

QUESTIONS AND ANSWERS

PLEASE REFER TO THE GENERAL FAQs SECTION OF ARPA-E'S WEBSITE ([HTTP://ARPA-E.ENERGY.GOV/?Q=FAQ/GENERAL-QUESTIONS](http://arpa-e.energy.gov/?q=faq/general-questions)) FOR ANSWERS TO MANY GENERAL QUESTIONS ABOUT ARPA-E AND ARPA-E'S FUNDING OPPORTUNITY ANNOUNCEMENTS. ADDITIONAL QUESTIONS SPECIFIC TO THIS FOA ONLY ARE INCLUDED BELOW. PLEASE REVIEW ALL EXISTING GENERAL FAQs AND FOA-SPECIFIC QUESTIONS BEFORE SUBMITTING NEW QUESTIONS TO ARPA-E.

I. Concept Paper Phase Questions:

Q1. Can I speak or meet with the ARPA-E program director or other ARPA-E personnel about this funding opportunity announcement?

ANSWER: No. Upon the issuance of this Funding Opportunity Announcement (FOA), ARPA-E Program Directors and other ARPA-E personnel are prohibited from communicating (in writing or otherwise) with Applicants or potential Applicants regarding the FOA. This "quiet period" remains in effect until ARPA-E's public announcement of its project selections. During the "quiet period," Applicants may submit questions regarding the FOA to ARPA-E-CO@hq.doe.gov with the FOA name and number in the subject line. Applicants may also submit questions regarding ARPA-E's online application portal, ARPA-E eXCHANGE, to ExchangeHelp@hq.doe.gov with the FOA name and number in the subject line. ARPA-E will not accept or respond to communications received by other means (e.g., fax, telephone, mail, hand delivery). E-mails sent to other e-mail addresses will be disregarded.

Q2. Is there a difference between DE-FOA-0002625 HESTIA FOA and DE-FOA-0002626 HESTIA SBIR/STTR FOA, other than the latter being through the SBIR? (difference in terms of application content, etc.?)

ANSWER: No. However, note that small businesses that qualify as a "Small Business Concern", as defined in the SBA's "Guide to SBIR/STTR Program Eligibility" (http://sbir.gov/sites/default/files/elig_size_compliance_guide.pdf) may apply to only one of the two ARPA-E HESTIA FOAs: DE-FOA-0002626 (SBIR/STTR) or DE-FOA-0002625. Small businesses that qualify as "Small Business Concerns" are strongly encouraged to apply under the former (SBIR/STTR FOA). To determine eligibility as a "Small Business Concern" under DE-FOA-0002626 (SBIR/STTR), please review the eligibility requirements in Sections III.A – III.D of that FOA.

Q3. The HESTIA and HESTIA SBIR/STTR FOA's appear identical, apart from one apparently being administered as an ARPA-E award and the other being administered as a SBIR/STTR award.

Can you indicate what this distinction means in practice? All other technical narrative & administrative requirements appear the same.

ANSWER: The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are highly competitive programs that encourage domestic small businesses to engage in Federal Research/Research and Development (R/R&D) with the potential for commercialization. More information about SBIR/STTR awards can be found at <https://www.sbir.gov>.

Q4. I HAD A QUICK QUESTION ABOUT THE TEAM WE ARE FORMING FOR THE CALL. THE CALL SEEMED TO INDICATE THAT THE CO-PI WORKING ON THE LCA WILL BE FUNDED THROUGH A SEPARATE SOLICITATION. I WAS WONDERING IF IT MEANT WE SHOULD INCLUDE AN LCA EXPERT ON OUR TEAM, OR WILL THERE BE A MATCHING FROM ARPA-E TO JOIN US WITH A RELEVANT LCA COLLABORATOR?

ANSWER: As noted in Section I.G of the FOA, HESTIA Project Teams are “encouraged to include in-house LCA expertise wherever necessary in the development of the proposed technology”. A Co-PI serving as an in-house expert for a HESTIA Project Team will need to be included in the Team’s budget. Such in-house LCA expertise on a Team, however, is separate from the development of the LCA methodologies and frameworks for the HESTIA Program, as identified and funded through the separate solicitation (see DE-FOA-00001953, Appendix V “Life Cycle Assessment for Carbon Negative Buildings”). The teams funded under that separate solicitation will ensure consistency and transparency in LCA approaches and assumptions and develop new, needed tools across the Program.

