

# Qualifying Advanced Energy Project Credit (§ 48C) Program



## High-Level Overview

# MESC & Energy Communities IWG

## Collaborating to advance the clean energy transition



### Office of Manufacturing & Energy Supply Chains (MESC)

- Serves as the frontline of clean energy deployment, accelerating America's transition to a resilient, equitable energy future through **\$20 billion of direct investments in manufacturing capacity and workforce development**.
- Spurs development of secure, resilient, domestic clean energy supply chains and domestic manufacturing
- Supports workforce through programs at universities, community colleges, and trade schools to provide entry-level and mid-level career support.
- Develops and provides the analytical tools that help to inform programs and investments across DOE and the U.S.

### Interagency Working Group on Coal & Power Plant Communities and Economic Revitalization

- Created to break down barriers energy communities face when accessing federal resources to support economic revitalization
- Place-based approach to target federal engagement and investment to the most hard-hit coal and power plant communities
- Committed to:
  - Creating good-paying jobs
  - Remediating environmental damage
  - Supporting energy workers
  - Spurring economic revitalization

# What is 48C?

## What

- Investment tax credit (ITC) expanded by IRA with \$10 billion for (1) clean energy manufacturing & recycling, (2) critical materials, and (3) industrial GHG emissions reduction projects
- Projects receive 30% ITC (or 6% if prevailing wage and apprenticeship requirements not met)
- At least 40% of the total \$10 billion will be allocated to projects in communities with closed coal plants known as “energy communities”

## Eligible Entities

- Clean energy manufacturers & recyclers; critical materials processors, refiners, & recyclers; industrial facilities planning GHG emissions reduction projects

## Why

- 48C will play a critical role in creating high-quality jobs, reducing industrial emissions, and increasing domestic production of critical clean energy products and materials

### Legend

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



### Clean Energy Manufacturing and Recycling

- Re-equip, expand, or establish Industrial or manufacturing facility for production or recycling of clean energy and energy efficiency technologies

### Critical Materials Processing, Refining, and Recycling

- Re-equip, expand, or establish an industrial facility to process, refine, or recycle critical materials (50 USGS minerals + DOE critical materials)

### Industrial GHG Emissions Reductions

- Re-equips industrial or manufacturing facility to reduce greenhouse gas emissions by at least 20%



