



925.719.2704



anna@buildmomentum.io

Notice of Funding Opportunity

Title: BESTFIT Innovative Charging Solutions
Website: <https://www.energy.ca.gov/solicitations/2020-08/gfo-20-605-bestfit-innovative-charging-solutions>
Funding: Total: \$7,500,000. Maximum award: \$2M, depending on technology.
Dates: Pre-Application Workshop: August 18, 2020
Deadline for Written Questions: August 21, 2020
Deadline to Submit Pre-Application Abstracts: September 18, 2020
Deadline to Submit Full Applications: November 20, 2020

Summary: This is a competitive grant solicitation. The California Energy Commission's (CEC's) Clean Transportation Program (formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program) announces the availability of up to \$7,500,000 in grant funds for projects that demonstrate transformative technology solutions and work to accelerate the successful commercial deployment of electric vehicle (EV) charging for both light-duty and medium- and heavy-duty (MD/HD) applications.

Previous work at the CEC, such as the EV Ready Communities Challenge grants and analysis for Assembly Bill 2127, have highlighted the need for unique charging solutions that are suited to the local built environment. There is no one-size-fits-all solution to EV charging, and there is instead a need to have a portfolio of charging solutions that complement and compete with one another. The purpose of this solicitation is to demonstrate novel technologies and/or business models that highlight these types of innovative charging solutions and form factors that are the "best fit" for the local built environment, use case, and vehicle type.

Project Topic Areas: The Areas of Focus are expanded upon below:

Increase Utilization – This category addresses projects designed to increase or maximize efficient utilization of charging infrastructure. The goal of increasing utilization is to increase the throughput of electric miles serviced to EVs by each charger through the creation of new business models and/or technologies that leverage innovative placement and locations, user sharing, queuing, vehicle management, and/or other strategies.

Minimize Operating, Purchase, and/or Installation Costs – This category addresses efforts to maximize the benefits of charging installations by avoiding high operating, purchase, and installation costs as well as costly grid impacts. The goal for innovative charging solutions like smart charging and discharging, energy management systems, and distributed energy resources (DERs) is to minimize peak energy use and demand charges as well as defer or outright avoid grid capacity upgrades and associated costs otherwise incurred with traditional approaches. In addition, innovative charging approaches improve site flexibility, such as avoiding trenching in constrained spaces, and mitigate high installation costs. MD/HD projects in this category *may not* incorporate DERs, defined as technologies that provide power to electric vehicle supply equipment (EVSE) independent of the electric system. These may include, but are not limited to, standalone battery systems, renewable energy systems, and fuel cell systems operating with low-carbon renewable fuels.

Demonstrate Advancements in Customer or Charging Interface – This category addresses technological advances to facilitate the adoption of EVs by making the charging experience seamless for drivers and users through standardized interfaces and streamlined customer services. The goal for these advanced interfaces is to simplify charging today, but also lay the foundation for emerging electric transportation applications including autonomous, shared, and connected vehicles. MD/HD projects in this category *may not* incorporate DERs, defined as technologies that provide power to EVSE independent of the electric system. These may include, but are not limited to, standalone battery systems, renewable energy systems, and fuel cell systems operating with low-carbon renewable fuels.

Examples of project types across the three categories include, but are not limited to: Fast Charging Plazas; Novel Sharing Business Models; High-level Communication Adapter; Energy Management

801 K Street, Suite 2700
Sacramento CA 95814
buildmomentum.io



MOMENTUM

925.719.2704



anna@buildmomentum.io



System; Lamp or Utility Pole; Distributed Energy Resources; Intra-site Storage; Inter-site Storage; Vehicle-to-Vehicle Charging; Pantograph Connection; Wireless Charging; Robotic Connection; Automated Parking Garage; or Interoperability for MD/HD Vehicles. Projects must include deployment of chargers. Light-duty projects may include deployment of renewable DERs or energy storage systems for supplying power to EVs or EV chargers provided the Applicant demonstrates that the DER is a component of the system necessary to address their designated Area of Focus. MD/HD projects *may not* include DERs.

The CEC recognizes that the examples listed above are diverse, and represent markets that could be either robust, newly forming, or somewhere in the middle. As a result, different technologies and business models will be at various stages of development. To reflect this, eligible projects must fall within at least one of the categories below: Bench Testing and Validation; Demonstration; Prototype; Complete Operational System; or Commercial Availability.

