



**INSTITUTE FOR
TRANSPORTATION
DECARBONIZATION**

Call for Research Proposals

Grid Readiness for Electric Vehicle Deployment

May 2023

ISSUED BY

Institute for Transportation Decarbonization

REPRESENTATIVE

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Introduction

The [Institute for Transportation Decarbonization \(ITD\)](#) is pleased to announce a call for proposals for research to support and inform decision-makers in the federal government on policy development to prepare the power grid for the deployment of electric vehicles (EVs) and move to a zero carbon transportation sector. The deadline for submission is June 30, 2023. Prospective Principal Investigators are strongly encouraged to send an email of intent to grants@decarbonizetransportation.org by June 16, 2023.

Goals of this Request

ITD's mission is to develop a pathway to 100% transportation emissions reduction by 2050 in the United States and recognizes that in order to meet the EV deployment goals needed for this, significant investments must be made to improve the power grid.¹ ITD will issue grants to researchers working on understanding the interaction between EVs and the grid (particularly in areas where power is not readily available for large demand), novel, rapidly-deployable charging solutions that incorporate energy management standards, and modeling of a variety of EV deployment scenarios. This funding will go towards a policy engagement strategy for existing research, rather than new research. These grants are intended to fund the Principal Investigator (PI) and supporting staff's time to develop targeted materials for federal agencies, Congressional staff, and Administration officials including reports, briefs, and presentations. Successful project proposals will target research areas outlined in the [Transportation Decarbonization Blueprint Study](#) that have been noted as areas of priority and will have a strong focus on policy solutions across the following areas:

1. Strategic regional and technological targets for grid investment to support the deployment of EVs
2. Innovations in design and operation of the grid to help the transition to EVs
3. Updated modeling and analysis to plan distribution and transmission upgrades and operate a reliable and affordable decarbonized grid
4. Incentivizing charging at times and locations that are beneficial for the grid (including independently from the grid) using innovative policy and market designs
5. Consensus building and data-sharing mediums to coordinate stakeholders needed for grid deployment including Federal, state, and local governments, utility companies, utility

¹ Fleming, Kelly L., "Pathway to Net Zero Transportation in the United States: An Exploration of Technologies and Policies," Institute for Transportation Decarbonization, accessed February 22, 2023, <https://www.decarbonizetransportation.org/publications/pathway-to-net-zero/>.

commissions, charging providers, charging manufacturers, automotive OEMs, local communities, and community groups

ITD seeks to issue 1-2 awards to compelling submissions with individual awards of up to \$20,000 to be spent over a three-month period.

Submission Guidelines & Eligibility Requirements

Grants are open to any and all professional researchers working in non-profit organizations, universities, or national laboratories. The following submission guidelines & requirements apply to this Call for Proposal:

1. Proposals should include a short abstract or executive summary (maximum 500 words)
2. Project description should include:
 - a. A description of the research and its stage of completion. If not completed, a specific timeline should be given with completed research before the end of the ITD grant timeframe (December 2023).
 - b. An explanation of how the research outcome will help inform decision-makers at the federal level.
 - c. Give specific examples of how this research will help further the goals of the United States to have 50% of all new vehicle sales be electric by 2030 and support over 500,000 new chargers. Examples of milestone targets are specifically outlined in the Transportation Decarbonization Blueprint and how it could benefit environmental justice goals.
 - d. Propose a policy engagement strategy, including public, executive branch and congressional engagement.
3. Anticipated budget for travel, salary for relevant staff to spend up to 25% of time on policy engagement for the duration of the grant, and other associated costs.
 - a. Indirect costs: All applicants must submit a line-item program budget with their application for funding. Such a budget shall limit indirect costs to up to 25% of the project budget, or include a narrative justification for indirect costs in excess of 25%. Applicants are advised that the percentage of indirect costs shall be a criteria of selection, and prioritization shall be given to applicants who maximize program spending and limit indirect costs in accomplishing their project. For the purposes of this section, indirect costs are defined as costs for activities or services that support the organization as a whole, and are not directly associated with the

delivery of program services. Examples of such costs include finance and accounting support, human resources, bank fees, board meetings, and fundraising.

4. List of staff and relevant background information (similar to NSF biosketches).

CFP & Project Timelines

The Request for Proposal timeline is as follows:

Call for Proposal Issuance	05/12/2023
Submissions due	06/30/2023
Award Notifications	07/14/2023
Contract Start	08/04/2023

The need-date for project completion is December 2023. Applicants may propose a date earlier or later, and will be evaluated accordingly.

Award Amount

The Institute for Transportation Decarbonization budget for the project is up to \$20,000 including associated costs. Please refer to ITD's indirect cost policy above for maximum allotted budget to overhead and other indirect costs.

Evaluation Factors

ITD will rate proposals based on the following:

1. Responsiveness to the goals set forth in this Call for Proposal: What policy question can the applicant's research help inform?
2. Relevant past performance/experience: Has prior research resulted in policy actions or led to industry-wide change?
3. Applicable research areas to EV and grid deployment policy: Does the applicant have prior experience specific to EV grid integration or similar applications?

4. Technical expertise/experience of PI and relevant staff: Does the research team have expertise in electric vehicle policy, grid management, electrical engineering, utility design, or other relevant technical areas?

To Submit

To submit application materials please send a single pdf that meets all of the requirements listed above to grants@decarbonizetransportation.org before the deadline of June 30, 2023.

Identifying information will be removed before the reading committee reviews applications.