Per Section I.G. of DE-0002625, HESTIA Project Teams “will be required to cooperate with one of awardee(s) selected through” DE-FOA-0001953; similarly, HESTIA Project Teams awarded through DE-0002626 are, per Section I.H., “encouraged to cooperate with one of the LCA awardee(s) selected through” DE-FOA-0001953. (The difference between “required” and “encouraged” is due to the SBIR/STTR FOA (DE-FOA-0002626) being administered in accordance with the Small Business Act and the SBIR and STTR Policy Directive issued by the U.S. Small Business Administration (SBA)).

Q5. I'M WRITING TO ASK IF IT IS ACCEPTABLE TO PROPOSE THAT AN LCA PERSON WILL BE EMBEDDED WITH A PROJECT RESPONDING TO DE-FOA-0002625. WILL THIS MAKE US INELIGIBLE AND/OR DECREASE THE COMPETITIVENESS OF OUR PROPOSAL?

WE'VE READ BOTH SOLICITATIONS, DE-FOA-0002625 AND DE-FOA-0001953, AND WE UNDERSTAND THAT SEPARATELY FUNDED LCA TEAMS WILL WORK ON DEVELOPMENT OF GENERALIZABLE SOFTWARE AND OTHER TOOLS FOR LCA-BASED EVALUATION OF RESULTS GENERATED BY THE TECHNICAL TEAMS. HOWEVER, WE THINK IT WILL BE CRITICAL TO HAVE AN LCA PERSON ON THE TECHNICAL TEAM TO HELP GUIDE DECISION-MAKING AND DESIGN DURING THE EARLY PHASES OF THE TECHNICAL WORK. A SIGNIFICANT PART OF WHAT WE PROPOSE WILL BE RELATED TO MATERIAL FORMULATIONS (I.E., RECIPES, RATIOS OF CONSTITUENTS). WE THINK IT WILL BE VALUABLE TO HAVE AN LCA PERSON IN PLACE TO DO TEA CALCULATIONS UP FRONT, TO HELP ENSURE THAT THE FORMULATIONS THAT ARE CREATED AND TESTED ARE AS INHERENTLY LOW-CO2 AS POSSIBLE.

WE ALSO THINK THAT HAVING AN LCA PERSON EMBEDDED ON THE TECHNICAL TEAM WILL FACILITATE KNOWLEDGE TRANSFER AND COMMUNICATION TO THE ASSIGNED EXTERNAL LCA TEAM LATER ON, AS THE PROJECT MOVES TOWARDS THE LATTER STAGES.

ANSWER: Please refer to prior question.

Q6. I HAVE SEVERAL QUESTIONS ABOUT THE PROGRAM:

- 1) CAN A TEAM INCLUDE PRIMARY APPLICANT OF NON-PROFIT, BUT WORKING WITH A FOR-PROFIT WITH A PROMISING TECHNOLOGY ALONGSIDE A COLLEGE AND A NATIVE AMERICAN GROUP. THIS WOULD NOT BE A CO-APPLICANT SITUATION, JUST A SINGLE APPLICANT, BUT VARIOUS COMPONENTS WORKING IN TANDEM WITH DIFFERENT PARTNERS.**
- 2) CAN THE PROJECT EXAMINE THE CARBON SEQUESTRATION PROPERTIES OF A MATERIAL THAT IS ALREADY IN USE AND HAS SOME EVIDENCE POINTING TO ITS CARBON SEQUESTRATION PROPERTIES, BUT NOT ENOUGH HARD DATA ON THE MAXIMUM FORMULATION OF THE MATERIAL, AND TESTING TO DETERMINE QUANTITIES OF SEQUESTRATION.**
- 3) WHEN ANALYZING CARBON SEQUESTRATION, WE ASSUME THAT ALL APPLICANTS WOULD STUDY CARBON SEQUESTRATION (IF ANY) IN THE RAW INPUTS, IN THE MANUFACTURING PROCESS, AND IN THE PERFORMANCE ON-SITE IN SITU. IS THIS CORRECT?**

ANSWER:

(1) Yes. Please refer to Sections III.A - III.B of the FOA for further information regarding eligible applicants and cost sharing.

(2) ARPA-E will not pre-assess an applicant's proposal. Prospective applicants must review the technical requirements of the FOA and independently determine whether their proposed concept warrants a submission. Kindly refer to Section III.C.3. of the FOA for submissions specifically not of interest.

(3) Carbon storage will be assessed on a life cycle basis. Please refer to the FOA for specifics on the life cycle analysis, including definitions in Section I.B. of the FOA (e.g., "Cradle-to-gate" and "Cradle-to-grave").