Funding:

A total of \$7,500,000 is available for awards under this solicitation. Applicants must identify whether their proposed project will serve light-duty or MD/HD vehicles. Applicants whose proposed projects serve light-duty vehicles are eligible for up to \$1 million, while Applicants whose proposed projects serve MD/HD vehicles are eligible for up to \$2 million. If an Applicant plans to submit an application for a project that serves light-duty vehicles, and another separate and distinct application for a project that serves MD/HD vehicles, the Applicant can be eligible for the maximum award amount in both categories, totaling \$3 million. Please note the maximum award amount applies to the Applicant, not the project. Please also note that Applicants are not required to submit an application that requests the maximum award amount. Applicants may submit one or more applications that request less funding if that is all that is required. Each proposed project must be separate and distinct and adhere to all requirements contained in this solicitation.

If a single proposed project will serve a combination of light-duty and MD/HD vehicles, the Applicant must designate which Vehicle Sector will be principally served to determine the appropriate maximum award amount. However, the additional scope of the proposed project serving the other Vehicle Sector will be factored in the Pre-Application Abstract Evaluation Criteria and the Full Application Evaluation Criteria. Based on their Vehicle Sector designation, Applicants must identify which Area of Focus their proposed project will principally address. This Area of Focus designation will be used to categorize and rank applications for funding. The CEC expects to award at least one project in each Area of Focus. Once the highest ranked projects achieving at least the minimum passing score in each Area of Focus are recommended for funding, if funding remains available, the CEC will award the next highest-ranking project achieving at least the minimum passing score within the Vehicle Sector that has available funding. Please note that applications are not required to request the full award amount, and Applicants are eligible to receive multiple awards up to the maximum award amount per Applicant.

Applications must include at least 25% of the total allowable project costs as match share (i.e., the sum of the CEC’s reimbursable share and Recipient’s match share). Applications must include a minimum cash contribution equal to at least 50% of the minimum match requirement.

Vehicle Sector	Area of Focus	Maximum Award Amount	Total Funding Available
Light-Duty	Increase Utilization	Up to \$1 million per Applicant	\$3.5 million
	Minimize Operation, Purchase, and/or Installation Costs		
	Demonstrate Advancements in Customer or Charging Interface		
MD/HD	Minimize Operation, Purchase, and/or Installation Costs	Up to \$2 million per Applicant	\$4 million
	Demonstrate Advancements in Customer or Charging Interface		

Topic Area Requirements:

All demonstrations must be installed for public or private use, real-world operating conditions at least at the bench scale, and must demonstrate how the novel technology and/or business model could be deployed at scale in the future and become commercially viable.



MOMENTUM

925.719.2704



anna@buildmomentum.io



Each project must provide a minimum of 12 months of data collection on deployed charging equipment, submitted electronically in a monthly progress report, rather than in a summary report at the conclusion of the 12 months. Applicants shall describe in detail plans to ensure EVs will utilize their infrastructure and enable them to collect 12 months of data on charging events for deployed infrastructure, including, but not limited to: Charge and session duration; Energy delivered in kilowatt-hours (kWh); Peak power delivered in kilowatts (kW); Applicable price for charging, including but not limited to: electric utility tariff, EVSP service contract, or public charger price; Payment method; Types of vehicles using the charging equipment; Number of unique vehicles and frequency of “repeat vehicles”; and Energy delivered back to grid or facility if a bidirectional charging use case (kWh). In addition, the Applicant should identify and develop a plan for providing other relevant data and information to the CEC throughout the duration of the funding agreement including, but not limited to: Lessons learned; Best practices (e.g., permitting and installation processes); Potential job creation; Economic development; and Increased state revenue.

Eligible Applicants:

This solicitation is open to all private entities with a business presence in California. To be eligible, Applicants must be involved in the EV or charging equipment business, such as the following: Automotive original equipment manufacturers (OEMs) – Entities that manufacture and produce vehicles; EV charging product manufacturers – Entities that manufacture and develop charging equipment and products; or Electric vehicle service providers (EVSPs) – Entities that manage connectivity across a network of chargers and/or offer software solutions using EV charging equipment. Applicants are encouraged to partner with local city or county government authorities, nonprofit entities, community-based organizations, environmental organizations, local workforce development agencies, building developers, technology vendors, utilities, researchers, local community colleges, and financiers throughout the application process.