

## Part III - Administrative, Procedural, and Miscellaneous

### Initial Guidance Establishing Qualifying Advanced Energy Project Credit Allocation Program Under Section 48C(e)

Notice 2023-18

#### SECTION 1. PURPOSE

.01 This notice establishes the program under § 48C(e)(1) of the Internal Revenue Code (Code)<sup>1</sup> to allocate \$10 billion of credits (\$4 billion of which may be allocated only to projects located in certain energy communities) for qualified investments in eligible qualifying advanced energy projects (§ 48C(e) program). The goal of the § 48C(e) program is to expand U.S. manufacturing capacity and quality jobs for clean energy technologies (including production and recycling), to reduce greenhouse gas emissions in the U.S. industrial sector, and to secure domestic supply chains for critical materials (including specified critical minerals) that serve as inputs for clean energy technology production.

.02 This notice and its appendices provide the initial program guidance for the § 48C(e) program. The Department of the Treasury (Treasury Department) and the Internal Revenue Service (IRS) intend to issue a supplemental notice and appendices

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<sup>1</sup> Unless otherwise specified, all “section” or “§” references are to sections of the Code.

(additional § 48C(e) program guidance) by May 31, 2023.

.03 The Treasury Department and the IRS anticipate providing at least two allocation rounds under the § 48C(e) program. For the first allocation round (Round 1) of the § 48C(e) program, which will begin on May 31, 2023, the Treasury Department and the IRS anticipate allocating \$4 billion of qualifying advanced energy project credits (§ 48C credits) with approximately \$1.6 billion in § 48C credits to be allocated to projects located in certain energy communities. Although the Treasury Department and the IRS intend to allocate a total of \$10 billion of § 48C credits with not less than \$4 billion of § 48C credits to projects located in certain energy communities over the duration of the § 48C(e) program, depending upon applications received, the Treasury Department and the IRS may not allocate exactly 40 percent of the total § 48C credits allocated in Round 1 to projects located in certain energy communities. To be considered for an allocation of § 48C credits in the § 48C(e) program for Round 1, taxpayers must submit concept papers to the Department of Energy (DOE) by July 31, 2023. Following submission of a concept paper, DOE will encourage or discourage taxpayers from submitting a joint application for DOE recommendation and for IRS § 48C(e) certification (§ 48C(e) application).

## SECTION 2. BACKGROUND

.01 For purposes of the § 38 general business credit, § 46 provides that the amount of the investment credit for any taxable year is the sum of the credits listed in § 46. That list includes the § 48C credit, which was originally enacted by § 1302(b) of the American Recovery and Reinvestment Act of 2009 (2009 Act), Public Law 111-5, Division B, Title I, Subtitle D, 123 Stat. 115, 345 (February 17, 2009), to provide an

allocated credit for qualified investments in qualifying advanced energy projects.

.02 In addition to certain amendments made by the Tax Increase Prevention Act of 2014, Public Law 113-295, 128 Stat. 4010 (December 19, 2014), § 48C was most recently amended by § 13501 of Public Law 117-169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA). Section 13501(a) of the IRA added § 48C(e) to the Code to extend the § 48C credit and to provide an additional credit allocation of \$10 billion. Section 13501(b) of the IRA modified the definition of a “qualifying advanced energy project” contained in § 48C(c)(1)(A). Section 13501(c) and (d) of the IRA made conforming amendments to § 48C(c)(2)(A) and (f). The amendments made by § 13501 of the IRA became effective on January 1, 2023. See § 13501(e) of the IRA.

.03 Section 48C(a) provides that the § 48C credit for any taxable year is an amount equal to a certain percentage of the qualified investment (as defined in § 48C(b)) for such taxable year with respect to any qualifying advanced energy project (as defined in § 48C(c)(1) and section 3.01 of this notice) of the taxpayer. The § 48C credit generally is allowed in the taxable year in which the eligible property (as defined in § 48C(c)(2) and section 3.03 of this notice) is placed in service (as defined in section 3.04 of this notice). For purposes of § 48C credit allocations under the § 48C(e) program, § 48C(e)(4)(A) provides a base credit rate of 6 percent of the qualified investment. In the case of any project which satisfies the requirements of § 48C(e)(5)(A) and (6) (prevailing wage and apprenticeship requirements), § 48C(e)(4)(B) provides an alternative rate of 30 percent of the qualified investment. See section 4 of this notice.

.04 Section 48C(b)(1) provides that the qualified investment for any taxable year is the basis of eligible property that is placed in service by the taxpayer during such taxable year and is part of a qualifying advanced energy project.

.05 Section 48C(b)(3) provides that the amount which is treated as the qualified investment for all taxable years with respect to any qualified advanced energy project must not exceed the amount designated by the Secretary as eligible for the § 48C credit.

.06 Section 48C(e)(1) directs the Secretary of the Treasury or her delegate (Secretary) to establish the § 48C(e) program to consider and award certifications for qualified investments eligible for § 48C credits to qualifying advanced energy project sponsors.

.07 Section 48C(e)(2) provides that the total amount of § 48C credits which may be allocated under the § 48C(e) program may not exceed \$10 billion, of which not greater than \$6 billion may be allocated to qualified investments which are not located within census tracts that--

(1) Prior to August 16, 2022 (the date of enactment of § 48C(e)), had no project that received a certification and allocation of credits under the § 48C(d) allocation program established under the 2009 Act, and

(2) Are described in § 45(b)(11)(B)(iii) as one of the following:

(a) a census tract in which a coal mine has closed after December 31, 1999;

(b) a census tract in which a coal-fired electric generating unit has been retired after December 31, 2009; or

(c) a census tract directly adjoining a census tract described in section 2.07(2)(a)

or (b) of this notice.

.08 Section 48C(e)(3)(A) provides that each applicant for certification must submit an application at such time and containing such information as the Secretary may require.

.09 Section 48C(e)(3)(B) provides that each applicant for certification has 2 years from the date of acceptance by the Secretary of the § 48C(e) application during which to provide to the Secretary evidence that the requirements of the certification have been met.

.10 Section 48C(e)(3)(C) provides that an applicant who receives a certification has 2 years from the date of issuance of the certification to place the project in service and to notify the Secretary that such project has been so placed in service. If the project is not placed in service within the 2-year period, then the certification is no longer valid. If any certification is revoked under § 48C(e)(3), the total amount of the credits that may be allocated under § 48C(e)(2) is increased by the amount of § 48C credits with respect to such revoked certification.

.11 Section 48C(e)(3)(D) provides that in the case of an applicant which receives a certification, if the Secretary determines that the project has been placed in service at a location that is materially different than the location specified in the § 48C(e) application for such project, the certification is no longer valid.

.12 The at-risk rules provided by § 49, the credit recapture and other special rules provided in § 50, and pursuant to § 48C(b)(2), rules regarding qualified progress expenditures (similar to the rules of § 46(c)(4) and (d) (as in effect on the day before the enactment of the Revenue Reconciliation Act of 1990)) apply for purposes of the § 48C

credit.

