

Notice of Funding Opportunity

Title:	Zero-Emission Drayage Truck and Infrastructure Pilot Project
Website:	https://www.energy.ca.gov/solicitations/2020-11/gfo-20-606-zero-emission-drayage-truck-
	and-infrastructure-pilot-project
Funding:	Total: \$44,100,000. Maximum awards: \$100K-\$24M, depending on topic.
Dates:	Questions Deadline: December 14, 2020
	Pre-Application Workshop: December 17, 2020
	Application Submission Deadline: February 01, 2021

Summary: This is a competitive grant solicitation. The California Energy Commission (CEC) and California Air Resources Board (CARB or Board) announce the availability of \$44.1 million in funds to support large-scale deployments of on-road, zero-emission Class 8 drayage and regional haul trucks as well as the necessary zero-emission vehicle fueling infrastructure needed for service operation. For the purpose of this solicitation, drayage trucks are defined as on-road heavy duty trucks that transport containers and bulk to and from the ports and intermodal railyards as well as many other locations. Regional haul truck, for the purpose of this solicitation, have daily ranges of 200 to 400 miles on a single charge or refueling event and are designed for day use and typically return to a home base each night.

Project Topic Areas:

Costs incurred for the following are eligible for the CEC or CARB reimbursement or as the Applicant's match share and can include: For Vehicle Technology; For Battery Electric Vehicle Charging Infrastructure; For Hydrogen Refueling Infrastructure; For the ZEV Workforce Plan (No more than \$100,000 in project funds funding per project); For Administration (10% retention will be withheld on Administration expenses); For Outreach (10% retention will be withheld on Outreach expenses). Awardees will not be reimbursed for permitting or vehicle-related expenses, such as electricity for charging or fuel costs. These expenses may be counted towards match share only. Utility incentives for behind-the-meter infrastructure and rebates for charging equipment may also be counted towards match share. See Match Funding Requirements below.

Funding:

A total of \$44.1 million is available for awards under this solicitation. The CEC and CARB, at their sole discretion, reserve the right to increase or decrease the amount of funds available under this solicitation. Projects are eligible for up to 50% of total project costs, or \$44.1 million, whichever is less. This solicitation offers \$24 million for the purchase of on-road zero-emission Class 8 trucks, \$20 million for supporting zero-emission vehicle infrastructure, and \$100,000 for workforce training and development. Selected Awardees will enter into two grant agreements: one with the CEC to fund infrastructure and workforce training and development, and one with CARB to fund trucks. Applications must include a minimum 50% total match share of the total allowable project costs. Match costs for infrastructure and workforce training and development may be counted towards the CEC's grant agreement; match costs for trucks may be counted towards CARB's grant agreement. Other match costs associated with administrative and data collection tasks may be split between CEC and CARB.

Project Requirements:

Eligible Projects

All proposed projects must be located in California. All proposed projects must deploy on-road zeroemission Class 8 trucks and the necessary charging or refueling infrastructure and include a ZEV Workforce Plan. All technologies, including trucks and supporting infrastructure, should be a commercial product at the time of application. For the purpose of this solicitation, the CEC and CARB will be using the federal procurement policy definition of "commercial product". If the trucks are not yet commercially available when the application is submitted, then the Awardee must have a reasonable, realistic, and expedited plan to obtain an Executive Order from CARB by June 1, 2022. If the supporting infrastructure

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technology is not commercially available, the proposed project technology must have demonstrated successful continuous operation for at least six months and the Awardee must submit a reasonable, realistic, and expedited plan for commercialization of the technology from its project partner(s).

Vehicle technologies must produce no tailpipe emissions of GHG, criteria pollutant, or toxic air containment during the truck's entire duty cycle, whether stationary (idling) or operating. Applicants must demonstrate that the proposed projects will reduce on-road motor vehicle air emissions. Applicants must demonstrate how proposed projects will support air quality improvements in and provide measurable benefits to disadvantaged and low-income communities, priority populations, and/or tribal lands. Projects are not required to be located in disadvantaged communities to be eligible for funding; however, in accordance with the evaluation criteria, projects will be evaluated, in part, on the degree to which the proposed project is located in disadvantaged or low income communities. Each funded project must provide a minimum of 12 months of data collection on the full deployment of vehicles and infrastructure, submitted electronically as part of the quarterly progress reports, rather than in a summary report at the conclusion of the 12 months.

