

## 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. I THINK MY TECHNICAL RESEARCH AND DEVELOPMENT CONCEPT CAN BE APPLIED TO MORE THAN ONE SUBTOPIC. CAN I SUBMIT THE SAME CONCEPT PAPER TO BOTH?

**ANSWER:** No. All submissions to the Vision OPEN FOA must be scientifically distinct. If the same applicant wants to submit the same or a similar R&D concept to multiple subtopics, the individual Concept Papers must be scientifically distinct and tailored to those unique subtopics. Duplicate Concept Papers will be declared Non-Responsive and not merit reviewed.

#### Q2. WHAT IS THE DIFFERENT BETWEEN A SUBTOPIC AND A TECHNICAL CATEGORY?

**ANSWER:** Subtopics map to the Topics and Goals of the overall Vision OPEN FOA. Each submission must select one Subtopic as described in Section I.C. Additionally, each submission must select one or more Technical Category (or subcategory) as described in Section I.D. These Technical Categories and Subcategories are used for internal reviewer matching purposes, may be changed by ARPA-E, and have no bearing on the merit review the submission receives. In eXCHANGE, Technical Categories will show as Technical Areas; the two are interchangeable.

#### Q3. I HAVE A CONCEPT RELATED SOLELY TO CARBON CAPTURE, WHICH IS LISTED AS A SUBMISSION SPECIFICALLY NOT OF INTEREST IN SECTION III.C.3. HOWEVER, I SEE A SUBCATEGORY FOR CARBON CAPTURE, 4.F, UNDER SECTION I.D. SHOULD I SUBMIT MY CONCEPT?

**ANSWER:** A technology's presence as a Technical Subcategory in Section I.D. does not mean that that technology is responsive to the Vision OPEN 2024 FOA. Technical Categories in Section I.D. are used across multiple ARPA-E FOAs and to register reviewers; many Subcategories may be considered non-responsive to the specific Goals, Topics, and Subtopics for Vision OPEN 2024.

#### Q4. IS PRODUCTION OF VALUABLE PROTEINS (E.G. FUNCTIONAL PROTEINS, ANIMAL FEED ENZYMES, OR THERAPEUTICS) IN PHOTOSYNTHETIC ORGANISMS THAT WOULD DISPLACE CURRENT PRODUCTION IN SUGAR BASED FERMENTATION IN SCOPE FOR SUBTOPIC 3.A.1: SYNTHETIC PRODUCTS?

**ANSWER:** ARPA-E will not pre-assess an applicant's proposal. Prospective applicants must review the technical requirements of the FOA, including the "Submissions Specifically Not of Interest" in Section III.C and independently determine whether their proposed concept warrants a submission.

**Q5. I HAVE 2 QUESTIONS REGARDING THE ELIGIBLE SCOPE OF TECHNOLOGIES THAT IS ALLOWED FOR DE-FOA-0003387 TOPIC 3.A. LIVING REFINERIES:**

