

Qualifying Advanced Energy Project Credit (§48C) Frequently Asked Questions

Updated on February 13, 2024 (version 8)

Posted on February 13, 2024

1. Can updated or additional documentation be provided after my application has been submitted and the application submission period has ended?

No additional documents can be submitted after the application submission period has concluded. However, DOE may request that applicants submit clarifications and/or supplemental information in writing.

2. Can the appendices be emailed to 48cquestions@hq.doe.gov if there were issues submitting multiple attachments in Exchange?

All § 48C(e) application materials must be submitted through the eXCHANGE portal at <https://48C-exchange.energy.gov> before the submission date and time listed to be considered by DOE. Section 48C(e) applications submitted by any other means will not be accepted. See IRS Notice 2023-44. DOE may request that applicants submit clarifications and/or supplemental information in writing.

3. When will the round 2 concept paper and application process begin for the year 2024?

Information on future rounds will be announced through IRS guidance. You can also check the [DOE 48C landing page](#) for updates.

4. Will reviewers ask applicants additional questions or request additional information?

DOE may request that applicants submit clarifications and/or supplemental information in writing. Individual reviewers will not contact applicants.

5. For the requirement of “A Professional Engineer must inspect and certify the project documents for feasibility,” must that engineer be a professional Engineer licensed in the United States or will a professional licensed Engineer with only Canadian credentials be adequate?

Canadian credentials equivalent to U.S. credentials are acceptable.

Posted on December 21, 2023

1. What should the lengths of the application sections be within the 30-page application? Are there internal limits or suggestions?

The application sections do not have any specified length limitations.

2. Where should appendix materials be uploaded?

After completing all necessary details in the application, proceed to the “upload and submit” page to find the option to include a new file. Further guidance could be found in the [Applicant Guide](#).

3. **Which entity is considered the “Organization” for the purpose of cells C10:C23 in the “Commercial Viability” tab of the GHG Emission Reduction Data Sheet?**
The entity that is referred to as the “Organization” in cells C10:C23 is the applicant.
4. **Which market is being referred to in cells C46:C50 in the “Commercial Viability” tab of the GHG Emission Reduction Data Sheet?**
Cells C46:C50 refers to the product from the facility that is being re-equipped with equipment to reduce greenhouse gas emissions.
5. **Which cost does cell C51 refer to in the “Commercial Viability” tab of the GHG Emission Reduction Data Sheet?**
Cell C51 refers to the unit cost of the product produced by the existing manufacturing facility.
6. **What do cells B27 & B28 in the “Commercial Viability” tab of the GHG Emission Reduction Data Sheet refer to?**
Cell B27: B28 refers to the project.
7. **The Appendix checklist stated, "Site plan with evidence that applicant owns or controls a site" on the list of documents. Is having a specific site identified and acquired at this stage a prerequisite for approval?**
An identified site is not required but will weigh heavily in determining a project’s commercial viability and the allocation for projects in energy communities.
8. **Some of the requirements seem geared for commercial companies; are pre-commercial companies eligible to participate in the DOE 48C program? For instance, will letters of intent suffice to show the interest instead of an offtake agreement?**
Letters of intent can be submitted as appendix materials if an offtake agreement has yet to be acquired. Note as part of the application process, a Business Entity Certification submission is required. See IRS Notice 2023-44, Appendix B.
9. **What does Equity Commitments mean?**
An example of an equity commitment could be, but not limited to, a letter that documents the commitment to contribute financial support.
10. **What does Debt Commitments mean?**
An example of a debt commitment could be a written agreement that outlines the conditions for one entity (the provider) to lend money to another entity (the recipient).
11. **What is required for the Shareholders agreement?**
An example of a shareholder agreement could be an agreement that details the operational guidelines for the company and delineates the rights and responsibilities of each shareholder.
12. **For the Operations and Maintenance agreement, Is this with the Construction Engineering firm or the Companies internal CBA union agreement?**
An example of an Operations and Maintenance Agreement could be a contract between the applicant and an entity to manage the operations and maintenance of the project.

13. **Notice 2023-44 page 52 asks for a description of the “ownership structure of the company.” Please clarify if the “company” refers to the entity that owns and operates the existing manufacturing facility or the special purpose project company that will own and operate the retrofit Greenhouse Gas Emission Reduction Project system.**

The “company” refers to the entity listed in Business Entity Certification submission as the applicant.

14. **Notice 2023-44 page 52 asks for a copy of the “audited financial statements for the applicant and other projected funding sources.” If the applicant is a special purpose entity that will own and operate the retrofit Greenhouse Gas Emission Reduction Project system, is it sufficient to provide financial statements of prospective investors in the special purpose entity?**

According to IRS Notice 2023-44, additional information or appendices that provide similar evidence of corporate health can be provided in lieu of audited financial statements.

15. **Does DOE require evidence of the corporate health of the entity that owns and operates the existing manufacturing facility who would be the offtaker for the special purpose entity?**

Offtake agreements and other documents provided as evidence may be included as appendix materials. DOE does not explicitly require evidence of corporate health of the offtaker entity.

