

Welcome

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Qualifying Advanced Energy Project Credit (§ 48C) Program Informational Applicant Webinar

Presented by



MESC

OFFICE OF MANUFACTURING AND ENERGY SUPPLY CHAINS



Notice

- NO NEW INFORMATION OTHER THAN THAT PROVIDED IN THE GUIDANCE WILL BE DISCUSSED IN THE WEBINAR.
- There are no particular advantages or disadvantages to the application evaluation process with respect to participating on the webinar today.
- Your participation is completely voluntary.
- All applicants are strongly encouraged to carefully read the IRS Notice 2023-44 and adhere to the stated submission requirements.
- This presentation summarizes the contents of the Notice. If there are any inconsistencies between the Notice and this presentation or statements from DOE personnel, the Notice is the controlling document, and applicants should rely on the Notice language and seek clarification by submitting a question.
- There will be no Q&A section of today's webinar. Please submit any programmatic questions to 48CQuestions@hq.doe.gov.

DOE 48C Landing Page:
<https://energy.gov/infrastructure/48C>

Agenda

- MESC overview
- 48C overview
- Concept paper themes
- 48C(e) application process
- Guidance for developing a strong application



MESC is focused on the “HOW” of the energy transition



PURPOSE

To deliver the *HOW* of the energy transition quickly, securely, and equitably



MISSION

Frontline of clean energy capital deployment to accelerate America’s transition to a **resilient, equitable** energy future via \$20B+ of direct investment.



VISION

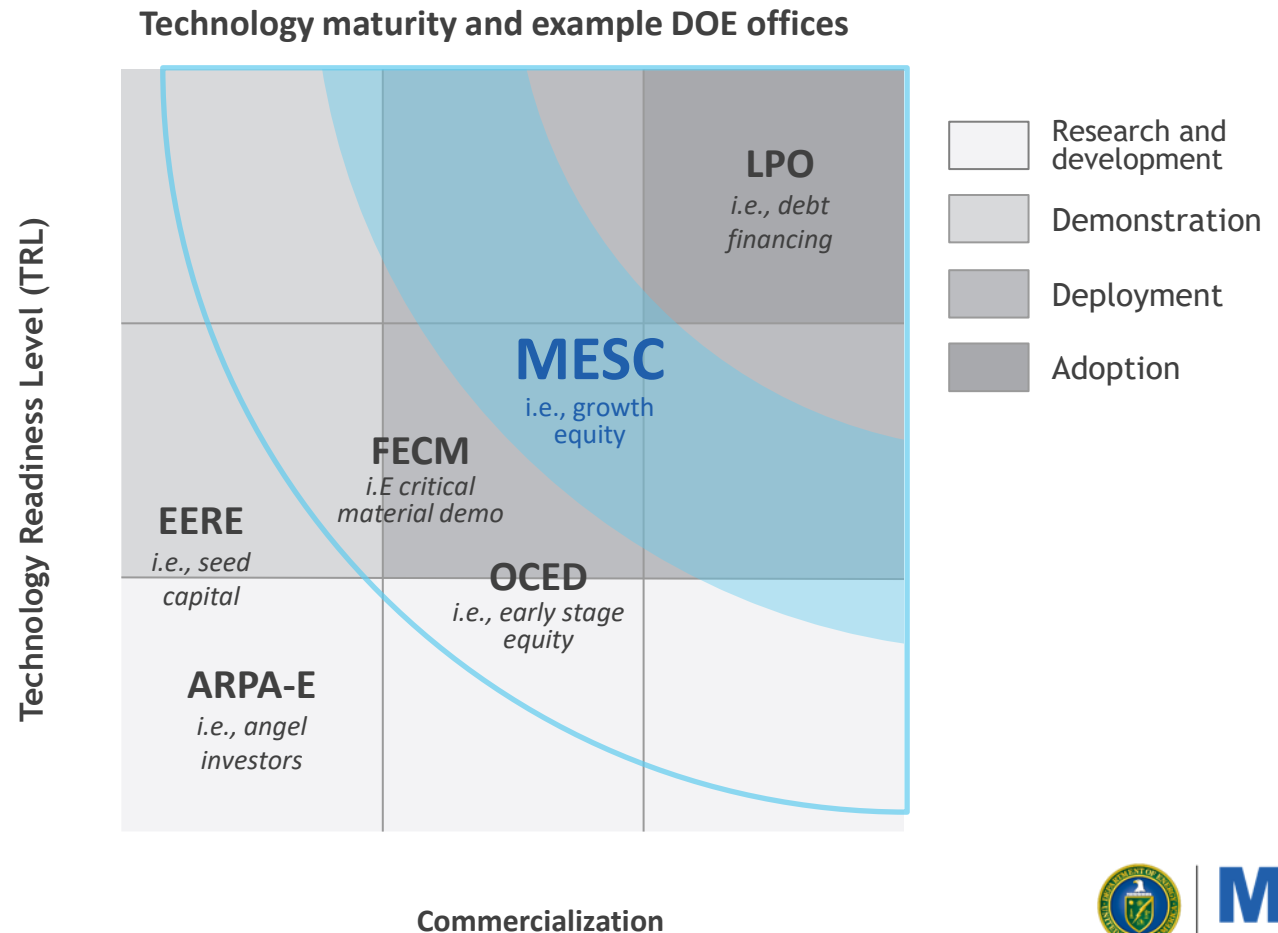
To eliminate vulnerabilities in US Clean Energy supply chains, while driving unparalleled social, economic, and environmental impact through our programs & awards

MESC operates in late-stage technology development, driving large-scale deployment of new technologies

The Office of Manufacturing and Energy Supply Chains is working alongside private capital to be a force multiplier to secure American supply chains domestically.