- 1. ARE BACTERIA-BASED PROCESSES ALLOWED UNDER THIS TOPIC? ALTHOUGH THE FOA ONLY MENTIONS “PLANTS & ALGAE” IN THIS SECTION, THERE IS NO EXPLICIT MENTION OF BACTERIA BEING DISALLOWED IN THE SECTION DETAILING “SUBMISSIONS SPECIFICALLY NOT OF INTEREST.” IT DOES SAY THAT “MICROBIAL CONVERSION OF SUGARS” IS DISALLOWED, BUT WHAT IF THE MICROBES ARE USING CO<sub>2</sub> AS THE FEEDSTOCK FOR POLYMER PRODUCTION? FOR EXAMPLE, IF PHOTOSYNTHETIC CYANOBACTERIA OR NON-PHOTOSYNTHETIC KNALLGAS BACTERIA ARE ABLE TO FIX CO<sub>2</sub> INTO POLYMERS, WOULD THOSE FIT WITHIN THE ALLOWABLE PARAMETERS OF THIS TOPIC?**
- 2. CAN CO<sub>2</sub>-DERIVED C<sub>1</sub> COMPOUNDS BE INCORPORATED AS INTERMEDIATES FOR POLYMER PRODUCTION? THE “SUBMISSIONS SPECIFICALLY NOT OF INTEREST” SECTION SPECIFIES THAT “REDUCTION OF CAPTURED CO<sub>2</sub> TO C<sub>1</sub> CHEMICALS” IS NOT ALLOWED FOR THIS TOPIC. HOWEVER, THE WORDING IS UNCLEAR AS TO WHETHER THIS MEANS THAT C<sub>1</sub> COMPOUNDS CANNOT BE THE FINAL PRODUCT OF THE PROPOSED PROCESS, OR WHETHER IT MEANS THAT NO CO<sub>2</sub> CONVERSION TO C<sub>1</sub> CAN BE INVOLVED AT ANY STEP OF THE PROCESS. FOR EXAMPLE, IF CO<sub>2</sub> IS FIRST CONVERTED TO A C<sub>1</sub> COMPOUND, BUT THE C<sub>1</sub> COMPOUND IS SUBSEQUENTLY CONVERTED INTO A POLYMER VIA A DOWNSTREAM BIOLOGICAL PROCESS, WOULD THAT BE ALLOWED? OR WOULD THE INVOLVEMENT OF A CO<sub>2</sub> TO C<sub>1</sub> CONVERSION STEP AT ANY POINT AUTOMATICALLY DISQUALIFY THE PROCESS?**

**ANSWER:** See Vision OPEN FAQ 4

**Q6. FOR SUBTOPIC 2.A.4, WE WOULD LIKE TO KNOW IF AMMONIA SYNTHESIS AND AMMONIA DECOMPOSITION FIT INTO THE BIDIRECTIONAL PROCESSES. SPECIFICALLY, OUR TECHNOLOGY IS RELEVANT TO ELECTROMAGNETIC REACTOR FOR AMMONIA SYNTHESIS USING RENEWABLE POWER, THEN THE SAME REACTOR SYSTEM CAN BE USED TO DECOMPOSE AMMONIA.**

**ANSWER:** See Vision OPEN FAQ 4

**Q7. I AM HOPING TO GAIN SOME CLARITY ON A PIECE OF THE GUIDELINES FOR THE VISION OPEN 2024 (DE-FOA-0003387) OPPORTUNITY. MY QUESTION HAS TO DO WITH THE DEFINITION OF "GHG-FREE". THE FOA DEFINES "GHG-FREE" ON PAGE 8 FOOTNOTE 6 AS "PRIMARY ENERGY SOURCES WITH EXTREMELY LIMITED, DIRECT SCOPE 1 GHG EMISSIONS." CAN YOU PROVIDE ANY MORE DETAILED GUIDANCE ON WHAT THE UPPER ACCEPTABLE BOUND COULD BE FOR SCOPE 1 EMISSIONS, IN ORDER TO ASSESS WHICH PROJECT(S) ARE PERMITTED TO ADVANCE PAST THE CONCEPT PAPER STAGE?**

**ANSWER:** ARPA-E has not set an upper bound for direct scope 1 GHG emissions; however, higher emissions negatively affect the impact of a proposed technology.

**Q8. I WOULD LIKE TO ASK QUESTIONS REGARDING THE VISION OPEN 2024 FOA (DE-FOA-0003387). HERE ARE THE QUESTIONS FOR THE CONCEPT PAPER PHASE:**

- 1. TO CLARIFY, ARE FUEL CELLS – TRANSPORTATION AND BATTERIES – TRANSPORTATION (SUBCATEGORY D AND SUBCATEGORY J IN CATEGORY 2) UNDER TOPIC 2.A., SUBTOPIC 2.A.2 CHEMICAL AVAILABILITY AND SUBTOPIC 2.A.4 ENERGY CONVERSION?**
- 2. ARE THERE ANY STIPULATIONS REGARDING THE BASELINE PERFORMANCES OF THE PROPOSED FUEL CELLS, AND BATTERIES (LIQUID-ELECTROLYTE-BASED OR SOLID-ELECTROLYTE-BASED) IN PACK, AND CELL FORMS?**
- 3. DO WE NEED TO SPECIFY THE TRANSPORTATION APPLICATIONS (FOR EXAMPLE, PLUG-IN ELECTRIC VEHICLES (PEVS), HYBRID ELECTRIC VEHICLES (HEVS), HEAVY-DUTY VEHICLES, AND COMMON MOBILE VEHICLES) THAT WE WILL BE FOCUSING ON IN THE CONCEPT PAPERS?**