16. **Notice 2023-44 page 90 gives an example for an Application Appendix File “Expressions of interest from prospective customers.” Please clarify if the “prospective customer” is a prospective customer for the products produced by the existing manufacturing facility or a prospective customer of entities providing the proposed low carbon retrofit to the manufacturing facility for a Greenhouse Gas Emission Reduction Project.**

In the case of Greenhouse Gas Emission Reduction projects, the prospective customer is for the product produced by the existing manufacturing facility.

17. **Notice 2023-44 page 91 gives an example for an Application Appendix File “Project diagrams e.g., process flow diagrams.” Please clarify if the “process” being diagrammed is the project management process or the thermochemical production process.**

Process flow diagrams refer to diagrams that describe the flow of industrial processes at the plant, including but not limited to the thermochemical production process and the equipment forming the various functions to complete the process and operations.

Posted on December 04, 2023

- 1. Can you clarify the application deadline?**

The application deadline has been updated to December 26 at 5:00 PM ET to reflect the requirements in IRS Notice 2023-44.

- 2. The point of contact who submitted a concept paper on behalf of my organization has since left our organization and we are unable to log-in to eXCHANGE. Is there a way to add new users to an existing submission in eXCHANGE?**

Unfortunately, there is currently no way for the Department of Energy to add new users to an existing submission due to the inability to authenticate the identity of new users. However, the individual who created a submission can share access with others in their organization as long as they have an eXCHANGE account. As a best practice, we recommend the individual creating the submission share access with at least one other user in their organization.

- 3. How can I see whether my submission was encouraged or discouraged if I did not receive an email notification?**

Applicants can log in to the eXCHANGE portal and go to “My Submissions” tab to see the concept paper decision and the accompanying letter with additional information.

- 4. As an applicant, do I have to acknowledge within seven days of receiving my encourage/discourage notification that I will be moving forward with an application?**

No acknowledgment is required. The eXCHANGE portal is now open to receive applications from any applicant that submitted a concept paper.

- 5. I received a discourage notification. Can I request a debrief with the Department of Energy?**

No, debriefs for individual applicants are not available at this stage. However, applicants who submit full § 48C(e) applications and receive a denial letter may request a debriefing with DOE regarding its review of the § 48C(e) application. The denial letter will include instructions for requesting a DOE debriefing. Note that any applicant which submitted a concept paper and received a discourage notification is still eligible to submit a § 48C(e) application.

- 6. Are levelized costs required for applications for GHG Emissions Reduction or Critical Materials projects?**

Applicants are not required to provide levelized cost of emissions reduction for GHG Emissions Reduction or Critical Materials projects.

- 7. The “Scope 1 – Refrigerants” and “Scope 1 – Fire Suppression” tabs in the Greenhouse Gas Emissions Reduction project data sheet do not include a conversion from pounds to metric tons. Will an updated version of the data sheet be available that incorporates this conversion?**

An updated version of the data sheet with the correct unit conversion was added to eXCHANGE on November 16, 2023.

- 8. The 48C Concept Paper Clean Energy Manufacturing and Recycling data sheet had the option to enter a different fuel process in cell C5 if it was not represented in the dropdown menu. In the data sheet for the application, the instructions for “other” are not provided. Am I allowed to enter a more representative description in cell C5 of the full application data sheet?**

No, applicants should select the most representative fuel cell process from the dropdown menu in cell C5 and may provide further detail in the application narrative.

- 9. In the Clean Energy Manufacturing Data Sheet, the input required for the Primary Technology Area (row 22 of the 'Project Overview' tab) is restricted to specific technology areas, which do not include the 'Vehicles & Vehicle Components' area. Please advise on how to provide the appropriate input for this technology area.**

Applicants should select the Primary Technology Area in line 22 of the 'Data Sheet – Project Overview' tab for clean energy manufacturing and recycling, that most closely fits their manufactured product. Applicants should fill out the data sheet tab that most closely fits their manufactured product. As an example, an applicant may choose 'Electric or Fuel Cell Vehicles' as their Primary Technology Area and fill out the 'Vehicles and Vehicle Components' datasheet tab.

- 10. Can you provide clarity on the appropriate data sheet tab in the 'Data Sheet - Project Overview' worksheet to be completed for battery electrode active materials.**

Applicants should choose the data sheet tab that is most appropriate for their specific product. Further details can be provided in the full application narrative.

Posted on September 25, 2023

- 1. How will status updates on my application, including the encourage/ discourage notification, be shared?**

Answer: Status updates will be shared through the eXCHANGE portal. When there is an update on an applicant's submission, an email will be sent to all identified points of contact listed in eXCHANGE notifying them of the update. The owner of the submission and any users that have been shared permission to a submission will have access to view the status updates in eXCHANGE.

