

# IRS Issues Final Regulations on Energy Property and Rules Applicable to Energy Credit Under Section 48

## WRITTEN BY

Adam C. Kobos | Joel M. Post | Roger S. Reigner Jr. | Mitchell T. Emmert | Anne C. Loomis | McKenzie L. Bayliss | Camille M. Mennen | Tsitsi M. Mangosho

On December 4, the Treasury Department (Treasury) and the Internal Revenue Service (IRS) released [final regulations](#) providing further guidance in determining whether property is energy property and eligible for the Investment Tax Credit (ITC) pursuant to Section 48 of the Internal Revenue Code of 1986, as amended (Code). The final regulations follow the passage of the [Inflation Reduction Act of 2022](#) (IRA), the publication of Notice 2022-49, 2022-43 I.R.B. 321, which requested comments on issues arising under Section 48, and [proposed regulations](#) under Section 48 that were issued on November 22, 2023.

The final regulations will be effective on the date of their publication in the *Federal Register*. Treasury Regulations Sections 1.48-9 and 1.48-14, related to the definition of energy property and related rules, will apply with respect to property that is placed in service during a taxable year beginning after publication in the *Federal Register*, scheduled for December 12. Taxpayers may choose to apply the rules to property that is placed in service after December 31, 2022, and during a taxable year beginning on or before publication, provided taxpayers apply the rules in their entirety and in a consistent manner.

Treasury Regulation Section 1.48-13, related to the prevailing wage and apprenticeship (PWA) requirements, will apply to energy projects the construction of which begins, and which are placed in service, in taxable years ending after publication. Taxpayers may choose to apply Section 1.48-13 to energy projects that either begin construction before publication or are placed in service in a taxable year ending before publication if the taxpayer applies Section 1.48-13 in its entirety and in a consistent manner.

## Overview

The final regulations are substantially similar to the proposed regulations. Readers who want just the highlights can focus on the following summary. Subsequent sections discuss each of these items in greater detail.

Notably, the IRS declined to significantly modify several rules from the proposed regulations despite receiving extensive comments, including the following:

- **Energy property framework that includes the “unit of energy property” and integral property.** The final regulations retain the conceptual framework first introduced by the proposed regulations, under which energy property is either a “unit of energy property” or an “integral part.” The framework has significant implications in connection with the ownership rules, the rules related to retrofitted property, and ITC qualification for future capital improvements.

- **Ownership rules.** A taxpayer must directly own at least a fractional interest in the entire unit of energy property for an ITC to be determined with respect to such taxpayer's interest. An integral part is eligible for the ITC only if it is owned by an owner of a unit of energy property.
- **Retrofitted property.** The "80/20 rule" continues to determine whether a retrofitted unit of energy property qualifies as originally placed in service even if it contains some used components of property. As a result, the addition of new property to a unit of energy property is not eligible for ITC if the 80/20 rule is not met.
- **Incremental cost rules.** Only the incremental cost of energy property, meaning the excess of the total cost of energy property over the amount that would have been expended for the energy property if the energy property were not used for a qualifying purpose, is included in the eligible basis for ITC. This could have significant implications for rooftop and carport solar facilities.

However, the final regulations include some significant changes and clarifications, including:

- **Application of the "single project" factors to determine the scope of an "energy project".** The final regulations revise the two-factor test from the proposed regulations, such that multiple energy properties will be treated as a single energy project if four or more of the factors listed in the final regulations are met. The final regulations also add more flexible rules relating to the timing of the determination.
- **Key changes related to renewable natural gas (RNG) qualified biogas property.** The final regulations modify the classification of some qualified biogas property as either part of the unit of energy property or integral parts. As a result, the application of the ownership rules to RNG projects is less likely to be an obstacle to qualifying such property for ITC.
- **Clarifications related to qualified interconnection property (QIP) and related nameplate capacity determinations.** The final regulations retain the favorable approach from the proposed regulations that the five-megawatt limitation for QIP is measured at the level of the unit of energy property rather than the entire facility, while also clarifying that QIP is not subject to the PWA requirements or the requirements to qualify an energy project for the ITC adders.

These items are discussed further below.