**ANSWER:** 1. See Vision OPEN FAQ 3

2. See Vision OPEN FAQ 4
3. See Vision OPEN FAQ 4

**Q9. WE APPRECIATE THE ARTICULATION OF THE 3 GOALS AND CRITICAL AREAS OUTLINED IN THE VISION OPEN 2024 ANNOUNCEMENT.**

**WE WOULD LIKE TO ASK IF PROJECTS FOR ENERGY EFFICIENCY, SUCH AS HIGH-EFFICIENCY GHG-FREE HEAT PUMPS, OR REFRIGERANT-FREE COOLING ARE ELIGIBLE FOR CONSIDERATION?**

**IF OUR PROJECT, WHICH FOCUSES ON NEW PHYSICS AROUND THERMOELECTRIC COOLING PERFORMANCE, IS OUTSIDE OF THESE THREE TOPIC AREAS EXPLICITLY, SHOULD WE SUBMIT A CONCEPT PAPER?**

**WHAT AREAS OF EFFICIENCY CAN BE SEEN AS INCLUDED IN "PRIMARY ENERGY" IF ANY? OR IS "PRIMARY ENERGY" ONLY MEANT TO MEAN POWER GENERATION?**

**ANSWER:** See Vision OPEN FAQ 4

**Q10. \*\*\*REDACTED\*\*\*. I SAW THE RECENTLY POSTED GRANT OPPORTUNITY FROM YOUR AGENCY (DE-FOA-0003387), AND I THINK ONE AREA OF MY GROUP'S RESEARCH IS PERFECTLY POISED TO ADDRESS SUBTOPIC 3.D.2: DECONSTRUCTION OF POST-CONSUMER PLASTIC WASTE. FOR THE PAST COUPLE OF YEARS, MY GROUP HAS BEEN WORKING ON A PROJECT FUNDED BY THE DOE (CATALYSIS PROGRAM) THROUGH THE EARLY CAREER AWARD TO DEVELOP WAYS TO TRANSFORM RUBBER WASTE INTO VALUE-ADDED PRODUCTS. WE DID DEVELOP A PROOF OF CONCEPT AND NOW HAVE A MANUSCRIPT IN REVISION AT NATURE ON IT.**

**I WOULD BE INTERESTED IN ADVANCING THIS PROCESS TO MAKE IT MORE SCALABLE AND ECONOMICAL. AS PART OF THIS EFFORT, I WOULD LIKELY TEAM UP WITH A COLLABORATOR WITH EXPERTISE IN LCA AND TEA ANALYSES THAT WOULD HELP TO GUIDE THIS OPTIMIZATION PROCESS, AND I WOULD ALSO CONSIDER BRINGING ON BOARD A COLLABORATOR WHO DOES DIRECTED EVOLUTION OF ENZYMES AS AN ALTERNATIVE APPROACH.**

**I WANTED TO GET YOUR TAKE ON WHETHER SUCH BUILDING ON THE WORK FUNDED BY THE DOE WOULD BE CONSIDERED TOO MUCH OVERLAP. IF POSSIBLE, I WOULD LOVE TO CONNECT WITH YOU OVER ZOOM TO PROVIDE MORE DETAIL AND GET YOUR FEEDBACK.**

**ANSWER:** See Vision OPEN FAQ 4

**Q11. I AM WRITING FROM THE RESEARCH OFFICE OF \*\*\*REDACTED\*\*\* (NON FOR-PROFIT SCHOOL / RESEARCH INSTITUTION IN SWITZERLAND, \*\*\*REDACTED\*\*\*) TO GET SOME INFORMATION ABOUT THE ELIGIBILITY CRITERIA AND IP CONDITIONS FOR THE DE-FOA-0003387: VISION OPEN 2024.**