### SECTION 3. DEFINITIONS

The following definitions apply solely for purposes of the § 48C(e) program:

.01 Qualifying Advanced Energy Project. The term qualifying advanced energy project means a project that meets the following requirements:

(1) the project:

(a) re-equips, expands or establishes an industrial or a manufacturing facility (as defined in sections 3.05 and 3.06 of this notice) for the production or recycling of specified advanced energy property (as defined in section 3.02 of this notice) (see Appendix A for more information regarding these definitions);

(b) re-equips any industrial or manufacturing facility, with equipment designed to reduce greenhouse gas emissions by at least 20 percent through the installation of—

(i) low- or zero-carbon process heat systems;

(ii) carbon capture, transport, utilization and storage systems;

(iii) energy efficiency and reduction in waste from industrial processes; or

(iv) any other industrial technology designed to reduce greenhouse gas emissions, as determined by the Secretary (see Appendix A for more information regarding these definitions); or

(c) re-equips, expands or establishes an industrial facility for the processing, refining or recycling of critical materials (as defined in § 7002(a) of the Energy Act of 2020) (see Appendix A for more information regarding these definitions);

(2) the Secretary has certified pursuant to § 48C(e)(3) that part or all of the qualified investment in the qualifying advanced energy project is eligible for a § 48C

credit; and

(3) the project does not include any portion of a project for the production of any property that is used in the refining or blending of any transportation fuels (other than renewable fuels).

.02 Specified Advanced Energy Property. The term specified advanced energy property means any of the following:

(1) property designed for use in the production of energy from the sun, water, wind, geothermal deposits (within the meaning of § 613(e)(2)), or other renewable resources;

(2) fuel cells, microturbines, or energy storage systems and components;

(3) electric grid modernization equipment or components;

(4) property designed to capture, remove, use, or sequester carbon oxide emissions;

(5) equipment designed to refine, electrolyze, or blend any fuel, chemical, or product which is renewable, or low-carbon and low-emission;

(6) property designed to produce energy conservation technologies (including residential, commercial, and industrial applications);

(7) light-, medium-, or heavy-duty electric or fuel cell vehicles, as well as technologies, components, or materials for such vehicles, and associated charging or refueling infrastructure;

(8) hybrid vehicles with a gross vehicle weight rating of not less than 14,000 pounds as well as technologies, components, or materials for such vehicles; or

(9) other advanced energy property designed to reduce greenhouse gas

emissions as may be determined by the Secretary.

See Appendix A for more information regarding these definitions.

.03 Eligible Property. The term eligible property means any property that meets the following requirements:

(1) the property is necessary for the production or recycling of specified advanced energy property described in § 48C(c)(1)(A)(i) (and section 3.02 of this notice), re-equipping an industrial or manufacturing facility described in § 48C(c)(1)(A)(ii) (and section 3.01(1)(b) of this notice), or re-equipping, expanding, or establishing an industrial facility described in § 48C(c)(1)(A)(iii) (and section 3.01(1)(c) of this notice).

(2) the property is:

(a) tangible personal property; or

(b) other tangible property (not including a building or its structural components) that is used as an integral part of the qualifying advanced energy project.

(3) depreciation (or amortization in lieu of depreciation) is allowable with respect to the property.

.04 Placed In Service. (1) In general. Eligible property (as defined in § 48C(c)(2) and section 3.03 of this notice) is placed in service in the earlier of the following taxable years:

(A) The taxable year in which, under the taxpayer's depreciation practice, the period for depreciation with respect to such eligible property begins; or

(B) The taxable year in which the eligible property is placed in a condition or state of readiness and availability for a specifically assigned function, whether in a trade or



business or in the production of income.

.05 Industrial Facility. The term industrial facility means a facility that produces, processes, or refines materials or products from raw or manufactured inputs.

.06 Manufacturing Facilities. The term manufacturing facility means a facility that makes or processes raw materials into finished products (or accomplishes any intermediate stage in that process).

.07 Recycling Facility. The term recycling facility means a facility that:

(1) reclaims, recovers, or otherwise processes waste materials (including, but not limited to, property and components of property at end-of-service), the result of which is a useful product or material for use in the manufacture of a useful product; or

(2) performs an activity or series of activities in the processes described in section 3.07(1) of this notice.

#### SECTION 4. PREVAILING WAGE AND APPRENTICESHIP REQUIREMENTS

.01 Prevailing Wage Requirement

(1) Pursuant to § 48C(e)(5)(A), to meet the prevailing wage requirements, a taxpayer must ensure that any laborers and mechanics employed by the taxpayer or any contractor or subcontractor in the re-equipping, expansion, or establishment of a manufacturing facility that is part of a qualifying advanced energy project are paid wages at rates not less than the prevailing rates for construction, alteration, or repair of a similar character in the locality in which such project is located as most recently determined by the Secretary of Labor. See section 3 of Notice 2022-61, 87 F.R. 73580 (Nov. 30, 2022), for additional information regarding the prevailing wage requirements.

(2) In accordance with § 48C(e)(5)(B), a taxpayer that fails to satisfy the

prevailing wage requirements for any laborer or mechanic employed by the taxpayer or any contractor or subcontractor in the re-equipping, expansion, or establishment of a manufacturing facility that is part of a qualifying advanced energy project will be deemed to have satisfied the prevailing wage requirement if the taxpayer:

(a) makes a payment to any such laborer or mechanic employed by the taxpayer or any contractor or subcontractor in the re-equipping, expansion, or establishment of a manufacturing facility in an amount equal to the sum of the difference between the amount of wages paid to such laborer or mechanic and the amount of wages required to be paid to such laborer or mechanic (three times the sum of back wages due in the case of intentional disregard), plus interest on such difference at the underpayment rate established under § 6621 (substituting “6 percentage points” for “3 percentage points” in § 6621(a)(2)) and

(b) makes a payment to the Secretary of \$5,000 (\$10,000 in the case of intentional disregard) multiplied by the number of laborers and mechanics who were paid wages below the prevailing wage for any period during such year.

#### .02 Apprenticeship Requirements

(1) In accordance with § 48C(e)(6) and rules similar to § 45(b)(8), to meet the apprenticeship requirements, taxpayers must ensure that not less than 10 percent, 12.5 percent, or 15 percent (depending on the beginning of construction date) of the total labor hours for the construction, alteration or repair work must be performed by qualified apprentices. The labor hours requirement is subject to the apprentice-to-journey worker ratios of the Department of Labor or applicable State apprenticeship agency. In addition, each taxpayer, contractor, or subcontractor who employs 4 or more

individuals to perform construction, alteration or repair work related to re-equipping, expanding, or establishing an industrial or manufacturing facility must employ 1 or more qualified apprentices to perform the work. See section 4 of Notice 2022-61 for additional information about the apprenticeship requirements.

(2) A taxpayer will not be treated as failing to satisfy the apprenticeship requirements if the taxpayer satisfies either of the following:

(a) The taxpayer pays a penalty to the Secretary in the amount of \$50 (\$500 if the failure is due to intentional disregard) multiplied by the total labor hours for which the taxpayer failed to meet the apprenticeship requirements, or

(b) The taxpayer made a good faith effort in accordance with section 4.01 of Notice 2022-61.

.03 Credit Rate Conditioned Upon Prevailing Wage and Apprenticeship Requirements.

(1) A taxpayer that satisfies the prevailing wage and apprenticeship requirements may claim a credit that is equal to 30 percent of the taxpayer's qualified investment for such taxable year with respect to any qualified energy project.

(2) A taxpayer that fails to satisfy the prevailing wage and apprenticeship requirements generally may only claim a credit equal to 6 percent of the taxpayer's qualified investment for such taxable with respect to any qualified advanced energy project. However, such a taxpayer may claim a credit equal to 30 percent of the taxpayer's qualified investment for such taxable year with respect to any qualified advanced energy project if:

(a) In the event the taxpayer failed to meet the prevailing wage requirements, it

pays the correction and penalty amounts related to such failure to satisfy the prevailing wage requirements as described in section 4.01(2) of this notice; or

(b) In the event the taxpayer failed to meet the apprenticeship requirements, it pays the penalty amount related to such failure to satisfy the apprenticeship requirements or meets the good faith effort exception described in section 4.02(2) of this notice.