Eligible Vehicle Technologies and Fleet Requirements

Applicants are encouraged to deploy at least 50 on-road, zero-emission Class 8 trucks in a single fleet. In accordance with the evaluation criteria, applications will be evaluated, in part, on the degree to which the proposed project maximizes the number of zero-emission trucks deployed. Vehicles must be zero-emission, on-road Class 8 trucks. Technologies that are eligible include battery-electric trucks, fuel cell trucks, and battery-electric trucks utilizing fuel cells acting as range extenders. Fleets may choose to have up to two vehicle manufacturers within a fleet. The integration of some battery electric and some fuel cell trucks in a single fleet is allowable. Trucks must be able to operate in the fleet's typical duty cycle for a minimum of 150 miles on a single fueling. The fleet and truck manufacturer must agree that truck performance and specifications are met before payment of trucks occur. The reimbursable amount for any truck or truck package is based on range and payload capacity. Truck package includes: Class 8 zero-emission truck; Intelligent Transportation Systems (ITS); Zero-emission transportation refrigeration units; Low rolling resistance tires; Aerodynamic and/or hybrid trailers. All trucks must be deployed by June 15, 2023.

Manufacturers must demonstrate economies of scale. All trucks, no matter the technology, must have a CARB Executive Order by June 1, 2022. Stacking of public funds is permissible, with the exception of the Volkswagen Beneficiary Mitigation Trust and the Clean Truck and Bus Voucher project (HVIP). Any public funds used for stacking must be declared at the time of application and must comply with all requirements associated with the stacking funding source. At the end of this project, fleets will maintain ownership of the trucks. Lease options are eligible under this project. Lease terms must be in place throughout the project term. The proposed on-road trucks must be approved for use by the fleet that will be using them in the demonstration, and confirmation of that approval must be indicated in a memorandum of understanding or letter between the fleet and the truck manufacturer. Applicants must include documentation in the application that all vehicles in the proposed project will be operated more than 50% of the time on California roadways. Applicants must also include proof that they are compliant with all State requirements, such as, but not limited to, Department of Motor Vehicles licensing, California Highway Patrol requirements, and others.

Eligible Infrastructure Technologies for Project Pilot Trucks

CEC funding under this solicitation must be utilized for new or upgrades to existing charging or refueling infrastructure to support the proposed zero emission Class 8 trucks in each project. This can include battery electric charging infrastructure and equipment and hydrogen refueling stations and equipment. No proprietary charging or refueling receptacles will be permitted within this solicitation—the proposed project should help further the infrastructure standardization efforts to facilitate medium- and heavy-duty (MD/HD) vehicle charging and hydrogen refueling. Charging and refueling equipment should be placed at one location, preferably the physical address from where the trucks operate and return after each duty cycle. Applications may request funding for a single secondary site; however, Applicants must describe the purpose and function of the secondary site in their application. One of the goals of this solicitation is to

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understand fleet dynamics when deploying a large number of zero-emission trucks and supporting infrastructure, including assessing the ability of fleets to recharge or refuel large numbers of trucks on a daily basis—sometimes multiple times per day.

Eligible Applicants:

This solicitation is open to local air districts, California-based public entities, and California-based nonprofit organizations. Private sector parties (i.e., technology manufacturers and end-users) interested in securing funding for a technology or strategy, must partner with an eligible Applicant. Only projects submitted by eligible Applicants will be evaluated. Along with an eligible Applicant, applications should include a project team, consisting of identified end users of the proposed vehicles or equipment, technology manufacturer(s), data collection and analysis provider(s), community-based organization(s) (CBOs), infrastructure provider(s), and subcontractor(s). The Applicant must demonstrate its expertise at implementing large scale advanced technology deployment projects and providing sufficient administration and oversight.

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