**MY UNDERSTANDING IS THAT FOREIGN RESEARCHERS ARE ELIGIBLE TO PARTICIPATE TO THIS CALL AS SUBAWARDEE. COULD YOU PLEASE CONFIRM THIS? AND TELL ME IF THERE ARE SPECIFIC CONDITIONS.**

**MY SECOND QUESTION IS REGARDING THE IP CONDITIONS.**

**IF \*\*\*REDACTED\*\*\* RESEARCHERS PARTICIPATE TO A PROJECT FUNDED BY ARPA-E, WHAT WOULD BE THE IP CONDITIONS?**

**I SAW SEVERAL "ATTACHMENT 2" TYPES ON YOUR WEBSITE. WOULD THE ATTACHMENT 2 "UNIVERSITY" APPLY TO US, OR WOULD IT BE THE ONE LABELED "LARGE BUSINESS"?**

**IF THIS IS THE "LARGE BUSINESS" ONE, AND IF WE PROVIDE A COST SHARE OF 20%, THE WAIVER PATENT RIGHT WOULD APPLY? IS THAT CORRECT? AND IN THIS CASE, \*\*\*REDACTED\*\*\* WOULD RETAIN ITS IP RIGHTS (IF ANY DURING THE PROJECT) WITH A NONEXCLUSIVE, NONTRANSFERABLE, IRREVOCABLE, PAID UP LICENSE TO THE GOVERNMENT. IS THAT CORRECT?**

**ANSWER:** See answers 3.1 and 2.20 of the General Questions FAQ on the ARPA-E website.

[General Questions | arpa-e.energy.gov](https://arpa-e.energy.gov)

**Q12. ARE MULTIPLE CONCEPT PAPER PROPOSALS ALLOWED FOR VISION OPEN 2024?**

**ANSWER:** See Vision OPEN FAQ 1

**Q13. I HAVE A QUESTION REGARDING THE TECHNOLOGIES OF INTEREST UNDER TOPIC 2 OF VISION OPEN (INTERMODAL ENERGY SUPERHIGHWAY). WOULD NEW TECHNOLOGIES FOR ELECTRIFIED RAIL, PARTICULARLY FOR NEW FUEL TRANSPORT AND RELATED APPLICATIONS, BE OF INTEREST?**

**ANSWER:** See Vision OPEN FAQ 4

**Q14. IN THE FOA, THERE IS THIS STATEMENT “SUBMISSIONS THAT HAVE BEEN SUBMITTED IN RESPONSE TO CURRENTLY ISSUED ARPA-E FOAS.” FOR CLARITY, IS A “SUBMISSION” CONSIDERED JUST FULL APPLICATION SUBMISSIONS THAT BETTER DEFINED THE IDEA? OR ARE NON-ENCOURAGED CONCEPT PAPERS ALSO CONSIDERED SUBMISSIONS? WHO, BASED ON PREVIOUS ACTIVITY WITH ARPA-E IS BARRED FROM SUBMITTING TO OPEN?**

**ANSWER: A “SUBMISSION” IN THIS CONTEXT COULD BE A CONCEPT PAPER OR FULL APPLICATION THAT IS STILL BEING CONSIDERED UNDER ANOTHER FOA.Q15. I HAVE TWO QUESTIONS FOR VISION OPEN FOA (DE-FOA-0003387).**

- 1. SUBTOPIC AREA 3.D.1. DEALS WITH RECYCLABLE POLYMERS. OUR PROPOSAL FOCUS AREA IS THE SAME. HOWEVER, IF WE INCLUDE CELLULOSE- WASTE PLASTIC COMPOSITES AS PART OF RECYCLING, WOULD THAT BE OUT OF TOPIC AREA 3.D.1?**
- 2. DOES THE COMPUTATIONAL TOOL MEAN TECHNOECONOMIC ANALYSIS/LCA, OR CAN MODELING/SIMULATION BE PART OF IT?**

**ANSWER:** See Vision OPEN FAQ 4

**Q16. I AM REACHING OUT FOR CLARIFICATION ON DE-FOA-0003387 REGARDING THE ALLOWED FOREIGN WORK. PLEASE SEE THE QUESTION BELOW:**