All DOE and MESC investments follow a data-driven approach, building on modeling, mapping, and analysis foundational from MESC experts.

MESC is supporting workforce through direct funding of cutting-edge energy manufacturing programs at universities, community college, and trade-schools to proven entry-level and mid-career support.



Selected anticipated investment milestones

Domestic Manufacturing Conversion Grants (\$2B): Applicants under review

Battery Materials Processing and Battery Manufacturing Grants (\$6B): funding currently available

Extended Product System (EPS) Rebate Program & Energy Efficiency + Transformers Rebate Program (\$20M) : funding currently available

Qualifying Advanced Energy Project Credit (\$10B): Competitive process for Round 1 under way

Advanced Manufacturing and Recycling (\$300M): Round II funding to be released early 2024

Industrial Assessment Centers Implementation Grants (\$400M) : Round II funding expected to be released early 2024

Defense Production Act, Heat Pump Manufacturing (\$250M): Round I complete, Round II planned for early 2024





48C Program Overview



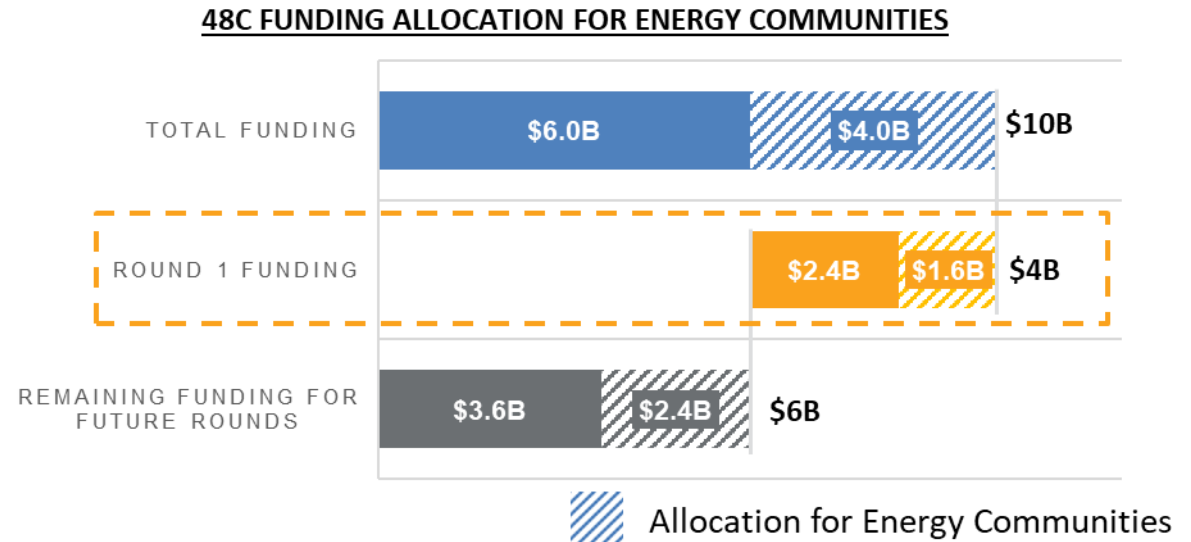
48C Overview

48C Expanded with \$10B in Funding

- Competitively-awarded **Investment Tax Credit (ITC)** first established by the 2009 Recovery Act
- **Expanded by IRA with \$10B** for
 1. clean energy manufacturing/recycling
 2. critical materials
 3. industrial GHG emissions reductions projects
- DOE will **accept a first round of applications in 2023** to allocate up to \$4B of the program's \$10B total, with additional application rounds in the future
- Selected projects receive a **30% ITC** (6% if apprenticeship and prevailing wage requirements are not met)
- In certain circumstances, **applicable entities can elect for direct pay** in lieu of a tax credit

Key Considerations for Round 1

- Open to **all project sizes** and DOE will not predetermine funding allocated to each category
- At least **40% of credits will be allocated to projects in energy communities**, if sufficient meritorious applications are received



IRA expanded 48C's scope and intended impact

\$10B

Legend

- Scope defined by ARRA in 2009
- Scope added by IRA

	Scope	Intended Impact
Clean Energy Manufacturing and Recycling	<ul style="list-style-type: none"> Re-equip, expand, or establish industrial or manufacturing facility for production or recycling of clean energy and energy efficiency technologies 	<ul style="list-style-type: none"> Strengthen domestic clean energy supply chains Expand manufacturing capacity for products that will accelerate & enable the nation's transition to net-zero
Critical Materials Processing, Refining, and Recycling	<ul style="list-style-type: none"> Re-equip, expand, or establish industrial facility to process, refine, or recycle critical materials (50 USGS minerals + DOE critical materials) 	<ul style="list-style-type: none"> Strengthen domestic clean energy supply chains Expand manufacturing capacity for products that will accelerate & enable the nation's transition to net-zero
Industrial GHG Emissions Reductions	<ul style="list-style-type: none"> Re-equips industrial or manufacturing facility to reduce greenhouse gas emissions by at least 20% 	<ul style="list-style-type: none"> Reduce GHG emissions in U.S. industrial and manufacturing sector Catalyze transition to low-carbon industrial sector to decarbonize and enhance U.S. competitiveness



Program Timeline

A two-stage technical evaluation process is being used for submissions:

