

GRANT INSIGHTS

The purpose of the Joint Office of Energy and Transportation: Communities Taking Charge Accelerator (Topic Area 3) is to fund projects that conduct planning and/or demonstration and/or deployment efforts that accelerate solutions in the EV charging ecosystem, support open-source distribution, and may also contribute to Standards Development Organizations (SDO) for industry consensus. Program funds are authorized through the Infrastructure Investment and Jobs Act (IIJA).

The agency intends to award projects aligned with the Joint Office's mission of providing a modernized and inter-agency approach to supporting the deployment of zero-emission, convenient, accessible, and equitable transportation infrastructure.

Federal Agency Name	U.S. Department of Energy - National Energy Technology Laboratory		
Funding Opportunity	Communities Taking Charge Accelerator (Topic Area 3)		
NOFO Release Date	04/16/2024		
Concept Papers Due Date	05/20/2024 by 5:00 p.m. ET via EERE eXCHANGE	Application Due Date	07/16/2024 by 5:00 p.m. ET via EERE eXCHANGE
# of Programs:	Topic Area 3: Managed Charging for Clean Reliable Energy		
Total Funding Available	\$11,000,000		
Award Minimum	\$1,000,000		
Award Maximum	\$4,000,000		
Recipient Cost-Share/ Match Requirements:	Applicants are required to provide a non-federal cost-match of 20% for Planning projects and 50% for Demonstration/Deployment projects.		
Summary	<p>Topic 3 will provide requirements and specifications for end-to-end managed charging functionality including charging and communications systems and can include demonstrations of these systems. General Requirements include:</p> <ul style="list-style-type: none"> • Projects will plan or demonstrate managing charging technologies developed to meet the requirements of CFR 680; • Description of how the project will facilitate the execution phase of forward-looking projects in the EV charging sector. This involves integrating CFR 680-stipulated technologies and to optionally integrate platforms for vehicle side telematic executing managed charging; • A comprehensive managed charging design, scenarios, and technical documentation detailing interface mapping, sequence diagrams, application integration model, and non-functional requirements; • Development of use cases that cover fast-charging (>150kW), off-corridor, and public Level 2 charging (with opt-in), aiming to establish a foundation for future EV infrastructure advancements; 		



	<ul style="list-style-type: none"> • Project learning that can inform the best practices around further deployment of EV chargers and associated mobility systems funded by other federal grant programs; and • Development of a communications plan for demonstrating, contributing, and socializing results (deployment only).
Eligible Applicants	<p>Proposed prime recipient(s) and subrecipient(s) must be one of the following:</p> <ul style="list-style-type: none"> • Institutions of Higher Education; • For-Profit Entities and Non-Profit Entities; and • State and Local Governmental Entities, and Indian Tribes. <p>*An entity may submit more than one Concept Paper and Full Application to this FOA, provided that each application describes a unique, scientifically distinct project and provided that an eligible Concept Paper was submitted for each Full Application.</p>
Special Considerations	<p>Applications can be proposed exclusively as planning projects, exclusively as demonstration/deployment projects, or as a combination of both.</p> <p>Applicants must plan/budget for participation in the Joint Office annual meeting. Awarded projects will provide a technical presentation and/or poster to detail the plans, progress, and results of the technical effort. Awarded projects will also share best practices and exchange ideas across similar projects in the topic area. Teams are highly encouraged to select Project Partners across multiple disciplines including units of local or regional government, land use and urban design, transportation, energy, labor, community engagement, and equity.</p>
Notes	<p>Planning Projects: Should provide designs and requirements, both functional and non-functional, to build next-generation managed charging applications and services, or provide comprehensive studies on existing technologies deployed in the market and strategies to improve their technical capabilities. Examples:</p> <ul style="list-style-type: none"> • Conducting studies to examine the number of connected home chargers with required chipsets that exist in the market, coupled with feasibility studies identifying steps to increase that number; • Detailing end-to-end implementation of managed charging, including the stipulated technologies and optional integration with platforms for vehicle side telematics, for defined use cases; use cases can include >150kW Alternative Fuels Corridor, off corridor, and public Level 2 (with opt-in); • Detailing end-to-end implementation of energy management and AC fleet management solutions based on power and pricing limitations; <u>CFR 680</u>-stipulated technologies; and • Creating Open Charge Point Protocol (OCPP)-based smart charging profiles/schedules aligned with planned departure times on the vehicles. <p>Demonstration/Deployment Projects: Should build and deploy managed charging solutions using federally required standards and advanced technologies to deploy scalable solutions for managing grid impact, while protecting the experience of the customer. Examples:</p> <ul style="list-style-type: none"> • Demonstrating end-to-end implementation of managed charging including <u>CFR 680</u>-stipulated technologies and optional vehicle telematics, for defined use cases; use cases can include >150kW m Fuel Corridor, off corridor, and public Level 2 (requiring customer opt-in); • Creating/contributing to open-source OCPP 2.0.1 home implementation; the projects should include an Application Programming Interface (API) gateway acting as the server and an ultra-thin OCPP client layer updated over the air to production hardware home chargers; and • Creating/contributing to open-source energy management logic for Level 2 station clusters and dynamic pricing logic for Level 2 dwell charging.
Contact Information	<p>Questions regarding the NOFO: FOA3214@netl.doe.gov Questions regarding EERE eXCHANGE: EERE-ExchangeSupport@hq.doe.gov FAQs posted at: https://eere-exchange.energy.gov (FOA #: DE-FOA-0003214)</p>