**THE FOA MENTIONS THAT ALL WORK UNDER THE ARPA-E AWARD MUST BE PERFORMED IN THE UNITED STATES UNLESS A FOREIGN WORK WAIVER IS APPROVED. OUR PROJECT ENTAILS A PORTION OF WORK TO BE PERFORMED OUTSIDE THE US. THE SCOPE OF WORK OUTSIDE THE US IS ESSENTIAL TO THE PROJECT OUTCOMES AND HAS ANTICIPATED BENEFITS TO THE UNITED STATES ECONOMY. IS THERE A PERCENTAGE OF FOREIGN WORK THAT IS CONSIDERED MAXIMUM ALLOWED FOR THIS FOA?**

**ANSWER:** See answer 3.1 of the General Questions FAQ on the ARPA-E website.

**Q17. \*\*\*REDACTED\*\*\* IS INTERESTED IN APPLYING FOR THE VISION OPEN FOA UNDER CATEGORY 2: SUBCATEGORY J - BATTERIES AND TRANSPORTATION: "TECHNOLOGIES FOR IMPROVED BATTERIES FOR A WIDE RANGE OF VEHICLE APPLICATIONS, INCLUDING HYBRID ELECTRIC VEHICLES (HEVS), PLUG-IN HYBRID ELECTRIC VEHICLES (PHEVS), AND BATTERY ELECTRIC VEHICLES (EVS).**

**WE IDENTIFIED THAT OUR TECHNOLOGY CAN SOLVE EITHER GOAL 1: GHG-FREE, ABUNDANT PRIMARY ENERGY—SUBTOPIC 1.B.2 NEW SOURCES OR GOAL 2: INTERMODEL ENERGY SUPERHIGHWAY—SUBTOPIC 2.A.4 ENERGY CONVERSION.**

**COULD YOU PLEASE ADVISE ON WHICH GOAL/SUBTOPIC TO PURSUE IN THIS CATEGORY? OR IS THERE A MORE APPROPRIATE GOAL/SUBTOPIC THAT OUR CATEGORY/SUBCATEGORY SHOULD PURSUE?**

**ANSWER:** See Vision OPEN FAQ 4

**Q18. SUBTOPIC 1.B.1 LISTS THE FOLLOWING AS A TOPIC THAT POTENTIALLY WOULD BE IN SCOPE FOR THE VISION OPEN SOLICITATION: "TECHNOLOGIES TO INCREASE PRODUCTION, FUNCTIONALITY, OR RESOURCE CHARACTERIZATION FOR ENHANCED GEOTHERMAL SYSTEMS." WOULD SIMILAR TECHNOLOGIES AS APPLIED TO OTHER GHG-FREE PRIMARY ENERGY SOURCES BE IN SCOPE AS WELL, SUCH AS HYDROELECTRIC OR NUCLEAR? IN OTHER WORDS, WOULD ANOTHER BULLET LIKE THE FOLLOWING REPRESENT A PLAUSIBLE EXAMPLE UNDER THIS SUBTOPIC: "TECHNOLOGIES TO INCREASE PRODUCTION AND FUNCTIONALITY FOR ADVANCED HYDROELECTRIC AND/OR NUCLEAR POWER SYSTEMS"?**

**TOPIC 1.B STATES THAT THIS TOPIC SEEKS INNOVATIONS IN "NASCENT" GHG-FREE FORMS OF PRIMARY ENERGY, WHICH IMPLIES ENERGY SOURCES THAT ARE STILL COMING INTO EXISTENCE. ONE OF THE EXAMPLES PROVIDED UNDER SUBTOPIC 1.B.1 REFERS TO "TRANSFORMATIONAL CONTROL SYSTEMS FOR ADVANCED POWER PLANTS." THE TERM "ADVANCED POWER PLANTS" IS NOT DEFINED. IN THAT CONTEXT, WOULD IT BE CORRECT TO STATE THAT THE POWER PLANTS MAY NOT NECESSARILY BE NASCENT, BUT THE PROPOSED CONTROL SYSTEM TECHNOLOGY WOULD NEED TO BE NASCENT/TRANSFORMATIONAL? FOR EXAMPLE, FISSION-BASED NUCLEAR PLANTS (EXISTING AND FUTURE) COULD BENEFIT FROM AUTOMATED OPERATION/CONTROL/MAINTENANCE CAPABILITIES, POTENTIALLY PROVIDING TRANSFORMATIONAL BENEFITS, BUT AS APPLIED TO AN EXISTING PRIMARY ENERGY SOURCE. WOULD THAT TYPE OF TECHNOLOGY CONCEPT FALL UNDER SUBTOPIC 1.B.1?**

