

DOCKETED

Docket Number:	18-ALT-01
Project Title:	2019-2020 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program
TN #:	229302
Document Title:	Tropos Technologies, Inc. Comments - submission on right-sizing to the CEC Clean Transportation Plan
Description:	N/A
Filer:	System
Organization:	Tropos Technologies, Inc.
Submitter Role:	Applicant Representative
Submission Date:	8/9/2019 9:44:50 AM
Docketed Date:	8/9/2019

Comment Received From: Tropos Technologies, Inc.
Submitted On: 8/9/2019
Docket Number: 18-ALT-01

Comment submission on right-sizing to the CEC Clean Transportation Plan

Additional submitted attachment is included below.

Comment from Tropos Technologies, Inc. on behalf of our brand, Tropos Motors: Recommendation to Include Right-Sized Light-Duty Electric Trucks in the 2019-2020 Clean Transportation Program Investment Plan

Executive Summary

Tropos Motors is submitting this comment to the California Energy Commission (CEC) on the importance of including Light-Duty Electric Trucks in its [2019-2020 Investment Plan for the Clean Transportation Program](#), formerly the Alternative and Renewable Fuels and Vehicle Technology Program. Currently, the Investment Plan does not specify funding the demonstration of Light-Duty Zero-Emission Vehicles in its 2019-2020 Investment Plan. We would request that right-sized light-duty electric vehicles be added as a priority investment activity. Right-sized vehicles are those which weigh less, and therefore, come in at a smaller vehicle class rating, but can perform the same duties as heavier trucks.

What is Right-Sizing

Right-sizing is choosing the right-sized vehicle to perform the job at hand. While there are many larger jobs that require heavy-duty, diesel powered trucks, there are also many smaller jobs and smaller operating environments that don't require as much power to get the job done. Right-sized vehicles are able to accomplish the same activities and results as their medium- and heavy-duty counterparts in more constricted areas and environments. These include campuses, shipyards and ports, industrial operations, and smaller communities. Right-sized vehicles can be outfitted with much of the same auxiliary equipment currently used on medium- and heavy-duty vehicles and equipment, providing numerous opportunities to displace large, inefficient diesel engines.

Importance of Right-Sizing

If you look at typical corporate and university campuses, manufacturing facilities, industrial yards, and groundskeeping services you will see full-sized gasoline or diesel-powered vehicles performing jobs that don't necessarily need the high power provided by these oversized engines. This misuse of larger vehicles leads to lower efficiency across the vehicle fleet which in turn leads to higher operating costs. This is coupled with higher manufacturing costs representing increased embedded energy with higher capital costs to owners. The higher energy inputs across the entire product lifecycle results in increased emissions that can be avoided with right-sizing.

Opportunity for Right-Sized Electric Vehicles

By utilizing a vehicle that is the right-size for the job, the necessary tasks can be done in a much more energy-efficient and sustainable manner. Light-duty electric vehicles a better solution for tasks such as clearing out garbage cans across campus, sweeping streets or industrial facilities, last-mile delivery, transporting equipment around facilities, and even providing vital emergency services

such a medical or fire response. As these markets face more regulatory pressure to electrify, light-duty electric vehicles become much more appealing options.

Need for Including Right-Sized Light-Duty Electric Trucks in Investment Plan

Due to the nascent state of right-sized vehicle and equipment technologies, many industries and potential end-users have been hesitant to adopt the Tropos Motors vehicles in their full range of applications. Accordingly, permitting these right-sized vehicles to be eligible for funding under the Clean Transportation Program's various demonstration programs would establish market certainty and industry exposure that could result in significant lifecycle energy savings and emissions reductions.

Tropos Motors

Tropos Motors vehicles are sized somewhere in-between a golf cart and pickup truck which would be classified as light-duty electric vehicles. Yet, these vehicles boast a payload capacity of up to 2,000 lbs. and a towing capacity of up to 3,000 lbs. These are capabilities that medium-duty trucks and larger perform. These power and distance capabilities make it the right-size vehicle for many jobs currently performed by much larger gasoline or diesel vehicles. The Tropos Motors vehicles can be outfitted with a range of auxiliary equipment that can be powered from the on-board energy storage system, further reducing emissions and increasing energy efficiency due to the avoided ramping inherent of combustion engines.