



U.S. Department of Energy
Advanced Research Projects Agency – Energy
Announcement of Teaming Partner List
for Upcoming Funding Opportunity Announcement:
Reliable Electricity Based on Electrochemical Systems (REBELS)

The Advanced Research Projects Agency Energy (ARPA-E) intends to issue a Funding Opportunity Announcement (FOA) entitled Reliable Electricity Based on Electrochemical Systems (REBELS) to solicit applications for financial assistance to fund new intermediate temperature fuel cell (ITFC) technologies that efficiently generate stationary power from fossil fuels in the near-term, while simultaneously building a bridge to a zero carbon future. Currently, ARPA-E anticipates that there will be three specific areas of interest identified in the REBELS FOA as follows: (1) low-cost, efficient, reliable ITFCs for small distributed generation applications, (2) ITFCs that are capable of in-situ charge storage in an electrode to enable battery-like response to transients, and (3) electrochemical devices that produce liquid fuels from methane using excess renewable resources. Fuel cell systems based on existing Department of Energy R&D programs, such as low temperature polymer exchange membrane (LT-PEM) and high temperature solid oxide fuel cells (HT-SOFCs), will not be areas of interest for the anticipated REBELS FOA.

Expertise in the following Technical Areas may be useful in responding to the FOA: intermediate temperature solid electrolytes; intermediate temperature electrocatalysts/electrodes with low or zero platinum group metal (PGM) loading; new approaches to activate carbon/hydrogen bonds for intermediate temperature fuel reforming; new approaches to direct reforming of fuels at a fuel cell electrode; novel fuel cell manufacturing processes without high temperature sintering; integration of fuel cell and battery functionality at the device level (rather than system level); and electrochemical production of liquid fuels.

As a general matter, ARPA-E strongly encourages outstanding scientists and engineers from different organizations, scientific disciplines, and technology sectors to form new project teams. Interdisciplinary and cross-sector collaboration spanning organizational boundaries enables and accelerates the achievement of scientific and technological outcomes that were previously viewed as extremely difficult, if not impossible.

The Teaming Partner List is being compiled to facilitate the formation of new project teams. The Teaming Partner List will be available on ARPA-E eXCHANGE (<http://arpa-e-foa.energy.gov>), ARPA-E's online application portal, starting in October 2013. The Teaming Partner List will be updated periodically, until the close of the Full Application period, to reflect new Teaming Partners who have provided their information.

Any organization that would like to be included on this list should complete all required fields in the following link: <https://arpa-e-foa.energy.gov/Applicantprofile.aspx>. Required information includes:



Organization Name, Contact Name, Contact Address, Contact Email, Contact Phone, Organization Type, Area of Technical Expertise, and Brief Description of Capabilities.

By submitting a response to this Notice, you consent to the publication of the above-referenced information. By facilitating this Teaming Partner List, ARPA-E does not endorse or otherwise evaluate the qualifications of the entities that self-identify themselves for placement on the Teaming Partner List. ARPA-E will not pay for the provision of any information, nor will it compensate any respondents for the development of such information. Responses submitted to other email addresses or by other means will not be considered.

This Notice does not constitute a FOA. No FOA exists at this time. Applicants must refer to the final FOA, expected to be issued by the end of the 2013 calendar year, for instructions on submitting an application and for the terms and conditions of funding.