



DE-LC-000L116 FY24 Fall Energy I-Corps Lab Call

Informational Webinar March 26, 2024, 12 p.m. ET

Housekeeping

- All applicants are strongly encouraged to read the entire lab call and adhere to the stated submission requirements.
- This presentation summarizes the contents of the lab call. If there are any inconsistencies between the lab call and this presentation or statements from DOE personnel, the lab call is the controlling document and applicants should rely on the lab call language and seek clarification from Office of Technology Transitions (OTT) at <u>energyicorps@hq.doe.gov</u>.
- Everyone has been placed on mute.
- Please provide your questions through the chat feature. All questions will go into the formal Q&A log and will be answered and publicly posted to Exchange.
- This Informational Webinar slides will be posted to Exchange

Webinar Purpose

The purpose of today's webinar is to:

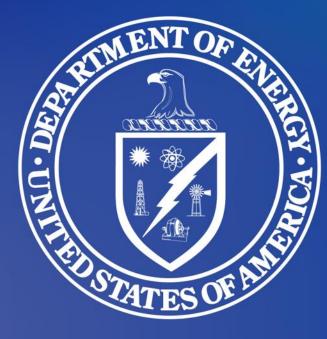
- 1. Provide an overview of the lab call
- 2. Highlight specific areas in the lab call that are **new for FY24**



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- 1. Background
- 2. Lab Call at a Glance
- 3. Topic 1: Pipeline Development
- 4. Topic 2: EIC Cohort Training (Cohort 19)
- 5. Topic 3: Post Energy I-Corps
- 6. Appropriations
- 7. Community Benefits
- 8. Appendices





BACKGROUND

Background

- Established in 2015, derived from the NSF I-Corps™ program
- DOE's OTT is the program administrator

Goals for Energy I-Corps

- Increase the number of DOE National Laboratory and DOE plant and site-developed technologies that are transferred into commercial development or industry agreements
- Train DOE National Laboratory and DOE plant and site researchers to better understand the commercialization process and private sector needs
- Promote DOE National Laboratories and DOE plants and sites to value commercialization and entrepreneurial activities