- Stage 1: Concept Paper
- Stage 2: § 48C(e) Application (*also referred to as "full application"*)

Key program dates:

Activity	Date
Initial guidance issue date	2/13/2023
DOE posts proposed list of critical materials	5/31/2023
Additional guidance issue date	5/31/2023
Informational webinar	6/27/2023
DOE eXCHANGE portal opens	No later than 6/30/2023
Submission deadline for concept papers	8/3/2023 by 12:00PM ET
Informational webinar	11/28/2023
Submission deadline for § 48C(e) applications	12/26/2023 by 5:00PM ET
IRS allocation decision notifications	No later than 3/31/2024





Concept Paper Themes



Common Themes and Issues

- DOE is unable to accommodate requests for debriefings with individual applicants for the concept paper stage.
 - Applicants who submit a 48C(e) application and are denied a credit may request a debriefing with DOE regarding its review of the applicant's application.
- However, each applicant's letter of encouragement or discouragement includes one or more text bullets giving feedback on their concept paper submission.
- A document has also been published describing common issues, areas frequently needing improvement, and other themes DOE observed across concept papers submissions.
 - At: <https://www.irs.gov/pub/newsroom/48c-round-1-concept-paper-themes-and-issues.pdf>
 - Applicants are highly encouraged to carefully read that document.

Concept Paper Feedback Areas

- Letters to applicants included one or more text bullets giving feedback in the following areas:

1. The submission did not include sufficient detail in one or more of the following documents that were required by the IRS notice: Concept Paper, Workforce and Community Engagement Plan, and/or Data Sheet provided by DOE.
2. Based on the information provided in the concept paper, it does not appear that the described project meets the criteria for an eligible qualifying advanced energy project, as described in IRS Notice 2023-44 Appendix A, in the project category/topic selected by the applicant.
3. The concept paper appears to describe a proposed qualified investment that includes costs not eligible for inclusion in a qualified investment, as described in IRS Notice 2023-18 section 5.04 and IRS Notice 2023-44 section 3.01 and Appendix A.
4. The concept paper appears to describe a project that would not be permitted or placed in service within the required timeframes.
5. Likelihood of commercial viability of a proposed project.
(Criterion 1: Commercial Viability).
6. Net impact on avoiding or reducing anthropogenic emissions of greenhouse gases of a proposed project.
(Criterion 2: Greenhouse Gas Emissions Impacts).
7. Ability to strengthen U.S. supply chains and domestic manufacturing needed for a net-zero economy.
(Criterion 3: Strengthening U.S. Supply Chains and Domestic Manufacturing for a Net-Zero Economy).
8. Workforce benefits and completed/proposed community engagement of the proposed project.
(Criterion 4: Workforce and Community Engagement).

Feedback Area 1:

Lack of sufficient detail in required documents

- Concept paper submissions that did not include sufficient information for DOE to complete a meaningful review against the program's eligibility requirements and technical criteria were discouraged from submitting 48C(e) applications.
- For documents and information required for the concept paper submission, see IRS Notice 2023-44 Appendix B(II)(D)(i) and Appendix B(III), and the concept paper templates and data sheets available at <https://48c-exchange.energy.gov>.
- For documents and information required for the full § 48C(e) application submission, see IRS Notice 2023-44 Appendix B(II)(D)(ii) and Appendix B(III), and the 48C(e) application templates and data sheets available at <https://48c-exchange.energy.gov>.

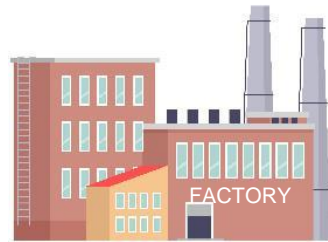
Feedback Area 2:

(1/2)

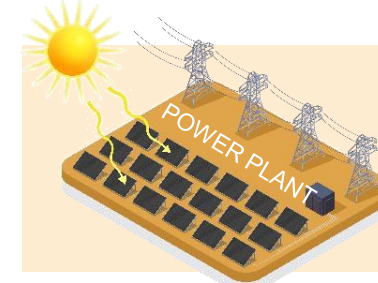
Failure to meet criteria for an eligible qualifying advanced energy project

Ineligible: Clean Energy Manufacturing and Recycling (CEMR) projects that deploy, produce, or procure an eligible product*, such as:

- Deployment of power generation facilities
- Deployment of facilities that produce fuels (such as biofuels or hydrogen), chemicals, or other industrial feedstock products
- Deployment of carbon capture, removal, use, or sequestration (CCUS) technologies



Facilities: Facility that Produce or Recycle an Eligible Product*



Facility that Deploys the Eligible Product*



Facilities:



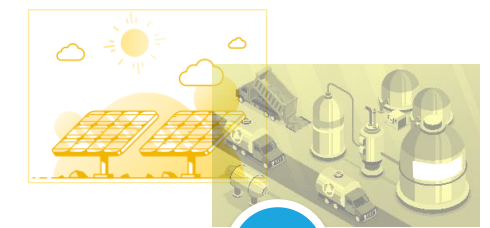
Re-equip/expand/establish the facility that will produce the eligible product*.



Operate the manufacturing facility to produce the eligible product*.



Re-equip/expand/establish facility that will use the eligible product*.



Operate the facility that uses the eligible product*.