- 2. What is the form of Business Entity Certification required by the 48C Full Application?**

Answer: A template for the Business Entity Certification will be provided on the eXCHANGE portal, along with other application materials that will be posted prior to the date when DOE begins accepting 48C application submissions.

- 3. How should we proceed if contracts and agreements requested in the appendix materials (e.g., Operations and Maintenance Agreement; Shareholders Agreement; Engineering, Procurement, and Construction Agreement) have not been finalized by the application deadline?**

Answer: Please provide as much information as possible on the anticipated agreements if not yet finalized by the date of the application submission deadline.

- 4. If we do not have a full address of incorporation (only the State of incorporation), what should we put in eXCHANGE when asked for the full address?**

Answer: An applicant may answer 'NA' in the address fields of the 'Place of Incorporation' location screen that do not apply to the applicant. The state should be the state where the applicant's entity is organized or incorporated.

Posted on July 28, 2023

1. Is the concept paper phase deadline pushed back?

Answer: Given the release of the final [DOE Critical Material List](#) and per Notice 2023-44 Appendix A, the Round 1 Concept Paper deadline has been extended by 72 hours. Submissions must be submitted through the 48C eXCHANGE portal by Thursday, August 3rd at 12:00 PM Eastern (noon).

2. Does the extension impact a concept paper that was already submitted?

Answer: The extension will not impact any prior submission. However, applicants may unsubmit, edit, and the resubmit before the extended deadline of Thursday, August 3rd at 12:00 PM Eastern (noon).

3. I've faced issues with creating a login.gov account necessary to submit the concept paper. What can I do?

Answer: The 48C eXCHANGE portal has a new capability to register users. Please visit the new user registration page on the 48C eXCHANGE portal (<https://48c-exchange.energy.gov/>).

4. Are the examples listed under the clean energy manufacturing and recycling project category in § 48C IRS Notice 2023-44 comprehensive?

Answer: Appendix A of IRS Notice 2023-44 lists property eligible under the clean energy manufacturing or recycling project category. The examples provided are non-exhaustive and property may be determined to be designed to reduce greenhouse gas emissions either through published guidance or in the letter notifying an applicant that the IRS has accepted the applicant's application for § 48C(e) certification with respect to the property.

5. In the project overview it asks to describe your baseline emissions compared to peers in your industry. How do you define a peer and where does one find peer emissions data?

Answer: A peer is a competitor within your industry who produces the same product and ideally has a similar industrial or manufacturing capacity. Peer data can be found through EPA's [Greenhouse Gas Reporting Program](#) and public emissions disclosures, among other sources.

6. How do you evaluate the compliance to the reduction in greenhouse gas emissions. Will you take any 3rd party software or are their specific standards that must be provided?

Answer: Where possible, justify these estimates with publicly available data (e.g., [EPA Greenhouse Gas Reporting Protocol \[GHGRP\] reporting](#)) and the results of engineering studies. In the full application stage, applicants will be asked to provide a more detailed emissions accounting in the Full 48C Application Data Sheet.

7. Our electric vehicle concept uses diesel fuel rather than gasoline. The excel file for concept paper clean energy only refers to gasoline equivalency, as does the DOE

GHG calculator. What shall we do about this baseline fuel type discrepancy? Use our own values for diesel fuel?

Answer: Please use your own values for diesel fuel and provide your source.

Posted on July 21, 2023

- 1. Will there be another window to apply for the 48C credits or is the deadline on July 31st the last opportunity to submit a concept paper?**

Answer: The July 31st deadline is for the first round of allocations only. There will be at least one more round of allocations in the future.

- 2. What is the “applicant case number” that is requested in the concept paper data sheets?**

Answer: The applicant case number is the same as the applicant control number.

- 3. Do the Concept Paper and Concept Paper Workforce and Community Engagement Plan each require a title page? Does the title page count toward the maximum page count?**

Answer: A title page is not required.

- 4. Is it necessary for an organization to have a Unique Entity Identifier (UEI) to apply for the Qualifying Advanced Energy Project Credit (§ 48C)?**

Answer: The UEI Number field is a required field in the 48C Exchange Portal. However, there is an option to select N/A if your organization does not have one.

- 5. Is it necessary for an organization to register on Sam.Gov for either “All Awards” or “Financial Assistance Awards Only” to apply for the Qualifying Advanced Energy Project Credit (§ 48C)?**

Answer: No, an organization will need to register for an account in the 48C Exchange Portal. Credentials for the 48C Exchange Portal are created and managed via Login.gov.

- 6. Is there any advantage to submitting a § 48C Concept Paper earlier than the deadline, or will DOE begin reviewing all applications after the deadline?**

Answer: There is no advantage to submitting a concept paper before the deadline. DOE will begin reviewing all applications after the deadline.

- 7. My zip code has a leading zero but the formatting in the concept paper data sheet does not allow this. How should I proceed?**

Answer: Please submit your zip code without the leading zero (e.g., as a four-digit zip code), and we will add the leading zero in after submission.

8. Will the industrial projects qualify for the credits by meeting only 1 of the “three project types”, or does it have to be a clean energy manufacturing facility?