**ANSWER:** See Vision OPEN FAQ 4



**Q19. I AM INTERESTED IN SUBMITTING A CONCEPT PAPER TO VISION OPEN 2024. I AM A FOREIGN NATIONAL (SOUTH KOREA) AND DO NOT HAVE CITIZENSHIP/RESIDENCY IN THE U.S. IN THIS CASE, IF I SUBMIT THE CP AS PART OF A DOMESTIC ENTITY WITH MY AFFILIATION (MIT, IN PARTICULAR), WOULD I BE ELIGIBLE FOR SUBMISSION?**

**ANSWER:** See answer 3.1 of the General Questions FAQ on the ARPA-E website.

**Q20. WE HAVE A QUESTION FOR SUBTOPIC 3.A.1: ARE YOU EXPECTING SOME STUDIES TO BE CONDUCTED ON A LARGE SCALE FOR THE MODIFIED PLANTS OR ALGAE (E.G. FIELD TRIALS, PONDS)?**

**ANSWER:** ARPA-E is not defining the scope of work for a given project. Refer to the Vision OPEN FOA for details on submission guidelines.



Q21. TO THE CONTRACT SPECIALIST,

\*\*\*REDACTED\*\*\* HAS BEEN REVIEWING THE REQUIREMENTS FOR THE VISION OPEN TO DETERMINE ELIGIBILITY FOR SUBMITTING A CONCEPT PAPER FOR THIS OPPORTUNITY. HOWEVER, THERE ARE A FEW QUESTIONS THAT AROSE FROM OUR REVIEW. SO I'M SEEKING SOME CLARIFICATIONS ON SOME OF THE CRITERION. MY QUESTIONS CENTER AROUND COST SHARE FOR IR&D FUNDING.

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*"IN ADDITION, PROJECT TEAMS MAY NOT USE INDEPENDENT RESEARCH AND DEVELOPMENT (IR&D) FUNDS TO MEET THEIR COST SHARE OBLIGATIONS UNDER COOPERATIVE AGREEMENTS. HOWEVER, PROJECT TEAMS MAY USE IR&D FUNDS TO MEET THEIR COST SHARE OBLIGATIONS UNDER "OTHER TRANSACTION" AGREEMENTS.*

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*"ARPE-E DOES NOT FUND INDEPENDENT RESEARCH AND DEVELOPMENT (IR&D) AS PART OF AN INDIRECT COST RATE UNDER ITS GRANTS AND COOPERATIVE AGREEMENTS. IR&D, AS DEFINED AT FAR 31.205-18(A), INCLUDES COST OF EFFORT THAT IS NOT SPONSORED BY AN ASSISTANCE AGREEMENT OR REQUIRED IN PERFORMANCE OF A CONTRACT, AND THAT CONSISTS OF PROJECTS FALLING WITHIN THE FOUR FOLLOWING AREAS: (I) BASIC RESEARCH, (II) APPLIED RESEARCH, (III) DEVELOPMENT, AND (IV) SYSTEMS AND OTHER CONCEPT FORMULATION STUDIES.*

I'M TRYING TO UNDERSTAND THE IMPACT OF THESE STIPULATIONS IN REGARD TO THE \*\*\*REDACTED\*\*\* PROGRAM. IN READING FAR 31.205-18, \*\*\*REDACTED\*\*\* SEEMS TO FALL UNDER DEVELOPMENT AND THUS WILL HAVE TO ADJUST HOW WE CALCULATE AND ACCOUNT FOR COST SHARE PER THIS CRITERION OF THIS AWARD.