Lifecycle:

Eligible under 48C CEMR category

* Specified Advanced Energy Property, as defined in IRS Notice 2023-44

Failure to meet criteria for an eligible qualifying advanced energy project

Common reasons projects appeared ineligible include:

- Lack of clear description of proposed project
- Choice of project category
- GHG Emission Reduction projects that build new or expand existing facilities
- GHG Emission Reduction projects that incorporate GHG emission reduction equipment in a new facility
- Uranium enrichment, conversion, and deconversion

Feedback Area 3:

Costs not eligible for inclusion in a qualified investment

Below are common reasons a proposed qualified investment appeared to include costs not eligible for inclusion in a qualified investment:

- Projects construct or expand a building
- Only a portion of a facility will be used to produce or recycle eligible 48C property
- Only a portion of a proposed facility's time will be used to produce eligible 48C property
- Multiple facilities/projects included in one concept paper submission
- GHG Emission Reduction projects build new or expand existing facilities
- Critical Materials Processing, Refining, and Recycling projects equip a facility to drill, pump, or use other means to extract resources
- See IRS Notice 2023-18 section 5.04, and discussion of qualified investment in IRS Notice 2023-44, including section 3.01 ("Section 48C Facility") and Appendix A ("Qualifying Advanced Energy Projects").

Feedback Area 4:

Not permitted or placed in service within the required timeframes

- Applicants who receive an allocation letter for a credit must provide documentation to DOE within 2 years of receiving the allocation demonstrating that they have received necessary permits and met other requirements of the program.
- After receiving a subsequent certification letter from the IRS, applicants will have no more than 2 years to place the proposed facility in service and notify DOE.
- Applications demonstrating evidence of timelines that would not meet these timeframe requirements are highly unlikely to receive an allocation.
- See IRS Notice 2023-44 section 5.03 and Appendix B(I)(C)(v)

Feedback Area 5: Likelihood of commercial viability

- See “Criterion 1: Commercial Viability” in IRS Notice 2023-44 under:
 - Appendix B(III)(A)(i)(b) for Clean Energy Manufacturing and Recycling Projects
 - Appendix B(III)(B)(i)(b) for Greenhouse Gas Emission Reduction Projects
 - Appendix B(III)(C)(i)(b) for Critical Materials Projects.

Feedback Area 6: Net impact on greenhouse gas emissions

- See “Criterion 2: Greenhouse Gas Emissions Impacts” in IRS Notice 2023-44 under:
 - Appendix B(III)(A)(i)(b) for Clean Energy Manufacturing and Recycling Projects
 - Appendix B(III)(B)(i)(b) for Greenhouse Gas Emission Reduction Projects
 - Appendix B(III)(C)(i)(b) for Critical Materials Projects

Feedback Area 7: Ability to strengthen U.S. supply chains and domestic manufacturing

- Multiple products produced by a facility in one application
- Components not specialized for an eligible clean energy product
- Lack of need for § 48C credit
- See “Criterion 3: Strengthening U.S. Supply Chains and Domestic Manufacturing for a Net-Zero Economy” in IRS Notice 2023-44 under:
 - Appendix B(III)(A)(i)(b) for Clean Energy Manufacturing and Recycling Projects
 - Appendix B(III)(B)(i)(b) for Greenhouse Gas Emission Reduction Projects
 - Appendix B(III)(C)(i)(b) for Critical Materials Projects

Feedback Area 8:

Workforce benefits and community engagement

- As described in IRS Notice 2023-44, the Workforce and Community Engagement portion of the submission should be specific to the applicant's proposed project.
- See “Criterion 4: Workforce and Community Engagement” in IRS Notice 2023-44 under:
 - Appendix B(III)(A)(i)(b) for Clean Energy Manufacturing and Recycling Projects
 - Appendix B(III)(B)(i)(b) for Greenhouse Gas Emission Reduction Projects
 - Appendix B(III)(C)(i)(b) for Critical Materials Projects

Other topics observed by DOE across concept papers

Other common issues, areas frequently needing improvement, or other themes DOE observed across concept papers submissions include:

- Large projects
- Projects located in a § 48C(e) Energy Community Census Tract
- Critical Materials Processing, Refining, and Recycling projects a facility to drill, pump, or use other means to extract resources (*discussed in feedback area 3 above*)
- Research and development facilities



48C(e) Application Process



Review Process

Compliance and eligibility review

- Have the eligibility requirements been met?
- Has the required information been submitted?
- Is the proposed project technically valid?
- Have all mandatory requirements of the notice been satisfied?

Technical review

- Criterion 1: Commercial Viability
- Criterion 2: Greenhouse Gas Emissions Impacts
- Criterion 3: Strengthening U.S. Supply Chains and Domestic Manufacturing for a Net-Zero Economy
- Criterion 4: Workforce and Community Engagement

Due diligence review

- DOE may conduct a due diligence review to determine if an applicant has a connection with a country of risk.

Final recommendation

- Following compliance, eligibility, technical and due diligence reviews. DOE may also consider program policy factors.
- DOE will transmit to the IRS its recommendations for allocations and denials of applications.



Technical Review Criteria

Eligible 48C(e) applications will be evaluated by DOE against technical review criteria reflecting **four major priorities**:



Criterion 1: Commercial Viability



Criterion 2: Greenhouse Gas Emissions Impacts



Criterion 3: Strengthening U.S. Supply Chains and Domestic Manufacturing for a Net-Zero Economy



Criterion 4: Workforce and Community Engagement

DOE will evaluate applications using the category-specific technical review criteria, including **whether the project addresses specific energy supply chain and manufacturing priority areas, as well as overarching program policy factors** identified by this Notice 2023-44.