(3) See section 5.07 of this notice for information regarding when an applicant must declare whether it will meet the prevailing wage and apprenticeship requirements for § 48C.

## SECTION 5. SECTION 48C(e) PROGRAM

.01 In General. The IRS will consider a project under the § 48C(e) program only if DOE provides a recommendation and ranking for the project (DOE recommendation) to the IRS. DOE will provide a recommendation and ranking only if it determines that the project has a reasonable expectation of commercial viability and merits a recommendation based on the criteria provided in the additional § 48C(e) program guidance. See section 5.03(3) of this notice for additional information regarding DOE recommendations.

.02 Program Timeline. Generally, the § 48C(e) program will proceed as follows:

(1) A taxpayer submits a concept paper to DOE through the eXCHANGE portal, an online application portal used by DOE available at <https://infrastructure-exchange.energy.gov/> (or any successor interface) (eXCHANGE portal). See Appendix B for additional information.

(2) DOE reviews the concept paper and sends the taxpayer a letter encouraging

or discouraging the submission of a § 48C(e) application. After receiving a letter of encouragement or discouragement from DOE, the taxpayer determines whether to submit a § 48C(e) application. All taxpayers who submit concept papers are eligible to submit a § 48C(e) application, regardless of DOE's response to its concept paper.

(3) Taxpayers submit § 48C(e) applications through the eXCHANGE portal. See Appendix B for additional information.

(4) DOE reviews the § 48C(e) applications for compliance with eligibility and other threshold requirements.

(5) If the § 48C(e) application complies with all eligibility and threshold requirements, DOE conducts a technical review of the application to form a DOE recommendation.

(6) DOE provides a recommendation to the IRS regarding the acceptance or rejection of each § 48C(e) application and a ranking of the applications.

(7) The IRS makes a decision regarding the acceptance or rejection of each § 48C(e) application based on DOE's recommendation and ranking and notifies each taxpayer that submitted a § 48C(e) application of the outcome by sending a letter allocating § 48C credits in the case of an acceptance (Allocation Letter) or letter denying the requested allocation in the case of a rejection (Denial Letter). In the case of an acceptance, the amount of § 48C credits allocated to a project will also be based on the taxpayer's qualified investment in the qualifying advanced energy project and whether the taxpayer intends to apply for and receive an allocation of § 48C credits calculated at the 30 percent credit rate (see section 5.07 of this notice). A taxpayer that receives a Denial Letter may be eligible to request a debriefing in accordance with the criteria set

forth in section 5.03(9) of this notice.

(8) Within 2 years of receiving an Allocation Letter, a taxpayer must notify DOE that the certification requirements have been met by submitting this information through the eXCHANGE portal. See Appendix B for additional information.

(9) DOE notifies the taxpayer and the IRS that it has received the taxpayer's notification that the certification requirements have been met.

(10) The IRS certifies the project by sending a letter (Certification Letter).

(11) Within 2 years of receiving the Certification Letter, the taxpayer notifies DOE that the project has been placed in service by submitting such information through the eXCHANGE portal. See Appendix B for additional information. A taxpayer that does not notify DOE that it has placed the project in service within the required 2-year period will forfeit § 48C credits allocated to the taxpayer for such project.

(12) DOE notifies the taxpayer and the IRS that it has received the taxpayer's notification that the project has been placed in service or notification that the taxpayer will not place the project in service within the required 2-year period.

(13) If the taxpayer has placed the project in service within the required 2-year period and has notified DOE, the taxpayer claims the § 48C credit on its income tax return for the taxable year in which the project was placed in service. If the taxpayer has not placed the project in service within the required 2-year period or has not notified DOE that the project has been placed in service within the required 2-year period, then the § 48C credit allocated to the taxpayer's project is forfeited.

#### .03 Program Specifications.

(1) For each project that a taxpayer sponsors, the taxpayer must submit the

following to request a credit allocation:

(a) A concept paper for DOE consideration;

(b) A § 48C(e) application.

(2) A taxpayer must submit a concept paper as specified in section 6 of this notice through the eXCHANGE portal. See Appendix B for additional information. This portal will allow applicants to securely input their data and information for review by DOE and the IRS.

A taxpayer that receives a letter of discouragement in response to a submitted concept paper may still submit a § 48C(e) application in accordance with the additional § 48C(e) program guidance. Receiving such a letter does not disqualify a taxpayer from submitting a § 48C(e) application but represents DOE's feedback that the project is unlikely to receive a recommendation based on the information provided in the concept paper.

(3) DOE's recommendation provided to the IRS will include a ranking of projects in descending order (that is, first, second, third, etc.). See section 5.06 of this notice for additional information regarding DOE recommendations with respect to projects located in § 48C(e) Energy Communities Census Tracts (as defined in section 5.06 of this notice). The amount of credit allocated to a project reduces the amount of credit available to the remaining pool of recommended projects. The IRS will make allocations to successive projects according to DOE recommendations and ranking until the amount available for allocation is exhausted. The amount of § 48C credits allocated to a project will be based on the taxpayer's qualified investment in the qualifying advanced energy project and whether the taxpayer intends to apply for and receive an

allocation of § 48C credits calculated at the 30 percent credit rate (see section 5.07 of this notice). DOE will recommend and rank projects only to the extent necessary to exhaust the amount available for allocation in each § 48C(e) program allocation round.

(4) For Round 1 of the § 48C(e) program, the application period begins on May 31, 2023, and ends on the date by which § 48C(e) applications must be submitted as specified in additional § 48C(e) program guidance (end of the application period). Any § 48C(e) application submitted through the eXCHANGE portal after May 31, 2023, and on or before the date that ends the application period will be deemed to be submitted by the taxpayer on the date that ends the application period.

(5) For Round 1 of the § 48C(e) program, a concept paper for DOE consideration must be submitted by July 31, 2023. The § 48C(e) application (as defined in section 5.02(3) of this notice) must be submitted by the date specified in additional § 48C(e) program guidance. If a project meets the preliminary compliance review criteria (as specified in section 6.01 of this notice), DOE will determine the merits of the project and (for projects determined to be meritorious) provide DOE recommendation to the IRS

(6) Each applicant will receive an electronically generated confirmation of receipt upon submission of (a) the concept paper and (b) the § 48C(e) application. The timeliness of submission of the § 48C(e) application will be determined by the submittal date and time shown on the confirmation of receipt.

(7) For Round 1 of the § 48C(e) program, the IRS will send each applicant an Allocation Letter in the case of an acceptance or a Denial Letter in the case of a rejection and will also notify DOE.

(8) If the taxpayer's § 48C(e) application is accepted, the IRS will determine the



amount of the § 48C credit allocated to the project and the Allocation Letter will state the amount of the credit allocated to the project. The date of the Allocation Letter will be treated as the date of acceptance by the Secretary of the taxpayer's § 48C(e) application for purposes of establishing the time to meet criteria for certification as required by § 48C(e)(3)(B).

(9) Upon request, DOE will offer a debriefing to an applicant that submitted a § 48C(e) application (after submitting a concept paper and being encouraged to submit such § 48C(e) application) and subsequently, was not allocated a credit in Round 1 of the § 48C(e) program. Debriefings will not be available to applicants that receive a letter of discouragement. Debriefings will be held by DOE after the application period ends. Requests for a debriefing must be received by DOE no later than 30 business days from the date of the Denial Letter issued to the applicant. The sole purpose of the debriefing is to provide DOE's impression of the strengths and weaknesses of the rejected § 48C(e) application to enable applicants to improve § 48C(e) applications for future rounds of the § 48C(e) program or § 48C credit allocation programs.

