

## QUESTIONS AND ANSWERS

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B) Do you mean that we are to disclose the federal financial assistance that the proposed staff members are currently receiving or have received within the last 5 years? ..... 8

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Q29. I need a clarification regarding the cost share as it applies to Technology Transfer & Outreach (TT&O) activities. As stated on page 48, "each Project Team must spend at least 5% of the Federal funding...on [TT&O] activities." If we ask for \$3 million in federal funding, then we would need to spend at least \$150,000 of the Federal funding on TT&O activities. In addition, our cost share -- 20% of the Total Project Cost -- would be \$750,000. However, if our Project Team does not contribute any funding to TT&O activities and only uses Federal funding instead, can our contribution to the Total Project Cost be \$720,000 (i.e. subtract 20% of \$150,000 -- \$30,000 -- from \$750,000)?..... 9

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I. FREQUENTLY ASKED QUESTIONS:

**Q1. if I have questions about this funding announcement, who do I contact?**

**ANSWER:** Please see the FOA guidance on submitting FOA content questions and response publication. Applicants may submit questions regarding this ARPA-E's Funding Opportunity Announcement (FOA) to [ARPA-E-CO@hq.doe.gov](mailto:ARPA-E-CO@hq.doe.gov). All emails must include the FOA name and number in the subject line. The cover page and Executive Summary of the Funding Opportunity Announcement state the deadlines for submitting questions to [ARPA-E-CO@hq.doe.gov](mailto:ARPA-E-CO@hq.doe.gov).

**Q2. How will I receive a response to questions submitted to [ARPA E CO@hq.doe.gov](mailto:ARPA_E_CO@hq.doe.gov) about this FOA?**

**ANSWER:** Responses are posted in the "Frequently Asked Questions" section of ARPA-E's website. There are general FAQs and a FAQ page for each FOA.

ARPA-E will post responses on a weekly basis to any questions that are received.

ARPA-E will cease to accept questions approximately 5 business days in advance of each submission deadline. Responses to questions received before the cutoff will be posted approximately one business day in advance of the submission deadline. ARPA-E may re-phrase questions or consolidate similar questions for administrative purposes.

**Q3. Will ARPA-E post a response to every question submitted to [ARPA-E-CO@hq.doe.gov](mailto:ARPA-E-CO@hq.doe.gov)?**

**ANSWER:** No. ARPA-E will only post responses to questions that have not already been addressed by a published FAQ. Also, ARPA-E may consolidate similar questions for administrative purposes.

**Q4. If I have questions about ARPA-E eXCHANGE, who do I contact?**

**ANSWER:** Applicants may submit questions regarding ARPA-E's online application portal, ARPA-E eXCHANGE, to [ExchangeHelp@hq.doe.gov](mailto:ExchangeHelp@hq.doe.gov). All emails must include the name and number of the Funding Opportunity Announcement in the subject line.

**Q5. 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 Programs 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](mailto: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](mailto: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). Emails sent to other email addresses will be disregarded.

**Q6. Can a person be PI on one proposal and a Co-PI on a second separate proposal?**

**ANSWER:** Yes, but the applications must be scientifically distinct from one another.

**Q7. May applicants submit more than one Concept Paper to this funding opportunity?**

**ANSWER:** Yes, but each Concept Paper submission must be scientifically distinct.

**Q8. I have developed a technology that may be a good fit for this funding opportunity. Will ARPA-E please review the attached project information and let me know if I should make a submission to this funding opportunity.**

**ANSWER:** No. Applicants must review the Technical Requirements of this funding opportunity to determine if their technology warrants a submission to ARPA-E.

## II. Questions for week ending: MARCH 29, 2013

**Q9. Is it allowable for a primary U.S. awarded contractor to pay a foreign university a consulting fee in order to support a PH.D. student doing work on the project at the foreign institution?**

**ANSWER:** Based on the limited information in your question, it appears the answer would be “no.” ARPA-E awards are generally subject to: 1) the requirement that all work under the award is conducted in the United States - subject to a partial waiver application process (rarely submitted, and more rarely granted); 2) United States manufacturing requirements for subject inventions resulting from research conducted under the award; and 3) export control and ITAR regulations, as applicable, for the research conducted under the award; and 4) other eligibility requirements that vary from FOA to FOA. Thus, Prime Recipients must expend 100% of the Total Project Cost in the United States. Applicants seeking a waiver of this requirement are required to include an explicit request in the Business Assurances Form, which is part of the Full Application submitted to ARPA-E. Such waivers are granted where there is a demonstrated need, as determined by ARPA-E. A consulting fee to a foreign university appears unlikely to qualify.