In determining allocation recommendations, DOE will also consider whether the proposed project is located in § 48C(e) Energy Communities Census Tracts, detailed in Appendix C of Notice 2023-44. In Round 1, **DOE anticipates recommending ~\$1.6 billion in § 48C credits to energy community projects.**

48C eXCHANGE Portal

Files required for application submission:

Component	File Format	Max Pages	File Name
Section 48C(e) Application	PDF	30	[ControlNumber]- 48CApplication.pdf
Section 48C(e) Application Workforce and Community Engagement Plan	PDF	5	[ControlNumber]-App-WCE.pdf
Business Entity Certification	PDF	N/A	[ControlNumber]-BusinessEntityCertification.pdf
48C Application Data Sheet	MS Excel	N/A	[ControlNumber]-App-DataSheet.xlsx
Appendix Files	Various	N/A	[ControlNumber]-Appendix-[FileNumber].[format] (e.g. 1234-Appendix-1.pdf)

Clean Energy Manufacturing and Recycling – Application Content Requirements

Application 30 pages max

Project Overview

- Company Overview
- Project Summary

Commercial Viability

- Project Plan
- Business Plan
- Management Plan

Greenhouse Gas Emissions Impacts

- GHG Emissions Impacts of the Facility's Products
 - End Product Impacts
 - Product Performance
- GHG Emissions from the Facility
 - Direct Emissions
 - Facility Performance
 - Mitigation Efforts
 - Company Commitments and Track Record

Strengthening U.S. Supply Chains and Domestic Manufacturing for a Net-Zero Economy

- Outputs of Your Facility
- Supply Chain Resilience
- Inputs to your Facility
- End-Use Applications

Application Workforce and Community Engagement Plan 5 pages max

- Job Creation and Workforce Continuity
- Ensuring Timely Project Completion Through Workforce and Community Engagement
- Energy Community Transition
- Local Environmental Impacts

Application Data Sheet MS Excel File

Project Overview

Technological or Cost Advantage Levelized Cost

Job Metrics

- Direct Construction Jobs
- Direct Operation Jobs

Emission Metrics

- Estimated Facility Greenhouse Gas Emissions Scope 1
- Estimated Facility Greenhouse Gas Emissions Scope 2

Details on Production Capacity

Submit Details Under Your Specific Primary Technology Area:

- Renewables
- Microturbines
- Fuel Cells
- Energy Storage (non-vehicle)
- Vehicles & Vehicle Components
- Grid Modernization & Charging
- Fuels, Products, and Chemicals
- Energy Conservation
- Carbon Capture
- Recycling
- Other

Clean Energy Manufacturing and Recycling – Round 1

Priority Areas (in alphabetical order)

H₂

Clean Hydrogen: Manufacturing of electrolyzers, fuel cells, and associated components (including gas diffusion layers, bipolar plates, and power electronics)



Electric Grid: Manufacturing of transformers, materials (including electrical steel, amorphous alloy), power electronics, and other grid components and equipment (including MVDC/HVDC converter station components and switchgears)



Electric Heat Pumps: Manufacturing of air-source or ground-source heat pump components and infrastructure, particularly reversing valves, control circuits, compressors, and heat exchangers



Electric Vehicles: Manufacturing of power electronics (including semiconductors, modules, and circuits for EV motor traction drives, on-board EV chargers, DC/DC converters, and EV charging stations), permanent magnets, and battery components for use in electric vehicle motors



Nuclear Energy: Manufacturing of specialized components and equipment for nuclear power reactors or their fuels (including fabrication of fuels, and manufacturing of equipment for conversion, enrichment, and deconversion), for both existing reactors and new reactor deployments



Solar Energy: Polysilicon, wafer production facilities, ingot and wafer production tools, and solar glass production facilities



Sustainable Aviation Fuels: Manufacturing of equipment needed for low-carbon aviation fuel production (including feedstock handling equipment and pretreatment reactors)



Wind Energy: Component production facilities and specialized steel production, particularly for offshore wind, such as monopile-grade steel and towers; recycling of wind components, particularly blades

Greenhouse Gas Emission Reduction – Application Content Requirements

Application 30 pages max

- **Project Overview**
 - Company Overview
 - Project Scope
 - Emissions
- **Commercial Viability**
 - Project Plan
 - Business Plan
 - Management Plan
- **Greenhouse Gas Emissions Impacts**
 - Emissions Impacts
 - Process Improvements
 - Best-In-Class Technologies
- **Strengthening U.S. Supply Chains and Domestic Manufacturing for a Net-Zero Economy**
 - Output of your Facility
 - Supporting Domestic Clean Energy Markets
 - Supporting Domestic Low-Carbon Industry
 - Innovation

Application Workforce and Community Engagement Plan 5 pages max

- Job Creation and Workforce Continuity
- Ensuring Timely Project Completion through Workforce and Community Engagement
- Energy Community Transition
- Local Environmental Impacts

Application Data Sheet MS Excel File

- **Project Overview**
- **Technological or Cost Advantage**
- **Levelized Cost**
- **Job Metrics**
 - Direct Construction Jobs
 - Direct Operation Jobs
- **Emission Metrics**
- **Details on Emission Metrics**
 - *Submit Details Under Your Specific Primary Technology Area:*
 - Stationary Combustion
 - Process Emissions
 - Refrigerants
 - Fire Suppression
 - Purchased Gases
 - Electricity
 - Steam
 - Hydrogen