(10) The Allocation Letter applies only to the taxpayer who requested it. Any successor in interest may request that the IRS, by letter, transfer the credit allocation for the project to the successor in interest. The due date for making this request with the IRS is no later than 30 days prior to the due date (including extensions) of the successor in interest's Federal income tax return for the taxable year in which the transfer occurs.

The successor's letter must be signed by a person who meets the requirements of section 7.02(2) of this notice. The successor's letter should provide:

- (a) the name of the transferor and its TIN;
- (b) the name and TIN of the successor's parent (if any) if the successor files a return as a member of a consolidated group;
- (c) DOE control number, and project name and location;
- (d) the successor's tax name and its TIN;
- (e) the successor's contact telephone number; and
- (f) copy of binding contract of the transfer;
- (g) a statement that there is no significant change from the application information provided by the transferor, including that the project has not been placed in service at a location which is materially different than the location specified in the application for such project.

The successor's letter must include a signed attestation using the language from section 7.02(1) of this notice (replacing "submission" with "letter"), be signed by a person who meets the requirements of section 7.02(2) of this notice, and should include the name, title, and contact information (address, phone number, fax number (if available), and email address) of the signer.

The successor in interest must submit the letter through the eXCHANGE portal. .

The IRS will review the taxpayer's request and determine whether to transfer the project's allocation to the successor in interest and will notify the successor in interest by letter of its decision. If the project's credit allocation is not transferred to the successor in interest, the following rules apply:

- (a) In the case of an interest acquired at or before the time the qualifying advanced energy project is placed in service, any credit allocated to the project will be

fully forfeited (and rules similar to the recapture rules of § 50(a) apply with respect to qualified progress expenditures); and

(b) In the case of an interest acquired after the qualifying advanced energy project is placed in service, the project ceases to be investment credit property and the recapture rules of § 50(a) (and similar rules with respect to qualified progress expenditures) apply.

(11) The additional § 48C(e) program guidance will provide further details of the information required to be submitted to DOE in an application for DOE recommendation. The additional § 48C(e) program guidance will also provide additional details regarding the process for applying for DOE recommendation and the instructions for filing concept papers and applications for DOE recommendation.

.04 Limitation on Qualified Investment. A taxpayer's qualified investment in a qualified advanced energy property is limited to the basis of eligible property (as defined in § 48C(c)(2) and section 3.03 of this notice).

.05 Denial of Double Benefit.

(1) In general. Section 48C(f) provides that a credit is not allowed under § 48C for any qualified investment for which a credit is allowed under §§ 48, 48A, 48B, 48E, 45Q, or 45V. If the IRS determines a credit has been claimed for that same investment under §§ 48, 48A, 48B, 48E, 45Q, or 45V, the IRS will not allocate the § 48C credit and any previously sent Allocation Letter is void."

(2) Coordination with § 45X credit. Additionally, property is not an "eligible component" for purposes of the credit under § 45X (§ 45X credit) if it is produced at a facility and the basis of any property included in such facility is taken into account for

purposes of § 48C after August 16, 2022. See § 45X(c)(1)(B). For purposes of § 48C, a facility includes all eligible property included in a qualifying advanced energy project for which a taxpayer receives an allocation of § 48C credits and claims such credits after August 16, 2022. Guidance regarding whether property has been produced at a facility the basis of which has been taken into account for purposes of § 48C will be provided in additional guidance regarding the § 45X credit.

(3) Required taxpayer certification. A taxpayer must certify under penalties of perjury that the taxpayer did not claim a credit for that same investment under any of §§ 45X, 48, 48A, 48B, 48E, 45Q, or 45V.

“Under penalties of perjury, I declare that I have examined the information contained in this affirmative statement and the documents that substantiate this affirmative statement, and to the best of my knowledge and belief, it is true, correct, and complete.”

Additionally, the person signing the penalty of perjury statement must also certify the following:

“I further declare that I have authority to sign this document on behalf of the taxpayer.”

A taxpayer must provide this certification statement with (1) its § 48C(e) application and (2) at the time it notifies DOE that the project has been placed in service.

.06 Section 48C(e) Energy Communities Census Tracts. Section 48C(e)(2) limits the total amount of § 48C credits that the Secretary may allocate under the § 48C(e) program to \$10 billion. Of that amount, the Secretary must allocate at least \$4 billion of § 48C credits to projects located in certain energy communities (as described in § 45(b)(11)(B)(iii)) that did not have a project that received a certification and allocation of credits under the § 48C(e) allocation program (§ 48C(e) Energy Communities Census

Tracts). Accordingly, as part of DOE's recommendations, DOE will determine which projects are in § 48C(e) Energy Communities Census Tracts and are therefore eligible for an allocation of the \$4 billion of § 48C credits that are available only for projects located in those census tracts. Because of the limitation in § 48C(e)(2) on allocations with respect to projects that are not in § 48C(e) Energy Communities Census Tracts, whether a project is in a § 48C(e) Energy Communities Census Tract may impact DOE's recommendation with respect to a project. An applicant will be able to determine whether its project is located in a § 48C(e) Energy Communities Census Tract using the mapping tool that will be referenced in the additional § 48C(e) program guidance. The determination of whether a project is located in a § 48C(e) Energy Communities Census Tract will be made at the time that DOE provides recommendations to the IRS and will not be redetermined.

.07 Certification for Prevailing Wage and Apprenticeship Requirements. As part of a § 48C(e) application (as described in section 6 of this notice), an applicant who intends to apply for and receive an allocation of § 48C credits calculated at the 30 percent credit rate must confirm that it intends to satisfy the prevailing wage and apprenticeship requirements described in section 4 of this notice (Initial PWA Confirmation). When the taxpayer notifies DOE that it has placed the project in service (pursuant to section 5.09 of this notice), such taxpayer must also confirm that it satisfied the requirements in section 4 of this notice (Final PWA Confirmation). If a taxpayer does not provide an Initial and Final PWA Confirmation at the times described in this paragraph, such taxpayer will be required to claim the § 48C credit at the 6 percent credit rate and the remainder of § 48C credits allocated to such project, if any, will be

forfeited and available for reallocation in a future § 48C(e) program allocation round. Nothing in this paragraph prevents the IRS from determining during an examination that a taxpayer did not satisfy the requirements in section 4 of this notice.

.08 IRS Issuance of Certification. A taxpayer whose application is accepted and who received an Allocation Letter from the IRS pursuant to section 5.02(8) of this notice must obtain a Certification Letter pursuant to section 7 of this notice to be eligible to claim the § 48C credit specified in its Allocation Letter.

.09 Notification that Project is Placed In Service.

(1) A taxpayer has 2 years from the date of the Certification Letter (as described in section 5.08 and section 7 of this notice) to place the project in service. See section 3.04 of this notice for the definition of placed in service. A taxpayer must notify DOE when the project is placed in service by submitting such notification through the eXCHANGE portal. DOE will accept a taxpayer's notification that the project was placed in service and send an acknowledgement letter.

(2) If a taxpayer fails to place a project in service within 2 years from the date of the Certification Letter, a taxpayer must promptly notify DOE and the IRS within 60 days of the date that is 2 years from the date of the Certification Letter by submitting such notification through the eXCHANGE portal. Under § 48C(e)(3)(C), any certification is void if the project is not placed in service within 2 years from the date of the Certification Letter.

## SECTION 6. CONCEPT PAPERS AND § 48C(e) APPLICATIONS

.01 In General. A taxpayer must submit for each project for which it seeks a § 48C allocation for Round 1 (1) by July 31, 2023, a concept paper for DOE

consideration and (2) by the date specified in the additional § 48C(e) program guidance, the § 48C(e) application. If an application for DOE recommendation does not (1) propose an eligible project or (2) include all of the information required in this notice and the additional § 48C(e) program guidance (referred to herein as compliance review criteria), DOE may decline to consider the application, or DOE may request an applicant resubmit its application with the missing information. If DOE does not provide a recommendation for the application, the IRS will not consider § 48C(e) application.