Answer: Only one of the following project types must be met:

- Clean energy manufacturing or recycling
- Industrial decarbonization (GHG emissions reduction), or
- Critical materials processing, refining, and recycling

9. Under the GHG emissions reduction category of § 48C: can you confirm that wastewater treatment facilities qualify as an industrial facility given their processing and recycling of raw water into releasable effluent, as well as energy producing solids?

Answer: Yes, wastewater and drinking water treatment facilities would qualify as an industrial facility.

10. Which category would semiconductors that play a vital role in power electronics across all application spaces addressed in the § 48C program (i.e., EV, grid, electric heat pumps, clean hydrogen, etc.) fall in? Which tab in the data sheet should manufacturers of power electronics complete?

Answer: Manufacturers of power electronics should fill in the tab most closely related to the anticipated end use of the product. We acknowledge there will be nuances that are hard to capture in the data sheet and intend to consider the data sheet with the context of the narrative.

11. What tool should applicants use to determine their Technology Readiness Level in the datasheet?

Answer: The descriptions provided in the TRL drop-down menu are provided for the applicants' clarity. Applicants may use the Commercial Adoption Readiness Assessment Tool (CARAT) linked in the instructions to calculate their appropriate level. While Technology Readiness Level (TRL) and Adoption Readiness Level (ARL) are distinct, we use the terms interchangeably in the data sheet.

12. Will § 48C concept papers that do not address Round 1 priorities be considered for Round 1 tax credit allocation or should organizations wait for Round 2 funding priorities?

Answer: All applicants that meet the eligibility criteria will be considered for Round 1 tax credit allocation. The indicated priorities for Round 1 signal priority for one of four technical review criteria, and they are not inclusive of all eligible properties.

13. Are expansions eligible for the industrial GHG emission reduction projects?

Answer: No, only projects that re-equip an existing facility are eligible under the GHG Emission Reduction project category. Expansion projects are eligible under the Clean Energy Manufacturing and Recycling or Critical Material Project categories.

- 14. If we include an early-stage capital cost estimate in the concept paper, are we allowed to update that number in the full application as we progress through different engineering stages of our project?**

Answer: Yes, current capital cost estimates can be updated in the full application. Please provide the current cost estimate in the concept paper.

- 15. In completing the data sheet for a § 48C(e) concept paper, can we include additional tabs for each component that is produced at the facility where more than one original equipment manufacturer (OEM) parts are being manufactured?**

Answer: Please fill in one tab as generally as possible and clarify the OEM parts being manufactured in the narrative of the concept paper. We acknowledge there will be nuances that are hard to capture in the data sheet and intend to consider the data sheet with the context of the narrative.

- 16. In completing the data sheet for a § 48C(e) concept paper, can we include additional tabs for each component that is produced at the facility where more than one original equipment manufacturer (OEM) parts are being manufactured? (Duplicate)**

Answer: Please fill in one tab as generally as possible and clarify the OEM parts being manufactured in the narrative of the concept paper. We acknowledge there will be nuances that are hard to capture in the data sheet and intend to consider the data sheet with the context of the narrative.

- 17. For the GHG Emission reduction category, how do renewable energy credits (RECs) factor into Scope 2 emissions? If RECs are already being purchased to offset electricity footprint, how does those RECs factor into the calculation of the 20% threshold?**

Answer: RECs may not factor into the baseline or future Scope 2 emissions or the emissions reduction calculation, as they cannot constitute a facility-level emissions reduction driven by the retrofit. Scope 2 emissions should be associated with the facility's direct electricity and fuel use. However, while they are not directly used in the calculation of the Scope 2 baseline or emissions reduction for the purposes of § 48C, applicants are welcome to share their RECs in the narrative. As with other efforts to reduce the facility's environmental impact, RECs may be considered in the overall evaluation of the project's merits.

- 18. On the data input sheet and concept paper, does the term “cost” actually mean the MSRP of the product?**

Answer: The guidance provides information on cost metrics (i.e., \$/W, \$/Unit, and efficiency) as well as higher-level metrics such as LCOE. Applicants are welcome to clarify whether this is the sales price or the production cost when explaining their technological or

cost advantage over competitors. We recognize that cost comparisons are not always publicly available, so applicants should do their best to compare their products to peers wherever possible.

Applicants can mark their applications for confidentiality to protect proprietary information.

19. When it comes to achieving greenhouse gas emission reductions in a manufacturing facility, can the reductions come from retrofits or reequipment of areas in the facility not directly related to the manufacturing activities?

Answer: There is no requirement that the property necessary for re-equipping an industrial or manufacturing facility be directly related to the manufacturing activities of such facility. The equipment, however, must be designed to reduce greenhouse gas emissions by at least 20% through the installation of (1) low- or zero-carbon process heat systems, (2) carbon capture, transport, utilization and storage systems, (3) energy efficiency and reduction in waste from industrial processes, or (4) any other industrial technology designed to reduce greenhouse gas emissions, as determined by the Secretary. Please refer to Appendix A(2)(d)(ii) of IRS [Notice 2023-44](#) for more information.