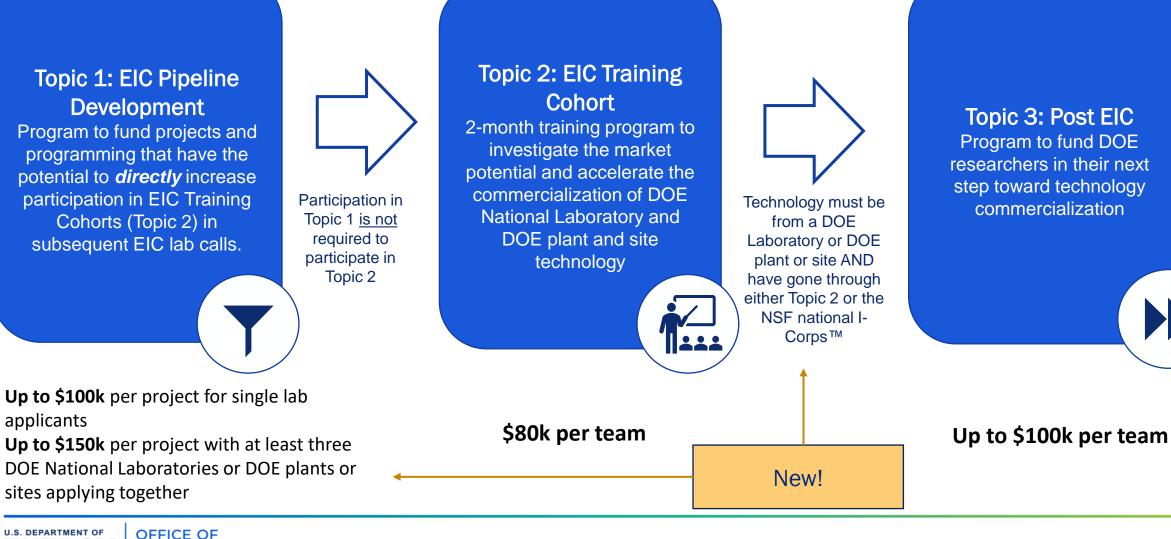
FY24 Program Portfolio

Technology Transitions

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ENERGY

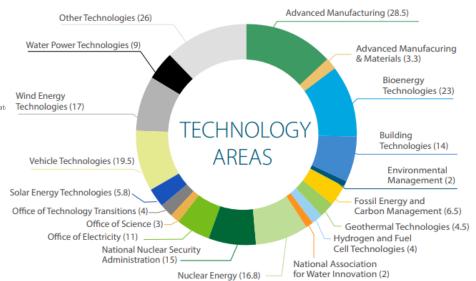


Program Impact since 2015

215 TEAMS | 12 NATIONAL LABORATORIES



BRINGING ENERGY INNOVATIONS TO



INVESTMENT TOTAL \$16,265,000







Stakeholder Discovery Interviews



OFFICE OF

Technology Transitions

U.S. DEPARTMENT OF

ENERGY

Energy I-Corps Annual Report 2023 (nrel.gov)

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LAB CALL AT A GLANCE

Key Dates

Event or Deadline	Date
NOI Issue Date	Friday, February 16, 2024
Lab Call Issue Date	Tuesday, March 19, 2024
Informational Webinar	March 26, 2024, 12:00 pm (ET)
Application Submission Deadline (Topics 1, 2, & 3)	Friday, April 12, 2024, 3:00 PM (ET)
Expected Date for Selection Notifications	Friday, June 14, 2024

Note the same deadline for all EIC Topics



General Information

Means of submission for Application	Topic 1: EERE Exchange (DE-LC-000L116) Topic 2: Microsoft Forms (link on page 21 of lab call, EERE Exchange, & <u>HERE</u>) Topic 3: EERE Exchange (DE-LC-000L116)
Total Amount to be provided	OTT expects to award at least \$350k across the three topics combined. However, additional funding may be available based on proposals' alignment with partner Program Office goals. DOE may issue one, multiple, or no awards.
Cost Share Requirement	None
Submission of Multiple Proposals	For all three topics, there is no limit on the number of applications each DOE National Laboratory or DOE plant and site can submit.
Questions	All questions and answers will be recorded in a Q&A log and posted on Exchange. RE: EIC Lab Call Solicitation (all topics): <u>energyicorps@hq.doe.gov</u> RE: EERE Exchange Technical Support: <u>eere-exchangesupport@hq.doe.gov</u>

Budget per Topic

Торіс	Available Budget
Topic 1: EIC Pipeline Development	Up to \$100k per project with one DOE National Laboratory or DOE plant or site. Up to \$150,000 per project with at least three DOE National Laboratories or DOE plants or sites applying together
Topic 2: EIC Training Cohort	\$80k per team
Topic 3: Post EIC	Up to \$100k per project

Cost share is not required for any of the three topics. However, DOE National Laboratories and DOE plants and sites may supplement team budgets with internal funding resources if desired. All funding will be provided to the national laboratory, plant or site as a bill code.

Summary of Key Changes

Topic 1 Budget: Up to \$100k per project with one DOE National Laboratory or DOE plant or site, and up to \$150,000 per project with at least three DOE National Laboratories or DOE plants or sites applying together

Topic 2 Team Structure: The EL must be employed by or have a contractual relationship with a DOE National Lab, DOE plant, or site.

Topic 3 Eligibility: The technology must 1) be from a DOE Laboratory or DOE plant or site AND 2) have gone through either EIC Training Cohort (Topic 2) or the NSF national I-Corps[™] (inclusive of technical pivots). EIC Training Cohort and NSF national I-Corps[™] graduates as well as non-graduates can apply to this topic. However, non-graduates are limited to individuals who are employed by or have a contractual relationship with a DOE National Lab, DOE plant or site (e.g. Technology Transfer Office personnel).