.02 Information Required in the § 48C Application. By submitting an application through the eXCHANGE portal, an applicant is submitting a joint application for DOE recommendation and an application for § 48C(e) certification. The eXCHANGE portal will prompt an applicant to enter necessary information and will provide corresponding instructions regarding the requirements for the § 48C(e) application. This information will include:

(1) The name, address, federal employer identification number, and unique entity identifier number of the taxpayer (more information on unique entity identifier numbers at [https://www.gsa.gov/about-us/organization/federal-acquisition-service/technology-transformation-services/office-of-systems-management/integrated-award-environment-iae/iae-systems-information-kit/unique-entity-id-is-here?\\_ga=2.5445299.1413902251.1675976444-2019528746.1671035291](https://www.gsa.gov/about-us/organization/federal-acquisition-service/technology-transformation-services/office-of-systems-management/integrated-award-environment-iae/iae-systems-information-kit/unique-entity-id-is-here?_ga=2.5445299.1413902251.1675976444-2019528746.1671035291)). If the taxpayer is a member of an affiliated group filing consolidated returns, the taxpayer must also provide the name, address, and TIN of the common parent of the group.

(2) The name, telephone number, and email address of a contact person.

(3) The census tract where the taxpayer will locate the project.

(4) Whether the taxpayer will satisfy the prevailing wage and apprenticeship requirements and seeks a credit allocation in an amount that is 30 percent of the qualified investment. If the taxpayer intends to comply with the prevailing wage and apprenticeship requirement, the application should include the Initial PWA Confirmation. See section 5.07 of this notice.

(5) The information requested in Appendix B of this notice and additional information specified in the additional § 48C(e) program guidance.

## SECTION 7. ISSUANCE OF CERTIFICATION

.01 In General. Section 48C(e)(3)(B) provides that a taxpayer has 2 years from the date of acceptance by the Secretary of the § 48C(e) application during which to provide evidence that the requirements of the certification have been met in accordance with section 7.02 of this notice. If such evidence is not timely received, the allocated § 48C credits will be forfeited. Section 48C(e)(3)(C) provides that a taxpayer that receives a certification has an additional 2-year period beginning from the date of issuance of the certification to place the project in service and to notify the Secretary that such project has been placed in service. If such project is not placed in service by that time period, then the certification is no longer valid.

.02 Satisfaction of Requirements for Certification. A project is eligible for certification only if the taxpayer has received all permits from federal, state, tribal, and local governmental bodies for construction of the project at the planned location, including environmental authorization or reviews necessary to commence construction of the project. The Secretary may conduct additional allocation rounds for applications for certification if the Secretary determines that: (1) there is an insufficient quantity of



qualifying applications for certification pending at the time of the review, or (2) any certification made pursuant to § 48C(e)(2) has been revoked pursuant to § 48C(e)(2)(B) because the project subject to the certification has been delayed as a result of third-party opposition or litigation.

The taxpayer must submit to DOE through the eXCHANGE portal evidence establishing that it has met all requirements necessary to commence construction of the project.

(1) The documentation establishing that the certification requirements of section 7.01 of this notice are satisfied must be accompanied by a letter that includes the following written declaration: "I declare that I am authorized to legally bind [name of taxpayer]. Under penalties of perjury, I declare that I have examined this submission, including any accompanying documents, and, to the best of my knowledge and belief, all of the facts contained herein are true, correct, and complete."

(2) The taxpayer's submission (the letter including the perjury declaration and documentation) must be signed and dated by the taxpayer. The person signing for the taxpayer must have personal knowledge of the facts. Further, the submission must be signed by a person authorized under state law to bind the taxpayer, such as an officer on behalf of a corporation, a general partner of a state law partnership, a member-manager on behalf of a limited liability company, a trustee on behalf of a trust, or the proprietor in the case of a sole proprietorship. If the taxpayer is a member of an affiliated group filing consolidated returns, the submission also must be signed by a duly authorized officer of the common parent of the group.

.03 DOE Notification. Upon receipt of the evidence described in section 7.02 of

this notice that the taxpayer has satisfied the requirements for certification, DOE will notify the IRS and will send an acknowledgment to the taxpayer.

.04 IRS Action on Certification. After receiving the notification from DOE described in section 7.03 of this notice, the IRS will notify the taxpayer, by letter, of the IRS's decision regarding certification. The date of the Certification Letter is the date of issuance of the certification for purposes of § 48C(e)(3)(C).

## SECTION 8. OTHER REQUIREMENTS

.01 Significant Change in Plans. The taxpayer must inform DOE and the IRS if the plans for the project change in any significant respect from the plans set forth in the concept paper and the § 48C(e) application. The additional § 48C(e) program guidance will provide the procedures for notifying DOE and the IRS. A significant change is any change that a reasonable person would conclude might have influenced DOE in recommending or ranking the project or the IRS in issuing the Allocation Letter had the person known about the change when considering the § 48C(e) application. Moving the project to a census tract different than the tract stated in the concept paper and § 48C(e) application is a significant change. Failure to satisfy the prevailing wage and apprenticeship requirements is not a significant change. See section 4.03 of this notice. Any significant change to the plans set forth in the § 48C(e) application will have the following effects:

(1) If the IRS is informed of the change after the date on which the final applications for DOE recommendation were due for Round 1 of the § 48C(e) program under section 5.02(3) of this notice and before the IRS sends the Allocation or Denial Letter, see section 5.02(7) of this notice, the IRS and DOE will not consider the project

during Round 1 of the § 48C(e) program; and

(2) If the IRS is informed of the change after the Allocation Letter is sent to the taxpayer, any allocation or certification based on that acceptance is void.

.02 Effect of an Acceptance, Allocation, or Certification. An acceptance, allocation, or certification under this notice is not a determination that a project is eligible for the § 48C credit or that any property that is part of the project is eligible property under § 48C(c)(2). The IRS may, upon examination (and after any appropriate consultation with DOE), determine that the project does not qualify for the § 48C credit or that the property is not eligible property for purposes of this credit.

.03 Reduction or Forfeiture of Allocated Credits. The § 48C credits allocated under section 5 of this notice may be reduced or forfeited in certain situations. A taxpayer must notify the IRS of the amount of any reduction or forfeiture as required by this notice through the eXCHANGE portal. The amount of any reduction or forfeiture of the allocated credits will be returned and included in the aggregate credit remaining in the § 48C(e) program and under the procedures prescribed pursuant to section 9.02 of this notice

## SECTION 9. FUTURE ALLOCATION ROUNDS

.01 Future Allocation Rounds. After Round 1 of the § 48C(e) program, the IRS will conduct one or more additional allocation rounds for the § 48C(e) program. Guidance issued subsequent to the additional § 48C(e) program guidance (subsequent § 48C(e) program guidance) will prescribe the procedures applicable to future allocation rounds of the § 48C(e) program.

.02 Review and Redistribution of Credits. Under § 48C(e), credits available

under § 48C(e)(2) may be reallocated if any certification made pursuant to § 48C(e)(3) has been revoked pursuant to § 48C(e)(3)(C). If credits under § 48C(e) are available for reallocation, the IRS may conduct an additional allocation program. Subsequent § 48C(e) program guidance will prescribe the procedures applicable to any additional program.