# Section 48C(e) Energy Communities Census Tracts



OF THE  
**\$10 billion**  
IN TAX CREDITS TO BE ALLOCATED,

**AT LEAST**

**\$4 billion**  
MUST GO TO QUALIFYING PROJECTS  
IN ENERGY COMMUNITIES.

## 48C energy communities include:

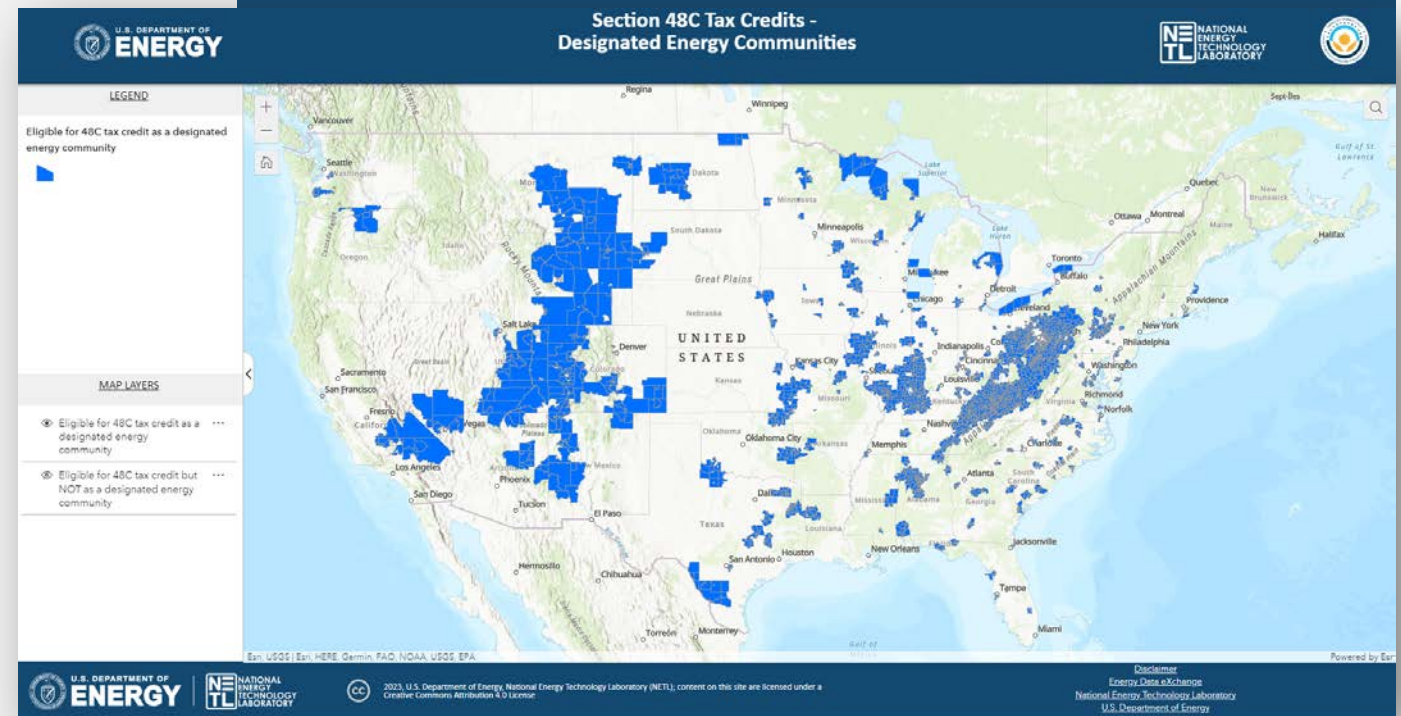
Census tracts with coal mines that  
have closed since **December 31, 1999**

Census tracts with coal power plants that  
have closed since **December 31, 2009**

Census tracts immediately adjacent  
to either of the above


**More information can be found in section 6 of  
Notice 2023-44**

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





# Clean Energy Manufacturing and Recycling – Round 1 Priority Areas



 **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

# Technical Review Criteria for Round 1 Allocations



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 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 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.**

# 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



# Initial Objectives for Engagement

MESC is partnering with the Energy Communities IWG in an effort to help ensure DOE receives **high-quality applications** for the **second round** of allocations.

- Stakeholder engagement activities will include:
  - High-touch engagement with private sector & energy community stakeholders
  - Regional Workshops
  - Federal & External Partner Events
  - Mapping tool allowing communities to identify promising sites
  - Media Outreach