Available Funding: OTT expects to award up to \$350K across Topics 1 and 3 in this instance of the EIC lab call. Due to appropriations cuts, OTT will have limited funding for Topic 1 and Topic 3 projects. Topic 3 applications will be assessed and reviewed by individual non-OTT DOE program offices and partner agencies for their selections and funding. Topic 2 applications will continue to be assessed and reviewed by individual DOE program offices and partner agencies for their selections offices and partner agencies for their selections.

These and other changes will be highlighted throughout this presentation





AVAILABLE FUNDING

Available Funding

- OTT expects to award up to \$350K across Topics 1 and 3 in this instance of the EIC lab call. Due to appropriations cuts, OTT will have limited funding for Topic 1 and Topic 3 projects. Topic 3 applications will be assessed, and reviewed by individual non-OTT DOE program offices and partner agencies for their selections and funding. Topic 2 applications will continue to be assessed and reviewed by individual DOE program offices and partner agencies for their selections OTT substance of the partner agencies for their selections.
- For all topics under this lab call, it is important to include information for "how" the proposed project supports DOE program office and partner agency technology research areas.
- See Appendix A of the lab call for DOE program office and partner agency technology research areas.





TOPIC 1: PIPELINE DEVELOPMENT

Funding transfer date adjusted from July 30 to Aug 30 to match lab call **New:** Up to \$150K per project with at least three DOE National Laboratories, plants or sites applying together

- Topic 1 seeks proposals from DOE National Laboratories and DOE plants and sites for projects and programming that have the potential to **directly increase applications in future Topic 2** EIC Training Cohorts.
- Successful projects will be able to demonstrate how the funded activity leads to increased EIC Topic 2 Training Cohort applications.
- Individual projects under Topic 1 will be considered up to a total \$100K per laboratory, plant or site
- Up to \$150,000 per project with at least three DOE National Laboratories or DOE plants or sites applying together
- DOE strongly encourages efforts that bring together multiple labs to meet the goal of this topic in the most effective manner possible.

Event	Date
Submission deadline	Friday, April 12, 2024 3:00 PM (ET)
Expected date for selection notifications	Friday, June 14, 2024
Funding transfer complete	After successful negotiation between OTT & DOE National Laboratory, plant or site. Targeting Aug. 30, 2024

Key Dates for Topic 1: Pipeline Development

Details for Topic 1 begin on page **10** of the lab call. ¹⁷

Examples of Topic 1 projects include:

- Funding interns to work directly with PIs to develop EIC applications
- Interviewing EIC alumni, analyzing the chain of events that led alumni to apply to EIC, and running a pilot to try to recreate the experience for other PIs
- Hosting or participating in a low cost, lighter lift entrepreneurial program geared towards recruiting for subsequent EIC training cohorts

Examples of activities that would <u>NOT</u> be well-suited for Topic 1 include:

- General trainings on a specific component of the commercialization process such as intellectual property protection
- General talks or lunch-and-learns about the commercialization process

Eligibility

Only DOE National Laboratories and DOE plants and sites are eligible to apply for Topic 1 under this lab call. Technology transfer offices can request FY24 funding and/or propose an adjustment or scope change for using un-costed Topic 1 funds from prior fiscal years. Any proposed adjustment, scope change or new funding request should address the goal to directly increase participation in future Topic 2 - EIC Training Cohorts.

Reporting expectations

• Quarterly project & budget updates in Program Information Collection System (PICS) software

Program Deliverables

- Negotiated deliverables
- A concise final report at the end of the proposed project.

Period of Performance

Proposed projects should seek to support EIC goals efficiently and effectively in FY24. However, applications with projects that expand beyond the end of FY24 will be considered.

Submission and Review Information

All submissions must conform to the following slide's form and content requirements, and must be submitted via Exchange.

