



**U.S. Department of Energy
Advanced Research Projects Agency-Energy
Announcement of Teaming Partner List
for Potential Funding Opportunity:
High Performance Insulated Glass Units**

The Advanced Research Projects Agency-Energy (ARPA-E) is considering issuing a funding opportunity to support the development of high performance insulated glass units (IGUs). The purpose of this announcement is to facilitate the formation of new project teams to respond to a potential funding opportunity. Any funding opportunity issued in the future would provide specific program goals, technical metrics, and selection criteria. Funding opportunity terms would be controlling.

The anticipated three-year program is expected to culminate in highly insulating, low-cost, retrofittable IGUs that can be integrated into a sash and frame. Although the sash and frame are important components of the window, they are out of the scope of this anticipated program. Vacuum insulated glazings and aerogel-based IGUs are two possible technologies that could meet the goals of the potential program, though other innovative solutions meeting the program targets would be considered. ARPA-E anticipates the teams will execute analytical, computational, design, and prototype efforts to reduce key risks associated with their technology during the first half of the performance period. Validation of thermal performance and durability would occur at the end of this period. The second half of the performance period would focus on further development of the manufacturing processes and validating their scalability for mass manufacture.

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 scientific and technological outcomes that were previously viewed as extremely difficult, if not impossible, to achieve.

ARPA-E strongly encourages the formation of interdisciplinary teams to overcome technology barriers to develop high performance IGUs suitable for the retrofit market that are cost-competitive with double-pane low-emissivity IGUs with argon fill. Successful teams are likely to incorporate expertise in relevant areas such as materials, simulation, thermal analysis, manufacturing, industrial engineering, technoeconomic analysis, reliability, chemistry, and other fields. The technical designs and processes developed by the teams will be evaluated by industrial equipment designers to ensure viable paths to commercialization. Thermal, optical, and durability testing will be performed by third-party certifiers.

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 September 2024. 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 form: <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 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. **Participation in and utilization of this list is completely voluntary.** ARPA-E will not identify or facilitate connections through the list and participation in the list has no bearing whatsoever on the evaluation of applications submitted to the potential funding opportunity.

This notice does not constitute a funding opportunity. No funding opportunity exists at this time. Applicants must refer to the funding opportunity, expected to be issued by November 2024, for instructions on applying and for the terms and conditions of funding.