## Analysis

### Energy Property Framework

The final regulations adopt the “unit of energy property” and “integral part” concepts from the proposed regulations. Units of energy property consist of all functionally interdependent components of property owned by the taxpayer that operate together and that can operate apart from other energy property within a larger energy project. Components are functionally interdependent if the placing in service of each component is dependent upon the placing in service of each of the other components in order to generate or store electricity, thermal energy, or hydrogen.

Property owned by a taxpayer is an integral part of an energy property owned by the same taxpayer if it is used directly in the intended function of the energy property as provided by Section 48(c) and is essential to the completeness of the intended function. Like the proposed regulations, the final regulations specify certain components that do or do not qualify as energy property by virtue of being or not being integral parts (including certain biogas property, as discussed below). Property that is an “integral part” of an energy property is energy property, and specify certain components that do or do not qualify as energy property by virtue of being or not being integral parts.

- The new framework was a conceptual shift from prior Treasury regulations on energy property, which enumerated qualifying and nonqualifying property. Since the release of the proposed regulations, many taxpayers have objected to the distinction between “unit of energy property” and “integral part” as being inconsistent with both the statutory language and the history of the credit. As they function in the ownership rules (discussed below), the concepts create additional hurdles that taxpayers must clear to claim the ITC for the equipment that clearly qualifies under the statute viewed in isolation.
- The final regulations and the preamble clarify that the unit for solar PV property is “all components ... up to the inverter.” The IRS declined a commenter’s request to clarify the issue for batteries.

## Ownership Rules

If multiple taxpayers directly own an energy property (e.g., as tenants in common), the final regulations require that each taxpayer determine its eligible basis based on its fractional ownership interest in the energy property.

The final regulations also provide that a taxpayer must directly own at least a fractional interest *in the entire unit of energy property* for an ITC to be determined with respect to such taxpayer’s interest. As noted above, an integral part is eligible for the ITC only if it is owned by an owner of a unit of energy property. If a taxpayer owns a unit and a second taxpayer owns property that is an integral part of that unit, this does not prevent the first taxpayer from claiming ITC with respect to its energy property, but the second taxpayer may not claim an ITC with respect to the integral part.

- In many situations, the ownership rules and the distinction between a unit and an integral part will be nonissues. However, in certain ownership structures, there could be otherwise ITC-eligible property that fails to qualify for the ITC simply because it is owned in the wrong way.

- The preamble notes that many commenters disagreed with the application of the ownership rules. Certain commenters pointed out that this conclusion was contrary to applicable case law and other authority. The preamble's attempts to distinguish this authority are not particularly convincing.

## **Retrofitted Property**

The application of the energy property framework and its departure from historical practice is most notable in the context of retrofitted property. The final regulations apply the so-called "80/20 rule" to determine whether a retrofitted "unit of energy property" qualifies as originally placed in service even if it contains some used components of property. Under the 80/20 rule, a unit of energy property may be originally placed in service only if the fair market value of the used components of the unit is not more than 20% of the total value of the unit, taking into account the cost of the new components and the value of the used components.

- As finalized, and arguably contrary to prior law, if a taxpayer makes a capital improvement to a unit of energy property that has previously been placed in service, the taxpayer generally may not claim an ITC for its basis in the improvements unless the improvements satisfy the 80/20 rule.

## **Incremental Cost**

The final regulations retain the rule from the proposed regulations that only the incremental cost of energy property is included in the eligible basis for ITC. The term "incremental cost" means the excess of the total cost of energy property over the amount that would have been expended for the energy property if the energy property were not used for a qualifying purpose. The final regulations include an example of bifacial solar panels installed over a reflective roof. Only the incremental cost of the reflective roof over the cost of a standard roof is included in the eligible basis of the energy property.

- The IRS declined to expand the example to specifically include other roof upgrades that enable the operation of energy property on the basis that the amount of incremental cost is determined on a case-by-case basis.
- While not likely to have a meaningful impact in the context of utility-scale projects, the incremental cost rule could require difficult determinations to be made regarding what the incremental cost is in the context of rooftop or carport solar installations.

## **"Single Project" Factors**

The IRA introduced the statutory term "energy project," which the proposed regulations defined as a project consisting of one or more energy properties that are operated as part of a single project. The proposed regulations would have provided that multiple energy properties would be treated as one energy project, if at any point during the construction of the multiple energy properties, they are owned by a single taxpayer (or by taxpayers under common control within the meaning of Treasury Regulation Section 1.52-1(b)) and any two or more factors listed

below are present.