Topic 1: Pipeline Development Application Documents

Document	Format	Description
Detailed narrative	 3-page max 8.5"x 11" pages with 1- inch margin 11-point font PDF file 	 Applicants are required to: Describe the proposed project including the leading participants, target participants, resources needed, anticipated level of impact, and overall plan to execute the project. Explicitly state how the proposed project will directly increase future participation in EIC Training Cohorts (Topic 2) from your laboratory, plant or site. Proposals that request adjustment or scope change of uncosted Satellite, Site Lab, or Asynchronous EIC funding must explicitly state how the rescoped funds will directly increase participation in Topic 2. List the barrier(s) to participating in EIC training cohorts (time, effort etc.) unique to your DOE National Laboratory or DOE plant or site that is addressed by your proposed project. Identify any hurdles that may arise when implementing your proposed project and your plans to overcome such hurdles. If your lab, plant, or site has received Topic 1 funding in the past, describe the past performance, accomplishments, and how this project builds on or improves the previous project. Describe how community benefit objectives ((1) DEIA; (2) energy equity; and (3) investing in America's workforce) will be incorporated in the proposed project. At minimum, include at least one SMART DEIA milestone supported by metrics to measure the success of the proposed action. Include a timeline for the proposed project.

Topic 1: Pipeline Development Selection Criteria

Criterion 1: Impact (80%) This criterion considers the following factors:

Potential to Increase EIC Training Cohort Participation	Long-Term Viability	Access to Resources	DEIA
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Criterion 2: Quality of Proposed Project (20%) This criterion considers the following factors:

Well-Defined Goals Challeng	es Mitigated Reasonable Assumptions & Timeline	Reasonable Budget
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These criteria are described in detail starting **page 13** of the lab call

Questions?





TOPIC 2: EIC COHORT TRAINING (COHORT 19)

Topic 2: Cohort Training (C19)

This topic seeks team applications to participate in EIC Training Cohort 19. Selected teams of researchers and industry mentors will participate in an intensive curriculum-based program to understand market awareness and learn about market pathways for their technology. Over the course of 2 months, selected teams attend in-person and virtual sessions, participate in weekly webinars, and learn from one-on-ones with instructors to systematically identify the most appropriate market application and commercialization pathway for their technology. Participation requires a considerable amount of time spent outside of the classroom conducting 75 stakeholder discovery interviews.

Each selected team will be provided \$80K to support their participation in EIC Training Cohort 19. Historically, DOE program offices have primarily funded Topic 2 teams

Appendix A of the lab call lists DOE program office and partner agency technology research areas. These are research areas of interest only and do not mandate applications to fall under the listed research areas.

Appendix E of the lab call includes a print-out version of the Topic 2 application as a reference.

Topic 2: Cohort Training (C19)

Eligibility

Only researchers & staff at DOE National Laboratories and DOE plants and sites are eligible to apply for EIC Training Cohort 19. Teams from any technology area will be considered. Technologies submitted for consideration should be at a stage in development that allows the team to identify potential partners within a target market.

To ensure fairness and maximum reach, DOE is restricting applications to <u>researchers who have not already</u> <u>gone through the EIC Topic 2</u>. Researchers who have already gone through any previous Cohort of EIC successfully will only be considered if they are applying with **both** a different technology **and** a different team role than they previously held.

Teams do not need to have previously participated in entrepreneurial training programs or activities, including EIC Topic 1, to apply for this topic.

Topic 2: Cohort Training (C19) Structure

EIC Training Cohort 19 consists of three key elements, summarized below:

- Lead Lab (aka the Node): The National Renewable Energy Laboratory (NREL) serves as the Node for this program. The Node is responsible for developing and delivering the training, as well as providing program guidance to participating teams.
- 2. Participating DOE Labs and DOE plants and sites: Recruit, assemble, and send teams to the Node for training. Support teams both during and after the program: may include assistance in identifying entrepreneurial leads (ELs) and industry mentors (IMs) during the application period, as well as technology transfer/business development support for potential market pathways identified by the team during training. Each participating lab, plant, or site will also assist with metrics collection during and after their team's participation in the program.

TTO leads coordination of funding transfer with sponsoring program office, if selected.

3. Teams: Applicants apply to EIC as a team, composed of a Principal Investigator (PI) with a commercially relevant technology, an EL, and an IM. The time commitment to this program is significant for both the PI and the EL, and teams should do their best to organize their workload during the training period accordingly.

