

## **Notice of Intent No. DE-FOA-0001484**

### **Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0001447**

The Office of Energy Efficiency and Renewable Energy (EERE) intends to issue, on behalf of the Vehicle Technologies Office (VTO), a Funding Opportunity Announcement (FOA) entitled “Advanced Systems Level Technology Development, Integration and Demonstration for Efficient Class 8 Trucks (SuperTruck II).”

The Vehicle Technologies Office supports a broad technology portfolio aimed at developing and deploying cutting-edge advanced highway transportation technologies that reduce petroleum consumption and greenhouse gas (GHG) emissions, while meeting or exceeding vehicle performance and cost expectations. Research, development, and deployment efforts are focused on reducing the cost and improving the performance of a mix of near- and long-term vehicle technologies including advanced combustion engines, vehicle systems, advanced batteries, power electronics and electric motors, lightweight and propulsion materials, advanced fuels and lubricants, and other enabling technologies.

The SuperTruck initiative focuses on reducing transportation fuel consumption by improving on-road heavy truck fuel economy. SuperTruck I focused exclusively on Class 8 long-haul trucks and achieved freight efficiency improvements in excess of the 50% goal, on a ton-mile-per-gallon basis, with many of the technologies being commercialized today. Building on lessons learned, SuperTruck II will include more aggressive freight efficiency and engine brake thermal efficiency goals as well as additional performance and cost effectiveness requirements to foster a more rapid market adoption of new energy efficient technologies. It will also provide an opportunity for teams to consider truck applications beyond Class 8 long-haul trucks.

The objective of the planned FOA is to research, develop, and demonstrate a Class 8 long-haul or regional haul truck that uses conventional fuels, can meet prevailing emission standards and applicable safety and regulatory requirements and can achieve the following goals:

- A greater than 100% improvement in vehicle freight efficiency (on a ton-mile-per-gallon basis) relative to a 2009 baseline. To ensure high-impact and additionality, applicants must propose a maximum freight efficiency target greater than 100% and describe the approach and technologies they will use to meet that target.
- A greater than or equal to 55% engine brake thermal efficiency demonstrated in an operational engine at a 65-mph cruise point on a dynamometer.

In addition, SuperTruck II places greater emphasis on technology suites that can be more cost-effective for end users to purchase and operate. DOE’s specific focus is on technologies (or

systems of technologies) with realistic potential for cost-effectiveness as expressed in terms of a simple payback (years to recoup initial investment through fuel cost savings), with shorter payback periods being deemed more cost-effective than longer periods.

Demonstration of the freight efficiency improvement goal will be performed using several drive cycles and must include a customer-tailored drive cycle that meets the needs of the particular customer application and the EPA Phase 2 GHG/fuel efficiency regulatory cycles for the appropriate vocation (Class 8 long haul or regional haul).

EERE envisions awarding multiple financial assistance awards in the form of cooperative agreements. The estimated period of performance for each award will be approximately 4-5 years.

This Notice is issued so that interested parties are aware of the EERE's intention to issue this FOA in the near term. All of the information contained in this Notice is subject to change. EERE will not respond to questions concerning this Notice. Once the FOA has been released, EERE will provide an avenue for potential Applicants to submit questions.

EERE plans to issue the FOA in March, 2016 via the EERE Exchange website <https://eere-exchange.energy.gov/>. If Applicants wish to receive official notifications and information from EERE regarding this FOA, they should register in EERE Exchange. When the FOA is released, applications will be accepted only through EERE Exchange.

In anticipation of the FOA being released, Applicants are advised to complete the following steps, which are **required** for application submission:

- Register and create an account in EERE Exchange at <https://eere-exchange.energy.gov/>. This account will allow the user to register for any open EERE FOAs that are currently in EERE Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission.

Questions related to the registration process and use of the EERE Exchange website should be submitted to: [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov)

- Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including the plus 4 extension, if applicable) at <http://fedgov.dnb.com/webform>
- Register with the System for Award Management (SAM) at <https://www.sam.gov>. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Please update your SAM registration annually.
- Register in FedConnect at <https://www.fedconnect.net/>. To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at [https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect\\_Ready\\_Set\\_Go](https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go).

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This is a Notice of Intent (NOI) only. EERE may issue a FOA as described herein, may issue a FOA that is significantly different than the FOA described herein, or EERE may not issue a FOA at all.

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- Register in Grants.gov to receive automatic updates when Amendments to a FOA are posted. However, please note that applications will not be accepted through Grants.gov. <http://www.grants.gov/>. All applications must be submitted through EERE Exchange.

**This is a Notice of Intent (NOI) only. DOE will not reimburse for information provided under this NOI. DOE may issue a Funding Opportunity Announcement (FOA) as described herein, may issue a FOA that is significantly different than what is described herein or DOE may issue no FOA at all.**