**Q10. Page 7, Figure 2 shows cost segments. In the case of titanium, a significant materials cost is presented. What are the items that make-up the materials cost? You state a significant fraction of the materials cost is the cost of mg. Figure 2 shows the cost of mg to be slightly above \$3/kg yet materials cost shown in figure 2 for titanium is approximately \$7.10/kg which is over twice the mg cost.**

**ANSWER:** Titanium costs were estimated. The dominant material components are titanium tetrachloride and magnesium where their combined costs are close to the total shown in Figure 2.

**III. Questions for week ending: APRIL 5, 2013**

**Q11. I would like to get a copy of the DOE report which is Reference Number 22 in the FOA (U.S. DOE Report No. DE-AC5-00OR22725, 2010). I could not locate a copy of this report on the web.**

**ANSWER:** This DOE report is the cited authority - in footnote 22 on Pages 9 (and page 23) - for the following statement on the production of Magnesium: "In comparison, domestic magnesium production is an electrolytic process that requires approximately 43.6 kWh/kg and has emissions of 6.9 kgCO<sub>2</sub>/kg." This DoE Report is not needed for submission of a concept paper. However, to obtain a copy of the Report, a records request for this document may be submitted electronically to the following web page: <http://energy.gov/doe-headquarters-foia-request-form>.

**Q12. In the metals FOA (DE-FOA-0000882 Mod 001), the scope of recycling technologies seems limited to sorting techniques. However, sorting exhibits fundamental limitations. ARPA-E states that "innovative concepts focused on energy intensive and/or high cost stages of both the primary and secondary production processes will also be considered." However it seems to rule out "recycling/secondary production technologies that only offer energy efficiency advantages without also incorporating advanced sorting technologies." (p. 18). Will ARPA-E accept proposals using scrap streams from existing sorting technologies, but with other transformational energy reduction and/or product purity improvements?**

**ANSWER:** ARPA-E will consider any concept paper that advances the program objectives of the FOA described in Section I.C (Program Objectives) and meets the technical performance targets in Section I.E (Technical Performance Targets) of the FOA. Please also see Section III.C.2 (Responsiveness Criteria) of the FOA.

**IV. Questions received by 5 PM: APRIL 15, 2013**

**Q13. Am I allowed to attach references and nomenclature to the two page concept paper or a list of references?**

**ANSWER:** Please see Section IV.C (Content and Form of Concept Papers) of the FOA.

**Q14. One of my partners is going to be \*\*\* University. I am at a \*\*\* University. Would it help our chances if \*\*\* were the Lead institution or will that not matter? If \*\*\* is the lead does that mean they have the PI or can I still be the PI?**

**ANSWER:** ARPA-E will not provide a pre-submission assessment of an Applicant's project team or proposed project. Applicants must determine individually how to structure their project team.

**V. Questions for week ending: MAY 31, 2013**

**Q15. I expected to find in the R&D strategy (20 pages max) described on pages 43 and 44 in the modified 2 FOA a category for presenting our experimental plan. But no such category is explicitly called out. My best guess is to put the experimental plan description, a major part i think of the R&D strategy, under feasibility. Is that correct? If not, please tell me where you intend it to be inserted and then clarify what you mean by feasibility.**

**ANSWER:** Please refer to Section IV.D.1 (“First Component: Technical Volume”) on pages 42-46 of the FOA for guidance regarding the structure of full applications. ARPA-E may not provide advice on how an applicant may structure its submission in part because ARPA-E is not aware of the contents/”plans” of applicant’s submissions.