The team is the core unit of each EIC Training Cohort. Each complete team consists of a PI, an EL, and at least one IM. Teams are expected to fully participate in the training program and together, they are expected to meet the requirements set by the Node.

New: Change in eligibility for EL. EL must be employed by or have a contractual relationship with a DOE National Lab, DOE plant, or site.

Topic 2: Cohort Training (C19)

<u>PI</u>: The PI is the technical lead and project manager based at the DOE National Laboratory or DOE plant or site, responsible for overall team management. The PI should have a laboratory, plant or site technology or other form of IP identified, that the team believes has a potential market application. The PI is required to attend the entire opening and closing week in person. During the core training period, <u>at least 20 hours per week</u> of the PI's time should be committed to EIC (excludes opening and closing sessions, which require full time). Prior experience is not required. However, the PI should be committed to pursuing potential market pathways.

<u>EL:</u> The EL must be employed by or have a contractual relationship with a DOE National Lab, DOE plant, or site. The EL is required to attend the entire opening and closing weeks in person. During the core training period, the EL is expected to commit <u>at least 30 hours per week</u> of their time to EIC (excludes opening and closing sessions, which require full time). The EL is expected to lead the team in coordinating stakeholder interviews, delivering team presentations, and developing the business model canvas. Prior entrepreneurial experience is not required.

IM: Ideally, the IM is an experienced industry representative or entrepreneur, from outside the laboratory, plant or site, with substantial expertise in a relevant sector. The IM is responsible for providing mentorship to the EL and PI for the duration of the EIC. IMs are not required to but are highly encouraged to attend the in-person opening week and closing week sessions. The IM is expected to commit <u>up to 6 hours per week</u> of their time during the core training period and to meet with the team on a weekly basis. To ensure unbiased mentorship, the IM should be a <u>volunteer and not have a direct interest in the team's technology or IP.</u> The IM's participation and lack of conflict of interest should be cleared with the lab, plant or site's POC and Tech Transfer or Business Development Office.

Topic 2: EIC Cohort Training (C19)

Period of Performance – 10 weeks

Key Dates for EIC Cohort 19

Event	Date
Submission deadline for team proposals	Friday, April 12, 2024 3:00 p.m. (ET)
Expected date for team selection notifications	June 14, 2024
Funding transfer complete	Wednesday, July 31, 2024
Fall 2024 program dates PI and EL are required to attend all program events including the in-person opening and closing weeks	Orientation webinars –August 29 & September 5, 2024 Opening week* – September 16-20, 2024 Curriculum webinars – September 26, 2024 Curriculum webinars – October 3, 10, 17, 24, 31, 2024 Curriculum webinars – November 7, 14, 2024 Closing week* – November 18 - 20, 2024

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*Subject to change but opening week is planned as in-person events in Golden, CO and closing week is tentatively planned for Washington, DC

Topic 2: EIC Cohort Training (C19)

Submission Information

To be considered for EIC Training Cohort 19, applicants must complete and submit the single document (Microsoft Form) in Table 6 (page 21) of the Lab Call. All submissions must be submitted via Microsoft Forms. DOE will not review or consider submissions that are received through means other than Microsoft Forms, submitted after the applicable deadline, or incomplete.

Form Link: <u>https://forms.microsoft.com/g/9SrM9yGY2F</u>

For Topic 2 applicants, no documents or submissions are required to be uploaded through Exchange.

Topic 2: Cohort Training (C19) Selection Criteria

Criterion 1: Impact (60%) This criterion considers the following factors:

Commercial Potential	Challenges Mitigated	Fit with DOE Program Offices
Learning Impact	Reasonable Budget Plan	Community Benefits

Criterion 2: Project Team (40%) This criterion considers the following factors:

Collaboration & Capability	Availability	DEIA
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These criteria are described in detail on page 22 of the lab call

Topic 2: Cohort Training (C19)

Questions?