Posted on July 17, 2023

1. What is the earliest date eligible property could be placed in service and still qualify for a section 48C credit allocation?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

2. Can costs be incurred before the allocation award date, as long as eligible property is not put into service before the award date?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

3. Can an organization submit one application for multiple eligible projects? Or would they have to submit one application per project?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

4. Should we still submit a concept paper through the eXCHANGE portal by July 31st, or is there a different process if we are participating in the elective pay option?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

5. How can I determine if my project is located in a § 48C(e) Energy Community Census Tract?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

6. Is there a limit or maximum credit on the § 48C credit per project/company?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

7. Does "Greenhouse Gas Emission Reduction Projects" only apply to existing facilities?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

8. Could an applicant receive an allocation of § 48C credits if it has also been the recipient of a grant/loan under other DOE manufacturing –related funding opportunities?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

9. What costs qualify as investments? Is it anything that goes into developing a property for these uses? What about "soft costs" such as design or development costs?

Please refer to [Frequently asked questions about the Qualifying Advanced Energy Project \(48C\) Credit | Internal Revenue Service \(irs.gov\)](#) for the answer.

Posted on July 13, 2023

1. I was unable to attend the June 27 informational webinar. Are the recording and slides available online?

Answer: Yes, the webinar recording and a pdf copy of the slides can be found here: [Qualifying Advanced Energy Project Credit \(48C\) Program | Department of Energy](#).

2. Where do I register to submit an application and how do I receive a control number?

Answer: To register in the Qualifying Advanced Energy Project 48C Credit Program, you will use this link: [Qualifying Advanced Energy Project 48C Credit Program: Registration](#). You will receive a control number (which is the unique identifier for your application) once you begin the application process (i.e., create the Concept Paper).

3. Is there a procedure for withdrawing a Concept Paper or application once either has been submitted? Is there any penalty for withdrawing a § 48C Concept Paper or application once either has been submitted?

Answer: Yes, if the taxpayer chooses to withdraw a submission at any phase of the program, the taxpayer must provide a formal withdrawal notification through the eXCHANGE or successor portal.

4. **Will taxpayers that fail to receive an allocation in round 1 be eligible to apply again during round 2?**

Answer: Yes, failing to receive an allocation in round 1 does not preclude an applicant from applying again in round 2.

5. **If a company is establishing a US entity for the purposes of § 48C, but that US entity is not set up by July 31 concept paper deadline, may a non-US entity submit the concept paper, so long as the US entity is formed to submit the § 48C(e) application and operate the project?**

Answer: Yes, a non-US entity may submit a concept paper as long as the US entity is formed to submit the full application and operate the project. Please be advised that the 48C eXCHANGE Portal may not be accessible through certain non-domestic (US-based) IP addresses.

6. **If an applicant includes a location in the 07/31 submission but the location changes after the 07/31 and before the final application is due, how can the taxpayer go about disclosing that? Do they simply make the address change on the data input sheet for the final application?**

Answer: Section 8 of Notice 2023-44 and Notice 2023-18 address significant changes in plan, which may include changes in the location of a facility.

Mapping

7. **What census tract boundaries are used to locate coal mines and coal-fired electric generating units for the § 48C(e) designated Energy Communities Census Tracts?**

Answer: Census tracts are those delineated in the 2020 Census, as described in [83 FR 56277](#). The shapefiles used to characterize census tract and therefore place mines within them are 2020 [TIGER/Line Geodatabases](#) as defined by the U.S. Census Bureau.

8. **How are coal mines identified and characterized as “closed” for the § 48C(e) designated Energy Communities Census Tracts?**

Answer: A coal mine is identified for purposes of the § 48C(e) designated Energy Communities Census Tracts if it is or has been in the Department of Labor’s Mine Safety and Health Administration’s (MSHA’s) “[Mines](#)” data set after Dec. 31, 1999. Mines for the energy community credit bonus are those with a type of “Surface” or “Underground.” A mine will be identified as “closed” if after Dec. 31, 1999 it has ever been listed in MSHA’s Mines dataset as having a status of “Abandoned” or “Abandoned and Sealed.” The definition of “mine status” can be found on pages 3-4 of the [Instructions for Completing the Mine Information Form \(MSHA 2000-209\)](#). The map showing the census tracts that have had coal mine closures since 1999 and census tracts directly adjoining to such census tracts is based on MSHA’s Mines dataset as of May 1, 2023. Historical versions of MSHA’s Mines dataset are also used to identify mines that have ever had, since Dec. 31, 1999, a status of “Abandoned” or “Abandoned and Sealed.”

9. How are coal-fired electric generating units identified and characterized as “retired” for the § 48C(e) designated Energy Communities Census Tracts?