## SECTION 10. QUALIFIED PROGRESS EXPENDITURES

.01 Section 48C(b)(2) provides that rules similar to the rules of § 46(c)(4) and (d) (as in effect on the day before the enactment of the Revenue Reconciliation Act of 1990) apply for purposes of § 48C. Former § 46(c)(4) and (d) provided the rules for claiming the investment tax credit on qualified progress expenditures (as defined in former § 46(d)(3)) made by a taxpayer during the taxable year for the construction of progress expenditure property (as defined in former § 46(d)(2)).

.02 In the case of self-constructed property (as defined in former § 46(d)(5)(A)), former § 46(d)(3)(A) defined qualified progress expenditures to mean the amount that is properly chargeable (during the taxable year) to the capital account with respect to that property. With respect to a qualifying advanced energy project that is self-constructed property, amounts paid or incurred are chargeable to the capital account at the time and to the extent they are properly includible in computing basis under the taxpayer's method of accounting (for example, after applying the requirements of § 461, including the economic performance requirement of § 461(h)).

.03 To claim the § 48C credit with respect to the qualified progress expenditures paid or incurred by a taxpayer during the taxable year for construction of a qualifying advanced energy project, the taxpayer must make an election (Qualified Progress

Expenditures Election) under the rules set forth in § 1.46-5(o) of the Income Tax Regulations (26 C.F.R. part 1). A taxpayer may not make the Qualified Progress Expenditures Election for a qualifying advanced energy project until the taxpayer has received a Certification Letter for the project under section 5.02(10) of this notice.

.04 If a taxpayer makes a Qualified Progress Expenditures Election pursuant to section 10.03 of this notice, rules similar to the recapture rules in § 50(a)(2)(A) through (D) apply. In addition to the cessation events listed in § 50(a)(2)(A), examples of other events that will cause the project to cease being a qualifying advanced energy project are:

(1) Failure to place the project in service within 2 years from the date of the Certification Letter; or

(2) A significant change to the plans for the project as set forth in the § 48C(e) application if, under section 8.01 of this notice, the allocation is void as a result of the change.

## SECTION 11. DISCLOSURE OF INFORMATION

Section 48C(e)(7) provides that upon making a certification under § 48C(e), the Secretary is required to disclose publicly the identity of the applicant and the amount of the credit certified with respect to such applicant. Accordingly, the IRS will publish the results of Round 1 of the § 48C(e) program and will disclose the identity of the taxpayer and the amount of the § 48C credits allocated to the taxpayer with respect to projects that have been allocated a § 48C credit and have received a certification.

## SECTION 12. EFFECTIVE DATE

This notice is effective on February 13, 2023.

## SECTION 13 PAPERWORK REDUCTION ACT

The collection of information contained in this notice has been submitted to the Office of Management and Budget (OMB) in accordance with the Paperwork Reduction Act (44 U.S.C. § 3507) under control number 1545-2151 and approval is pending. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection of information displays a valid OMB control number.

The collections of information in this notice are in sections 5, 6, 7, 8 and Appendix B of this notice. This information is required to obtain an allocation of § 48C credits. The IRS will use this information to verify that the taxpayer is eligible for the § 48C credits. The collection of information is required to obtain a benefit. The likely respondents are business or other for-profit institutions.

The estimated total annual reporting burden is 275,000 hours.

The estimated annual burden per respondent varies from 70 to 150 hours, depending on individual circumstances, with an estimated average of 110 hours. The estimated number of respondents is between 2000 to 3000.

The estimated annual frequency of responses is on occasion.

Books or records relating to a collection of information must be retained as long as their contents may become material in the administration of any internal revenue law. Generally, tax returns and return information are confidential, as required by 26 U.S.C. § 6103.

## SECTION 14. DRAFTING INFORMATION

The principal author of this notice is John M. Deininger of the Office of Associate

Chief Counsel (Passthroughs & Special Industries). For further information regarding this notice contact Mr. Deininger on (202) 317-6853 (not a toll-free call). Any questions or comments regarding the non-tax aspects of this notice can be submitted to the Department of Energy at [48CQuestions@hq.doe.gov](mailto:48CQuestions@hq.doe.gov). DOE may post questions and answers related to this notice on Infrastructure eXCHANGE at <https://infrastructure-exchange.energy.gov> (select 48C from the list of options to view questions and answers specific to notice). Any questions or comments received under this notice are subject to public release pursuant to the Freedom of Information Act. DOE is under no obligation to respond to, or acknowledge receipt of, any questions or comments submitted under this notice and any responses provided do not constitute legal advice provided by either DOE or the IRS.

## APPENDIX A Qualifying Advanced Energy Projects

For the purposes of determining eligibility for the § 48C tax credit, a qualifying advanced energy project means:

### 1. Clean Energy Manufacturing and Recycling Projects

A qualifying advanced energy project in this category re-equips, expands, or establishes an industrial or manufacturing facility for the production or recycling of:

a. Property designed to be used to produce energy from the sun, water, wind, geothermal deposits (within the meaning of 26 U.S.C. § 613(e)(2)), or other renewable resources.

(i) Examples of eligible property include solar panels and their specialized support structures; wind turbines, towers, floating offshore platforms, and related equipment; power electronics designed for use with eligible solar or wind property; equipment to concentrate sunlight to generate heat for industrial processes or to convert it to electricity; geothermal turbines and heat pumps; hydropower turbines; and other products directly used to generate electrical and/or thermal energy from renewable resources, as well as the specialized components, subcomponents, and materials incorporated into any such eligible property, including equipment for sensing communication, and control.

(ii) Examples of ineligible property include equipment for applications other than the conversion of energy from renewable resources for delivering electricity, building heat, or industrial process heat such as a gas turbine generator set which burns natural gas, or building that houses a boiler to heat water from fossil fuel.

b. Fuel cells, microturbines, or energy storage systems and components.

(i) Examples of eligible property include stationary batteries; stationary hydrogen fuel cells; hydrogen storage vessels; microturbines for combined heat and power systems; pumps and turbines for pumped hydropower storage systems; and the specialized components of any such equipment, including equipment for sensing communication, and control.

(ii) Examples of ineligible property include heavy gas turbines. For electric vehicle batteries and fuel cells for vehicles see the “light-, medium-, or heavy-duty electric or fuel cell vehicles” project class.

c. Electric grid modernization equipment or components.

(i) Examples of eligible property include grid equipment for electricity delivery; power flow, control, and conversion, such as transformers, power electronics, advanced



cables and conductors, advanced meters, breakers, switchgears, composite poles, converters, MVDC and HVDC lines, grid enhancing technologies, and electrical steel or alloys used in transformer cores. Examples of eligible property also include the specialized components of any such grid modernization equipment, including components for sensing communication, and control.

(ii) Electric vehicle supply equipment qualifies under the “light-, medium-, or heavy-duty electric or fuel cell vehicles” project class. Storage technologies for grid applications qualify under the “fuel cells, microturbines, or energy storage systems and components” project class.

d. Property designed to capture, transport, remove, use, or sequester carbon oxide emissions.

(i) Examples of eligible property include carbon capture equipment necessary to compress, treat, process, liquefy, pump or perform some other physical action to capture carbon oxides, including solvents; membranes; sorbents; chemical processing equipment; compressors; monitoring equipment; and injection equipment; and well components such as packers, casing strings, steel tubulars, well head, valves, and sensors suitable for use in Underground Injection Control (UIC) Class VI wells. Eligible property also includes transportation equipment, as in a system of gathering and distribution pipelines, including pipelines that collect carbon oxide captured from an industrial facility or multiple facilities for the purpose of transporting that carbon oxide.

