

**Funding Opportunity Announcement
FY06
“Office of FreedomCAR and Vehicle Technologies”**

Closing date for applications: March 16, 2006

Award ceiling: not given

Award floor: not given

Cost sharing or matching requirement: Yes

Agencies: US Department of Energy, National Energy Technology Lab

Category: Energy Efficiency and Renewable Research Information
Dissemination, Outreach, Training and Technical Analysis/Assistance.

Description

The objective of this announcement is to provide financial support to improve the efficiency and performance and reduce emissions in High Efficiency Clean Combustion applications. The announcement addresses two areas of interest: (1) Advanced Start-of-Combustion, Nox or PM Sensor; and (2) Fuels, Fuel Additives, and Lubricant Formulations.

- Develop and test a start-of-combustion sensor or method of sensing that will enable improved performance, emissions, and fuel efficiency in internal combustion engines.

The funding opportunity announcement seeks proposals addressing the topic of a low-cost, robust sensor for determining, on a cycle-by-cycle basis, the start of combustion.

The U.S. Department of Energy (DOE), National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy's (EERE) Office of FreedomCAR and Vehicle Technologies (OFCVT), is seeking applications for cost-shared projects supporting various programs within the OFCVT. The objective of this announcement is to provide financial support to improve the efficiency and performance and reduce emissions in High Efficiency Clean Combustion applications. The announcement addresses two areas of interest: (1) Advanced Start-of-Combustion, Nox or PM Sensor; and (2) Fuels, Fuel Additives, and Lubricant Formulations.

This area of interest is for new or early development concepts supporting and enabling the improved fuel efficiency, performance, and reduced emissions in internal combustion engines. The proposed work is to focus on technologies supporting high efficiency clean combustion technology including low-

temperature and homogeneous charge compression ignition combustion. Although large businesses are permitted to apply under this announcement, responses are encouraged from innovative companies that supply the major engine manufacturers.

This area of interest is "liquid fuel neutral." Fuels used in research can be either "gasoline-like" or "diesel-like" as long as the overall goals are supported. This area of interest is not intended for gaseous fueled applications.

Projects proposed in this area of interest shall be structured in a two phase approach. Phase I shall consist of a 6-12 month effort for demonstrating the proof-of-principle feasibility of the technology applicable to one or more of the specific topic areas. Phase II shall consist of an 18-24 month effort for the scaled-up testing of the technology developed in Phase I at the appropriate laboratory, bench, pilot, or on-board scale of testing. If the applicant can demonstrate sufficient evidence that proof-of-principle feasibility of the proposed technology has already been accomplished in previously completed testing, the applicant may choose to propose in their application to bypass Phase I and move directly into Phase II. The applicant should also provide a plan addressing the further development and commercialization of the proposed technology beyond the herein proposed Phase II effort.

Teaming arrangements under this area of interest are NOT required but are strongly encouraged. Participation of universities, small businesses, and DOE Laboratories is also encouraged (Reference Part III.C. for Federally Funded Research and Development Center [FFRDC] restrictions). The FFRDC contractor effort, in aggregate, shall not exceed 25% of the total estimated cost of the project, including the applicant's and the FFRDC contractor's portions of the effort.

It is expected that two (2) to four (4) cooperative agreements will be awarded in this area of interest.

It is estimated that a total of approximately \$1,000,000 in DOE funds will be available to be divided among all the awards in this area of interest.

The minimum Recipient cost share is 25% for Phase I and 50% for Phase II; see Part III.B. COST SHARING of PDF.

Link to Full Announcement: [Click here to view the Opportunity](#)

Original synopsis posted January 26, 2006