



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

Announcement of Teaming Partner List for an upcoming Funding Opportunity Announcement:

<u>Seeding Critical Advances for Leading Energy technologies with</u> <u>Untapped Potential 2021 (SCALEUP 2021)</u>

The Advanced Research Projects Agency – Energy (ARPA–E) intends to issue a new Funding Opportunity Announcement ("FOA"), "Seeding Critical Advances for Leading Energy technologies with Untapped Potential 2021 (SCALEUP 2021)," expected to be issued in 2021, to solicit applications for financial assistance to support the scaling of promising ARPA-E-funded technologies into early commercial products.

As described in more detail below, the purpose of this announcement is to facilitate collaborations among performing teams to respond to the upcoming FOA. The FOA will provide specific Program goals, technical metrics, selection criteria, and FOA terms. For the purposes of the Teaming Partner List, the following summarizes current planning for the FOA:

The <u>Seeding Critical Advances</u> for <u>Leading Energy</u> technologies with <u>Untapped Potential 2021</u> (SCALEUP 2021) solicitation provides a vital mechanism for the support of innovative energy R&D that complements ARPA-E's primary R&D focus on early-stage transformational energy technologies that still require proof-of-concept.

ARPA-E's mission is to develop transformational energy technologies in support of U.S. national security and economic competitiveness. ARPA-E funds the R&D of technologies to build and maintain U.S. technological leadership in highly competitive global energy markets, thus supporting American jobs and economic growth. ARPA-E's authorizing statute directs the Agency to develop linkages between its sponsored applied research and the marketplace¹. These linkages are central to realizing the public's return on technology investments.

An enduring challenge to ARPA-E's mission is that even technologies that achieve substantial technical advancement under ARPA-E support are at risk of being stranded in their development path once ARPA-E funding ends (averaging \$2.5M over three years). ARPA-E-funded technologies typically face significant remaining technical risks upon completion of an award's funding period. Experience across ARPA-E's diverse energy portfolios, and with a wide range of investors, indicates that pre-commercial "scaling" projects are critical to establishing that performance and cost parameters can be met in practice for these very early-stage technologies. These pre-commercial scaling projects aim to translate the performance achieved at bench scale to commercially scalable versions of the technology, integrate the technology with broader systems, provide extended performance data, and validate the manufacturability and reliability of new energy technologies. (These projects are often termed "prepilot" development in different industries.) Success in these scaling projects would enable industry, investors, and partners to justify substantial commitments of financial resources, personnel, production

¹ America COMPETES Act, Pub. L. No. 110-69, § 5012 (2007), as amended (codified at 42 U.S.C. §16538(c)(2)(A-C)).





facilities, and materials to develop promising ARPA-E technologies into early commercial products.

The SCALEUP 2021 FOA builds upon ARPA-E-funded technologies by scaling the most promising. Stranding promising ARPA-E-funded technologies in their development pathways leaves substantial intellectual property developed with American taxpayer dollars vulnerable to adoption by foreign competitors, who can and do capture it for continued development – and economic benefit – overseas. This harms national competitiveness, as U.S. industries often lose the lead on the development, scaling, and manufacturing of technologies necessary to compete in rapidly evolving global energy markets. These scaling energy technology projects will meet ARPA-E's its statutory goal of "accelerating transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty"².

As a general matter, ARPA—E strongly encourages different organizations with outstanding scientists and engineers across different scientific disciplines and technology sectors to participate in this Program. 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.

ARPA-E is compiling a Teaming Partner List for SCALEUP 2021 as an optional tool that potential applicants may choose to utilize to facilitate the formation of new project teams and identify potential collaborations. Teaming partners include organizations and individuals who can offer expertise, facilities, or other complementary resources toward a potential ARPA-E project. The teaming list identifies partners' capabilities as well as their areas of interest, understanding that expertise and experience in one field can often be applied successfully to a new field. **This list is completely voluntarily to participate in and utilize.** ARPA-E will not identify or facilitate connections through the teaming list and participation in the list has no bearing whatsoever on the evaluation of applications submitted to the SCALEUP 2021 FOA.

The Teaming Partner List is being compiled solely to facilitate the formation of new project teams. ARPA-E intends to make the Teaming Partner List available on ARPA-E eXCHANGE (http://ARPA-E-foa.energy.gov), ARPA-E's online application portal, starting in October 2021. The Teaming Partner List will be updated periodically, until the close of the Full Application period, to reflect the addition of new Teaming Partners who have provided their information.

Any organization that would like to be included on the Teaming Partner 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 via email or 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

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² 42 U.S.C. §16538(c)(2)(C)





FOA, expected to be issued in 2021, for instructions on submitting an application and for the terms and conditions of funding.