(ii) Examples of ineligible property include scrubbers for conventional air pollutants (except those that are required to remove pollutants upstream of carbon capture equipment for technical performance reasons); energy generation equipment, (except as related to energy recovery at carbon capture systems); and refining equipment.

e. Equipment designed to refine, electrolyze, or blend any fuel, chemical, or product which is renewable, or low-carbon and low-emission. For the purposes of Round 1 of the § 48C(e) program, such renewable, and low-carbon, low-emission fuels, chemicals, and products include:

- (i) Renewable transportation fuel which:
  - (A) is suitable for use as a fuel in a vehicle, marine vessel, or aircraft,
  - (B) is derived from or co-processed with:
    - (I) a biomass feedstock, or
    - (II) hydrogen produced from renewable energy and inputs, and
  - (C) is not derived from palm fatty acid distillates or fossil fuels, including coal, natural gas, and petroleum.

A qualifying advanced energy project does not include any portion of a project for the production of any property which is used in the refining or blending of any transportation fuel (other than renewable fuels, as described herein).

(ii) Clean hydrogen produced with a well-to-gate carbon intensity of less than 4kgCO<sub>2</sub>e/kgH<sub>2</sub>, in accordance with the definition of qualified clean hydrogen under the § 45V tax credit program.

(iii) Other fuel which:

(A) is derived from or co-processed with a renewable feedstock or achieves at least a 50 percent lifecycle greenhouse gas emissions reduction in comparison with the conventional alternative,

(I) is not a transportation fuel, and

(II) is not derived from palm fatty acid distillates or fossil fuels, including coal, natural gas, and petroleum.

(iv) Product or chemical which:

(A) is derived from or co-processed with a renewable feedstock or achieves at least a 50 percent lifecycle greenhouse gas emissions reduction in comparison with the conventional alternative,

(B) is suitable for use as an industrial feedstock, and

(C) is not derived from palm fatty acid distillates or fossil fuels, including coal, natural gas, and petroleum.

(v) Examples of eligible property include electrolyzers; mixing devices; pumps; separation devices; bioprocessing equipment; biomass preprocessing equipment; and reactors, so long as they are intended for use to produce eligible fuels, chemical, and products, as demonstrated through engineering specifications or offtake agreements.

(vi) Examples of eligible fuels, chemicals, and products produced by eligible equipment include hydrogen produced through electrolysis powered by low- or zero-emissions energy; low-emissions ammonia; renewable biofuels, including sustainable aviation fuel and fuels intended to displace petroleum fuel in on-road and off-road applications; and low-emissions chemicals, basic organic chemicals, and polymer resins.

(vii) Examples of ineligible fuels and chemicals would include those derived solely from fossil resources produced through conventional petroleum and natural gas refining.

Instructions for calculating well-to-gate carbon intensity of clean hydrogen and lifecycle emissions rates will be provided in additional § 48C(e) program guidance.

f. Property designed to produce energy conservation technologies (including residential, commercial, and industrial applications)

(i) Examples of eligible energy conservation property include technologies and grid-interactive devices eligible for residential or commercial efficiency improvements for purposes of the § 25C credit or the § 179D tax deduction, as well as equipment that directly reduces net energy use in industrial applications, such as ultra-efficient heat

pumps, insulation, ultra-efficient hot water systems, sensors, controls, and similar advanced efficiency technologies.

(ii) Examples of ineligible energy conservation property include those that reduce electricity usage by increasing direct natural gas or other fossil fuel use and/or lead to increased system-level emissions.

g. Light-, medium-, or heavy-duty electric or fuel cell vehicles, as well as technologies, components, or materials for such vehicles, and associated charging or refueling infrastructure.

(i) Examples of eligible property include battery electric, plug-in hybrid electric, or fuel cell cars, trucks, and buses, as well as the specialized components of those vehicles, such as batteries, electric drive systems, fuel cells, and the materials and subcomponents therein.

(ii) Examples of eligible charging or refueling infrastructure include electric vehicle supply equipment (EVSE), components from the grid connection to the vehicle, bidirectional charging equipment, and components used in hydrogen refueling stations (e.g., hydrogen compressors, pumps, storage vessels, and dispensing equipment).

(iii) Examples of ineligible equipment include internal combustion engine vehicles of all sizes, non-plug-in hybrid vehicles of less than 14,000 pounds gross vehicle weight rating, and their components, as well as associated refueling infrastructure, such as petroleum gas, liquefied or compressed natural gas, or ethanol refueling stations. Examples of ineligible equipment also include components of charging or refueling stations, such as signage, that are not directly involved in the transfer of fuel or power to the vehicle.

h. Hybrid vehicles with a gross vehicle weight rating of not less than 14,000 pounds, as well as technologies, components, or materials for such vehicles.

(i) Examples of eligible property include traction batteries, converters, power electronics, and assembled hybrid vehicles themselves, but components and materials must be designed for large hybrid vehicles with a gross vehicle weight rating of not less than 14,000 pounds, as demonstrated through engineering specifications and/or offtake agreements.

i. Other advanced energy property designed to reduce greenhouse gas emissions as may be determined by the Secretary.

(i) Examples of eligible advanced energy property include specialized components and equipment for nuclear power reactors or their fuels, and equipment used to reduce the emissions of industrial processes. Property may be determined to be designed to reduce greenhouse gas emissions either through published guidance or in the letter notifying a taxpayer that the IRS has accepted the taxpayer's application for

§48C certification with respect to the property.

## 2. Greenhouse Gas Emission Reduction Projects

A qualifying advanced energy project in this category re-equips an industrial or manufacturing facility, including energy-intensive manufacturing sectors, such as cement, iron and steel, aluminum, and chemicals, with equipment designed to reduce greenhouse gas emissions by at least 20 percent through the installation of one of more of the following:

### a. Low- or zero-carbon process heating systems.

(i) Examples of eligible equipment include electric heat pumps, combined heat and power (CHP) systems, and heating systems based on electricity, clean hydrogen, biomass, or waste heat recovery.

### b. Carbon capture, transport, utilization, and storage systems.

(i) Examples of eligible equipment include carbon capture equipment necessary to compress, treat, process, liquify, pump, or perform some other physical action to capture carbon oxides, and specialized equipment and materials needed for the storage of carbon oxide including carbon dioxide pipelines; monitoring equipment; and injection equipment and well components such as packers; casing strings; steel tubulars; well head; valves; and sensors suitable for use in UIC Class VI wells.

(ii) Examples of ineligible property include scrubbers for conventional air pollutants, except those that are required to remove pollutants upstream of carbon capture equipment for technical performance reasons; energy generation equipment, except as related to energy recovery at carbon capture systems; and refining equipment.

### c. Energy efficiency and reduction in waste from industrial processes.

(i) Examples of eligible equipment include technologies that reduce direct fuel use, electricity use, or waste in industrial applications, such as industrial heat pumps, combined heat and power (CHP) systems, insulation, sensors, controls, advanced recycling approaches, smart energy management, and similar advanced efficiency technologies.

d. Any other industrial technology designed to reduce greenhouse gas emissions, as determined by the Secretary.

(i) Examples of other eligible industrial technologies include electrification of direct fuel use processes, adoption of renewable or low-emissions fuels and feedstocks, and other equipment replacement or process redesigns that reduce fuel or process-related emissions or otherwise contribute to reducing greenhouse gas emissions by at

least 20 percent.

Instructions for calculating and demonstrating an emissions reduction of 20 percent will be provided in the additional § 48C(e) program guidance.