Critical Materials –Application Content Requirements

Application 30 pages max

- **Project Overview**
 - Company Overview
 - Project Summary
- **Commercial Viability**
 - Project Plan
 - Business Plan
 - Management Plan
- **Greenhouse Gas Emissions Impacts**
 - GHG Emissions Impacts of the Facility's Products
 - End Product Impacts
 - GHG Emissions from the Facility
 - Direct Emissions
 - Facility Performance
 - Mitigation Efforts
 - Company Commitments and Track Record
- **Strengthening U.S. Supply Chains and Domestic Manufacturing for a Net-Zero Economy**
 - Output of Your Facility
 - Inputs to Your Facility
 - Supply Chain Resilience
 - End-Use Applications

Application Workforce and Community Engagement Plan 5 pages max

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Application Data Sheet MS Excel File

- **Project Overview**
- **Technological or Cost Advantage**
- **Levelized Cost**
- **Job Metrics**
 - Direct Construction Jobs
 - Direct Operation Jobs
- **Emission Metrics**
 - Estimated Facility Greenhouse Gas Emissions Scope 1
 - Estimated Facility Greenhouse Gas Emissions Scope 2
- **Critical materials List**

Critical Materials – 2023 Final Critical Materials List

DOE has determined the final Critical Materials List to include the following:

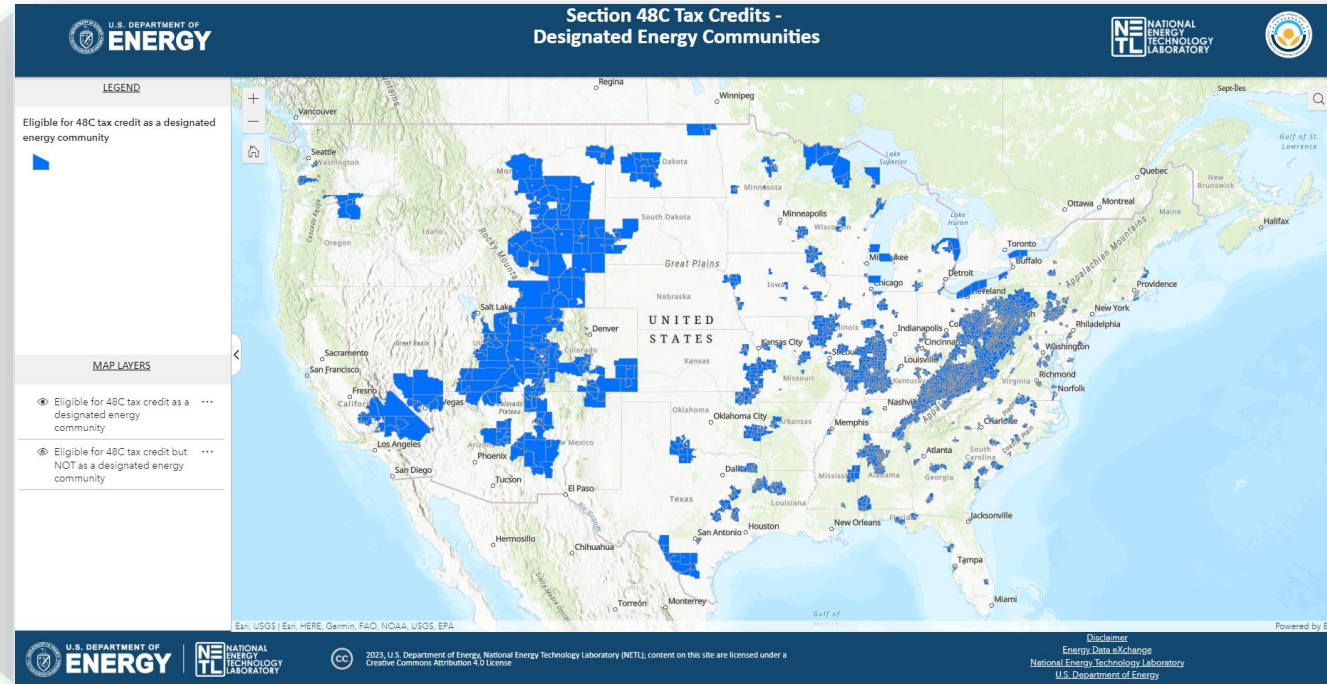
- **Critical materials for energy:** aluminum, cobalt, copper, dysprosium, electrical steel, fluorine, gallium, iridium, lithium, magnesium, natural graphite, neodymium, nickel, platinum, praseodymium, silicon, silicon carbide and terbium.
- **Critical minerals:** The Secretary of the Interior, acting through the Director of the U.S. Geological Survey (USGS), published a [2022 final list of critical minerals that includes the following 50 minerals](#): “Aluminum, antimony, arsenic, barite, beryllium, bismuth, cerium, cesium, chromium, cobalt, dysprosium, erbium, europium, fluorspar, gadolinium, gallium, germanium, graphite, hafnium, holmium, indium, iridium, lanthanum, lithium, lutetium, magnesium, manganese, neodymium, nickel, niobium, palladium, platinum, praseodymium, rhodium, rubidium, ruthenium, samarium, scandium, tantalum, tellurium, terbium, thulium, tin, titanium, tungsten, vanadium, ytterbium, yttrium, zinc, and zirconium.”

Section 48C(e) Energy Communities Census Tracts

APPENDIX C
Section 48C(e) Energy Communities Census Tracts

Census tracts that have ever had, since December 31, 1999, a closed coal mine or have ever had, since December 31, 2009, a retired coal-fired electric generating unit, and directly adjoining tracts, except for census tracts with applicants that previously received a § 48C credit allocation prior to the date of enactment of the IRA.