Answer: An electric generating unit is identified according to its presence in the Department of Energy’s (DOE’s) U.S. Energy Information Administration (EIA) Electric Generator Inventory data from Form [EIA-860](#), supplemented with Monthly Electric Generator Inventory from [EIA-860M](#).

Data from forms EIA-860 and EIA-860M provide listings of retirements. An electric generating unit is considered a retired coal-fired electric generating unit if it is classified as retired at any time since December 31, 2009, and at the time of being listed as retired is characterized as a coal-fired electric generating unit. The map of the § 48C(e) designated Energy Communities Census Tracts is based on EIA-860 and EIA-860M data available as of May 1, 2023.

An electric generating unit is characterized as “coal-fired” based on the available data for past years. For years 2014 to 2023, coal-fired electric generating units are those listed in EIA Form 860M or EIA Form 860 data as having a “Technology” of “Conventional Steam Coal” or “Coal Integrated Gasification Combined Cycle.” For years 2010 to 2013, coal-fired electric generating units are those listed in EIA Form 860 data as having a primary fuel source code of anthracite coal, bituminous coal, lignite coal, refined coal, coal-derived synthesis gas, subbituminous coal, and waste/other coal.

10. If a coal-fired electric generating unit switches to a different source for its fuel without being listed as ‘retired’, is it considered a retired coal-fired electric generating unit?

Answer: No. An electric generating unit must be coal-fired when it is retired to be considered a retired coal-fired electric generating unit. An electric generating unit is a retired coal-fired electric generating unit if it (1) appears in the retirements listing of any monthly release of the dataset from Form-860M since December 31, 2009, or any annual release of the dataset from Form-860 since December 31, 2009, (2) the month and year of retirement occur after December 31, 2009, and (3) for years 2014 through the most recent monthly listing, it is listed as having a “Technology” of “Conventional Steam Coal” or “Coal Integrated Gasification Combined Cycle” in the retirement listing, or for years 2010 through 2013, it is listed as having a primary fuel of one of the following in the retirement listing: anthracite coal, bituminous coal, lignite coal, coal-derived synthesis gas, subbituminous coal, waste/other coal (including anthracite culm, bituminous gob, fine coal, lignite waste, and waste coal), or refined coal.

11. I think there is a census tract with a coal mine closure that is not on this map. What should I do?

Answer: Access coal mine data through the Department of Labor’s Mine Safety and Health Administration (MSHA) “Mines” [data set](#).

For validation purposes, review the following:

- Does the mine appear in the Mines dataset?
 - If not, contact MSHA at mshadata@dol.gov.
 - If yes, next check the location information.
 - Do the latitude and longitude listed place the mine in the county and state listed?

- Do the latitude and longitude listed extend beyond the tenth decimal place (for example, format XXX.XXXXXX)?
 - If the answer to either of these is no, then contact MSHA at mshadata@dol.gov.
- What information should I provide to MSHA when I contact the Agency?
 - Name and contact information of the person or entity submitting the recommended change
 - Mine ID (if known)
 - Operating Company Name (if known)
 - Mine Name (if known)
 - County and state where the mine is or was located
 - Street address of the mine (if known)
 - Current latitude and longitude of mine in the Mine Data Retrieval System (MDRS) (if known)
- Recommended latitude and longitude of mine (make certain there are 6 digits to the right of the decimal point)
If MSHA considers the suggested correction valid, then the Agency will update the Mines dataset accordingly.
- See below for timing of updates to the IRS census tract listing and the DOE map based on any data corrections from MSHA.

12. I think there is a census tract with a retired coal-fired electric generating unit that is not on this map. What should I do?

Answer: First, check to see if there is an issue with the location data for the coal-fired generating electric unit:

- Coal-fired electric generating unit data comes from the Department of Energy's (DOE's) U.S. Energy Information Administration (EIA) Electric Generator Inventory data from Form [EIA-860](#), and the Monthly Electric Generator Inventory from [EIA-860M](#).
- Does the coal-fired electric generating unit appear in the EIA Form 860 or EIA Form 860M data?
 - If not, contact EIA via InfoElectric@eia.gov.
 - If yes, next check the location information.
 - Do the latitude and longitude listed map the mine to the county and state listed?
 - Do the latitude and longitude listed extend beyond the tenth decimal place?
 - If the answer to either of these is no, then contact EIA via InfoElectric@eia.gov.
- What information should I provide to EIA when I contact them?
 - Name and contact information of the person or entity submitting the recommended change
 - Plant ID and Generator ID (if known)
 - Operating Company Name (if known)
 - Plant Name (if known)
 - County and state where the unit is located
 - Street address of the unit (if known)
 - Current latitude and longitude of unit in the EIA Form 860 or EIA Form 860M data (if known)