### 3. Critical Material Projects

A qualifying advanced energy project in this category re-equips, expands, or establishes an industrial facility for the processing, refining, or recycling of critical materials (as defined in § 7002(a) of the Energy Act of 2020 (30 U.S.C. § 1606(a)). For purposes of this Phase I, critical materials will consist of:

a. The currently effective final list of critical minerals as determined by the U.S. Geological Survey (see 2022 Final List of Critical Minerals for the list published in 2022 available at: <https://www.federalregister.gov/documents/2022/02/24/2022-04027/2022-final-list-of-critical-minerals>); and

b. Any additional critical materials as determined by the Secretary of Energy and posted on the <http://www.energy.gov/criticalmaterials> by May 31, 2023.

Examples of eligible projects in this project category include industrial facilities that process raw ore, brines, mine tailings, end-of-life products, waste streams, and other source materials into critical materials.

Examples of ineligible projects under this project category include facilities that process critical materials into derivative products, such as metals processing. However, facilities of this latter type may be eligible under the Clean Energy Manufacturing and Recycling Projects category.

## APPENDIX B DOE APPLICATION PROCESS

### I. DOE REVIEW PROCESS

A two-stage technical evaluation process will be used for submissions:

- Stage 1 – Concept Paper
- Stage 2 – § 48C(e) Application

#### A. Concept Paper

The first stage requires taxpayers to submit concept papers describing the proposed project. Concept papers will be evaluated against criteria that may include eligibility requirements, definitions for qualifying advanced energy projects, reasonable expectation of commercial viability, and other factors described in the additional § 48C(e) program guidance. Following this preliminary review, taxpayers will receive a letter either encouraging them to submit a § 48C(e) application or discouraging them from submitting a § 48C(e) application. **DOE will begin accepting concept papers when the additional § 48C(e) program guidance is issued on May 31, 2023, and concept papers must be submitted to DOE no later than July 31, 2023.**

A taxpayer that receives a discouragement letter may still submit a § 48C(e) application in accordance with the § 48C(e) program guidance. Receiving a discouragement letter in response to a submitted concept paper does not disqualify a taxpayer from submitting a § 48C(e) application **but represents DOE's feedback that the project, as proposed, is unlikely to receive a recommendation based on the information provided in the concept paper.**

#### B. § 48C(e) Application

The second evaluation stage will consist of a review of § 48C(e) applications submitted after the concept paper stage. **Taxpayers may not submit § 48C(e) applications unless they submitted concept papers by the specified deadline.**

DOE will review applications for DOE recommendation for compliance to determine that (1) the application meets the eligibility requirements, (2) the information required by the additional § 48C(e) program guidance has been submitted, (3) the taxpayer filed a timely concept paper, and (4) all mandatory requirements of the additional § 48C(e) program guidance are satisfied. The review will also include a thorough, consistent, and objective examination of applications for DOE recommendation based on technical review criteria and program policy factors outlined in the additional § 48C(e) program guidance.

### II. APPLICATION EVALUATION INFORMATION

#### A. Technical Review Criteria

Applications for DOE recommendation will be evaluated based on technical review criteria to be described in the additional § 48C(e) program guidance. These criteria will include selection criteria described in § 48C(d)(3) and additional criteria that further the

goals of the program.

As part of the technical review criteria to be described in the additional § 48C(e) program guidance, DOE anticipates evaluating applications for DOE recommendation based on the net impact of the qualifying project in avoiding or reducing greenhouse gases emissions, as described in the additional § 48C(e) program guidance. DOE also anticipates evaluating applications for DOE recommendation based on the community benefits of the proposed qualifying advanced energy projects, which may include community and labor engagement and commitment to high quality and accessible jobs and workforce pathways.

#### B. Program Policy Factors

In addition to technical review criteria, DOE may consider one or more policy factors in determining which applications for DOE recommendation submitted during Round 1 of the § 48C(e) program to recommend to the IRS for certification.

To achieve maximum benefits to strengthen U.S. industrial competitiveness and clean energy supply chains as well as to promote high quality jobs and community benefits, DOE may consider giving priority to qualifying advanced energy projects not eligible for support from other DOE financial assistance programs funded by the Infrastructure Investment and Jobs Act (Public Law 117-58) or the Inflation Reduction Act of 2022 (Public Law 117-169).

In some cases, benefits towards the program's goals may be enhanced if a project receiving a credit under § 48C also receives complementary assistance from other programs. For taxpayers seeking assistance from other programs for the same proposed qualifying advanced energy project, DOE may consider whether the application for DOE recommendation sufficiently justifies the need for and benefits of receiving assistance from multiple programs. Complementary assistance may also affect the tax treatment of property for which a taxpayer receives an allocation under the § 48C(e) program.

#### C. Strengthening Secure, Domestic, Clean Energy Supply Chains

To help build more resilient, diverse, and secure U.S. clean energy supply chains, DOE may consider whether proposed projects address specific gaps, vulnerabilities, or risks in the domestic production of clean energy products. The additional § 48C(e) program guidance will indicate specific priority technologies that would address these gaps, vulnerabilities, and risks to relevant domestic supply chains.

To further ensure the § 48C(e) program supports these goals to the greatest extent possible, DOE may conduct a review to determine if an applicant has a connection with a foreign country of risk that could frustrate the achievement of these goals. To ensure transparency of foreign connections, DOE anticipates requiring applicants to provide certain information regarding, for example, board membership, ownership structure, and

foreign relationships, as well as sources of, and any plans to export, critical minerals.

### **III. SUBMISSION AND REGISTRATION REQUIREMENTS FOR DOE RECOMMENDATION PROCESS**

This section describes DOE's submission and registration requirements for applicants. An application for DOE recommendation will not be considered in Round 1 of the § 48C(e) program unless the concept paper is received by the concept paper deadline, and the § 48C(e) application is received by the end of the application period.

#### **A. Submission of Application**

All § 48C(e) application materials must be submitted through the eXCHANGE portal at <https://infrastructure-exchange.energy.gov> to be considered. Taxpayers will not be able to submit a § 48C(e) application through the eXCHANGE portal unless registered. Please read the registration requirements below carefully and start the registration process immediately. If you have problems completing the registration process, send an email to the eXCHANGE portal helpdesk at <https://infrastructure-exchange.energy.gov>. Section 48C(e) applications submitted by any other means will not be accepted.

#### **B. Registration Process Requirements**

Taxpayers that wish to participate in the § 48C(e) program must register and create an account on the eXCHANGE portal at: <https://infrastructure-exchange.energy.gov>. This account will allow the user to apply to any open Funding Opportunity Announcements (FOA) that are currently on the eXCHANGE portal. It is recommended that each business unit use only one account as the appropriate contact point for each submission.

Potential applicants will be required to have a [Login.gov](https://login.gov) account to access the eXCHANGE portal. As part of the eXCHANGE portal registration process, new users will be directed to create an account in [Login.gov](https://login.gov). Please note that the email address associated with [Login.gov](https://login.gov) must match the email address associated with the eXCHANGE portal account. For more information, refer to the Infrastructure eXCHANGE Login Guide in the Manuals section of the eXCHANGE portal at <https://infrastructure-exchange.energy.gov/Manuals.aspx>.

#### **C. Electronic Authorization of Applications**

Submission of § 48C(e) application materials through electronic systems used by DOE, including the eXCHANGE portal, will constitute the authorized representative's approval and electronic signature.

#### **D. Markings of Confidential Information**

If elements of a § 48C(e) application contain information the taxpayer considers to be trade secrets, confidential, privileged or otherwise exempt from disclosure under the Freedom of Information Act (FOIA, 5 U.S.C. § 552), the taxpayer may assert a claim of exemption at the time of application by placing the following text on the first page of the § 48C(e) application, and specifying the page or pages of the § 48C(e) application to be



restricted:

“Pages [list applicable pages] of this document may contain trade secrets, confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. [End of Notice]”

The header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: *“Contains Trade Secrets, Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure.”* In addition, each line or paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting.