



GRANT ALERT

May 24, 2023

Vehicle Technologies Office (VTO) Program Wide Funding Opportunity

DEADLINE	PROGRAM NAME & LINK
<p>Concept Papers Due– Monday, June 26, 2023, 5:00 p.m. EST</p> <p>Submission Deadline - Friday, August 11, 2023, 5:00 p.m. EST</p> <p><i>(Applicants must obtain an UEI from the SAM and register through the EERE eXCHANGE to apply. If an application is selected for negotiation of award, applicants must be registered with FedConnect to receive the award. Applicants must register with Grants.gov in order to receive automatic updates on amendments to the funding opportunity)</i></p>	<p>Vehicle Technologies Office Program Wide Funding Opportunity Department of Energy</p>
DESCRIPTION	
<p>This discretionary grant program seeks research projects to address priorities in the following areas: the cost-effective deployment of EV charging for those without easy home charging options; innovative solutions to improve mobility options for underserved communities; community engagement to accelerate clean transportation options in underserved communities; batteries and electrification; materials technologies; mobility system supporting public transportation; advanced vehicle charging solutions, dimethyl ether engine for off-road applications, hydrogen combustion engines, to improve fuel economy and reduce GHG emissions with the goals of carbon pollution free electricity by 2035 and net-zero of GHG emissions by 2050.</p> <p>What’s New this Round? N/A; This is a new program</p>	
ELIGIBILITY	
<p style="text-align: center;">Applicants</p> <ul style="list-style-type: none"> • U.S citizens and lawful permanent residents • For-profit entities • Educational institutions • Incorporated nonprofit entities • State and local governmental entities, • Tribal governments <p style="text-align: center;">Projects</p> <p>Applicants may use funds under this program to fund research projects which are covered by the following topics:</p>	

Batteries and Electrification

- High-Capacity, Long Cycle Life Lithium-Sulfur (Li-S) Batteries
- Mechanistic Modeling of Li-S Batteries
- Improved 12-volt Lead Acid Batteries for Safety-critical Electric Vehicle Applications
- Advanced Integrated On-board Charging Systems
- Advanced Wireless Charging Concepts for Heavy-Duty Vehicles

Combustion and Advanced Fuels

- Development and Demonstration of Dimethyl Ether Engine for Off-Road Applications
- Hydrogen Combustion Engines

Lightweight Materials

- Circularity and Sustainability of Polymer Composites for Vehicle Lightweighting and Decarbonization
- Domestic Magnesium Production Research
- Novel Lightweight Materials

Energy Efficient Mobility Systems

- Mobility System Approaches Supporting Public Transportation

Technology Integration

- Reducing Soft Costs of Electric Vehicle Infrastructure to Enable Widespread Deployment
- Consumer Education Campaign for Electric Vehicles and Charging
- Demonstration and Deployment (Open topic)
- Clean Cities Coalition Network Outreach, Education and Training

FUNDING

Up to \$99.5 million is expected to be awarded for FFY 2023.

Program	Award Total	Minimum Award	Maximum Award	Cost Share
High-Capacity, Long Cycle Life Lithium-Sulfur (Li-S) Batteries	\$12,000,000	\$3,000,000	\$4,000,000	20%
Mechanistic Modeling of Li-S Batteries	\$3,000,000	\$1,500,000	\$3,000,000	20%
Improved 12-volt Lead Acid Batteries for Safety-critical Electric Vehicle Applications	\$5,000,000	\$1,000,000	2,000,000	50%
Advanced Integrated On-board Charging System	\$10,000,000	\$3,333,333	\$5,000,000	20%
Advanced Wireless Charging Concepts for Heavy -Duty Vehicles	\$5,000,000	\$2,500,000	\$5,000,000	20% - R&D 50% - Demonstration
Development and Demonstration of Dimethyl Ether Engine for Off-Road Applications	\$2,500,000	\$2,500,000	\$2,500,000	20% - R&D 50% - Demonstration
Hydrogen Combustion Engines	\$7,000,000	\$1,500,000	\$3,500,000	20%
Circularity and Sustainability of Polymer Composites for Vehicle Lightweighting and Decarbonization	\$8,000,000	\$1,500,000	\$2,000,000	20%
Domestic Magnesium Production Research	\$4,000,000	\$1,000,000	\$2,000,000	20%
Novel Lightweight Materials	\$3,000,000	\$750,000	\$1,000,000	20%

Mobility System Approaches Supporting Public Transportation	\$10,000,000	\$2,000,000	\$3,333,333	20%
Reducing Soft Costs of Electric Vehicle Infrastructure to Enable Widespread Deployment	\$15,000,000	\$3,750,000	\$7,000,000	0%
Consumer Education Campaign for Electric Vehicles and Charging	\$5,000,000	\$2,000,000	\$5,000,000	0%
Demonstration and Deployment (Open Topic)	\$5,000,000	\$500,000	\$1,000,000	50%
Clean Cities Coalition Network Outreach, Education and Training	\$5,000,000	\$500,000	\$1,000,000	0%

APPLICATION & SELECTION CRITERIA

Application and Selection Criteria

Concept Paper (Monday June 26)

- Only applicants who have submitted an eligible Concept Paper will be eligible to submit a Full Application
- Limited to a single concept or technology
- Criterion for Topics 1-10
 - The applicant clearly describes the proposed technology, describes how the technology is unique and innovative, and how the technology will advance the current state-of-the-art.
 - The applicant has identified risks and challenges, including possible mitigation strategies, and has shown the impact that EERE funding and the proposed project would have on the relevant field and application.
 - The applicant has the qualifications, experience, capabilities and other resources necessary to complete the proposed project.
 - The proposed work, if successfully accomplished, would clearly meet the objectives as stated in the funding opportunity announcement.
- Criterion for Topics 11-14
 - The applicant clearly describes the problem being addressed by the project, the project goal, and what technologies will be used within the scope of the project.
 - The applicant clearly describes how the project is unique and innovative.
 - The applicant demonstrates adequate involvement from intended partnerships.
 - The applicant has the qualifications, experience, capabilities and other resources necessary to complete the proposed project.
 - The proposed project clearly meets the requirements of the FOA topic.
 - The proposed work, if successfully accomplished, would have a meaningful impact on the problem targeted by the funding opportunity announcement topic.

Full Submission (Friday August 11)

- Technical review criteria Topics 1-10
 - Technical Merit, Innovation, and Impact
 - Project Research and Market Transformation Plan
 - Team and Resources
 - Community benefits plan
- Technical review criteria Topics 11-14
 - Project Approach and Impact
 - Project Plan
 - Project Team and Qualifications

- Community Benefits Plan
- Other selection factors for all Topics
 - Diversity
 - Optimize Funding
 - Complementary Efforts
 - Market Impact
 - EE/Deployment
 - Tech Transfer

PROJECT TIMEFRAME

The Office of Energy Efficiency and Renewable Energy (EERE), in the U.S. Department of Energy, anticipates making awards that will run from 24 up to 36 months in length, comprised of one or more budget periods. Budget periods greater than 12 months may be established for compelling programmatic or administrative reasons, such as to allow for project phases not evenly divisible with 12-month increments or to provide program personnel with logical decision points to evaluate whether the project should proceed. Project continuation will be contingent upon several elements, including satisfactory performance and Go/No-Go decision review.

ADMINISTRATIVE REQUIREMENTS

One-Time Actions

There are several one-time actions that must be completed before applying and must be completed as soon as possible as some may take several weeks to complete:

- EERE Funding Opportunity Exchange (eXCHANGE) registration
 - <https://eere-exchange.energy.gov/>
- System for Award Management registration
 - <https://www.sam.gov/>
- FedConnect registration
 - <https://www.fedconnect.net/>
- Grants.gov registration
 - <http://www.grants.gov/>

PENNDOT ROLE

PennDOT Emphasis

PennDOT seeks to support the goals of the PA Climate Action Plan 2021 ([Pennsylvania Climate Action Plan](#)) in reaching the Commonwealth's greenhouse gas reduction goals. Through the Vehicle Technologies Office Program Wide Funding grant program, PennDOT and its partners, have the opportunity to conduct research and development activities which will support the innovation of clean energy technologies.

PennDOT Support

Transportation Federal Funding Opportunities Resource Account:

RA-PDTRANSFEDFUNDOPP@pa.gov.

PennDOT will consider providing support for regionally supported grant proposals as applicable. PennDOT support may include offering data and subject matter expertise as available.

The deadline for requesting PennDOT support is July 28, 2023.