**Q16.A. Are joint ventures (JV) allowed (assuming only one member of the jv is the prime)?**

**Q16.B. If so, does the billing to ARPA-E from the JV members flow through the prime (appear on the prime’s books) or can the billing bypass the prime and come directly from each JV member?**

**Q16.C. Alternatively, can the JV prime do the billings for the other JV members but not have their funds appear on its books and therefore not have to charge ARPA-e its customary Q&A on the other members’ billings?**

**Q16.D. Are there any other ways of handling the billing so that the prime does not have to charge Q&A on the other partners’ billings?**

**ANSWER:**

Q16.A. Please see Section III.A.4 (“Consortium Entities”) on page 31 of the FOA to determine if your joint venture may apply.

Q16.B. Billing must be submitted by the prime.

Q16.C. See above (answer to Q16.B).

Q16.D. See above (answer to Q16.B).

**VI. Questions for week ending: JUNE 7, 2013**

**Q17. Do sub-awards complete a “Business Assurance Form” and does the prime applicant include it in their Full Application?**

**ANSWER:** Yes, applicants should add the Sub Recipient Business Assurance forms to the Lead organization Business Assurance form.

**Q18. Do sub-awards complete the “Other Sources of Funding Form” and does the prime applicant include it in their Full Application?**

**ANSWER:** Yes, applicants should add the Sub Recipient Other Sources of Funding Form to the Lead organization Other Sources of Funding Form.

**Q19.A. I have a general question...when an FFRDC is going to be part of a project team (not as a lead), it is understood that DOE will fund the FFRDC’s directly. However, how does the applicant include the FFRDC in their proposal and what/if any information/forms is needed from the FFRDC to be included in the applicant’s application?**

**ANSWER:** Please see pages 47-48 of modification #2 of the FOA under Section IV.D.7 (“Seventh Component: Business Assurances Form”) and Questions 8 and 9 of the Business Assurances Form. If the Applicant is a FFRDC, it is required to submit written authorization from the cognizant Federal agency and append it to the Business Assurances Form. If the Applicant is a DOE/NNSA FFRDC, it must also submit a Field Work Proposal and append it to the Business Assurances Form.

**Q19.B. Do the FFRDC’s complete an SF 424a?**

**ANSWER:** Per the instructions for completing the SF 424A under Step 7 of the Budget Justification Workbook Guidance, “Applicants must provide and justify proposed costs related to Subrecipients, vendors, contractors, consultants, and FFRDC partners under the tab ‘f. Contractual’ for each Budget Year.”

The instructions for completing tab “f” also include further instructions on submitting budgets specific to an FFRDC.

**Q20. Mod 2 of the remote FOA states that for proposals against this FOA, the technology to market strategy section of the technical volume is limited to 2 pages (see page 44 of the FOA). However, the technical volume template that is posted on your website states that this section is limited to 5 pages maximum. Could you please clarify which page limit is correct?**

**ANSWER:** ARPA-E has published an updated Technical Volume template on the ARPA-E Funding Opportunity Exchange funding opportunity announcement. The Technical Volume has been modified to a 2 page limit for the Technology to Market Strategy section.

**VII. Questions for week ending: JUNE 14, 2013**

**Q21. I would like to clarify one point, on technical volume, regarding line spacing, is it suppose to be single line spacing, or double line spacing? The instructions did not address this point specifically. Your clarification is appreciated.**

**ANSWER:** Applicants may choose to use either single or double line spacing in the Technical Volume section, so long as this section conforms to the page limits outlined in the FOA.

**Q22. The primary applicant has the DUNS number - is it acceptable if the co-investigators do not have DUNS number?**

**ANSWER:** Yes, this is acceptable.

**Q23. Is there an ARPA-E archive which gives example cost share letters? If so please provide link[s]**

**ANSWER:** No, there is not an ARPA-E archive which gives example cost share letters.

**Q24. In the instructions for component 1, technical volume, the R&D strategy instruction calls for a description of the proposed team members. In addition, the management plan calls for a description of the roles of each project team member, and the multi-investigator projects section requires a description of the roles and work to be performed by each PI and key participant for "multi-organizational" as well as multi-investigator project. We are proposing a multi-organizational team, but only a single PI. Please explain the difference between these three sections in the technical volume.**

**ANSWER:** For a multi-organizational team, these sections are overlapping. Please provide the information requested in each section.