1. DO YOU KNOW WHAT "OTHER TRANSACTION AGREEMENTS" ARE ELIGIBLE? OR DO YOU KNOW WHERE I CAN FIND THE DEFINITION OF OTHER TRANSACTION AGREEMENTS?
2. WHAT FUNDS ARE ACCEPTABLE TO MEET COST SHARE IF WE ARE NOT ABLE TO UTILIZE OUR INTERNAL R&D FUNDS?
3. AS FOR PAGE 42, DOES THIS MEAN THAT WE CAN ONLY ACCOUNT FOR DIRECT COSTS (I.E. LABOR COST) BUT NOT OVERHEAD AND G&A FOR INDIRECT COSTS?

**I'D APPRECIATE ANY GUIDANCE OR DIRECTION YOU CAN PROVIDE. THANKS IN ADVANCE FOR ANY ASSISTANCE YOU CAN PROVIDE.**

**ANSWER:**

1. DOE's other transactions authority are codified at 42 USC §7256(a) and (g). OTA's are a legal agreement between DOE and a non-federal entity that is generally defined by what it is not – it is not a procurement contract or financial assistance agreement used by the federal government to obtain supplies and services or support a public purpose. An OT Agreement provides the flexibility to adopt and incorporate business practices that reflect commercial industry standards and best practices into its award instruments.
2. See 2 CFR § 200.306 Cost sharing or matching.
3. Page 42 refers specifically to IR&D as it relates to indirect costs.

**Q22. THE FOA STATES "REDUCTION OF CAPTURED CO2 TO C1 CHEMICALS" IS SPECIFICALLY NOT OF INTEREST. CAN DOE CLARIFY IF A TWO-STEP PROCESS WHERE A C1 PRODUCT IS PRODUCED AS AN INTERMEDIATE, BUT CONVERTED TO A C2+ PRODUCT IN A SUBSEQUENT STEP WOULD BE ELIGIBLE? OR IS THIS FOA ONLY INTERESTED IN ONE-STEP PROCESSES THAT REDUCE CO2 DIRECTLY TO C2+ PRODUCTS?**

**ANY CLARITY YOU CAN PROVIDE IS GREATLY APPRECIATED.**

**ANSWER:** See Vision OPEN FAQ 4

**Q23. I HAVE A QUICK QUESTION REGARDING THE PRODUCTION OF ELECTROBIOFUELS. WE WANT TO PROPOSE SCALING ELECTROCATALYSIS TO UPGRADE PYROLYSIS BIO-OIL FROM LIGNOCELLULOSIC BIOMASS TO SERVE AS FUELS AND FUEL INTERMEDIATES. IF THE ELECTRICITY THAT POWERS ELECTROCATALYSIS IS FROM NON-FOSSIL CARBON EMITTING SOURCES (WIND, SOLAR, NUCLEAR), WILL THIS PROPOSAL BE ACCEPTABLE UNDER GOAL 2: INTERMODAL ENERGY SUPERHIGHWAY? I ASK FOR CLARIFICATION BECAUSE UNDER SECTION III(C)3, SUBMISSIONS SPECIFICALLY NOT OF INTEREST, IT LISTS "BIOFUELS (ALONE)". AS WE ARE MAKING AN ELECTROBIOFUEL, BIOMASS IS NOT THE ONLY INPUT SOURCE OF ENERGY, THEREFORE DOES IT QUALIFY FOR CONCEPT PAPER REVIEW?**

**ANSWER:** See Vision OPEN FAQ 4

**Q24. WHEN SUBMITTING A CONCEPT PAPER, THE "GENERAL" TAB HAS A SPACE FOR A REQUIRED MAXIMUM 6000-CHARACTER ABSTRACT. THE CONCEPT PAPER FOA HAS NO MENTION OF AN ABSTRACT OTHER THAN THE SUMMARY TO BE INCLUDED IN THE FOUR-PAGE CONCEPT PAPER. COULD YOU GIVE SOME GUIDANCE AS TO WHAT IS REQUIRED FOR THE ABSTRACT? 6000-CHARACTERS SEEMS LARGE FOR A CONCEPT PAPER THAT IS ONLY ABOUT TWICE THAT SIZE. ALSO, SHOULD THE ABSTRACT BE LIMITED TO NON-PROPRIETARY INFORMATION?**

**ANSWER:** The Abstract field in the ARPA-E Funding Opportunity Exchange website submission form is provided for applicants to provide a brief (Not to exceed 6,000 characters including spaces) description of the proposed project.