The definition of energy project is modified in the final regulations to require that four or more factors be present and that the factors may be assessed, at the taxpayer's choice, either (i) at any point during the construction of the multiple energy properties or (ii) during the taxable year in which the last such energy property is placed in service.

The relevant factors are as follows:

1. The energy properties are constructed on contiguous pieces of land;
  2. The energy properties are described in a common power purchase agreement, thermal energy, or other off-take agreement or agreements;
  3. The energy properties share a common intertie;
  4. The energy properties share a common substation, or thermal energy off-take point;
  5. The energy properties are described in one or more common environmental or other permits;
  6. The energy properties are constructed pursuant to a single master construction contract; or
  7. The construction of the energy properties is financed pursuant to the same loan agreement.
- The increase from two factors to four factors is a welcome development for taxpayers wishing to avoid inadvertently combining energy properties into a single project that would fail to qualify for an increased credit.
  - The language of the final regulations appears to suggest that there are two tests — *i.e.*, multiple energy properties are treated as part of a single “energy project” if they either are operated as part of a single energy project (the facts and circumstances test) or meet the four-factor test (the safe harbor). However, the preamble indicates that Treasury and the IRS view the four-factor test as the sole test and do not believe a facts and circumstances test should apply.

The final regulations also clarify that an energy project (as defined for purposes of the increased credits for PWA, energy community, or domestic content) is considered placed in service on the date the last of the energy properties within the energy project is placed in service.

- The preamble creates more confusion around the timing of the analysis, noting that the placed in service rule is necessary because PWA, the domestic content bonus, and the energy community bonus are each applied at the energy project level, and thus the determination of whether an energy project meets any of these requirements cannot be made before the last of the multiple energy properties within such energy project are

placed in service. That explanation contradicts the rule itself, which provides optionality for the timing of the determination.

- The final regulations do not explain how to claim and report ITCs for an energy project that includes energy properties placed in service in multiple years. Consider an energy project that otherwise qualifies for domestic content. Does the property placed in service in year one qualify for the domestic content adder in year one even though it cannot be known as of the end of year one whether the energy project qualifies?

The final regulations do not adopt a rule from the proposed regulations that would have provided that, if multiple energy properties are treated as a single energy project for beginning of construction purposes with respect to the ITC, then the multiple energy properties also will be treated as a single energy project for purposes of the PWA requirements, the domestic content bonus, and the energy community bonus, recognizing that the proposed rule may conflict with existing beginning of construction guidance and the definition of “energy project” that is being adopted in the final regulations.

- Accordingly, some taxpayers will need to apply two distinct tests: (i) the “single project” test from a series of IRS notices that applies for “beginning of construction” purposes and (ii) the energy project test from the final regulations that applies for all other ITC purposes.
- Note that Section 48E does not appear to have incorporated the “energy project” concept and may offer planning opportunities for taxpayers confounded by the “energy project” rules under the Section 48 ITC.

## **Qualified Biogas Property**

Biogas projects fare well under the final regulations. Section 48(a)(3)(A)(x) was added by the IRA to provide that energy property includes qualified biogas property, a boon for an industry that was previously ineligible for the ITC. The statute defines “qualified biogas property” as a system that converts or concentrates biomass into a gas that is at least 52% methane by volume, specifically including “cleaning and conditioning” property. The proposed regulations initially excluded RNG upgrading equipment (*i.e.*, equipment that concentrates gas to methane levels suitable for pipeline injection) from qualifying property, though the IRS later issued a correction allowing RNG upgrading equipment to qualify if “integral” to the underlying biogas property. This approach creates challenges for RNG projects when coupled with the rule that an integral part is only eligible for ITC if owned by the owner of a unit of energy property, an ownership pattern that is often not practical (or even possible) for RNG projects.

The final regulations eliminate the distinction between RNG upgrading equipment (previously, a potentially integral part) and “cleaning and conditioning equipment” (part of the unit of energy property), clarifying that the RNG upgrading equipment is cleaning and conditioning equipment. The final regulations also classify the waste feedstock collection system, a landfill gas collection system and mixing or pumping equipment as property that is an integral part of qualified biogas property, rather than part of the unit of energy property as in the proposed regulations.