TOPIC 3: POST EIC

Topic 3: Post Energy I-Corps

Topic Description

Topic 3 is an opportunity to continue advancing EIC Topic 2 technologies toward commercialization. Funding is intended to cover costs of the next actionable step in technology commercialization and facilitate the teams in reaching their next source of more substantive support to continue their commercialization journey. Applicants should identify a clear, discrete next step in commercialization and the amount of funding needed to reach that next step. Applications should represent projects that are ambitious but achievable. Projects will be considered up to \$100K in funding (subject to annual appropriations). Applications will also be shared with relevant program offices for their funding consideration.

Event	Date
Submission deadline	Friday, April 12, 2024, 3:00 PM (ET)
Expected date for selection notifications	June 14, 2024
Funding transfer complete	After successful negotiation between DOE HQ & DOE National Lab, plant or site. Targeting August 30, 2024

Key Dates for Topic 3: Post EIC

Topic 3: Post Energy I-Corps

Eligibility

The technology must 1) be from a DOE Laboratory or DOE plant or site AND 2) have gone through either EIC Training Cohort (Topic 2) or the NSF national I-Corps[™] (inclusive of technical pivots). EIC Training Cohort and NSF national I-Corps[™] graduates as well as non-graduates can apply to this topic. However, non-graduates are limited to individuals who are employed by or have a contractual relationship with a DOE National Lab, DOE plant or site (e.g. TTO personnel).

Reporting expectations

• Regular project & budget updates in PICS software - cadence depends on period of performance

Program Deliverables

- Negotiated deliverables
- A final report at the end of the proposed project.

Period of Performance

Proposed projects should seek to support EIC goals efficiently in FY24. However, applications with projects that expand beyond the end of FY24 will be considered.

Submission and Review Information

All submissions must conform to the following slide's form and content requirements, and must be submitted via Exchange.

Topic 3: Post Energy I-Corps Application Documents

New: Detailed narrative must provide the current ARL of technology. Additional resources on ARL can be found at the following link: <u>Adoption Readiness Levels (ARL): A Complement to TRL |</u> Department of Energy

Document	Format	Description
Cover Page	 1 page max 8.5"x 11" pages with 1- inch margin 11-point font PDF file 	 Applicants are required to include: Name of project and technology. Name(s) of individual or team members involved. EIC Training Cohort number that team members previously participated in or year that the team participated in the U.S. National Science Foundation's Innovation Corps program. A maximum 200-word summary of the project suitable for public release if the project is funded.
Detailed Narrative	 3-page max 8.5"x 11" pages with 1-inch margin 11-point font PDF file 	 Applicants are required to: Describe the proposed project: the clear, discrete next step to commercialize your technology, and explain how receiving this funding will help you achieve this step. Describe an overview of the technology (including the status of its commercialization), the leading participants for the proposed project and their roles, resources needed, and overall plan to execute the project. Explain how the successful implementation of the proposed project will unlock the potential for much larger public or private funding sources to continue the commercialization process. State any roadblocks that may arise when implementing your proposal and your plans to overcome such barriers. Answer the following questions: What is the best possible outcome for this project? What are the project team's goals after this project is complete? How should project success be measured? What are the conditions that would make this project not worth continuing? Explain the steps and timeframe needed for full technology commercialization after this proposed project, assuming the proposal is funded. Describe how community benefit objectives ((1) DEIA; (2) energy equity; and (3) investing in America's workforce) will be incorporated in the project. Include how the project will support or implement the lab-wide DEIA plan. At a minimum, include at least one SMART DEIA milestone supported by metrics to measure the success of the proposed action. Briefly indicate specific experiences or outcomes from EIC Topic 2 participation that influenced this proposal. Describe steps taken to commercialize the technology since participation in Topic 2. If none, state so. Provide the current ARL of technology. Additional resources on ARL can be found at the following link: Adoption Readiness Levels (ARL): A <u>Complement to TRL Department of Energy</u> Include a timeline for the proposed moject. Describe a plan for implementin

