

DOCKETED

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Wrightspeed - Outline Proposal for 2017/2018 Budget Year Funding (Updated)

Additional submitted attachment is included below.



Heavy Duty Range-Extended Electric Vehicle Powertrains
California Energy Commission (CEC)
Demo Fleet Funding Proposal for 2017/2018 Budget Year

Background:

Wrightspeed is a World Economic Forum Technology Pioneer award winner and a leading manufacturer of Range-extended Electric Vehicle (REV) powertrain systems for heavy duty urban cycle applications (refuse trucks, city buses, package delivery trucks etc) - designed to deliver economic, environmental and performance benefits in both OEM-installed new vehicles and existing fleet retrofits including:

- Up to 60% reduction in fuel consumption
- Up to 60% reduction in maintenance costs
- Up to 60% reduction in emissions

Each new vehicle platform requires re-packaging of Wrightspeed REV powertrain systems to customize the installation and optimize the performance for that vehicle model.

Wrightspeed thanks the California Energy Commission (CEC) for their support of the development and commercialization of core Wrightspeed REV powertrain technology over the last 5 years. To date Wrightspeed has been awarded \$7 M in CEC grants.

Recent Accomplishments:



- CNBC reports Wrightspeed and Ratto Group unveiling of the world's first recycled recycling truck: <http://video.cnbc.com/gallery/?video=3000564345>
- Wrightspeed relocates to 120,000 ft² repurposed US Navy aircraft hangar in Alameda (06/16)
- Wrightspeed receives World Economic Forum – 2016 Technology Pioneer award: <http://widgets.weforum.org/techpioneers-2016/>
- Volvo-Mack Truck video at Waste Expo 2016: <https://srm-cdn.vitruve.com/ns/assets/publisher/media/video/09/4b56902e8111e68590a134027bb28b/Mack-and-Wrightspeed-at-Waste-Expo.mp4>
- NZ Bus CEO Zane Fulljames explains why he chose Wrightspeed: <https://soundcloud.com/nbr-radio/nz-bus-ceo-zane-fulljames-explains-why-his-company-chose-wrightspeed-hybrid-technology>



Heavy Duty Range-Extended Electric Vehicle Powertrains
California Energy Commission (CEC)
Demo Fleet Funding Proposal for 2017/2018 Budget Year

Outline Proposal for 2017/2018 Budget Year CEC Funding:

Wrightspeed is now scaling its commercial production capacity at its factory in Alameda, CA. This expansion enables:

- Development of more new vehicle platforms (adaptations of Wrightspeed REV powertrains)
- Fleet demos (in addition to single vehicle demos) of the performance, economic & environmental benefits of Wrightspeed REV powertrains

Potential CEC Funded Programs Include:

- Port drayage equipment (Los Angeles, Oakland, San Diego etc)
- City bus fleets (Central Valley incl. Sacramento, Oakland, Los Angeles, San Francisco etc)
- Urban refuse collection fleets (Central Valley incl. Sacramento, Oakland, Los Angeles etc)

2017/2018 Budget Year CEC Funding Request = Total \$23 M:

- For Vehicle Fleets & Demos = \$18 M
 - \$5.0 M for each demo fleet (re-packaging NRE + powertrain kits for up to 20 vehicles)
 - \$1.0 M for each demo vehicle (re-packaging NRE + a powertrain kit for 1 vehicle)
- For Manufacturing Investment = \$ 5M

In addition we respectfully recommend that additional funding is prioritized for both manufacturing investment and clean vehicle deployment to accelerate the environmental and economic benefits of this technology. For example manufacturing investment of at least \$5 to 10 M per individual award will be required to have a meaningful impact.

Environmental & Economic Benefits:

These investments will accelerate the widespread deployment of Wrightspeed REV powertrain-enabled fleets resulting in significant economic and environmental benefits in California – including:

- Accelerate both direct & indirect job creation locally in Alameda / Oakland and state-wide.
- Directly address air quality problems in some of the worst affected areas in CA.
- Strengthen CA's position as the technology leader and supplier for this major new industry.

Ian Wright

Founder and CEO, Wrightspeed Inc.