# Phased Approach



## Building to a Successful Second Round of Concept Papers

### Phase I: Listen, Learn, & Activate

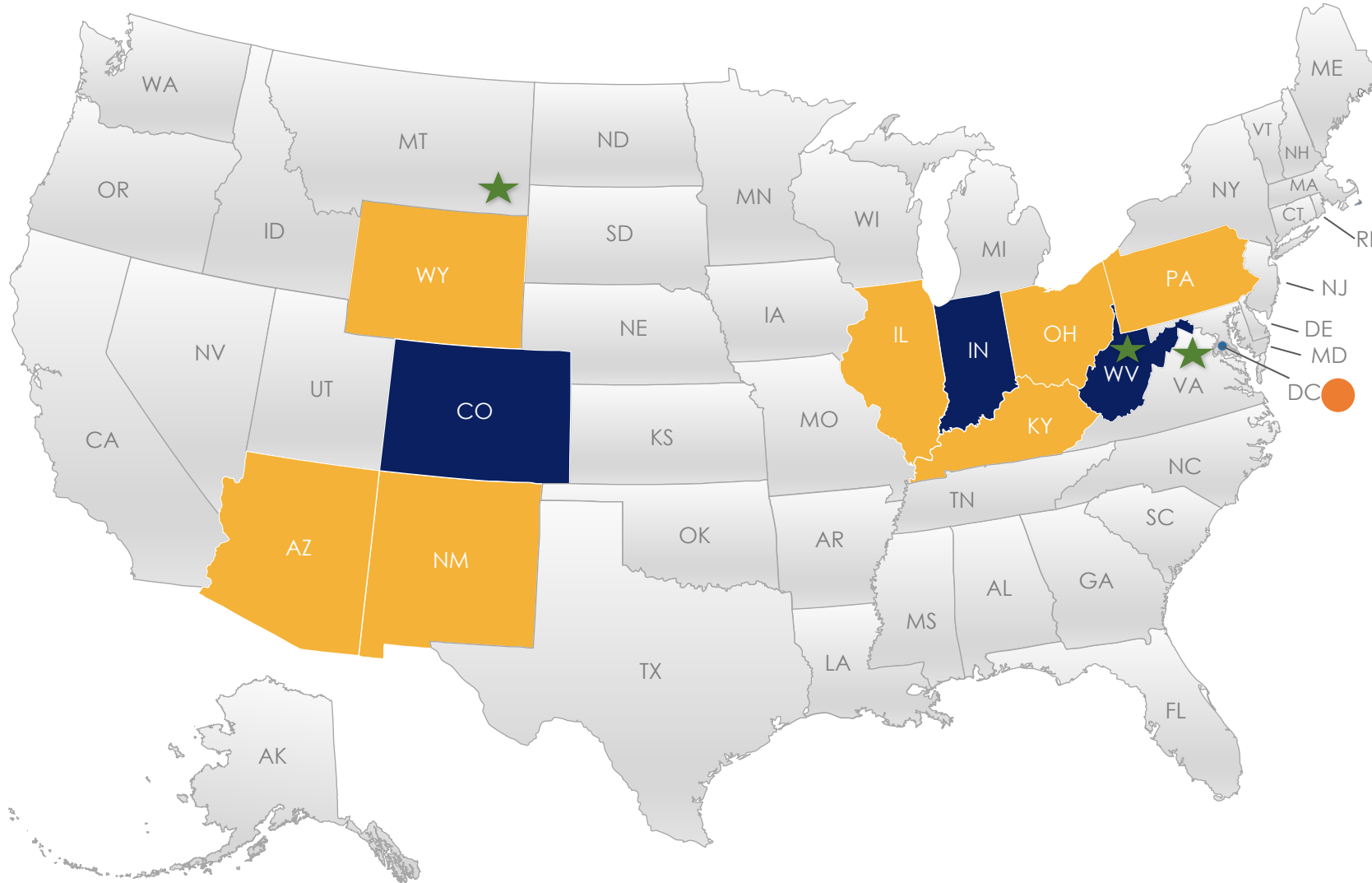
- High-touch engagement with private sector & energy community stakeholders

### Phase II: Engage & Catalyze

- Regional workshops & events in energy communities

Nov	Dec	Jan	Feb	Mar	Apr	May
Listen, Learn, & Activate						
			Engage & Catalyze			

# Geographic Focus



## ■ Targets for 48C Regional Events

- Intermountain West - Colorado
- Illinois Coal Basin - Indiana
- Central Appalachia - West Virginia

## ■ Engagement via Rapid Response Teams

- Four Corners
- Kentucky
- Illinois
- Pennsylvania
- Wyoming
- Ohio

## ★ Planned IWG RRTs

- Southeast Montana
- Virginia
- West Virginia

## ● Other Proposed Events

- IWG Anniversary Event
- Ad-hoc Events

*\*pending consultation with partners*

# Notice

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- All applicants are strongly encouraged to carefully read **IRS Notice 2023-44** and **IRS Notice 2023-18** and adhere to the stated submission requirements.
- The Notice is the controlling document, and applicants should rely on the Notice language and seek clarification by submitting a question.

The Section 48C Tax Credits - Designated Energy Communities mapping tool is available here:  
<https://arcgis.netl.doe.gov/portal/apps/experiencebuilder/experience/?id=a44704679a4f44a5aac122324eb00914&page=home>

# For More Information

Please submit any programmatic questions to  
[48CQuestions@hq.doe.gov](mailto:48CQuestions@hq.doe.gov).

Additional information on 48C program, including a  
recent webinar, is available at  
<http://www.energy.gov/infrastructure/48C>



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OFFICE OF MANUFACTURING AND ENERGY SUPPLY CHAINS



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