**VIII. Questions for week ending: JUNE 21, 2013**

**Q25. In the technical volume, each section has a page limit, i.e. R & D strategy is 20 pages, technical approach is 1 page etc. Does a cover sheet and table of contents if placed before all these sections, count, as I did not see a page limit for "cover page" or "table of contents"**

**ANSWER:** No, an applicant's cover sheet and table of contents do not count towards any of the page limits outlined in the Technical Volume section.

**Q26. This is a question regarding the fillable form on "other sources of funding". The form states that "if additional tables are required, include the tables in an addendum to this form". The form is so "protected", though, that I cannot add an addendum to it, copy it, or do anything to it except fill in the existing boxes.**

**ANSWER:** The original Microsoft Word version of the "Other Sources of Funding Disclosure Form" cannot be modified. Applicants may, however, save the "Other Sources of Funding Disclosure Form" to a .PDF format and then insert additional pages into the .PDF file. This is an acceptable method for including an addendum to this form.

**IX. Questions for week ending: JUNE 28, 2013**

**Q27. Please provide clarification regarding questions (3) a. and (3) b. Under the other sources of funding disclosure form for DE-FOA- 0000882 (metals):**

**A) Do you mean that we should disclose all the federal financial assistance that the principal investigator (pi) is currently receiving or has received within the last 5 years?**

**Or**

**B) Do you mean that we are to disclose the federal financial assistance that the proposed staff members are currently receiving or have received within the last 5 years?**

**ANSWER:** As stated in the instructions for Questions (3)a. and (3)b. in the “Other\_Sources\_of\_Funding\_Disclosure\_Form\_(Fillable)\_-04-23-13” document provided in the Funding Opportunity Announcement, the Applicant’s PI is required to disclose (1) “all financial assistance from any Federal entity that the proposed Prime Recipient, Subrecipient(s), PI, or any Co-PI(s) are currently receiving or has received within the last 5 years” and (2) “any funding from any non-Federal entity for related work (i.e., work that is related directly or indirectly to the proposed R&D project) that the proposed Prime Recipient, Subrecipient(s), PI, or any Co-PI(s) are currently receiving or has received within the last 5 years.” This document can be viewed or downloaded from the Required Application Documents section of the FOA on the ARPA-E Funding Opportunity Exchange website.

**Q28. With regards to the other sources of funding disclosure form [for DE-FOA-0000882] -- please provide clarification regarding questions (2) a. and (2) b. potential overlap with other applications. Please let me know if those questions apply only to the PI, Co-PI(s) and sub-recipients?**

**ANSWER:** Please see the instructions for Questions (2)a. and (2)b. in the “Other\_Sources\_of\_Funding\_Disclosure\_Form\_(Fillable)\_-04-23-13” document provided in the Funding Opportunity Announcement. Question (2)a specifies applications regarding “this project,” while Question (2)b specifies “any application(s) for related work.” This document can be viewed or downloaded from the Required Application Documents section of the FOA on the ARPA-E Funding Opportunity Exchange website.

**Q29. I need a clarification regarding the cost share as it applies to Technology Transfer & Outreach (TT&O) activities. As stated on page 48, "each Project Team must spend at least 5% of the Federal funding...on [TT&O] activities." If we ask for \$3 million in federal funding, then we would need to spend at least \$150,000 of the Federal funding on TT&O activities. In addition, our cost share -- 20% of the Total Project Cost -- would be \$750,000. However, if our Project Team does not contribute any funding to TT&O activities and only uses Federal funding instead, can our contribution to the Total Project Cost be \$720,000 (i.e. subtract 20% of \$150,000 -- \$30,000 -- from \$750,000)?**

**ANSWER:** The cost share of each Applicant must be 20% of the Total Project Cost unless the Project Team qualifies for a "Reduced Cost Share Requirement," as outlined in Section III.B.3 of the FOA. In the hypothetical provided, the cost share must be \$750,000. The cost share formula is not applied to calculations of funding for TT&O activities. The overall cost share of the Applicant remains the same regardless of how much the Project Team contributes to funding for TT&O activities.

**Q30. On p. 25 the FOA states that "Proof-of-Concept seedlings are projects which range between \$250,000 and \$1 million." does this refer to the total project cost or to the federal share?**

**ANSWER:** The \$1 million maximum budget refers to the funding amount that may be requested from ARPA-E.