DE-FOA-0002250 - SMARTFARM

Questions can be sent to ARPA-E-CO@hq.doe.gov

FIRST DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV:
5 PM ET, FRIDAY, FEBRUARY 7, 2020
SECOND DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV:
5 PM ET, TBD

QUESTIONS AND ANSWERS

PLEASE REFER TO THE GENERAL FAQS SECTION OF ARPA-E'S WEBSITE (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:

Q1.1 [W]e have two questions regarding the availability of data from Phase 1 of the program. Since phase 1 will start roughly one year ahead of phase 2, would it be reasonable to assume phase 2 performers will have access to preliminary field data by the beginning of phase 2, and the first full-season data by half year into phase 2 (mid 2021)?

ANSWER: While ARPA-E cannot guarantee the exact timing of data availability and its alignment with negotiating and executing Phase 2 awards, the intention is to make the Phase 1 data available to Phase 2 performers as soon as possible.

Q1.2 Are there any new types of data have been incorporated into phase 1 that are proposed by the selected performers but not listed in the phase 1 solicitation? We are particularly interested in the soil nitrogen in the form of nitrate(NO3-) and ammonium (NH4+) measured at regular frequencies with certain space resolution during the growing season.

ANSWER: This information cannot be shared at this time as the Phase 1 awards are still being negotiated. However, we intend to make as much data collected from Phase I sites publically available as soon as possible.

Q2. My company seeks to document the impact of the Biofuel - Biogas derived from US Dairy Farm Agricultural Waste Resources and Management. This is not specifically referenced in the above FOA-0002250 or DE-FOA-0002251 (SBIR / STTR), however in readings the concept paper requirements due for submission on February 19, 2020 it fits perfectly with our project scope of work. The question is simply this: "Does either DE-FOA-002250 or DE-FOA-0002251 (SBIR / STTR) FOA apply to quantifying feedstock production and lifecycle emissions from BIOGAS as an agriculturally derived biofuel for a qualified US company to apply for with in the rules and criteria for this application?"

ANSWER: Please refer to Technical Requirements sections of the DE-FOA-002250 (Section I.D. and I.E.) or DE-FOA-0002251 (SBIR / STTR, Section I.E. and I.F.) FOAs. Technologies capable of meeting the specifications under these sections will be considered.

Q3. [We are] seeking clarification regarding the language on Page 35 in [FOA] Section [IV.C.1.c] "Operational Plan and System Cost" … . This is a requirement for the Concept Paper, and the third bullet point is as follows:

QUESTIONS AND ANSWERS

How much the system is expected to cost at commercial scale on a $/acre/year basis, broken down by hardware & software components, deployment/labor assumptions, and O&M costs.

[W]e would like to know if the budget you are requesting for "how much the system is expected to cost at a commercial scale" is referring to:

1. **funding that DOE would provide to the [recipient] (the project budget), OR**
2. **if this is an estimate of the costs that the PIs of the proposal believe it will require for the DOE to spend to commercialize the technology developed as a result of receiving this award.**

ANSWER: The request is to estimate the cost of the proposed system at commercial scale (e.g. *nth* of a kind), not the project budget, DOE funding requirement, or anticipated cost of achieving commercial scale. The expectation is that applicants will form these budget estimates in the context of the information requested in Section IV.C.1.c: Operational Plan and System Cost, and that commercial costs will comprise the hardware, software and labor required to achieve the technical targets. It is understood that these estimates will be based on assumptions regarding the cost of hardware components, and the labor and analytics required to achieve the technical targets specified in Technical Requirements sections of the DE-FOA-002250 or DE-FOA-0002251 (SBIR / STTR) FOA.

Q4. Are the awardees who receive the SMARTFARM phase 1 funding eligible for applying to the phase 2 FOA call?

ANSWER: Yes.

Q5. We are developing an concept paper to the SMARTFARM program with a total of two experiment sites in two US states (i.e. one site in each state). The SMARTFARM FOA requires an experiment scale of >=80 acres. Does this mean each experiment site have to have at least 80 acres of experiment fields or the total acreage from all experiment sites need to be >=80 acres?

ANSWER: The scale specification in Technical Requirements sections of the DE-FOA-002250 or DE-FOA-0002251 (SBIR / STTR) FOA do not refer to the development of experimental sites; rather, it refers to the scale of operation assuming technical success of the proposed technology. For example, a system capable of achieving the cost and uncertainty targets at <80 acres, but would not be capable of meeting the cost or uncertainty targets at the >80 acre scale, falls outside the technical parameters specified in this FOA.