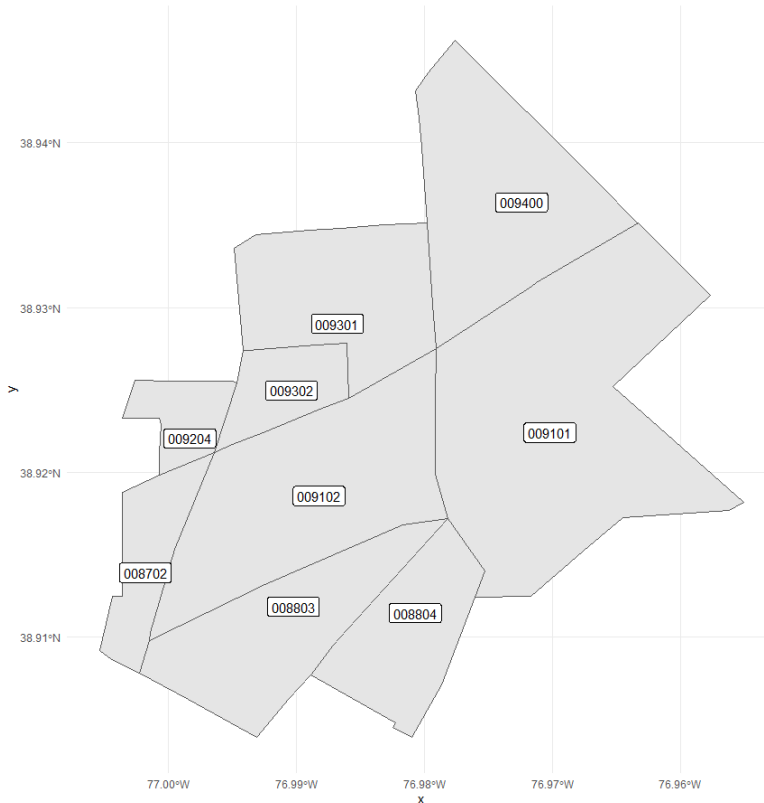
- Recommended latitude and longitude of unit (make sure there are at least 4 digits to the right of the decimal point)
If EIA considers the correction valid, then it will update the EIA Form 860 and/or EIA Form 860M data accordingly.
- See below for timing of updates to the IRS census tract listing and the DOE map based on any corrected data from EIA.

13. If two census tracts touch at a single point, are they considered “directly adjoining”?

Answer: Census tracts shapefiles from the U.S. Census Bureau are used to identify adjoining census tracts. Census tracts are considered directly adjoining if their boundaries touch at any single point. There are many cases of where multiple census tracts meet at a single point. If a closure occurred in one of the census tracts, the other census tracts sharing the single point would be considered directly adjoining.

Figure 1 shows an example of census tracts with their 6-digit identifiers. All of these census tracts are considered directly adjoining to census tract 009102.

Fig. 1: Example of adjoining census tracts



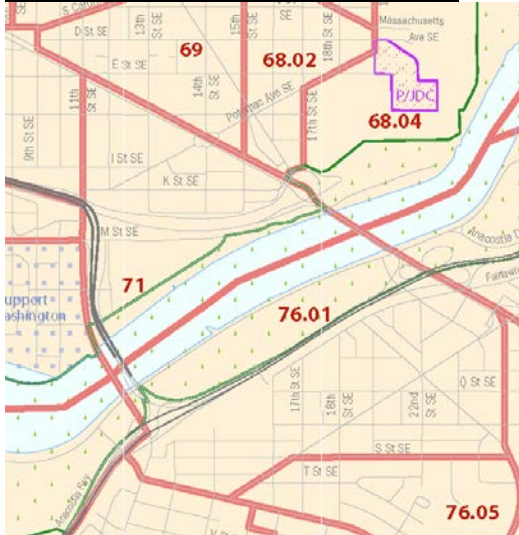
Source: Treasury Office of Tax Analysis.

14. If two census tracts have a river between them, are they considered directly adjoining?

Answer: Census tract boundaries may follow rivers or other waterways. However, these waterways do not prevent census tracts from being directly adjoining. Census tract boundaries incorporate waterways by either extending into waterways or by wholly covering a waterway within a census tract.

Figure 2 shows one example of how a waterway may interact with census tracts. This shows census tract 007100 (denoted without the floating zeroes as “71”) having a border in the river. Census tract 007601 (denoted here as 76.01) also has a border in the river. Census tracts 007100 and 007601 are directly adjoining to each other.

Fig. 2: Waterways in census tracts



Source: <https://www.census.gov/geographies/reference-maps/2020/geo/2020pl-maps/2020-census-tract.html>

15. How often does Treasury anticipate updating the maps and data?

Answer: Treasury will only update the list of § 48C Energy Communities Census Tracts in the year of a new allocation round(s) for the § 48C(e) program and as an attachment to the Notice announcing the new allocation round(s). Note that Appendix C of Notice 2023-44 and any subsequent Notice announcing a new allocation round provide the sole means taxpayers may substantiate a tax return position with respect to whether their project is located in a § 48C Energy Communities Census Tract.