Topic 3: Post Energy I-Corps Application Documents

New: 1-page Technology "pitch" / summary sheet must be included in application documents

Document	Format	Description
1-page Technology "pitch" / summary sheet (Please do not include any proprietary info rmation on this document, as it is intended to be used as a resource to share with external parties)	 1-page max 8.5"x 11" pages with 1- inch margin 11- point font PDF file 	 Technology name and summary Specific problem or opportunity and how your technology solves this problem ARL & TRL of your technology currently: Assess your ARL with DOE's Commercialization Adoption Readiness Assessment Tool: Adoption Readiness Levels (ARL): A Complement to TRL Department of Energy Target Audience: Identify the potential stakeholders and end-users who could benefit from the project. Value Proposition: Articulate the unique value proposition of the project, explaining why stakeholders would have interest. Call to Action: Encourage stakeholders to get involved or support the project by specifying next steps, such as contacting the project team or attending a presentation or demo. Contact Information: Include contact details for the project team or lead, allowing stakeholders to reach out for more information or collaboration opportunities. Include reliable data, verifiable facts, key metrics, and statistics as relevant Visual Elements: Incorporate visually appealing elements such as graphs, charts, or diagrams to enhance understanding and engagement. Include at least one image of your technology.
Copy of NSF I- Corps™ final project report and outcomes report (Only required for NSF I- Corps™ technology)	• PDF File	 If the applicant is applying with DOE technology that went through an NSF national I-Corps[™] training instead of an EIC Topic 2 cohort, submit a copy of the NSF I-Corps[™] final project report and project outcomes report that was submitted when successfully completing the full NSF I-Corps[™] program.

Topic 3: Post Energy I-Corps Selection Criteria

Criterion 1: Impact (80%) This criterion considers the following factors:

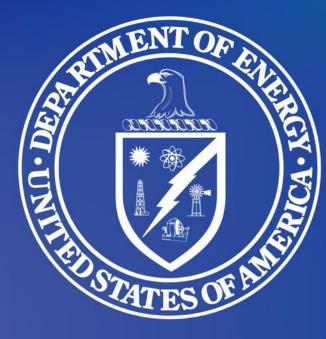
Potential of Project Success	Long-Term Viability	Commercial Potential
Access	DEIA	

Criterion 2: Quality of Proposed Project (20%) This criterion considers the following factors:

Well-Defined Goals	Challenges Mitigated	Reasonable Assumptions & Timeline	Reasonable Budget
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These criteria are described in detail beginning on page 27 of the lab call





APPENDICES

Appendices

Appendix A: Program Office and Partner Agency Technology Research Areas

Lists DOE program office and partner agency technology research areas that may be used as reference when completing applications for all lab call topics. These are research areas of interest only and do not mandate applications to fall under the listed research areas.

Appendix B: Community Benefits Guidance

Resource explaining DOE's community benefits initiative & expectations. Applicants shoud critically think about implications of how the proposed work will benefit the American people and lead to broadly shared prosperity, including for workers and disadvantaged communities. Addressing all aspects of community benefits is encouraged but, incorporating <u>DEIA is required.</u>

Appendices C & D: Topics 1 & 3 Statement of Work and Spend Plan Template

For topics 1 & 3, selected applicants will go through a negotiations process which will require the development and approval of a statement of work and spend plan. Templates of these documents are included in Appendices C and D and can be used as a resource when completing application documents. **They are not required as part of the application**.

Appendix E: Topic 2 Application Print-Out:

Appendix E is a print-out of the Topic 2 Application for the purpose of showing TTOs and Team Members the information that will be required when completing the Topic 2 application here. Applications should not be completed on paper – it should be submitted via the MS Forms listed on EERE Exchange and in the lab call.

Questions?

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Specific questions about this lab call should be submitted via email to <u>energyicorps@hq.doe.gov</u>.

To ensure fairness across all labs, individual DOE staff cannot answer questions while the lab call remains open.

OTT will post all questions and answers on EERE Exchange.

Questions about Exchange: EERE-ExchangeSupport@hq.doe.gov