U.S. Department of Energy
Advanced Research Projects Agency – Energy

Announcement of Teaming Partner List for Upcoming Funding Opportunity Announcements: *M*icro-scale *O*ptimized *S*olar-cell *A*rrays with *I*ntegrated *C*oncentration (*MOSAIC*)

The Advanced Research Projects Agency Energy (ARPA-E) intends to issue Funding Opportunity Announcements (FOAs) entitled ***M***icro-scale ***O***ptimized ***S***olar-cell ***A***rrays with ***I***ntegrated ***C***oncentration (***MOSAIC***). The objective of these FOAs is to develop high-performance concentrated photovoltaics (CPV) in a low-profile module similar to traditional non-concentrated "flat-plate" PV in order to provide low-cost solar electricity for the roof-top, commercial, and utility-scale markets. As described in more detail below, the purpose of this announcement is to facilitate the formation of new project teams to respond to the upcoming MOSAIC FOAs. The FOAs will provide specific program goals, technical metrics, and selection criteria and the FOA terms are controlling. For purposes of the Teaming Partner List, the following summarizes current planning for the FOAs:

The MOSAIC program's overall goal is to develop micro-scale CPV technologies that enable significant geographic and demographic expansion of solar electricity generation. A key motivation for the MOSAIC program, therefore, is to greatly accelerate efforts in the CPV community that seek to shrink cell, optics, tracking and module dimensions and apply the scalability of micro-systems approaches that have the potential to remove manufacturing, operational and market barriers to widespread commercial use.

Currently, ARPA-E anticipates that the FOAs will target research in: (1) Micro-tracking systems: approaches that have the form factor of a static rooftop flat panel Silicon, utilize optical concentration, but also contain embedded tracking; (2) Macro-tracking systems: approaches that utilize micro-system integration, achieve the form factor of rooftop flat panel silicon PV, but use conventional tracking methods as currently practiced, e.g., moving the entire panel on one or two axes; (3) Hybrid systems: approaches that specifically address the challenge of harvesting light in areas with a large percentage of diffuse light, such as found in regions of the Northern U.S.; and 4) novel manufacturing approaches for small and fragile CPV cells that are high-throughput, low-cost, and scalable.

In order to realize the goals of the MOSAIC program, ARPA-E aims to bring together diverse engineering and scientific communities, including material scientists, electrical and packaging engineers, optical engineers, micro-scale manufacturing specialists, and researchers in polymers and opto-electronics to advance micro-scale PV to working prototypes and engage with stakeholders who can drive these devices toward market adoption.

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 November 2014. 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 FOAs exist at this time. Applicants must refer to the final FOAs, expected to be issued in November 2014, for instructions on submitting an application and for the terms and conditions of funding.