Section 48 Tax Credit Program Privacy Act and Paperwork Reduction Act Notice

The Department of Energy (DOE) is collecting concept papers and applications on behalf of the Internal Revenue Service (IRS) for IRS to use to determine taxpayer eligibility for tax credits under section 48C of the [Internal Revenue Code \(Code\)](#). Authority for IRS and DOE to collect this information is Code sections 48C, 6001, 6103(n), 6109, 7801, and 7803. Concept papers, applications, and related information submitted through the DOE portal are return information owned by IRS. This information will be disclosed to DOE employees and contractors for purposes of review and recommendation to IRS regarding an application's compliance with technical criteria for eligibility for these tax credits. This information may also be disclosed to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. Other disclosures of return information are provided under Code Section 6103 and the routine uses published in two IRS Privacy Act System of Records Notices (SORNs): [Treasury/IRS 24.030, Customer Account Data Engine \(CADE\) Individual Master File \(IMF\)](#), published at 80 Fed. Reg. 54082-54083 (Sept 8, 2015) and [Treasury/IRS 24.046, Customer Account Data Engine \(CADE\) Business Master File \(BMF\)](#) published at 80 FR 54083-54084 (Sept. 8, 2015). Any additional records which are not maintained under the above IRS SORNs will be maintained under DOE SORN [DOE-82, Grant and Contract Records for Research Projects, Science Education, and Related Activities](#), published at 74 Fed. Reg. 994 (January 9, 2009).

Providing this information is voluntary but necessary to process your concept paper and application. If you choose to apply for the tax credit allocation under Code section 48C, you must provide all requested information. Failure to provide complete information may delay or prevent processing or reviewing your materials. Providing false or fraudulent information may subject you to penalties.

You are not required to respond to a collection of information that is subject to the Paperwork Reduction Act unless the collection displays a valid OMB control number. The OMB number for this collection of information is 1545-2151. Books or records relating to tax matters must be retained as long as their contents may become material in the administration of any Internal Revenue law.

The time needed to complete and submit a concept paper and an application will vary depending on individual circumstances. The estimated average time is: 136 minutes for recordkeeping and reporting for the concept papers, and 626 minutes for recordkeeping and reporting for the application process.

Personal information collected from merit reviewers will be protected under the Privacy Act of 1974. Acknowledgement of the Privacy Act statement covering personal information collected from merit reviewers is part of the application process:

Section 48 Tax Credit Program Merit Reviewer Registration

Privacy Act Statement

The Department of Energy (DOE) is collecting applications and concept papers on behalf of the Internal Revenue Service (IRS) for administration of tax credit programs under [Section 48C of the Internal Revenue Code \(IRC § 48C\)](#).

To register as a Merit Reviewer for the IRC § 48C tax credit program, you are asked to provide: information about yourself, including contact information; whether you are a US citizen and reside in the US; a copy of your resume or CV; a Uniform Resource Link (URL) to your LinkedIn profile or similar on-line professional resource; and answers to questions about your areas of subject matter expertise. Your information will be maintained by DOE and IRS and protected under the Privacy Act of 1974 and other applicable federal privacy laws. Our authority to request this information is 5 U.S.C. § 301. We will use it to assess your credentials as a potential Merit Reviewer. You are not required to apply to be a Merit Reviewer for this program; however, if you apply you are required to provide the information requested. Failure to provide complete information may delay or prevent processing your application. Providing false or fraudulent information may subject you to penalties.

Approved Merit Reviewers are provided access to federal tax information (FTI) that requires specific handling and protections. All documents and information received, obtained, or generated by DOE or IRS (and their contractors) regarding applicants under the IRC § 48C tax credit program are tax return information and are owned by the IRS. **As a Merit Reviewer, you are required to protect the confidentiality of FTI and related tax return information by following the IRS's tax information protection standards under the Internal Revenue Code (IRC) Section 6103 and applicable federal regulations.**

The information you provide in your application to be a Merit Reviewer for the IRC § 48C tax credit program, and information regarding your training for this program, may be disclosed to the IRS, the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. All records pertaining to Merit Reviewers, including applications and training records, will be maintained under the following Privacy Act System of Records Notices (SORNs), where additional routine uses may be found:

- Office of Personnel Management/GOVT-1, General Personnel Records, 77 FR 73694 (Dec 11, 2012).

- [Treasury/IRS 24.030 SORN for Customer Account Data Engine \(CADE\) Individual Master File \(IMF\)](#), published at 80 Fed. Reg. 54082-54083 (Sept 8, 2015).
- [Treasury/IRS 24.036 SORN for Customer Account Data Engine \(CADE\) Business Master File \(BMF\)](#), published at 80 FR 54063 (Sept. 8, 2015).
- [DOE-28, General Training Records](#), published at 74 Fed. Reg. 994 (January 9, 2009).
- [DOE-82, Grant and Contract Records for Research Projects, Science Education, and Related Activities](#), published at 74 Fed. Reg. 994 (January 9, 2009).

For more information on the way DOE protects your information, please review DOE's privacy policy at www.energy.gov/privacy; for more information on how IRS protects tax information, please review IRS's privacy policies at www.irs.gov/privacy.