**Q25. WE ARE A START-UP COMPANY WITH A GOAL OF VALORIZING COMPOUNDS AND CREATING VALUE-CHAINS FROM CULTIVATED MACROALGAE - MARINE BIOMOLECULES. WE ARE INTERESTED IN FUNDING OPPORTUNITY NO. DE-FOA-0003387, SPECIFICALLY DEVELOPING BIOREFINERIES AND PRODUCTS, SUCH AS FOR GOAL 3, SUBTOPIC 3.B.2 "NOVEL FEEDSTOCKS, PROCESSES AND PRODUCT." SPECIFICALLY WE ARE EXTRACTING HIGH-VALUE COMPOUNDS FROM MACROALGAE FOR NUTRACEUTICALS AND PHARMACEUTICAL APPLICATIONS.**

**COULD YOU PROVIDE MORE CLARITY IF WE WOULD QUALIFY FOR THIS RFP? WILL THERE BE A WEBINAR ON THIS TOPIC?**

**ANSWER:** See Vision OPEN FAQ 4

**Q26. HOPE YOU'VE HAD A GREAT START TO THE WEEK! \*\*\*REDACT\*\*\*. WE ARE INTERESTED IN SUBMITTING IDEAS TO THE RECENT FOA (DE-FOA-0003387), AND WANTED TO REACH OUT TO ASK IF THE CONCEPT WE HAVE FALLS WITHIN SCOPE. WE ARE INTERESTED IN SUBTOPIC 3.B.2, AND THE IDEA IS TO DO ELECTROCHEMICAL CATALYSIS TO UPGRADE CO<sub>2</sub>/CO INTO SHORT-CHAIN PRODUCTS AND THEN USE BIOLOGICAL CONVERSION FOR FURTHER UPGRADING INTO BIOFUELS AND BIOPRODUCTS. THIS TECHNOLOGY USES CO<sub>2</sub> AS THE FEEDSTOCK, BUT WE ARE NOT SURE IF IT'S CONSIDERED AS REFINERY-BASED METHODS OR IF WE CAN ADJUST THE SCOPE TO BETTER ALIGN TO THE CALL. ANY INSIGHTS ARE HIGHLY APPRECIATED!**

**ANSWER:** See Vision OPEN FAQ 4



**Q27. I'M PREPARING A CONCEPT PAPER FOR THE ARPA-E VISION OPEN 2024 (FUNDING OPPORTUNITY NO. DE-FOA-0003387) OPPORTUNITY.**

**I BELIEVE MY COMPANY NEEDS TO COMPLETE THE FOLLOWING REGISTRATIONS FOR THE CONCEPT PAPER ONLY:**

- LOGIN.GOV**
- ARPA-E EXCHANGE PORTAL**

**CAN YOU CONFIRM THIS IS CORRECT AND/OR WHETHER THERE ARE OTHERS WE WILL NEED TO COMPLETE (E.G. SAM.GOV), ETC.?**

**ANSWER:** Applicants must meet the requirements in Section IV. APPLICATION AND SUBMISSION INFORMATION of the FOA.

**Q28. CAN YOU KINDLY ADVISE HOW MANY YEARS WE CAN PROPOSE FOR A PROJECT PERIOD? I DON'T THINK THIS WAS MENTIONED IN THE SOLICITATION.**

**ANSWER:** Per Section II.A. of the FOA, The period of performance for funding agreements may not exceed 36 months.

**Q29. THE FUNDING OPPORTUNITY ANNOUNCEMENT (FOA) SPECIFIES "CONVERSION OF FOSSIL FEEDSTOCKS DIRECTLY INTO SOLID CARBON PRODUCTS RATHER THAN FUELS." DOES THIS DEFINITION OF FOSSIL FEEDSTOCKS INCLUDE FOSSIL METHANE?**

**ANSWER:** See Vision OPEN FAQ 4