State Name	County or County-Equivalent Entity Name	2020 Census Tract Number FIPS code	Tract Type
Alabama	Baldwin County	1003010100	Directly adjoining
Alabama	Bibb County	1007010001	Mine closure, Directly adjoining
Alabama	Bibb County	1007010005	Directly adjoining
Alabama	Bibb County	1007010006	Mine closure, Directly adjoining
Alabama	Bibb County	1007010007	Directly adjoining
Alabama	Bibb County	1007010008	Mine closure, Directly adjoining
Alabama	Bibb County	1007010009	Directly adjoining
Alabama	Bibb County	1007010010	Directly adjoining
Alabama	Bibb County	1007010011	Directly adjoining
Alabama	Blount County	1009050104	Directly adjoining
Alabama	Blount County	1009050200	Directly adjoining
Alabama	Blount County	1009050502	Directly adjoining
Alabama	Blount County	1009050601	Directly adjoining
Alabama	Blount County	1009050603	Directly adjoining
Alabama	Blount County	1009050701	Directly adjoining
Alabama	Blount County	1009050702	Mine closure
Alabama	Cherokee County	1019955701	Directly adjoining
Alabama	Cherokee County	1019956101	Directly adjoining
Alabama	Chilton County	1021060404	Directly adjoining
Alabama	Clarke County	1025957901	Directly adjoining
Alabama	Clarke County	1025957902	Directly adjoining
Alabama	Clarke County	1025958003	Directly adjoining
Alabama	Colbert County	1033020500	Directly adjoining
Alabama	Colbert County	1033020600	Directly adjoining
Alabama	Colbert County	1033020901	Directly adjoining
Alabama	Colbert County	1033020902	Generating unit retirement
Alabama	Colbert County	1033021000	Directly adjoining
Alabama	Cullman County	1043965501	Directly adjoining
Alabama	Cullman County	1043965502	Directly adjoining
Alabama	Cullman County	1043965600	Directly adjoining
Alabama	Cullman County	1043965700	Mine closure, Directly adjoining



Of the \$10 billion in tax credits to be allocated, **at least \$4 billion must go to qualifying projects in energy communities.** As defined in section 5.06 of Notice 2-23-18, 48C energy communities include*:

- Census tracts with coal mines that have closed since December 31, 1999
- Census tracts with coal power plants that have closed since December 31, 2009
- Census tracts immediately adjacent to either of the above

These energy communities have knowledge, infrastructure, resources, and know-how to play a leading role in the move to a clean energy economy.

DOE Recommendation Process

- DOE will **provide a recommendation and ranking for a project only if it determines that the application meets all requirements described in the guidance**, and that the project is eligible, has a reasonable expectation of commercial viability, merits a recommendation, and supports program policy factors when considering the full portfolio of recommended projects.
- For the concept paper stage, **an applicant that receives a letter of discouragement** in response to a submitted concept paper **may still submit a § 48C(e) application** in accordance with the guidance.
- For the § 48C(e) application stage, the **DOE recommendation will include the portfolio of projects that help to achieve the goals of the program**. This recommendation will be based on a combination of the numeric score from the technical review process, as well as the application of the program policy factors.
- Upon receiving a denial letter from the IRS, **applicants can request a debriefing with DOE** on its review of the § 48C(e) application. The denial letter will include instructions for requesting a debriefing.



Developing a Strong Application



Example Technical Criteria Scoring

Rating	Descriptive Statement
<i>Outstanding</i>	Applicant fully addresses all aspects of the criterion, convincingly demonstrates that it will meet the Government's performance requirements, and demonstrates no weaknesses
<i>Good</i>	Applicant fully addresses all aspects of the criterion, convincingly demonstrates a likelihood of meeting the Government's requirements, and demonstrates only a few minor weaknesses.
<i>Adequate</i>	Applicant addresses all aspects of the criterion and demonstrates the ability to meet the Government's performance requirements. The Application may contain significant weaknesses and/or a number of minor weaknesses.
<i>Poor</i>	Applicant does not address all aspects of the criterion nor is evidence presented indicating the likelihood of successfully meeting the Government's requirements. Significant weaknesses are demonstrated and clearly outweigh any strengths presented.
<i>Unacceptable</i>	Applicant does not address all aspects of the criterion and the information presented indicates a strong likelihood of failure to meet the Government's requirements.

Source: [DOE Merit Review Guide for Financial Assistance and Unsolicited Proposals Attachment 6](#)



Technical Criteria Deep Dive – Commercial Viability

- Project schedule and time from certification to completion:
 - Readiness to proceed with the proposed project as evidenced by **firmness of site selection and progress towards securing required permits, contracts, reviews, and agreements**; and
 - **Reasonableness of the timeframe** required for construction and commissioning of the project, including interim milestones and overall timeline
- The extent to which **risk management issues and mitigation strategies are identified and addressed**, including the level of contingency proposed to address risk
- Strength of the proposed business plan, including:
 - The **potential for commercial deployment**, based on estimates of market share, market growth potential, and price competitiveness of the product
 - The **source and certainty of funding** for the equity that will be invested in the project, including private financing, DOE funding, state and local incentives, and other sources
 - The **strength of key arrangements**, such as financing, acquisition/supply strategy, and power purchase agreements for the proposed project, as well as offtake (sales) arrangements for the facility's products
 - The degree to which the application justifies the **proposed project's economic viability, sustainability, and potential growth**
 - The **degree to which the investment is profitable**, based on the proposed budget and spend plan, as well as described cash flow analysis of the project
 - The **levelized cost of generated or stored energy**, or of measured reduction in energy consumption or GHG emission (or similar metric) for the facility's products, **compared to similar technologies or materials within the same market segment**
- Strength of the proposed management plan, including the **management team's track record of success** in areas relevant to the project **and corporate health** of the applicant



