes — For Heavy Duty Trucks and long haul; must be carefully assessed to understand the feasibility and impact of a hydrogen fueling station network placement; to successfully place the fuel station infrastructure, an examination of the route, station placement and destinations along that route must be thoroughly dissected.

Refueling infrastructure developers and owners, if held to the "makes good economic sense" doctrine will develop infrastructure that gives the greatest "bang for the buck"; forcing or choosing route development will have unintended consequences of 'orphan' stations.

Urban and Rural Routes

While less "bang for the buck", in the realm of passenger cars, the re-fueling network must have an extent such that reasonable access to all areas can exist for the family vehicle.

Boarding States

The CEC should seek agreements with Bordering States, such that Phoenix, Tucson, Las Vegas, Reno etc..., become available for FCEV's, particularly HD trucks.

I would like to thank the CEC for the remarkable job on ZEV re-fueling centers to date; we at Element certainly look forward to a robust and responsible growth in Zero Emissions and climate preservation.

One Shell Plaza 910 Louisiana Street | Suite 5030 Houston TX 77002 | USA Direct : +1 832 353 2507 

Yours sincerely,

Chief Executive

Element Resources Inc.