- The final regulations illustrate the importance of this change with an example of a taxpayer that places in service an anaerobic digester which generates biogas meeting the not less than 52% methane requirement, and sells the biogas to another taxpayer who in turn places in service cleaning and conditioning property to clean such biogas. The example provides that each taxpayer has a qualified biogas property and may be eligible for the ITC.

### **Qualified Interconnection Property**

The IRA provided that energy property includes amounts paid or incurred by a taxpayer for “qualified interconnection property” in connection with the installation of energy property with a maximum net output of not greater than 5 MW(ac) (five-megawatt limitation). The proposed regulations would have defined QIP as any tangible property that is part of an addition, modification, or upgrade to a transmission or distribution system that is required at or beyond the point in which the energy project interconnects to the transmission or distribution system and clarify that qualified interconnection property is not part of an energy property. As a result, QIP would not be taken into account in determining whether energy property satisfies the domestic content requirements or qualifies for the energy community bonus credit. The final regulations adopt these rules as proposed. The preamble also confirms that QIP is not subject to the PWA requirements.

- The clarification that QIP is not subject to the PWA requirements and the requirements to qualify for the ITC adders is a welcome one. A contrary reading, in addition to contradicting the statute, could have made compliance with the PWA requirements and certain ITC adder requirements impossible.

The final regulations retain the rule from the proposed regulations that the five-megawatt limitation is measured at the level of the energy property.

- This is a very favorable rule. Because the limitation is tested by unit rather than at the project level, very large renewables projects can claim ITCs for QIP if the nameplate capacity of the relevant unit is small enough.

The final regulations provide that, for energy properties that generate electricity in direct current, the taxpayer may choose to determine whether an energy property has a maximum net output of not greater than 5 MW(ac) by using the lesser of (i) the sum of the nameplate generating capacities within the unit of energy property in direct current, which is deemed the nameplate generating capacity of the unit of energy property in alternating current; or (ii) the nameplate capacity of the first component of property that inverts the direct current electricity generated into alternating current.

- This rule provides flexibility for taxpayers while ensuring that the maximum net output (in alternating current) of an energy property can be determined in an administrable and reasonably accurate manner for energy properties that generate electricity in direct current.
- Commenters requested clarification of how the QIP rule operates if one taxpayer pays the interconnection costs

and then sells the project to another taxpayer who claims the ITC. Although the final regulations themselves do not clarify much, the preamble states: “in the case of a purchase of energy property (or a deemed purchase of energy property in the case a pass-through lease transaction), any amount paid or incurred by the buyer attributable to the value of interconnection costs associated with that energy property is an amount paid or incurred with respect to the construction, reconstruction, or erection of that qualified interconnection property.” (Emphasis added.) The preamble also clarifies that for purposes of determining the original use of interconnection property in the context of a sale-leaseback or lease transaction, the principles of Section 50(d)(4) are taken into account.

The preamble notes that situations may arise in which the cost of QIP is reduced after the taxable year in which the taxpayer claims the ITC, such as reimbursements. In that case, the determination of whether qualified interconnection costs have been paid or incurred by the taxpayer and whether cost is reduced by virtue of transactions with the utility or with a third party should be based on generally applicable federal tax principles.

## Conclusion

Treasury and the IRS should be commended for working so quickly to issue the final regulations, which will provide guidance of fundamental importance to the renewable energy industry. Although there are aspects of the regulations that do not appear to be as well thought out or justified as one would hope, there is a larger political backdrop that made issuing the regulations a top priority for Treasury and the IRS.

The final regulations will have a long runway with projects that have begun construction before 2025. At the same time, the new tech-neutral CEITC and CEPTC under Sections 48E and 45Y will be phasing in for projects placed in service after 2024. Final regulations for the CEITC and CEPTC are expected shortly and are likely to include many of same themes addressed in this update. We will provide updates on those regulations as they are issued.

In the meantime, please reach out to us with questions.

## RELATED INDUSTRIES + PRACTICES

- [Energy](#)
- [Energy Tax](#)
- [Inflation Reduction Act of 2022 – Energy Industry Implications](#)
- [Renewable Energy](#)
- [Tax](#)