Technical Criteria Deep Dive – Workforce and Community Engagement

Prioritizing workforce and community engagement, will lead to domestic job creation, reduce barriers that might otherwise increase project completion time, and have an impact on avoiding or reducing local pollution

Ensuring Timely Project Completion through Workforce and Community Engagement



Energy Community Transition



Job Creation and Workforce Continuity



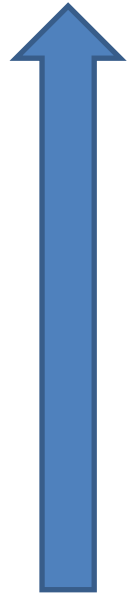
Local Environmental Impacts



Workforce and Community Engagement Plans



1. **Decrease** project risks and delays due to community or labor opposition
2. **Decrease** health and safety risks to workers and communities



3. **Increase** participation of affected stakeholders in decision-making
4. **Increase** opportunities for two-way communication
5. **Increase** accountability to affected workers and communities
6. **Increase** benefits and broadly shared prosperity from place-based projects

Job Creation and Workforce Continuity

- Applicants can detail commitments to:
 - High-Quality Jobs
 - Pay **above average wages** and benefits in both the construction and ongoing operations jobs
 - Invest in workforce training to **support a skilled workforce** and provide pathways to advancement
 - Ensure worker participation in workplace **health and safety** plan design and implementation
 - Affirmative support for worker organizing and collective bargaining



Job Quality and Workforce Continuity: Examples of Effective Commitments

Construction-Phase Jobs

1. Commitments to negotiate Project Labor Agreements for large construction activity associated with project. (An MOU can spell out the process by which PLAs would be negotiated)
2. Commitments to utilize registered apprentices, such as a ratio 15-20% of work hours
3. Commitments to local hire, such as 50% of jobs
4. Commitments to skilled and trained/credentialed workforce with a national journey-card credential
5. Wages above required Davis-Bacon prevailing wages

Job Quality and Workforce Continuity: Examples of Effective Commitments

Operations Phase Jobs

1. Commitments to support worker organizing and collective bargaining, such as:
 - Pledge to remain neutral during any union organizing campaigns
 - Pledge to permit union recognition through card check (as opposed to requiring union elections)
 - Pledge to enter into binding arbitration to settle first contracts
 - Pledge to allow union organizers access to appropriate onsite non-workspaces (e.g., lunchrooms)
 - Pledge to refrain from holding captive audience meetings
2. Commitments to provide high-quality jobs, such as:
 - 75th percentile wages or above for industry and relevant production occupations + competitive benefits
 - Paid training plus tuition reimbursement for additional training
 - Establishment of health and safety committees with participation and training of hourly production workers

Ensuring Timely Project Completion Through Workforce and Community Engagement

- Describe the applicant's plans to engage with labor unions and worker organizations, Tribal governments, and community-based organizations representing local stakeholders including disadvantaged communities.
- Describe plans to negotiate formal workforce and community agreements to detail benefits, partner obligations, and remedies to ensure accountability.



Energy Community Transition

Examples of Effective Commitments

Applicants proposing projects in energy communities should describe plans to utilize existing local and regional resources that previously supported coal, other energy, or automotive industries, including through transition opportunities for workers.

Applicants may:

- Describe plans to repurpose existing infrastructure/assets that have been abandoned due to the closing of a coal mine or coal plant.
- Describe plans to maintain high-quality jobs for both new and incumbent workers such as:
 - Honoring existing collective bargaining agreements at facilities that are being retooled;
 - Identifying and working with local unions to employ workers dislocated from fossil energy or manufacturing employment.



Community and Labor Engagement:

Examples of Effective Commitments

1. Commitment to negotiate Collective Bargaining Agreements, Community Benefits Agreements, Community Workforce Agreements, and/or Good Neighbor Agreements. (MOU outlining the conditions for negotiation at DOE negotiation stage)
2. Identification of benefits provided to affected stakeholders and local community (e.g., the number of local jobs to be created and wages paid), timelines, and remedies for non-compliance
3. Establishment of Community Advisory Councils including labor, Tribal, and Environmental Justice representatives

Local Environmental Impacts: Examples of Effective Commitments

- Applicant clearly identifies the communities impacted (positive or negative) by the project or program and indicates how these communities are characterized, including whether they are designated as disadvantaged by the CEJST, DOE DAC reporter, state tools, other.
- Applicant clearly defines what benefits will result from the project or program and how these benefits will flow to the communities impacted. Benefits should be reasonable and obtainable.
- Applicant must clearly describe impact of the project (both positive and negative) on local air, water, and/or land quality.
- Applicant offers clear and reasonable metrics to track how the identified benefits will flow and provides milestones/a schedule for when these expected outcomes will be achieved.

Questions?

For questions or comments regarding the non-tax aspects of the program, email the Department of Energy at 48CQuestions@hq.doe.gov.

For applicant registration and/or application submission related questions email InfrastructureExchangeSupport@hq.doe.gov.

For Tax-related questions, please refer to the IRS contact information in the updated guidance.

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